

Katarzyna Pluta (katarzyna.pluta@pw.edu.pl)

Chair of Urban Design and Rural Landscape, Faculty of Architecture,
Warsaw University of Technology

CONTEMPORARY SPATIAL COMPOSITION OF HISTORIC ARCHITECTURAL-
GARDEN SYSTEMS AND URBAN PARKS IN THE AREA OF WARSAW
ESCARPMENT IN THE DISTRICT MOKOTÓW IN WARSAW

WSPÓŁCZESNA KOMPOZYCJA PRZESTRZENNA HISTORYCZNYCH UKŁADÓW
ARCHITEKTONICZNO-OGRODOWYCH I PARKÓW MIEJSKICH W REJONIE
SKARPY WARSZAWSKIEJ NA OBSZARZE DZIELNICY MOKOTÓW W WARSZAWIE

Abstract

The article presents the contemporary spatial transformations of valuable architectural-garden systems and urban parks shaped in the area of Warsaw Escarpment in the district Mokotów in Warsaw: residential complex Królikarnia and Park Arkadia, residential complex Mokotów and Dreszer Park. Contemporary spatial composition of the complexes refers to carefully composed landscape of original projects, which emphasized the most valuable characteristics of the place, but also indicate many spatial transformations of study areas as well as the areas located in the immediate vicinity. These transformations are both positive and negative. Among the positive changes it is necessary to mention contemporary attempts of shaping and use of public spaces in parks and complexes, together with the processes of revalorization of different elements.

Keywords: composition, urban park, public space, Warsaw Escarpment

Streszczenie

Artykuł przedstawia współczesne przekształcenia przestrzenne najcenniejszych układów architektoniczno-ogrodowych i parków miejskich ukształtowanych w rejonie Skarpy Warszawskiej na obszarze dzielnicy Mokotów w Warszawie: zespołu rezydencjonalnego Królikarnia i Parku Arkadia, zespołu rezydencjonalnego Mokotowa oraz Parku Dreszera. Współczesna kompozycja zespołów nawiązuje do starannie komponowanego krajobrazu pierwotnych założeń, który podkreślał i wydobywał najcenniejsze cechy miejsca, ale także ukazuje liczne przekształcenia przestrzenne badanych obszarów, jak i terenów położonych w najbliższym sąsiedztwie. Przekształcenia te mają charakter zarówno pozytywny, jak i negatywny. Wśród pozytywnych przemian można wymienić współczesne próby kształtowania i użytkowania przestrzeni publicznych zespołów wraz z procesami rewaloryzacji różnych elementów.

Słowa kluczowe: kompozycja, park miejski, przestrzeń publiczna, Skarpa Warszawska

1. Introduction

Vistula River in Warsaw with its valley, terraces and high escarpment on the left bank was a major factor of the city location, and for centuries it has determined its spatial development and cultural landscape, shaping its identity. The high escarpment as the single eminence on the flat Mazovian plain and the main landscape value of the city, caused the creation of the most magnificent architectural and urban complexes on its area. The composition of these complexes consciously emphasized the most valuable features of the natural landscape of the place. Most of the historical complexes were planned on axes perpendicular to the edge of the escarpment. All urban complexes and even single buildings had view points or wide view openings towards Vistula Valley and forests on the other side of the river, and were carefully composed, what created a very harmonious landscape of escarpment and panorama of the city, visible from Vistula River [7, p. 195–216].

First on the edge of the escarpment there was located the Duke's seat, then Old Town with Royal Castle, New Town, then other royal, magnate and noble residences (manor-houses, palaces and villas with terrace gardens), temples and monastic architectural and garden complexes. Until the nineteenth century buildings on the area of the escarpment had a rather homogeneous character. Along the whole of today's urban section of the escarpment, a series of complexes were developed (urban or rural residences). The most important architectural objects and architectural and urban complexes shaped until the 19th on the area of the escarpment are: Old Town with Royal Castle, New Town, Kazanowscy and Koniecpolsky residences, Kazimierz' Villa Regia (17th century), rural residences: Ujazdowski Castle with gardens – Ujazdów (17th century), Marymont (Sobieska), Młociny (Brühl); in the second half of the 18th century: Ustron, Książęce and Góra, Mokotów, Królikarnia, Roskosz, Natolin; in turn of the 18th and 19th centuries: the residential district of Żoliborz [10, p. 49–60].

In the eighteenth century, two large-scale spatial complexes related to the escarpment were planned: Saska axis (1720) and Stanisławowska axis, created in two stages (1 – Calvary Ujazdowska and Piaseczyński Canal) – in the second half of the 18th century, 2 – “Łatawiec” road system in 1770, which contributed to the development of the southern district of Warsaw) [13, p. 83–98].

Among the next large-scale complexes connected with the escarpment and shaped on the basis of its unique landscape values it is necessary to mention: Wilanowski Key and complexes in the forest areas of the northern territory (Młociny, Bielany, Marymont) [3, p. 101].

Most of the residential complexes on the escarpment area were located in places of changes of the escarpment line, in contact with the edge ravines in order to enhance view values of the place.

“Parks located on the escarpment area have created their own specific layout. They consisted of an upper, usually regular garden, and a palace on the edge of the slope, which determined the main axis of the complex. The lower garden beneath the slope, had free composition. Both parts of the garden were linked by view axes” [11, p. 101].

Today the area of Warsaw Escarpment is still one of the most valuable cultural landscapes in the town. However, we can observe many spatial transformations of this area. The political,

economic and social transformations in the last two decades have greatly influenced the development of the city, shaping and often restoring its cultural identity, also connected with the area of Warsaw Escarpment. There was an increase of the role of cultural landscapes in the city as well as there were changed the patterns of leisure time. Unfortunately, changes are also related to growing investment pressure on these areas. It is possible to observe, that the most precious values of the cultural landscape of Warsaw Escarpment have been lost in some of its sections, and the new plans and propositions of the development of the escarpment area have been taking them into account in varying degrees [7, p. 195–216].

Therefore the propositions of shaping the landscape of the escarpment are very important. They will become elements of a larger urban composition, so important in the process of planning the sustainable development of Warsaw.

Many experts recognize and perceive Escarpment's threats, but also think that we would be able to prevent them:

"We still have great opportunities and chances – to save and enhance an extraordinary meeting in the city space, which is the integration of diverse forms of living nature: wild and cultural forms; outstanding complexes of cultural heritage on the Escarpment and beneath it" [12, p. 24].

"Warsaw Escarpment requires protection as a magnificent work of nature and the man who shaped it, creating conscious spatial compositions. They were designed and created thanks to royal, magnate, church and bourgeois patronage. The escarpment has been for centuries the line of reference of Warsaw's urban complexes and plans that shaped its cultural identity. As an area of special historical and landscape value, it should be a constant concern for town planners, according to the tradition of good periods of planning of Warsaw's development. The areas beneath the slope, on its slope, and on the upper terrace – within the view reach – require great care as well as culture of investment and design" [13, p. 96].

2. The purpose of the research, the methodology

The main purposes of the research presented in the article are following: 1/detailed studies of contemporary spatial transformations of the most valuable architectural and garden systems and urban parks shaped in the area of Warsaw Escarpment in the area of Mokotów district in Warsaw, 2/general studies of contemporary spatial transformations of areas located in the immediate vicinity of architectural and garden systems and urban parks in the area of Warsaw Escarpment and Puławska street, 3/determining the influence of transformations on the spatial composition of the studied complexes and their identity and quality. The research has been carried out with taking into account the existing state of knowledge and with applying methods proper for the morphological research of urban space. There have been used the following research methods: 1) method of analysis and criticism of sources (planning documents, literature, design projects), 2) observation method (used for the evaluation of the existing conditions), 3) comparative method.

3. The description of the research and results

The main elements of the natural landscape of the Vistula Valley are the high escarpment on the left bank, flood terraces with old river beds, lakes, wetlands and marshy areas. The most important feature of this landscape is the continuity of all elements: river valley with vegetation and its edges. Despite this characteristic feature, the areas linked with Warsaw Escarpment within the present administrative boundaries of the city differ in both natural and cultural terms.

There are three important areas to be identified here: the northern one (where there survived forest areas near the city), the inner city area (within the trenches of the 18th century, characterized by the earliest and most intense urbanization, and the largest transformations of natural landscape), the southern area (where the development of agriculture on fertile soils was visible). The escarpment in the southern area has moved away from Vistula River, creating a framework for the vast valley. Within the areas mentioned above, many spatial or cultural landscapes can be identified [4, p. 124–137].

At present, the southern part of Warsaw Escarpment can be divided into four sections, characterized by different ways of development and degree of transformations: 1) section from Lublin Union Square to the South Station (subject of research in the area of Mokotów district), 2) section from the South Station to Służew complex, 3) section from Służew complex to Natolin Park, 4) section from Natolin Park to the administrative border of the city.

Warsaw Escarpment on the city area has a various course. On the section from Lublin Union Square to the South Station the escarpment moves away from the river at a distance about 5 km (large area of terraces). The relative height of the slope in Mokotów area in characteristic places is following: Mokotów – 14 m, Królikarnia – 20 m, Służew – 14 m, (height referring mainly to the adjacent Wilanowski terrace). The slopes angles of the escarpment in Mokotów area (from the Służewiec Valley to the Śródmieście district border) are various – both steep and mild sections are here (about 12–30° slope). Warsaw Escarpment in Mokotów area is a wet slope (numerous springs, dunes at the foot of a slope, wet meadows in the scarp zone).

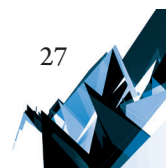
The history of the Mokotów district (located on the left bank of the Vistula River, on the vast upper and lower areas of Warsaw Escarpment) dates back to the 11th century, when the first traces of settlement appeared (Mokotowo village). Thanks to the green scarp, numerous parks and greenery of streets and gardens, this district is considered to be extremely green today. Mokotów's remarkable location resulted in a considerable development in the 17th and 18th centuries, when wealthy burghers and aristocrats erected villas and palaces with gardens, designed by prominent architects: Tylman of Gameren, Dominik Merlini, Szymon B. Zug, Jakub Kubicki, Jan Chrystian Szuch, Efraim Schroeger [1, p. 5–88, 8, p. 114–122].

Mokotów and Królikarnia are the most important architectural and urban complexes shaped on Warsaw Escarpment area in the Mokotów district. At present, residential complexes of Mokotów and Królikarnia are also among the most important types of spatial architectural and garden systems existing in the escarpment area. These two spatial systems of gardens linked with the scarp are based on the connections with shaped water reservoirs (artificial ponds) beneath the slope due to the considerable distance of the river from the escarpment [6].

In the 19th century, Mokotów became a prestigious summer resort – there were built numerous health and recreational buildings, guest houses and inns. Mokotów's spatial development was limited at the end of the 19th century (1883) through the system of forts (Fort Mokotowski, Fort Odyńca, Fort Legionów), which formed the first ring of fortifications of the Fortress of Warsaw. At the turn of the 19th and 20th centuries, many new streets of today's Old Mokotów were proposed during the process of parceling of the former Mokotów Manor. The area of Mokotów with 28 thousand inhabitants, was attached to Warsaw in 1916, resulting in further development of the district (the construction of representative villas and townhouses incorporated into green areas, offices, scientific institutes, hospitals, schools, colleges, modernization of Puławska street, introduction of tram lines). The buildings were introduced into escarpment area in the Mokotów district in the interwar period (mainly housing). The district Mokotów was transformed in that period from a suburb of a cottage style into a modern residential and service center (more than 89 thousand inhabitants in 1939). The district is an area, which was often destroyed and then rebuilt: the first destruction occurred by the Swedish army in 1655–1657, than following the Kościuszko insurrection in 1794, and after the November Uprising in 1830. World War II brought huge losses of the population and destruction in the Mokotów district, especially during the Warsaw Uprising (in the defense of the district died soldiers of the Home Army regiments, scouts of Gray Battalions and civilians, 65% of buildings have been ruined). After the war, the Mokotów district was rebuilt and expanded, including residential and park complexes [1, p. 5–88, 8, p. 114–122].

It should be added, that Puławska street in the area of the Mokotów district is a part of the unique road in Warsaw townscape and one of the main road routes of the city. On the section from Lublin Union Square to the South Station, Puławska Street has special landscape features: it runs very close to the edge of the escarpment and its eastern frontage (continuous and compact) is continuous and compact interrupted rhythmically by green open areas. There are existing unique view openings from the street to the lower terraces, what allows inhabitants and tourists direct contact with the escarpment area. For these reasons, open areas that are part of this section should not be built.

The first opening from Puławska Street is Goworka street, and the second one (situated about 300 meters from the first one) is a wide belt of green – it is the beginning of the vast **Morskie Oko Park**, which from the east reaches Belwederska street and Łazienki Park, and from the south almost Dolna Street (founded in 1955, according to the design of E. Jankowska). The upper edge of the escarpment in the park is a magnificent viewpoint towards the lower terrace with Morskie Oko pond in the foreground, greenery (including green of the Łazienki Park) and housing on the lower terrace visible on the horizon. This panoramic view is much more diversified, because the first observation plan is closed by green scenes of varied species, what is giving the impression of extensive green interior. It should be emphasized that the view point is in the immediate vicinity of Puławska Street, what allows partial observation of views also by people on the street. Unfortunately, apart from the low development, there were designed also high housing buildings in the area on the edge of the escarpment, built above the average height of tenement houses forming the frontage of Puławska Street, together with pavilions occupied large surface on the ground floor. At the



edge of the escarpment at the entrance to the park there was also introduced an outdoor gym, what caused spatial disturbance of view point. Unfortunately, pavements and urban details in this area need to be modernized or replaced (Figs. 1, 2).



Fig. 1. Park Morskie Oko, Warsaw
(photo by K. Pluta, 2016)



Fig. 2. Park Morskie Oko, Warsaw
(photo by K. Pluta, 2016)

The second part of the present Morskie Oko Park is the **Mokotów residential complex**, which forms **the park with Szuster Palace** (from which the original classicistic palace “Mon Coteau” of Izabela Czartoryska Lubomirska was named Mokotów district, designed by Efraim Schroeger 1772–1774, rebuilt into neo gothic villa for Potocki, designed by Henryk Marconi 1822–1825; on the upper level – geometrical garden designed by Szymon Bogumił Zug 1848, on the lower level – natural composition of the garden). During World War II park trees were destroyed and the palace was burned out in 1944, only a Moorish little house and pigeon-house survived. After the war in 1966, Szuster Palace was rebuilt for the Warsaw Musical Society (designed by J. Brabander), preserving the former layout of the composition of the garden [8, p. 114–122, 11, p. 111].

This is another interruption of the eastern frontage of Puławska Street by a 100-m long green space, on the axis of which is Szuster Palace, picturesquely situated at the edge of the escarpment. Together with the green system, subordinated to the main axis, it is the architectural spatial dominant on the escarpment. On the main axis of the complex near Puławska street there was located in 1995 Monument of Jan Matejko (designed by Marian Konieczny, 1989). Unfortunately, the entire complex is in a state of great negligence and requires a revalorization, especially the following spatial elements: the terrace near the palace on the slope side, ramps on both sides of the palace, main axis of the park on the western side. Main actions should include: new development of low greenery of the terrace and main axis, replacement of pavement alleys and replacement of urban details (mainly benches) (Figs. 3–5). The park at the lower level (of natural composition layout, including organic alley shapes, groups of different species of free layout trees, green interiors formed on the basis of water reservoirs), also requires modernization activities (replacement of alley pavements and urban details – benches and lighting, cleansing the pond, better maintaining of grassy surfaces with a possible new composition of low greenery).



Fig. 3. Residential complex Mokotów, Warsaw
(photo by K. Pluta, 2016)



Fig. 4. Residential complex Mokotów, Warsaw
(photo by K. Pluta, 2016)

South of **St. Michael Church** Puławska street runs on a short sector among park greenery situated for the first time on both its sides: from the west side General Gustaw Orlicz-Dreszer's Park, and from the eastern side the green of Małkowsky Square, starting the greenery of a large landscape complex and at the same time a sport club "Warszawianka" with an important view point on its territory. The sport complex SKS "Warszawianka" was established in the 1960s according to the design of Jerzy Sołtan. It is an unusual example of the inclusion of terrains and sport facilities in the topography of the escarpment and lower terrace [8, p. 114–122].

General Gustaw Orlicz-Dreszer's Park – a modernist layout, was founded during the presidency of Stefan Starzyński in the fortress moat of the former Mokotowski Fort (designed by Z. Hellwig, in the studio of L. Danielewicz, June 26, 1938). The park was designed as a walk and recreational park on a rectangular plan with a central alley as the main compositional axis. The park area consisted of three geometrical park interiors of different character and green walls with regular vegetation (interiors are separated by compact groups of coniferous trees on both sides of the axis). The composition of the park enriches the chestnut-tree alley in oval shape, located in the eastern part of the park [11, p. 138–139].

During Warsaw Uprising there were heavy fights in this part of the city and the park was severely destroyed and became one of the largest provisional cemeteries. The park was renovated in 1951 (restoration of the former axial composition system), in 1989 it was entered into the register of monuments, and in 2007 a comprehensive revalorization of the park was completed. A monument of "Mokotów fighting 1944" was situated in the park (the cracked boulder is a monument of inanimate nature – the gray granitoid), where the annual anniversary of Warsaw Uprising begins on August 1 every year. At present, after the revalorization, the first interior in the park was complemented with sculptures; in the second interior, besides the monument, there is a new playground with a summer cafe (both functions on the other side of the axis); and in the third interior there was proposed special composition of floral ground-floor and a new fountain on the main axis. It should be emphasized that the quality of all pavements of alleys and urban details (benches, lighting, baskets) as well as of low greenery is very high. During summer the park hosts jazz concerts and other cultural events (Figs. 6–9).



Fig. 5. Residential complex Mokotów, Warsaw
(photo by K. Pluta, 2016)



Fig. 6. Gustaw Orlicz-Dreszer's Park, Warsaw
(photo by K. Pluta, 2016)



Fig. 7. Gustaw Orlicz-Dreszer's Park, Warsaw
(photo by K. Pluta, 2016)



Fig. 8. Gustaw Orlicz-Dreszer's Park, Warsaw
(photo by K. Pluta, 2016)

Another explored **residential complex** is **Królikarnia** – one of the most valuable palace and park complexes shaped in the second half of the 18th century on the area of Warsaw Escarpment (Figs. 10, 11) The complex is also one of the most important spatial types of architectural and garden systems existing in the escarpment area (a system based on the connection with artificial water reservoirs beneath the slope – due to the considerable distance of the river from the escarpment). The name of the residential complex Królikarnia is derived from the rabbit farm belonging to King August II Mocny in the early 18th century. Near the complex there is situated **Arkadia Park** (founded in 1968–1970 according to the design of Longin Majdecki, the upper and lower parts with pounds are connected by a staircase system) (Fig. 12). In the explored area the escarpment creates an unusually picturesque landscape with numerous ravines, ponds on the lower terrace and greenery, shaping the interiors and view closes and reflecting in the water plane. At this place, the escarpment is unfortunately very far away from the river (about 5 km). The Królikarnia complex was shaped at the site of changes of the escarpment line, in contact with the edge of ravines in order to increase view values of the place. The complex consists of the following elements: the upper garden,

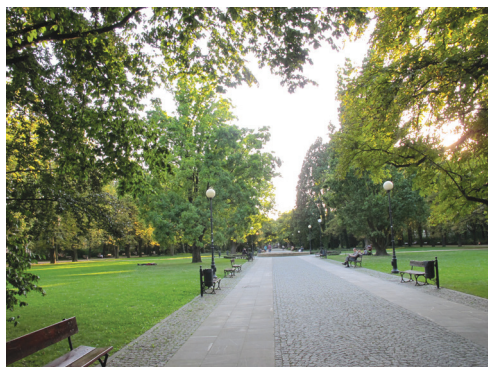


Fig. 9. Gustaw Orlicz-Dreszer's Park, Warsaw
(photo by K. Pluta, 2016)



Fig. 10. Residential complex Królikarnia,
Warsaw (photo by K. Pluta, 2016)



Fig. 11. Residential complex Królikarnia,
Warsaw (photo by K. Pluta, 2016)



Fig. 12. Park Arkadia, Warsaw
(photo by K. Pluta, 2016)

the palace at the edge of the escarpment – determining the main axis of the complex, and the lower garden of a free composition. The palace, situated on one of the hills between the ravines, forms with its greenery one of the most beautiful architectural spatial dominant on the escarpment (classicist palace designed by Dominik Merlini 1782–86, the 18th-century landscape park, rebuilt in the nineteenth century, the reconstruction of the palace according to the design of Jan Bieńkowski 1959–1964, reconstruction of the garden according to the design of Gerard Ciolek 1962 – according to layout of the garden from the middle of the 19th century, cleaning works in the park according to the design of Longin Majdecki 1967–1969) [9, p. 291–299; 5, p. 213; 11, p. 114–118].

Both in the palace project as well as in the kitchen project it is possible to find European cultural influences from various periods: the kitchen is a round building – modeled on the Tomb of Cecilia Metellia in Rome in Via Appia (a circle plan in the form of picturesque ruin), while the palace is a classicist suburban villa (centrally planned building on the square plan with circular living room in the middle, covered by dome on the drum, double floor with high ground-floor and extraordinary portico) – referring to the renaissance villa

“Almerico-Capra” called “La Rotonda” near Vicenza (designed by Andrea Palladio, 1550) [2, p. 71–72].

Until the 1920s, the complex was still a suburban residence. The complex of Królikarnia was severely damaged during the Second World War: the palace was burned and destroyed in September 1939 and then the kitchen was burned during the Warsaw Uprising in 1944, the terrace with grotto and park trees were destroyed. After the war the palace was rebuilt, the interiors of the palace were partially rebuilt, and the palace was dedicated to the seat of museum of sculptor Xawery Dunikowski (now it is the National Museum Branch in Warsaw).

At present, the public space of Królikarnia complex is very often the place of various exhibitions, performances, concerts and multimedia shows. The interior of the oval alley in front of the palace on the western side is filled with lawn and single trees, which are unusual spatial accents. This vast empty space, which is a magnificent observation plane of facade of the palace, is surrounded by a massif of leafy trees of various species. Along the oval alley, there are situated various sculptures, which are a permanent exhibition in the park (Sculpture Park). The reconstructed terrace also has small scale sculpture elements. From the terrace of the palace there is an extensive view for the ponds, park greenery, allotment gardens, residential buildings, multi-family housing estates and forests on the horizon. Unfortunately, this view is increasingly narrowed by overgrown greenery. At the same time, the view is dominated by objects or groups disturbing the harmonious landscape, such as “Siekierki” heating plant and power station complex with high chimneys. The complex was partially fenced – outside the fence it is a northern gorge and a part of the park with ponds. This resulted in the division of the complex into parts available temporary (located higher) and the part available without a restriction (located lower). Between these two parts, there are view connections and links by alleys in both ravines. Two artificial ponds located on the axis of the complex are separated by a dam. The positive changes of the landscape of the complex include: revitalization and modernization of the lower part of the park and the neighboring and associated directly with it Arkadia Park (replacement of surface pavements from hardened to biologically active, new composition of low greenery, cleansing of ponds, new elements of small architecture – benches, rubbish bins, lighting in both parks). There is also a children’s playground and an outdoor gym near the north avenue. On the other hand, there are also negative changes in the landscape of the areas adjacent to the complex, caused by strong investment pressure, the growth of motorization and air pollution and the increase in noise intensity.

4. Summary

The explored complexes are an important heritage of the Polish nation and are a valuable examples of European cultural influences. These are places where nature harmoniously meets culture, history meets contemporaneity, preservation of values of environment and cultural heritage meets contemporary spatial transformations.

Contemporary spatial composition of historic architectural-garden systems and urban parks in the area of Warsaw Escarpment in the district Mokotów refers to carefully

composed landscape of original projects to a large degree, and emphasizes the most valuable characteristics of the place. However, there are also many spatial transformations of the study areas as well as of the areas located in the immediate vicinity. These transformations are both positive and negative. Among the negative phenomena it is necessary to mention: negligence of areas, including low quality of urban details, pavement and low greenery, narrowing of valuable views by overgrowing high greenery and random modern use, lack of processes of revalorization of some systems and their fragments, strong investment pressure on areas in the immediate vicinity, air pollution and the increase in noise intensity caused by the growth of motorization. Among the positive changes it is necessary to mention contemporary attempts of shaping and use of public spaces in parks and complexes, together with the processes of revalorization of different areas and elements (including low greenery, surface of alleys' pavement and small architecture), introduction of positive elements of contemporary development (such as playgrounds, sports facilities).

The desire of protection of these unique spatial complexes and urban parks creates the need to reconcile protection of their natural and cultural heritage with the emerging new needs of a dynamically developing European city.

References

- [1] *Dzieje Mokotowa*, Państwowe Wydawnictwo Naukowe, Warszawa 1972.
- [2] Jaroszewski T.S., *Księga Pałaców Warszawy*, Wydawnictwo Interpress, Warszawa 1985.
- [3] Kicińska E., *Krajobraz kulturowy Skarpy Warszawskiej – główne założenia wielkoprzestrzenne*, [w:] *Skarpa Warszawska*, Materiały sesji naukowej, 28–29.05.1993, Biblioteka Towarzystwa Opieki nad Zabytkami, Warszawa 1993.
- [4] Kicińska E., *Teraźniejszość i przyszłość krajobrazu kulturowego doliny Wisły w rejonie Warszawy*, [w:] *Zagospodarowanie Doliny Wisły w granicach województwa warszawskiego – wybrane aspekty ekologiczne, rekreacyjne i społeczne*, Towarzystwo Społeczno-Kulturalne Miasto-Ogród Sadyba, Warszawa 1996.
- [5] Leśniakowska M., *Architektura w Warszawie*, „Arkada” Pracownia Historii Sztuki, Warszawa 1998.
- [6] Majdecki L., *Gucin – Gaj – Analiza układu kompozycyjno-przestrzennego na tle warunków naturalnych i zarysu historycznego*, Rejestr Ogrodów Polskich, Zeszyt 4, PWN, Warszawa 1965.
- [7] Pluta K., *Przekształcanie krajobrazu kulturowego Skarpy Warszawskiej na obszarze dzielnicy Mokotów*, [w:] *Przyroda i Miasto*, red. J. Rylke, Vol. X, Part I, Wydawnictwo SGGW, Warszawa 2007.
- [8] Pluta K., *Zielone Osie Mokotowa na obszarze Skarpy Warszawskiej – planowanie i zarządzanie*, [w:] *Zarządzanie krajobrazem kulturowym*, Komisja Krajobrazu Kulturowego Polskiego Towarzystwa Geograficznego, Prace Komisji Krajobrazu Kulturowego PTG nr 10, Sosnowiec 2008.

- [9] Pluta K., *Założenie pałacowo-parkowe Królikarni w Warszawie – przekształcenia przestrzenne*, [w:] *Założenia rezydencjonalno-ogrodowe, dziedzictwo narodu polskiego (na tle europejskich wpływów kulturowych)*, Zakład Sztuki Ogrodowej i Terenów Zielonych Instytutu Architektury Krajobrazu, Wydział Architektury Politechniki Krakowskiej, Instytut Botaniki im. W. Szafera, Polska Akademia Nauk w Krakowie, Kraków 2008.
- [10] Roguska J., *Realne przemiany na Skarpie w wiekach XIX i XX*, [w:] *Skarpa Warszawska*, Materiały sesji naukowej, 28–29.05.1993, Biblioteka Towarzystwa Opieki nad Zabytkami, Warszawa 1993.
- [11] Różańska A., *Parki Warszawy na tle warunków przyrodniczych miasta*, [w:] *Wartości krajobrazu kulturowego Warszawy na tle warunków przyrodniczych miasta*, Wydawnictwo SGGW, Warszawa 2004.
- [12] Skibniewska H., *Szanse i zagrożenia Skarpy Warszawskiej*, [w:] *Skarpa Warszawska Doliny Wisły*, Materiały z sesji, 17–18.06.1998, Oddział Warszawski Towarzystwa Opieki nad Zabytkami, Warszawa 1998.
- [13] Zarębska T., *Miasto a Skarpa: problem tożsamości kulturowej Warszawy*, [w:] *Skarpa Warszawska Doliny Wisły*, Materiały z sesji, 17–18.06.1998, Oddział Warszawski Towarzystwa Opieki nad Zabytkami, Warszawa 1998.