

Modern Science

Moderní věda

№ 3 - 2022

scientific journal

vědecký časopis

Prague Praha

MODERN SCIENCE - MODERNÍ VĚDA

№ 3 - 2022

Incorporated in
Czech Republic
MK ČR E 21453
published bimonthly
signed on the 27th of June 2022

Evidenční číslo
Česká republika
MK ČR E 21453
Vychází šestkrát do roka
podepsáno k tisku 27. června 2022

Founder
Nemoros
Main office: Rubna 716/24
110 00, Prague 1, Czech Republic

Zakladatel
Nemoros
Hlavní kancelář: Rybná 716/24
110 00, Praha 1, Česká republika

Publisher
Nemoros
Main office: Rubna 716/24
110 00, Prague 1, Czech Republic

Vydavatel
Nemoros
Hlavní kancelář: Rybná 716/24
110 00, Praha 1, Česká republika

*The East European Center
of Fundamental Researchers
Rubna 716/24
110 00, Prague 1, Czech Republic*

*Východoevropské centrum
základního výzkumu
Rybná 716/24
110 00, Praha 1, Česká republika*

Address of release
Modern Science
Rubna 716/24, 110 00, Praha 1
Czech Republic

Adresa redakce
Moderní věda
Rybná 716/24, 110 00, Praha 1
Česká republika

Editorial Board / Redakční rada
Dr. Iryna Ignatieva, Ph.D. Diana Kucherenko, Roman Rossi

Editorial Council / Redakce
*Dr. Oleksii Hudzynskyi, Dr. Halina Aliakhnovich, Ph.D. Angelina Gudkova,
Dr. Iryna Ignatieva, Ph.D. Diana Kucherenko, Dr. Natalia Yakovenko,
Dr. Oleksandr Makarenko, Dr. Natalia Mamontova, Ph.D. Nataliya Chahrak,
Dr. Iryna Markina, Ph.D. Nataliia Ivanova, Dr. Yuriy Chernomorets*

Chief-editor / Vedoucí redaktor
Dr. Iryna Ignatieva

CONTENTS

Economics

Olena Bogma, Hanna Silakova, Oksana Vialets. The impact of European integration on the economic security of business in Ukraine5

Olha Liakhovych, Antonii Zaluzhnyi, Olha Osadcha, Oksana Zinkevych, Iryna Oplachko. Analysis of consumer needs' transformation in the conditions of digitalization12

Iryna Mykolaichuk, Alla Rasulova, Olga Salimon. Digitalization of HR management at enterprises in the service field: transformation of technologies and modern challenges23

Public administration

Oleh Demydkin. Websites of public authorities as an information space for citizens to obtain38

Geography

Grygoriy Denysyk, Victoria Kanska, Liudmyla Ataman, Iryna Kravtsova, Alla Kiziun. Garden and park landscapes in the tourist and recreational activities of Central Europe46

Oleksii Sytnyk, Liubov Bezlatnia, Oksana Valchuk-Orkusha, Bohdan Denysyk, Leonid Stefankov. Anthropogenic landscapes of the interzonal geocoton «forest-steppe-steppe» of Ukraine as factors of its steppification.....56

Pedagogy and psychology

Yulia Bilyk. Conditions of efficiency of distance learning in primary school: theoretical analysis.....69

Marine Doroshchuk. Legal cultural tendencies of educators in the postmodern space.....79

Anna Zadorozhna, Kateryna Volokhata. Model of moral and legal norms and rules of children's behavior88

Ievgeniia Ivanchenko, Oleh Masliy, Nataliya Bhinder, Oleksandra Shahova, Ihor Cherkun, Svarychevska Anzhela. Perspective on formation of future military officers' readiness to use stem-technologies: a case study of Ukrainian

GEOGRAPHY

GARDEN AND PARK LANDSCAPES IN THE TOURIST AND RECREATIONAL ACTIVITIES OF CENTRAL EUROPE

Grygoriy Denysyk,

Doctor of Science (Geography), Professor,

Victoria Kanska,

Ph.D. in Geography, Associate Professor,

Liudmyla Ataman,

Ph.D. in Geography,

Vinnitsia Mykhailo Kotsiubynskyi State Pedagogical University, Ukraine,

Iryna Kravtsova,

Ph.D. in Geography, Associate Professor,

Pavlo Tychyna Uman State Pedagogical University, Ukraine,

Alla Kiziun,

Ph.D. in Geography, Associate Professor,

Vinnitsia Trade and Economics Institute, Ukraine

Annotation. *The garden and park landscapes as the objects of recreation and tourism in Central Europe have been investigated in the article. It is noted that Central Europe is a natural-geographical region, which includes the central parts of Europe, which are distinguished by geological and geomorphological structure. As a socio-geographical region, it is a territory that includes countries with an average level of economic development and a socialist past.*

The basis of tourist and recreational activities of any region is the cultural heritage of each country and its peoples. It should be noted that culture is a key resource for tourism, providing interpretation of lifestyles, heritage and identity. Along with the immaterial elements of culture, there are also material ones, which from the point of view of anthropogenic landscape science are revealed through the corresponding groups of man-made landscapes. Garden and park landscapes are a group of man-made landscapes, which is a socio-historical and cultural formation. They are especially interesting objects that promote the development of tourist and recreational activities. These landscape systems are rich in various cultural artifacts, have strong associative, historical aspects and, in our opinion, are the so-called landscape cultural identifiers of the respective regions. At the same time, this group of man-made landscapes, which contains information about the usual and unique features of the natural conditions of the region.

Keywords: *Central Europe, ethno-identifier, garden and park landscape, recreation, tourism.*

The sociosphere of the XXI century is a complex modern landscape system formed by natural shells, which seem to be «stitched» by objects that man uses for his existence and development. To be, humanity is building houses, paving roads, extracting minerals and even trying to go beyond the earthly oikumena. It is interesting that different ethnic groups, depending on their traditions, culture and customs, have different manifestations of saturation of the landscape with certain anthropogenic components. Some ethos's

are characterized by organic incorporation of anthropogenic components into the natural landscape environment, and for others, this environment needs to be radically changed, technicalized and create / organize such man-made landscape systems that are not inherent in the corresponding latitude. Mankind, for some reason, always seeks to break the chorological axiom (although the axiom can neither be violated nor refuted, it is not necessary to prove). Such activities «painfully» affect all components of the landscape, but most of all, still suffers the person himself. The technical, rebuilt, artificial environment is, first of all, uncomfortable for the life and work of an intelligent person. There is a paradox of our existence, man creates it to be comfortable to live and work, and, instead, gets an extremely unreasonable environment for his life and work. Therefore, the organization of a constructive environment in which natural, technical elements aimed at restoring the productive forces of man are suppletively, or at least compensatory, combined with artificial, technical elements is an urgent scientific problem.

Recreation and tourism is a topical area of modern scientific research for both ukrainian and foreign scientists. The works of such scientists are dedicated to them: I.V. Smal, O.M. Kharchenko, V.L. Petranovsky, M.Y. Rutinsky, O.O. Liubitseva, Ye.V. Pankova, V.I. Stafyichuk, O.O. Beidyk, V.I. Novikova, Owsianowska S., Banaszkiwicz M., Muhar A., Siegrist D., Widawski K., Wyrzykowski J. and others. Scientists are working to reveal the main issues of tourism geography, conceptual and theoretical foundations of tourist local lore; research of tourist resources, tourist and recreational potential; analysis of the peculiarities of the historical and modern development of tourism and the tourism industry of the world, Ukraine. Problems of man-made landscape studies are developed in the scientific works of G.I. Denisyk and his scientific school, namely: the theoretical and methodological principles of modern man-made landscape science and its scientific directions are substantiated; the relevant classes of man-made landscapes within the relevant natural and administrative regions are studied; geographical features of anthropogenic transformation of landscape systems are clarified; issues of functioning, dynamics and development of man-made landscapes and landscape-technical systems are revealed (Denisyk, 2012).

The purpose of the article is to reveal the functional features of the garden and park landscapes of Central Europe as modern objects of recreation and tourism.

Central Europe as a natural-geographical region is a territory that includes the central parts of Europe, which are separated by geological-geomorphological structure and occupy an intermediate hypsometric position between the highlands of Western and Southern Europe, the Midlands of Northern and Lowlands of Eastern Europe, limited to the «forest formation» of the stretch. Central Europe is formed by the Central European Plain, the Carpathians (including the Danube Plains) and the islands of the North and Baltic Seas adjacent to the Central European Plain (Frisian, Danish, Bornholm, Rügen, Moondzu, etc.). The straits of the Baltic Sea (Skagerrak, Kattegat, Oresund, Hamrarne), the Gulf of Finland, the Neva and Svir rivers, Central Europe is separated from Fennoscandia, and the waters of the North Sea – from the British Isles. In the south, the territory is limited by the Hercynids, the eastern foothills of the Alps and the

Morava, Sava, Danube and Black and Azov Seas. The eastern border of Central Europe runs along the western spurs of the meridional and sublatitudinal chain of hills (Veps, Tikhvin, Valdai, Central Russia, Smolensk-Moscow, Don Range) and the Don River before it flows into the Taganrog Bay. This region is formed at the junction of the Eastern European Precambrian Platform and the Mediterranean Mobile Belt (Hudzevych, 2005).

Central Europe as a socio-geographical region is a territory formed by countries with different levels of socio-economic development and different cultures. As noted by I.V. Smal and O.M. Kharchenko: «They are inhabited by peoples with different ethnogenesis and mentality» (Smal, Kharchenko, 2013). This region includes countries (Czech Republic, Poland, Hungary, Slovakia, Romania, Belarus, Moldova, Ukraine) with an average level of economic development and a socialist past.

The world's first tourist meeting took place in Graz in 1884. It was attended by 107 representatives of Austrian municipalities, who discussed the development of Austrian tourism and concluded that tourism is a promising economic activity. Today, tourism is an active activity that creates experiences for visitors. When tourism is linked to other activities, innovative tourism products are developed. Culture and tourism are interconnected, constantly evolving and complementing each other. Culture is a key resource for tourism, providing interpretation of lifestyles, heritage and identity.

Culture is the basis of tourism development, an important component of the attractiveness of most tourist destinations. At the same time, culture is the main beneficiary of tourism development. The United Nations World Tourism Organization (UNWTO 2001, UNWTO 2018: 15) points to the relationship between culture and tourism and characterizes it as follows: «Culture and tourism have a symbiotic relationship. Arts and crafts, dances, rituals, and legends which are at risk of being forgotten by the younger generation may be revitalized when tourists show a keen interest in them. Monuments and cultural relics may be preserved by using funds generated by tourism. In fact, those monuments and relics which have been abandoned suffer decay from lack of visitation».

Among the many man-made landscapes, cultural heritage is made up of garden and park landscapes. These landscape systems are rich in various cultural artifacts, have strong associative, historical aspects and, in our opinion, are the so-called landscape cultural identifiers of the respective regions. At the same time, this group of man-made landscapes, which contains information about the usual and unique features of the natural conditions of the region.

Garden and park landscapes are a group of man-made landscapes that are formed as a result of human economic activities aimed at meeting material and spiritual needs; in which natural components (rocks, water, air, soil, vegetation, fauna, solar radiation) in combination with small architectural forms and structures, the road-linear network form a harmonious, supple landscape system.

Garden and park landscapes of Central Europe will be considered within the territorial boundaries of the respective states and their cultural features.

Moldova is one of the poorest European countries with troubled Transnistria. However, this country has a rich cultural heritage and landscape diversity. The cultural

symbols of Moldova are Codri, Jok, Cricova, wine, Transnistria, Grigor Ureke, Dmytro Cantemir, Mihai Eminescu, Eugene Doga (Smal, 2011). The garden and park landscapes of Moldova are represented by the following objects: Chisinau Dendrological Garden, Tiraspol Dendrological Garden, Khirbovetsky Park, Pavlovsky Park, lime alley between the villages of Pavlovka and Larga, Kukhuresht Park, Temeleuts Park, Belebenesht Park, Miklesht Park.

Poland is a country of Central Europe, whose territory is located in the zone of seasonally comfortable and subcomfortable weather and climatic conditions. It has a favorable geotourism position: Poland has access to the Baltic Sea; the territory is characterized by landscape diversity: from mountain to plains and wetlands, from natural landscapes to urban and rural landscapes; extensive river network, lakes; Poles are proud of their centuries-old history and culture, which left a powerful material and spiritual heritage, which became the basis for the development of cognitive tourism; the country is located in the center of capacious tourism. Ethno-identifiers of this state are: Vistula, Belovezhskaya Pushcha, Czestochowa, Auschwitz, Krakow, Bigos, wild boar, amber, Goldwasser, Wawel Dragon, Boleslaw pottery, Oscipek cheese, Nicolaus Copernicus, Tadeusz Kosciuszko, Rosa Luxemburg, Rosa Luxemburg Mickiewicz, Frederic Chopin, Jan Matejko, Boleslaw Prus, Henrik Senkiewicz, Maria Skłodowska-Curie, Anna Herman, Lech Walesa, Jerzy Hoffmann (Smal, 2011).

Garden and park landscapes of Poland are represented by the following objects: Muskau Park (on the border of Germany (Bad Muskau, Saxony) and Poland (Lenknica, Zharsky County, Lubusz Voivodeship); Neborow Palace (Neborow, Łowicz County, Łód Voivodeship), Krakow Parks and Poznań Parks.

Garden and park landscape «Arcadia» is located 5 km southeast of the town of Łowicz, Łowicz County, Łód Voivodeship, in the structure of a rural subclass of the residential class of man-made landscapes. Arcadia in the Neborów commune. «Arcadia» is organized within the Mazowieckie-Podlaskie lowland (Nizina Mazowiecko-Podlaska), in the valley of the river Skierniewka, the right tributary of the river Bzura (Vistula basin); in the area of deciduous forests of Central Europe. The Arcadia Landscape Park was founded in 1778 by Princess Helena Przeździecka Radziwiłł. The formation of «Arcadia» took place over 40 years. Architects Simon Gottlieb Zug (Szymon Bogumił Zug), Henryk Ittar, and artists Jan Piotr Norblin (Jean-Pierre Norblin de la Gourdain), Alexander Orłowski. The first small architectural structures were the Sibylla Grotto (1781), the Temple of Diana (1783), the Aqueduct (1784), a stone arch (1784), a Gothic house (1795–1797), the Muğrabi House. (1795), circus and amphitheater (1801) (Lichanski Jakub Z., 2009). In 1785–1789 on the island of Poplar was built a symbolic tombstone of the Duchess with an ambiguous Latin sentence «Et in Arcadia ego» on the model of the Tomb of Jean Jacques Rousseau in Ermenovil. Helena Radziwiłł had collected in «Arcadia» a rich collection of ancient sculptures, copies of ancient works, as well as medieval and Renaissance antiquities, from which she created a kind of museum in the temple of Diana.

Geographical coordinates of the object of study – 52° 05' N, 20° 00' E. The garden

and park landscape has a flat surface, divided by the valley of the Skierniewka River (a tributary of the Bzura River, the Vistula River Basin). The absolute height of the physical surface is 85–96 m. «Arcadia» is extended in the direction from northwest to southeast. The surface is composed of sandy glacial and water-glacial deposits, the valley of the river Skirnevka is swampy. The surface is covered with gray forest soils, broadleaf park plantings. The main tree-forming species of park plantations is the European plane tree. The landscape structure of the Arcadia garden and park landscape is formed by river channel and floodplain-type tracts. The river channel type of localities is represented by the Skirnevka riverbed. The river channel is winding, 2–5 m wide, average depth – 0.5 m, the banks are low, covered with grassy and shrubby vegetation. The river is complicated by the tracts of the pond and the island of Poplar. The floodplain type of areas is represented by tracts of leveled surfaces, composed of alluvial deposits, covered with meadow soils with park plantings with numerous small architectural forms. Garden and park «Arcadia» is an example of a floodplain type of garden and park landscapes. The area of the research object is 14.5 hectares. Today, the garden and park landscape «Arcadia» is part of the museum in Neboriv, which was established in 1945.

Romania is a Danube, Black Sea and Carpathian country, which has a favorable geotourism position: access to the Black Sea, the mountain system of the Carpathians, close geographical location to Western Europe. The ethno-identifiers of this state are: Danube, Carpathians, Dracula, Bran, Maramures, Mamaliga, Tsuyka, Khorezm pottery, vase «gale», Romanian porcelain, Easter eggs, Tudor Vladimirescu, Tristan Tzara, Mircea Eliade, Nicolae Giurescu (Smal, 2011). Garden and park landscapes of this area are represented mainly by national parks. These are: Bucegi Nature Park, Neamt Vinetor, Apusen Mountains, Mechin Mountains, Munchelului – Choklovin Hredges, Danube Delta, Domogled – Valya Cherney, Iron Gate, Kozia, small basin of Braila, Pietra Craiului, Retezat, Rodna, Semenyshe – Umelyche Bikaza – Hashmash, Ner Gorge – Beushnitsa, Chahleu.

Slovakia is a country with a favorable geotourism position. It is located in the center of the European market of tourist services, has rich landscape and balneological resources, as well as comfortable weather and climatic conditions. In fact, Slovakia is a country in the tourism industry that meets the needs of skiing, balneological and climatotherapy recreation, health and medical treatment. As for its identifiers, they are as follows: Tatras, Morava, Devin Castle, Demanovska Valley, Travnice, Chrpak, Volashki, Fujara, Slivovitz, Tatra Tea, Modra pottery, Oshtepok cheese, Drunkards, Hockey, Alexander Dubcek, Zigmu, Peter Dvorsky (Smal, 2011). The garden and park landscapes of this territory are represented mainly by national parks: Velka Fatra, Mala Fatra, Muranska Polonyna, Low Tatras, Pieniny, Polonyny, Slovak Karst, Slovak Paradise, Tatras.

Hungary is a country of «thermal baths». It is located in close proximity to both Western and Eastern European consumer markets, has favorable natural and cultural-historical preconditions. Cultural identifiers of this state are the Danube, Lake Balaton and Hévíz, Tokay wines, thermal waters, salami, lecho, Rubik's cube, Chardash, Hungaricum, operetta, Icarus, Sandor Petofi, Imre Kalman [9]. Garden and park

landscapes of Hungary are represented by the following objects: the National Botanical Garden (Vazratot), Memenoto Park (Budapest), the Hungarian-Turkish Friendship Park (Sigetvar).

Ukraine is the largest country in Europe, which has rich natural conditions and resources, history of formation and development and, as a result, significant natural and historical and cultural recreational resources. Scientists note that in terms of geotourism, it has the following features: located in favorable climatic conditions; has access to the Black and Azov Seas; the territory is characterized by landscape diversity; rich history and culture, being in the zone of interaction of Catholicism, Orthodoxy and Islam; neighborhood with EU countries. As for ethnic identifiers, they are as follows: Dnieper, Hoverla, chernozem, Sophia of Kyiv, Kyiv-Pechersk, Pochaiv and Sviatohirsk Lavra, Trypillia, Cossack culture, Khortytsia, hopak, oak, viburnum, poppy, sunflower, stork, Chersonese, Kamyana Grave, Chernobyl, borsch, dumplings, embroidered shirt, pysanka, bandura, Kobzar, Shchedrivka, Baturyn, Kruty, Kholodny Yar, Volodymyr Velyky, Oleksandr Dovzhenko, Lina Kostenko, Okean Elzy, plane Mriya, Vitaliy and Volodymyr Klychko, Dynamo, Valery Lobanovsky (Smal, 2011), etc. As for garden and park landscapes, these are numerous objects that form the nature reserve fund of Ukraine, are monuments of architecture and urban planning, etc. Among them, it is worth focusing on the characteristics of the Sofiyivka National Dendrological Park of the National Academy of Sciences of Ukraine.

The park was founded by Polish magnate Stanislaw Szczenny Potocki. Construction began in 1796 under the direction of engineer L. Metzel and continued, alternating with long periods of calm, almost the entire nineteenth century and part of the twentieth century. Today I.S. Kosenko, studying in detail the history of the creation of this garden and park landscape, distinguishes six stages of development of «Sofiyivka»: 1796–1832; 1832–1859; 1859–1929; 1929–1955; 1955–1980; 1980 is our time. At the first stage, the construction was supervised by Captain Engineer Ludwig Metzel. He was ordered to build cascades and waterfalls, plant watersheds, and conduct a significant amount of earthworks. In the first four years, the construction of hydraulic structures was carried out most intensively, underground locks, grottoes, fountains were created, stone boulders were moved and installed in the appropriate order. Local stones were used to create dams, bridges, locks, pedestals for sculpture. Grottoes and waterfalls were created from stones. The underground river Acheron was breached, the oval bed of Lake Acheron was made, the Valley of the Giants was created, and so on. Simultaneously with the movement of stones in the park cleared areas for picturesque lawns, planted deciduous and coniferous trees, ornamental shrubs. Local and exotic species of trees were used in the construction of the park – sycamore, various species of pine, spruce, fir, tulip tree. Bare slopes of beams were planted with local species – oak, linden, maple, hornbeam and ash. Some large exotics were brought from afar and planted in lawns to create finished park compositions. Thus were formed the main arrays of the park called Dubinka, Hrybok and Zvirynets. At the beginning of the 19th century, reservoirs and an island were created, the course of springs was changed, fountains and waterfalls were

built, a greenhouse was built, trees and bushes were planted. Until 1836, the entrance to Sofiyivka was only from the greenhouse.

The park was opened in May 1800 to the birthday of Sophia Glavan-Witt-Potocka. By 1805, the main cascade was created, the underground river Styx (Acheron), locks, stone grottoes, filled with water Upper and Lower Ponds. The park was decorated with marble copies of ancient sculptures, obelisks, decorative vases. Its corners have received a symbolic name associated with ancient mythology, local legends, events of the owner's family. There are no documents that would prove the existence of a general plan for the creation of the park. There is an assumption that the works were planned directly «on the spot», based on the experience of masters, creative intuition of L. Metzel and other engineers, gardeners, artists, as well as by processing unsuccessful details and gradually approaching the ideal model (Bilous, 2001; Kosenko, 2003; Kosenko, Hraban, Mitin, Garbuz, 1990).

Sofiyivka National Dendrological Park of the National Academy of Sciences of Ukraine was established on the territory divided by beams and the valley of the Bagno River with outcrops of crystalline rocks on the day surface, covered with steppe meadows. Initially, S.Sh. Potocki planned to turn the entire Kamyanka river valley with hills and granite cliffs into a large English park equipped with numerous cascades and fountains. It was planned to plant all the surrounding hills with trees with lush leaves, in the open spaces south of the river Umanka, southeast of the village Gorodetsky Uman district of Cherkasy oblast, to create a solid green area, and in the northwest to connect the park with the Greek forest. In the west, it was to start from the city outpost (now the area of the intersection of European and Great Fountain) and continue east to the modern village Pikivets, Uman district, Cherkasy oblast (Bilous, 2001; Kosarevsky, 1961; Kosenko, 2003; Kosenko, Hraban, Mitin, Garbuz, 1990; Kucheriavyi, 2005).

During the following periods the development of the park territory took place, the borders were arranged, the construction of small architectural forms was carried out, the species composition of flora and fauna increased (Kosenko, 2003). Since the opening of the park in May 1802, its area has increased by 118.4 hectares, which is a characteristic feature of this garden and park landscape. «Sofiyivka» is an example of a valley-beam garden-park landscape, the landscape structure of which is formed by tracts of channel, floodplain, slope and watershed types of areas.

During the second period (1832–1859) the park underwent significant changes. Sadova Street was built in 1833, connecting the park with the city, in 1838 the Main Alley was widened and paved, and water was drained from the center of the park to the Main Entrance. In 1844, two Gothic towers were built at the Main Entrance. In 1841 – the Arbor of the Fungus and the Chinese Arbor. From 1842 to 1845, the Flora Pavilion was built according to the design of the architect Rapponet. 1843–1845 – Pink Pavilion on the island of Anti-Circe. After visiting the park in 1847, Tsar Nicholas I rebuilt the entrance towers, the Flora Pavilion and the Pink Pavilion (1850–1852). The Grotto of Apollo was filled up on the terrace of the Moose and the obelisk «Eagle» was

installed. Most researchers point out that the second period of Sofiyivka's development was the main one in the construction of architectural structures. In 1889–1890 V.V Pashkevich laid the arboretum. The area of the park has increased due to the addition of the Grekova Balka tract, where a forest nursery was established. In 1946, the Council of Ministers of the Ukrainian SSR adopted a special resolution on the restoration and improvement of the Uman State Reserve «Sofiyivka». 1 million rubles were allocated for the repair and restoration of the park. In 1948, the master plan for the restoration and development of the Sofiyivka Reserve was approved. 1949 – an ornamental nursery was created on an area of 20 hectares. At this time, work is underway to repair and restore small architectural forms, road-alley system, sculptures of the park; inventory of tree and shrub species. In 1958, according to the resolution of the Cherkasy Regional Council «Sofiyivtsi» 6.19 hectares of land were allocated at the expense of the lands of the Uman City Communal Economy and 9.5 hectares at the expense of the lands of the Uman Agricultural Institute. In 1972, a 5.1 hectare territory formerly owned by a military unit was annexed to Sofiyivka. Since January 23, 1991, Sofiyivka has been granted the status of an independent scientific institution of the National Academy of Sciences of Ukraine. Works on restoration and restoration of park objects, expansion of the territory are carried out. Thus, the modern park occupies part of the Kamyanka river valley, Grekova beam and Zvirynets beam. The current area is 179.2 hectares. The main axis of composition is the valley of the river Kamyanka, which is the focus of all architectural compositions.

The Czech Republic is a country of amazing architectural examples. Its identifiers are Karlovy Vary, Charles Bridge, St. Witt's Cathedral, Moravian Karst, pomegranate, Skoda, Becherovka liqueur, beer, platters, bohemian crystal, Warsaw, polka, hockey, Jan Hus, Jaroslav Hasek (Smal, 2011). The garden and park landscapes of the Czech Republic are represented by the following objects: Waldstein Garden (Prague), Prague Gardens (Prague), Žleb Castle and Park (Žleb), Gluboko nad Vltavou Castle (Prague), Castle and Park Troy (Prague), Konopiště Castle and Garden (Prague), Prague Botanical Garden (Prague), Pruhonice Castle and Park (Prague). It is worth noting that the special garden and park landscapes of the Czech Republic are the castle gardens in the cities of Kromeriz, Telc, Trebon, Cesky Krumlov.

There are seven gardens surrounding the Prague Castle. The Royal Garden is historically the most valuable of them. Originally a Renaissance garden, with some beautiful elements of architecture inspired by Italian influences, it used to be a place, where the king and his family relaxed, played games and raised exotic plants. There is an exceptional Renaissance building the Royal Summer Residence, the Royal Ball Game Hall and some valuable Renaissance and Baroque sculptures and fountains.

The Royal Garden is a garden and park landscape around Prague Castle in Hradčany in Prague. Its area is 3.6 hectares. It is separated from Grad by a reindeer beam. The garden was founded by King Ferdinand I in the Renaissance style in 1534 on the site of medieval vineyards. The garden was designed to grow trees atypical for Central Europe. This is how chestnuts, maples and hazelnuts appeared in Prague.

The Royal Garden is considered one of the first examples of the application of Renaissance principles in the planning of garden and park landscapes. The park was organized at the Castle, in close connection with the dominant building – the Royal Summer Residence of Queen Anne. The unity of architecture and nature was preserved. Regularity and accuracy in planning.

The first work began in 1535, for which Ferdinand I invited the Italian architect Giovanni Spazio. Under his leadership, a wall appeared. Landscaping was to be prepared by the Italian Francesco (Francis Skaryna). Later, Paolo della Stella was invited for this work, and in 1538 he began to build the summer palace of Queen Anne according to all the canons of the Renaissance garden – at the highest point. From the east the relief went down sharply, and in the west there was a flat horizontal surface. Dr. Hugo Vennia from Kotreik was invited to form the garden and laid the foundations of the botanical garden. The decorative elements were created by the Reinhart brothers from Alsace. The garden and park landscape was to be supplemented with sculptures, so Ferdinand I ordered two bronze fountains (one of them singing – located in front of the entrance to the summer palace).

The most important building in the Royal Garden, the Royal Summer Residence, was built between 1538–1563 for Queen Anna Jagiello. Projected by Paolo della Stella and later by Bonifac Wohlmut. In front of the building there is the beautiful Singing Fountain from 1568. Ferdinand I was interested in exotic plants, so there were soon Mediterranean plants such as orange trees, lemon trees and fig trees growing in the garden. In 1570 a special building was built for it. There are only walls preserved of this building nowadays, but figs grow at the place again after years. In 1554, the Royal Garden in Prague was the first place in Europe, where the tulips were growing. It was bought in Turkey, and it became so admired, that it spread to the whole Europe from Prague, and started to be grown in Holland. Ferdinand I also founded the Lion Courtyard in the Royal Garden. It used to be a place for keeping exotic animals. The buildings around the Lion Courtyard were built by Ulrico Aostallis in 1583. Nowadays, there is a restaurant with a special view on the St. Vitus Cathedral.

The successors of Ferdinand I continued with cultivating the garden. Maxmilian II had the Royal Ball Game Hall built there by Bonifac Wohlmut between 1567 and 1569. It was used for sport activities of the Emperor's courtiers, as well as the shooting-range or skittle alley nearby. Various competitions and games were organized here. There is a valuable Baroque Hercules fountain from 1670 by the Royal Ball Game Hall.

Maxmilian II had also new precious plants grown here, so there were such specialities like narcissi or bluebells at the time. The successive Emperor Rudolph II founded a pheasantry in the Royal Garden in 1604. He made an astronomical observatory in the Royal Summer Residence, used by Tycho de Brahe and Johannes Kepler. He had also his favourite lion Mohamed, a present from the Turkish sultan, kept in the Lion Court.

The Royal Garden was seriously damaged during the Thirty Years' War. It was restored in the second half of 17th century by Leopold I, still in the Renaissance style. The Royal Garden was changed in 1740s: it was projected in Baroque style, decorated

with statues by M. B. Braun, and there was a new glasshouse built by K.I. Dienzenhofer. The valuable sculpture *The Night* by M. B. Braun is situated in front of the Royal Ball Game Hall. There used to be a similar sculpture *The Day*, but it was destroyed by Prussians in 1757. The final big change of the Royal Garden came in the 19th century. It became an English park. Today the Royal Garden is accessible to the public, it is only closed during the wintertime.

Thus, garden and park landscapes are objects that combine the natural features of the territory and its cultural features, due to the history of formation and development. Today it is a group of man-made landscapes, which should be considered as an example of the cultural heritage of Central Europe, as well as areas of modern recreation and tourism.

References:

1. Arkadia (powiat łowicki). [https://pl.wikipedia.org/wiki/Arkadia_\(powiat_%C5%82owicki\)](https://pl.wikipedia.org/wiki/Arkadia_(powiat_%C5%82owicki))
2. Bilous, V.I. (2001) *Landscape art. A brief history of development and methods of creating art gardens*. K. : Scientific World. 299 p.
3. Cultural tourism in the UA macro-regions: Cultural Routes to increase the attractiveness of remote destinations. Routes4U Project. European Commissions and Council of Europe. June. 2020.
4. Curl James Stevens. *Arkadia, Poland: garden of allusions*. *Garden History*. Vol. 23, № 1, pp. 91–112.
5. Denisyk, G.I. (2012) *Anthropogenic landscape science. Part I. Global anthropogenic landscape science*. Vinnytsia: PE «TD «Edelweiss and K». 336 p.
6. Hudzevych, A.V. (2005) *Regional physical geography (Europe and Asia)*. Vinnytsia: «Windruk». 464 p.
7. Kosarevsky, I.O. (1961) *Parks of Ukraine: methods of creating a park landscape*. K. : State edition of the literature of construction and architecture of the USSR. 176 p.
8. Kosenko, I.S. (2003) *Dendrological Park «Sofiyivka»: monograph*. Uman. 230 p.
9. Kosenko, I.S. Hraban, G.E., Mitin, V.V., Garbuz, V.F. (1990) *Dendrological Park «Sofievka»*. K. : Naukova Dumka. 160 p.
10. Kucheriavyi, V.P. (2005) *Landscaping of populated areas*. Lviv: Svit. 456 p.
11. Lichanski Jakub Z. (2009) *Arkadia, Poland: a homage to Romanticism (Arkadia kolo Nieborowa: Homagium dla romantyzmu)*. *Rocznik Historii Sztuki*. Vol. 34, pp.