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CURRENT STATE AND DEVELOPMENT OF THE CITY PARK IN SKOPJE

STANJE I RAZVOJ GRADSKOG PARKA U SKOPLJU

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Abstract

The City Park in Skopje was established in the early 20th century. There are not many historical data about its establishment. Only modest documentation could be found, for the period between the two world wars.

At the beginning of the 20th century in Skopje a couple of avenues and green areas have been built. The bigger green area was the one on the location where today's City Park is built. It was called "Islahane", after the craft school around which it was established. Its establishment is connected with Hafiz Mehmed Pasha and the period of Ottomans domination in Macedonia. Built in 1905, it spread out over 16 000 m^2 and was organized in a classical, geometric style, with trees, shrubs, floral elements and pathways. It was founded on where today's City Park is located.

Through the years it has changed until it got today's dimensions and borders. The biggest change in its structure was made in the '70s of the 20th century when the basic main project for the City Park was made. In the last ten years intensive work on its reconstruction has been done, so there is more relevant data for the Park for this recent period of time.

Besides its establishment, this paper presents the current state of the Park, its main characteristics and functions. It gives a review of the vegetation and other park elements, as well the state of its overall area and the changes that have occurred to date.

Keywords: City Park, floral elements, green area, park elements, shrubs, trees, vegetation

1. INTRODUCTION / UVOD

Parks are the most important elements in the city system of greenery. They have many functions that are very useful for the citizens in today's way of life. A fast way of life in the cities requires people to spend more time in the green areas for rest, recreation or sport activities (Anastasijević, 2007).

The greenery in an urban environment has positive influences on many aspects of people's lives. It influences in seizing the air pollution, high summer temperatures, and gives other benefits to the people in the big cities (Simonov et al., 2002).

At the beginning of the 20th century in Skopje only a couple of areas with avenues and lawns were built. Some new green areas were built there like the one which rose up on the loca-

tion of today's City Park. As the city grew, the need for parks and green areas grew more. So, many of them were built up there after the II World War and especially after the catastrophic '63 Skopje earthquake. In the period of the city renewal, the planting of trees was planned, but after that, there was a period when plants were planted more spontaneously.

The City Park in Skopje is an open Public Park. It was established in 1905 by Hafiz Mehmed Pasha when Macedonia was under Ottomans domination (Almanah Opštine grada Skoplje, 1928).

It spread out over 16 000 m^2 and it was formed in classic, geometric style. There were trees, shrubs, floral elements and pathways. It was called "Islahane", after the craft school around which it was raised up and it was founded on the location where present City Park was later built. It had not changed until the '70s of the XX century when changes in its structure were made. It was a period when basic project for the City Park was made as a quite solid project in which principles of solving some urban problems were established for the first time.

But many decades passed until the real reconstruction in the park was made. It happened in 2009 and since then there have been constant interventions in a way of planting or introducing various elements there. Conceptually, today the City Park is organized in landscape style. It gives many opportunities for the ones who want to do some activities there, like rest, recreation, etc. (Mihova, 2011).

2. OBJECTS AND LOCATION / OBJEKAT ISTRAŽIVANJA

The object of research is the City Park of Skopje. From its establishment and further on through the years, the Park has been enriched with various plant species, park elements and architectural objects so it spread out to its present borders.

City Park today is spread out on the central part of the City of Skopje on 370 267 m^2. Its borders are: east to the Naum Naumovski Borce and Leninova Streets, west to 8 Septemvri Street, north to Vardar River and south to Ilinden Boulevard, the Zoo and nursery garden (Figure 1).

Figure 1. Location of the City Park. *Retrieved February 15, 2016, from* http://www.orangesmile.com/travelguide/skopje/high-resolution-maps.htm

3. METHOD / METOD

Method of work is based on theoretical-conceptual, practical and research approach which means that the analysis includes terrain activities and office work. The research was realized in phases. In the first phase, a proper literature and concrete projects that affect the object of research had to be gathered. In the second phase historical data found from various sources were analyzed, considering the collected photos from each period of the development of the park. The third phase consisted of terrain prospection, analysis and recognition of condition of the various elements in the park especially of the plant species there. The location where the Park was established was determined. In the process of research, from 2012 to 2106, a new photo documentation was done and used in the following phase together with collected photographs. The fourth phase was office work which included analyzing of gathered information and data taken with the terrain work over research on the elements. These studies also gave answers on questions connected to current state of the park considering changes of the plant and architectural elements through the years. Syntheses of the results led to concrete conclusions that will be presented below.

4. HISTORY OF SKOPJE CITY PARK / ISTORIJA GRADSKOG PARKA U SKOPLJU

The public green areas in Skopje appeared at the end of 19th and the beginning of 20th century when first data for the City Park are found (Istoriski arhiv, 1968).

In that period, European way of life started to affect the society in many aspects including green areas. Over the years they have changed and have been spread out in the city according to its urban planning.

Rising up green areas was more intensive in the period between the Balkan Wars, which was the beginning of foundation of the City Park on the right bank of Vardar River (Figure 2).

At the beginning of 20th century, Skopje's sanjak belonged to Kosovo's vilayet ruled by Hafiz Mehmed Pasha. Among his other occupations, he was dedicated to education, so he started to build "Idadija" high school that was very close to the present City Park. He also built gymnasium "Idadija mektebi" (Figure 3) and arranged river beds of Vardar and Serava Rivers (Istoriski arhiv, 1968).

The Park founded near craft school "Islahane" (Figure 4) was designed by Hafiz Mehmed Pasha's architects and for years it was known as Islahane Park. The terrain there was flat and it was often flooded by Vardar River because of its vicinity and not regulated river bank.

Figure 2. Islahane in 20s of 20th century. *Retrieved October 15, 2018, from* https://www.novamakedonija.com.mk/makedonija/skopski-legendi

Figure 3. Teacher's school "Idadija mektebi". *Retrieved February 15, 2016, from* https://commons.wikimedia.org/wiki/File:Skopje,_razglednica_so_Idadija,_1928.jpg

Figure 4. Islahane-the craft school. *Source*: World Wide Web

The first part of Idadija Park, (Figure 5) according to some data was spread out at 7600 m^2 and by other 113 ha. The plants were set up in parcels by special plan. Other data indicate the park was built up on 16 000 m^2 in approximately quadratic form (Figures 6 and 7).

Figure 5. "Idadija" Park in 1931. *Retrieved December 17, 2016, from* https://skopjeinfo.mk/za-nostalgicharite-pivo-i-porcija-kjebapi-vo-omilenata-skopska-kafeana

Figure 6. Park Idadija in front of Kermes restaurant. *Source*: World Wide Web

Figure 7. Park Idadija near Kermes restaurant now. *Source*: World Wide Web

First trees planted there were *Populus tremula* L., *Platanus orientalis* L., *Robinia* sp., *Salix* sp., *Tilia* sp., *Ailanthus* sp., *Catalpa bignonioides* Walter, *Fraxinus oxycarpa* Willd., and at the edges of the Park, *Populus simonii* 'Fastigiata' (Džekov, 1954a,b) (Table 2). There were also small shrubs, grass, perennials and flowers in pots (Table 3). The park had a restaurant and two tobacco and newspapers shops.

The park built up in those borders is the oldest part of the present City Park. It was framed with *Populus simonii* 'Fastigiata' that was in the same time border line of the park in the area where restaurant "Kermes" existed (Figure 7). Those borders stand even today enriched with floral elements and compositions (Table 2).

Beside the tree lines, roses were also planted in the Park (Table 3). Many trees like poplars, ashes, acacias, plane trees stand up in the Park even today. But some old plane trees with big dimensions were cut in 2009.

After building the Islahane school, in 1903, in the school yard young plants of *Pinus nigra* J.F. Arnold were planted. In the avenues of the park, many flowers, domestic and exotic ones, were set up. A pump and pond pool with water taken from Vardar River were made for irrigation. A new part of the Park that took 4800 m^2 where the area was divided on parcels planted with trees was also arranged (Kara-Radovanović, 1937).

There were a few architectural objects in the Park such as the City House (Figures 8 and 9), while especially interesting was the house of the park

manager built in Swiss style. Next to it, there was a glass-house of 200 m² for production of flower seedlings used for Park arrangement.

Figure 8. City Park-City House in the past. *Retrieved February 15, 2016, from* https://mk.wikipedia.org/wiki/Градски_Парк_(Скопје)#/media/File:Park_starofoto.jpg

Figure 9. City Park-City House. *Source*: World Wide Web

The park had several plateaus. In the park avenues on 2200 m² were planted 750 trees: 100 *Populus* sp., 200 *Ailanthus* sp., 250 *Robinia* sp. etc. There were also planted hedges that looked unique. There were planted: 267 various kinds of tall trees, 500 small, 90 conifers, 50 topiary formed boxwood species (*Buxus* sp.) and 200 various kinds of roses (Tables 2 and 3).

From 1918 until 1928, 25 707 plants were planted, 30 benches were set and a guardhouse was bulit for the park security. The Park kept that size until 1923 when the first reconstruction started. (Almanah Opštine grada Skoplje, 1928).

After the I World War, Skopje became an administrative and cultural center. With the influx of the new population Skopje continued to be built and redesigned, which also affected the City Park. So, in 1923 an Austrian gardener was invited to redesign the Park. He extended the Park in direction of the present City Zoo, organizing it in a formal, classic style with a centrally positioned fountain. Within its extension to the west, in 1928 it was enlarged up to the present borders including the City Zoo. The enlargement also went to the north of the old Park, so in 1931 (Figure 5) it spread out to the canal near the so called "Pioneer railway" (Figure 10). In ten years period, the rest of the park Idadija founded in the time of Turkish Empire, extended to the west, and finally the old City Park was established. That is the part of the Park, which today we call the first part of the City Park.

Figure 10. "Ezerce" restaurant and the park-railway. *Source*: World Wide Web

On the bank of Vardar River, near the Park, there were white and black poplars on their natural habitats. They were the most represented trees from all other exotic species. French travel writers recorded that "Vardar is wide river with clear water and high poplars on its banks" (Monev, 1991).After three years stay, Austrian gardener left Skopje. His place was taken over by engineer Protić. Dedicated to his work, he continued to follow the famous French school of park arrangement, building up parts in the Park in a formal, classic style with species pruned in round, spherical forms, topiary of *Buxus sempervirens* L. and umbrella forms, topiary of *Ligustrum ovalifolium* Hassk. With that arrangements in 1941, the City Park got its new look.

When the first part of the Park was finished, the arrangement of its second part started. The idea was that the river bed of Vardar River to be moved away from the Park, especially from the City Zoo. The first systematic organization of this part of the Park started when dr Slavko Karaman was nominated as director of the Zoo under whose competence was the second part of the City Park. He managed to do a very simple irrigation system using the water from Vardar River. Considering vegetation, beside willows, poplars and acacias, there were also *Gleditsia* sp., *Pinus* sp., *Catalpa* sp., *Sophora* sp., *Maclura pomifera* (Raf.) Schneid., *Salix babylonica* L., *Thuja orientalis* L., *Ligustrum* sp., *Elaeagnus angustifolia* L. (Džekov, 1955) (Table 2). This part of the Park was on 85 ha and together with the first part, it took 93 ha. We couldn't say it was typical Park with park elements in it. It was a huge green complex with tendency to become a park. In the period of the Second World War, from 1941–1945, there was a stagnation in the arrangement of the Park. In that time some extraordinary poplar specimens were cut on Ilinden Boulevard, just before the entrance of the Park. After the liberation, the renewal and rearrangement of the Park started. A communal organization was founded to maintain it. In that period, the Park enlarged its area to 114 ha. Part of the first part of the Park was renewed and rearranged with new species, among them perennials and floral compositions. Pathways were reconstructed and covered with asphalt, and new objects for rest and recreation were built (Figure 11).

Figure 11. "Kermes" restaurant in the past. *Retrieved September 16, 2017, from* https://skopjeinfo.mk/staro-skopje-vo-kafeana-na-edna-rakija-alovina-boza-i-salep

5. RESULTS AND DISCUSSION / REZULTATI I DISKUSIJA

There was no document that could legally regulate the perspective of this type of green area, so the problems were solved partially. The new urbanization in the City and regulation of the river bed of Vardar River brought some difficulties. The low level of the groundwater, caused by regulation, affected the vegetation there, drying out part of the vegetation in some parts of the Park.

Other negative consequences on the Park caused the '63 catastrophic earthquake that had a bad impact on the whole look of the Park. For a long time no City authority has taken up the full realization of the main project for the City Park in Skopje, which was for the area of 50 ha. Citizens of Skopje know it by several recognizable points such as the monument "Goce Delchev" (Figure 12), the fountain "Lotus Flower" (Figure 13) and the entertainment part for children. But there were also plans for Japanese garden, an exhibition pavilion and a summer reading room with an awning.

Figure 12. Platau in front of "Goce Delcev" monument. *Source*: PE Parks and Greenery archive, 2008

Figure 13. Fountain "Lotos flower" 1970. **Source**: World Wide Web

Figure 14. Fountain"Lotos flower" 2009. *Source*: World Wide Web

Instead of swimming pools and reading rooms, mentioned in the plan, the park has remained covered only with grass. Three large lakes, a flower island, bathing pools that would only be an imitation of the former Russian beach along Vardar, a tower for observation, a summer scene over water are only part of the contents anticipated in the City Park, which unfortunately have been forgotten and remained only on paper (Šojlevski, 1970).

The main project for the City Park is in the PE "Parks and Greenery",(JP Parkovi i zelenilo, 1996) located in 17 folders, with a seal and urban permission from the City authority. According to this project, the entrance of the park was planned opposite from the High School "Orce Nikolov" where today tennis courts are located. A pompous entry was envisaged, with two new huge alleys, new lake and baroque columns with relief, on which the contents of the park would have been drawn out. From there it was planned to be the entrance of the newer part of the Park, today called the second part of the Park, where it should be an assembly library from which the citizens would take books and read in the nature on the nearby benches. Also, according to the plan, an observation tower with a restaurant and three open swimming pools with clean water were planned there, next to the jetty of Vardar River.

From the project, one can see that a construction of nursery for decorative plants is planned in front of the headquarters of PE "Parks and Greenery". In front of the entrance, there are shops and parking space, while at the very beginning there is a sculpture. A flower park with a fountain, a large lake, a flower island, an administrative park building, a fishery, an exhibition pavilion and another large fountain were also planned. Also, the project envisaged a children's playground, tennis courts, basketball, volleyball and mini golf playgrounds, a boat port, a bird garden, a zoo, summer stage with a stage over water, Japanese garden, park of sculptures and several avenues near linden boulevard with magnolia and plane trees.

But, from all of that, in this part of the park only the infrastructure elements like pathways and ponds have been built (Table 1). There is only one sanitary facility on almost 50 ha. In the first part of the park, not all contemplated content has been realized. Behind "Kermes" restaurant (Figure 11) a Baroque fountain has been built (Table 1). In the place where there is the labyrinth of hedgerow, lake with a restaurant in the middle is planned. There have also been plans for a chamber stage, at the site of today's improvised stage called "Shell", and parking space on location of today's City Hall. The pond that exists next to the restaurant "Ezerce" should have been a parking place.

The author of the project from 1970 considered that for optimal use of the territory of the Park there should be an entrance located between the Zoo and the City Park nursery.

It should be emphasized that with Skopje climate conditions, without water, it would not be a well-regulated park. One of the basic issues was the regulation of the provision of water for creating favorable living conditions for vegetation in the park (Lozanova & Vasileva, 2011).

Šojlevski (1969-1970) made a project for the Park trying to avoid plant species sensitive to diseases. From all the vegetation there, the most affected species were the poplars, as dominant trees in the Park. This project also reduced the park's area as a result of the urban disposition, as well as for possibilities for financing its arrangement and its maintenance.

Irrigation system was planned to be on the entire surface of the Park, to enable more efficient maintenance of the vegetation and especially for the exotic plant species with high decorative values.

Skopje should have had three parks. It was deliberately envisioned that the new parks would be nearby Vardar River in order to disallow buildings near the river and to be a barriere from the flow. It was predicted to preserve the city from the summer high temperatures, which unfortunately failed when "China Wall" building was erected on the spot where the international auto camp was first positioned.

In the General Urbanistic Plan of Skopje (GUP) since 1974 two more parks beside the existing one were planned. The one beside Vardar River, in a direction of the New Railway Station and the other to extend near Vardar River to Karposh settlement, where today "Alexander Palace" Hotel, "Boris Trajkovski" Hall and "Mladost"swimming pool are built.

In the current General urbanistic plan since 2002 there has not been such locations because greenery is associated with the purpose of sports and recreation. According to it, urbanization of Skopje determined the location of City Park at the area of 80 ha.

At the beginning of 2008 there was an open competition for a horticultural arrangement of a part of the City Park. In May 2008 the whole area near "Goce Delcev" monument and "Lotus flower" fountain together with the pavement on 2718 m^2 was rearranged (Table 1, Figures 12 and 14). Also, the marble of the monument's postament was changed and new light poles were placed. Following months the paths were rebuilt and new trees were planted. On 3rd of September the platau in front of "Shell" podium was paved and the Park got its new look. Also, new safety posts were placed there as a fence for motor vechicles.

The new look of the Park appeared on 29 April 2008, on the birthday of the Queen of Holland, when green labyrinth was raised up (Figure 15) as a gift from the Ambassy of this country. Near the labyrinth a children's playground has been established.

Figure 15. Area for green labyrinth, established 2008. *Source*: PE Parks and Greenery archive, 2008

Besides the old plants in the Park, (Figure 16), new 1020 white and grey colour planters were set in two and three rows, from the stairs along the path near the Stadium (Figure 17). Considering the drinking fountains, the existing ones have been renewed, while some new ones have been set. Besides those, the pet fountains were also set (Table 1, Figure 18).

Figure 16. Part of the City Park near the Stadium. *Source*: PE Parks and Greenery archive, 2008

Figure 17. Part of the City Park. *Source*: PE Parks and Greenery archive, 2008

Figure 18. Water element for pets (© R. Apostolovski)

In the past few years, some activities, such as cleaning the bottoms of the lakes and horticultural arrangement of the area near the lake in the first part of the Park have been done. At the same time, some old trees have been cut there. In the second part of the Park bridges have been renewed and the whole look of that part of the Park started to change (Figure 19). But "Ezerce" restaurant has remained the same as a monument of an old time (Figure 20 and 21).

Figure 19. Bridge over a lake in the Park. *Source*: PE Parks and Greenery archive, 2008

Figure 20. Pioneer railway near the Ezerce restaurant. *Source*: PE Parks and Greenery archive, 2008

Figure 21. Part from the City Park (© I. Apostolovska)

In the spring of 2010 the Mayor of the City insisted on renewal of the floral areas in the first part of the Park. New floral arrangements have been set there with new season flowers. (Table 1, Figures 22–24).At the same time the main entrance of the Park from Ilinden Boulevard has been decorated with floral elements.

Figure 22. Floral composition of summer flowers (© I. Apostolovska)

Figure 23. Flower beds of summer flowers
(© I. Apostolovska)

Figure 24. Floral composition in the Park
(© I. Apostolovska)

In March 2012 in the second part of the City Park the first pet park was opened on the area of 1200 m^2. The elements there were closed within 1.5 m high fence. The main purpose for that was to protect the green areas in the Park from the irresponsible pet owners.

In the second half of 2012, at the first part of the City Park on many locations wooden sculptures have been set up. They were on various themes, mostly taken from the cartoons and fairy tales. They are intended for the youngest population. 70 more of them has been planned to be set in the next two years (Figure 25).

These elements and others have been predicted with the Program for parterre arrangement, setting sculptures and other park elements in the central part of the City Park. But, until now, nothing was done.

Figure 25. Sculpture on cartoon theme
(© I. Apostolovska)

With the Programme for arrangement and maintenance of the Park, it has been predicted building of "Park of civilizations" positioned in the first part of the Park behind "Uranija" restaurant. There, the foreign embassies in Skopje could plant trees, donate sculptures or make playgrounds for children.

Activities connected with parterre arrangements of the City Park and setting up the sculptures and other park elements should be realised through the architectural-urbanistic project and basic projects for realisation of the architectural and urbanistic project in accordance with the law. Proper arrangement of the open city space means a lot for the people in an urban surrounding considering their living and recreational needs (Mihova, 2011).

The closest, most intimate and the best relationship between the observer and the piece of art is when it is placed in the nature, as part of it. Considering that fact, the sculpture takes the advantage over other arts and artistic works. Set in an open space, it gives a seal for a period of time, always in accordance with the other elements there.

The most important guideline in the molding and positioning the elements in the Park is its zone layout, but first it should be determined the basic use of the Park. The zones could be changed depending on the needs of the visitors (Popovski, 1989).

Cadastral overview on elements of the first and second part of the City Park is given in Table 1.

The document is taken from the official documentation from PE "Parks and Greenery", which maintains the urban greenery and the City Park, for the period until December 2016 (Parkovi i zelenilo, 1996).

Table 1. Cadastral overview of the City Park / **Tabela 1**. Katastarski pregled Gradskog parka

Object / Objekat		**2010**	**Part I of the Park, 2016** / Prvi dio parka	**Part II of the Park, 2016** / Drugi dio parka
Lawns / Travnjaci	m²	454 413	98 910	290 385
Conifer trees / Četinari	No.	1 450	1800	1200
Deciduous trees / Listopadno drveće	No.	5900	5700	4800
Conifer shrubs / Četinarsko žbunje	No.	3300	2630	2500
Deciduous shrubs / Listopadno žbunje	No.	6700	6050	6000
Floral arrangements / Cvetni aranžmani	m²	750	523	/
Rosaries / Ružičnjaci	m²	850	/	/
Hedges / Žive ograde	m²	3600	/	/
Ground covers / alpineums	No.	1300	/	/
Perennials / Perene	m²	77	/	/
Asphalt paths / Asfaltne staze	m²	68 200	49 874	41 700
Sandy paths / Peščane staze	m²	27 900	11 348	/
Borders along paths / Ograde uz staze	m²	57 200	67 166	55 600
Fountains / Fontane	No.	3	2	/
Monuments / Spomenici	No.	/	12	3
Benches / Klupe	No.	210	373	218
Waste basket / Korpe za otpatke	No.	50	271	97
Vistas	No.	2	/	2
Bridges / Mostovi	No.	24	19	17
Concrete manholes / Betonski šahtovi 200 x 200 x 140	No.	2	/	/
Drinking fountain / Česme	No.	8	9	3
Electric pumps / El. pumpe 35 kw	No.	3	/	3
Electric pumps / El. pumpe 65 kw	No.	1	/	1
Sectorial sprinkles / Prskalice	No.	450	700	400
Round sprinkles / Obrtne prskalice	No.	7	/	450
Hydrants 1" and 3/4" / Hidranti	No.	26	/	/
Wells / Bunari	No.	/	1	/
Candelabras / Lampe	No.	/	251	162
Sanitary knots / Sanitarni čvorovi	No.	/	2	/
Avenues / Avenije	m²	/	300	/
Pavilions / Paviljoni	No.	/	1	/

According to data presented in Table 1 there are some differences in vegetation between 2010 and 2016. The number of deciduous and conifer trees and shrubs, as well as floral compositions, rosaries, perennial arrangements, hedges, groundcovers and alpineums noted in 2010 are missing in 2016. However, there are aberrations due to bad field work, because the situation in reality is much different; especially in the first part of the Park. There are much more floral arrangements and hedges that do not correspond with the given data. The same is with the number of trees and shrubs because there is no evidence of those, which were cut or planted. But the number of park elements such as candelabras, benches and waste baskets has increased.

The presence, condition and current state of the trees in the City Park is given in Table 2, together with the specification of their presence in 1954 (Džekov, 1955).

Table 2 also presents lists of trees recorded in 2016. There is comparative data for them considering their presence, condition, vitality, position in the Park.

The presence is determined as:

- Low presence, few species in the Park area.
- Good presence, number of species on several locations in the Park.
- Very good presence, number of species on many locations.

Positions of the trees, in groups or as solitaires, were also considered.

Considering condition of the trees, we take vitality of the species as it is:

- Low vitality, trees with small dimensions, not in good shape
- Good vitality, trees in good shape,
- Very good vitality, dimensions appropriate for concrete species, fructification.

Table 2. Comparative table of the species in 1954 and 2016, their presence and condition / **Tabela 2**. Uporedna tabela prisustva i stanja vrsta (1954. i 2016.)

	Trees / Drveće 1954	**Presence / Condition** / Prisustvo / Stanje 1954	**Trees** / Drveće 2016	**Presence / Condition** / Prisustvo / Stanje 2016
1.	*Abies alba* Mill	Low vitality	*Acer platanoides* L. *Acer pseudoplatanus* L. *Acer negundo* L.	Solitaire and in groups
2.	*Larix leptolepsis*	1 specimen, 5 m,	*Aesculus hippocastanum* L.	Solitaire
3.	*Cedrus deodara* Laws	2 specimens	*Ailanthus altissima* (Mill.) Swingle	Spreading out wild
4.	*Ruscus aculeatus*	/	*Betula verrucosa* Roth.	Solitaire and in groups
5.	*Salix alba* L.	Grows naturaly in II part of the Park	*Catalpa bignonioides* Walter	Very good presence
6.	*Salix babylonica*	Low presence	*Cedrus atlantica* (Endl.) Manetti ex Carriere	Solitaire / groups
7.	*Salix pentandra* L.	Grows naturally in II part	*Cercis siliquastrum* L.	Solitaire
8.	*Salix purpurea* ssp. *amplexicaulis* Boisss	Naturally in groups in I part of the Park	*Crateagus oxycantha* L.	Solitaire
9.	*Populus alba* L.	/	*Chamaecyparis lawsoniana* (A. Murrai) Parl. 'Columnaris' *Chamaecyparis* 'Allumi gold'	Solitaire / groups in I part of the Park
10.	*Populus* sp. Sec. *Tacamahaca*	Solitaire trees with low vitality	*Elaeagnus angustifolia* L.	In II part of the Park

	Trees / Drveće 1954	**Presence / Condition** / Prisustvo / Stanje 1954	**Trees** / Drveće 2016	**Presence / Condition** / Prisustvo / Stanje 2016
11.	*Populus deltoides* Marsh	Spread out / fast growth	*Fagus sylvatica* L. *Fagus sylvatica* 'Royal purpurea'	Solitaire
12.	*Betula verrucosa* L.	Very good presence	*Fraxinus angustifolia* L.	Good presence
13.	*Corylus avellana* L.	/	*Ginkgo biloba* L.	In II part of the Park
14.	*Quercus cerris* L.	Few specimens	*Liriodendron tulipifera* L.	Solitaire / groups
15.	*Quercus rubra* Duroi	Few specimens	*Morus alba* L.	Solitaire
16.	*Ulmus effusa* Willd	Grows naturally in II part of the Park	*Pinus nigra* J.F.Arnold *Pinus excelsa* A.B.Jacks	Solitaire / groups
17.	*Ulmus campestris* L.	/	*Picea pungens* Engelm.	Solitaire / groups
18.	*Celtis australis* L.	Present in big number	*Platanus orientalis* L.	Old trees, good presence
19.	*Platanus orientalis* L.	Old species	*Populus nigra* L.	Very good presence, old species
20.	*Magnolia* sp.L.	/	*Prunus serrulata* Lindl. Kanzan, *Prunus cerasifera* Lamotte 'Pissardii'	I part, good vitality
21.	*Acer pseudoplatanus* L.	/	*Robinia pseudoacacia* L.	Solitaire / groups
22.	*Acer negundo* var. *variagatum* Carr.	/	*Salix alba* L., *Salix babylonica* L.	Solitaire
23.	*Sorbus torminalis* (L.) Crantz	Solitaire	*Sequoiadendron giganteum* (Lindl.) J. Buchh.	Solitaire
24.	*Pirus piraster* Borkh	Grows naturally	*Sophora japonica* (L.) Schott	Solitaire
25.	*Prunus mahaleb* L.	1 specimen	*Sorbus torminalis* (L.) Crantz	Solitaire
	Prunus virginiana L.	I part. Low presence	*Taxus baccata* L.	Solitaire
26.	*Caragana arborescens* Lam	/	*Thuja occidentalis* L. 'Rosentalis', *Thuja occidentalis* L. 'Smaragd', *Thuja occidentalis* L. 'Woodwardii'	Most presented
27.	*Amorpha fruticosa* L.	Spread out spontaniosly	*Tilia tomentosa* Moench. *Tilia cordata* Mill.	Solitaire / groups
28.	*Elaeagnus angustifolia* L.	/		
29.	*Paulownia tomentosa* S. et Z.	/		
30.	*Catalpa bignonioides* Walter.	Among the first planted species		
31.	*Campsis radicans* Seem	/		
	Fraxinus excelsior L.			
	Fraxinus ornus L.	Few species		
32.	*Ligustrum ovalifolium* Hassk	Good presence		
	Sambucus nigra L.	Grows naturally near Vardar river		

Table 2 shows the difference in the presence of the species comparing 1954 and 2016. In the table are presented trees by their condition, vitality, presence in groups or as solitairs. The change of the species is obvious taking the long period of time, through which there were natural causes and other risks that affected the vegetation in many ways, considering the regulation of the river bed of Vardar river, the floodings, the earthquake.

Today there is a difference in the number of leading groups of trees, against their varieties, which are increasing, compared to the lists of ones that were planted from its foundation. There are some especially rare species of trees in the City Park. There are species that mainly belong to the South European Mediterranean Region. But, there are others from almost all over the world. They are implemented in groups or as accents in the green areas. *Ginko biloba* and *Sequoiadendron giganteum* should be mentioned as they are especially rare species that are in quite good condition. (Rizovska Atanasovska, 2002).These were brought from Croatia. The first one has about 40 specimens with height of about 30 m. The second one has only three specimens with the height of about 50 m, 30 years old. In the first part of the Park there are 96 *Platanus orientalis* trees that are 100 years old. In the second part there is *Citrus japonica* brought from Brioni, an island in Croatia, *Acer platanoides* "Drummondii", brought also from Croatia and *Liriodendron tulipifera* brought from Netherlands. There are 40 specimens of this species, which are about 40 years old. Among them, there are six specimens of *Crataegus oxyacantha*, 30 years old. What particularly increased the number of decorative plants introduced in the Park are species like *Prunus serrulata* Kanzan, planted in big number in the first part of the Park in 2011 (Figure 26). Not only in the City Park, there are exotic trees in other public green areas in Skopje. Most of them were planted on proper habitats, considering their ecologycal and other needs (Nikolovski, 1955).

Figure 26. Part of the City Park (© I. Apostolovska)

Table 3. Shrubs, perennials and annual plants present in the City Park / **Tabela 3**. Žbunje, perene i jednogodišnje biljke zabilježene u Gradskom parku

Shrubs / Žbunje	**Condition / Presence** / Stanje / Prisustvo	**Spring seedling** / Prolećne sadnice	**Summer seedling** / Letnje sadnice	**Perennials** / Perene
Berberis thubergii DC. *Berberis julijanae* Schneid.	In groups, good vitality	*Viola tricolor* L.	*Petunia* sp. Juss.	*Aster alpinus* L.
Bruousonetia papyrifera (L.) Vent.	Solitaire, old species	*Bellis perennis* L.	*Ageratum* sp. L.	*Ajuga reptans* L.
Buddleia davidii Franch.	Solitaire, old specimen	*Silene* sp. L.	*Salvia* sp. L.	*Cerastium tomentosum* L.
Buxus sempervirens L.	New planted in I part	*Calendula* sp. L.	*Dahlia* sp. Cav.	*Dianthus alpinus* L.
Cornus sp. L.	solitaire / in groups	*Myosotis* sp. L.	*Zinnia* sp. L.	*Festuca glauca* Vitt.
Cotoneaster horizontalis Decne, *Cotoneaster salicifolia* Franch	In groups in good vitality	*Dianthus barbatus* L.	*Tagetes* sp. L.	*Lavandula angustifolia* Mill.

Shrubs / Žbunje	**Condition / Presence** / Stanje / Prisustvo	**Spring seedling** / Prolećne sadnice	**Summer seedling** / Letnje sadnice	**Perennials** / Perene
Cydonia japonica (Thunb.) Lindl.	Old specimen, solitaire / in groups		*Celosia* sp. L.	*Primula acaulis* Huds.
Deutzia gracilis Siebold & Zucc	Solitaire, old specimens		*Impatiens* sp. L.	*Stachys lanata* L.
Euonimus alatus (Thunb.) Siebold	In groups, good vitality		*Pelargonium* sp. L.Her.	*Santolina* sp. L.
Forsythia x intermedia	Solitaire / in groups old specimens		*Verbena* sp. L.	*Lobelia* sp. L.
Hedera helix L.	Spread out		*Begonia* sp. L.	
Hibiscus siriacus L.	Solitaire / in groups, old specimens		*Coleus* sp. L.	
Hypericum sp. L.	In groups, good vitality		*Cineraria maritima* (L.) Pelser	
Jasminum nudiflorum Lindl.	In groups, good presence			
Lonicera nitida E.H.Wilson	In groups, good vitality			
Mahonia aquifolium (Pursh) Nutt	In groups, good vitality			
Philadelphus coronarius L.	Solitaire / in groups, old specimens			
Polygonum aubertii (I.Henry) Holub	Solitaire, old specimens			
Potentilla fruticosa (L.) Rydb.	In groups, good vitality			
Prunus laurocerasus L.	Solitaire / in groups, good vitality			
Pyrocantha coccinea M. Roem	In groups, good vitality			
Rosa sp. L.	In groups, old specimens			
Spiraea japonica var. *alpina*	In groups, good vitality			
Viburnum sp. L.	Solitaire / in groups, old specimens			

Table 3 presents data for the presence of the shrubs, perrenials and annual plants in the Park. Considering shrubs, they are very often in groups, and some of them are planted as solitaires. There are many old species among them and some with low vitality. Many of them were with inappropriate maintenance.

Lately, it is observed that floral compositions are much more present especially in the first

Figure 27. Floral arrangement in the Park (© I. Apostolovska)

part of the Park with floral season seedlings. In one season the average number of flower plants is about 30 000 and for both seasons, 60 000 flowers. The planting is mostly along the paths that gives the lawns and the whole area a more colorful look (Figure 27). There was intensive planting of them in the first part of the Park.

6. CONCLUSIONS / ZAKLJUČCI

On the basis of the research over historic development of the City Park in Skopje from its establishment, the conclusions are presented as follows:

The park was established during the rule of Hafiz Mehmed Pasha.

The initial green area was about 16 000 m^2. Part of this first location of the park exists today, that is the part around the restaurant Kermes.

1923 - an Austrian park gardener extended the park towards the Zoo.

1925 – Eng. Protić organized the Department of Town Greenery and expanded the park according to the principles of the so-called French School

1941 - the first part of the park got its final form. Systematic arrangement of the second part of the park has begun with the arrival of dr. Slavko Karaman as director of the ZOO. In his time an irrigation system that used the water from the river Vardar was set, and also pedestrian paths were made and the flora in the park was enriched.

1945 - After the liberation, along with the general construction and restoration of the City of Skopje, started the rebuilding of the park. During this period, its surface area increased to 114 ha.

1963 - after the earthquake, the regulation of the riverbed of Vardar River started, in order to prevent future floods. As a result, the level of groundwater had lowered, which led to drying out of some old trees.

1970 - the embankment was completed and the park soon got its present form. Today's area occupied by the City Park is 486 000 m^2.

In 1969/70, Šojlevski elaborates a Main Project for the City Park.

The City Park is located in the central part of Skopje.

The basic shape of the Park is rectangular.

The parterre solution is classic, formed from several parts: the entrance, the area around former "Kermes" restaurant, the area around "Ezerce" restaurant, the part under the old plane trees, the labyrinth and the sculptures placed in the first part of the Park, the roundels and floral compositions in the first and second part of the Park.

The parcels are with rectangular and square form in the biggest part of the Park keeping the geometric style from its foundation and later over reconstruction throughout the years the landscape style was introduced. Walking paths are mostly rectangular and they follow the shape of parcels. Flower palette is rich with seedlings with intensive colours that change twice a year. The vegetation is rich and consisted of various domestic and exotic species.

Health condition of the trees, shrubs and other vegetation in the Park is in satisfying condition.

There are many water elements in the Park such as system of canals and lakes, decorative and drinking fountains. There is also irrigation system that provides water for the vegetation and regulates the water regime of the soil.

Considering the soil conditions in future arrangements of the Park, agrotechnical measures and fertilization there have to be done. In the places where the structure of the soil is bad and the depth of the hummus layer is shallow the reconstruction by laying out fertile soil should be done.

The maintenance of the Park is very important. After the '63 earthquake until today there are problems in financing the care of the greenery

and other elements in the Park. Funds must be continually provided for the care and maintenace of the Park. It is a specific object for all the citizens that it must be built up constantly, because it is not only for now and for us, but it has to be of use for the future generations too. We should take care for something that has been built many decades ago, that has its own values and is important for the citizens not only as decorative object, but also in many other ways.

Considering all the conditions and possibilities for development of the City Park, regarding the values for its future arrangements, possibilities for its building, renewal and reconstruction, it should be given an advantage in infrastructure arrangement, taking care of the areas that were never subject of arrangement before.

The anthropogenic factor has a direct influence in many ways on the park areas, and some of them could be connected with devastation of the vegetation and inappropriate management. Other damages could be the: wounds on the trunk of the standing trees making it physiologically weak, changes in the quality and structure of the soil, contamination of the water that can affect their growth, bad maintenance, wrong choice of plants, not considering their ecological needs. All of that can affect loss of the entire green complexes. But the most often damages in the Park caused by the man are: breaking of the branches, damage of the root system by building various objects, paths, damage of the surface roots, damage of the bark and making wounds on it, damage caused by equipment, installation or building as well as a nonprofessional care and maintenance of the Park.

References / Literatura

Almanah Opštine grada Skoplje 1918 – 1928. godine. (1928). Skoplje: 84–85.

Anastasijević N. (2007). *Podizanje i negovanje zelenih površina.* Univerzitet u Beogradu, Šumarski fakultet.

Džekov S. (1954a). Skopskite parkovi i nivnata dendroflora*. Šumarski pregled*: 35–37.

Džekov S. (1954b). Skopskite parkovi i nivnata dendroflora*. Šumarski pregled*: 38–50.

Džekov S. (1955). Nekoi poretko odgleduvani egzoti vo NR Makedonija. *Šumarski pregled, Skopje* 3(1): 45–61.

JP Parkovi i zelenilo (1996): *35 godini gordost i dostoinstvo "Parkovi i zelenilo".* Skopje. Grad Skopje: 10–15.

Kara-Radovanović P. (1937). *Krupni problemi grada Skoplja.* Beograd: 42 pp.

Istoriski arhiv. (1968): *Dokumenti za istorijata na Skopje.* Skopje: 137–150.

Lozanova N., Vasileva I. (2011). Vodata vgradinsko-parkovoto izkustvo. In: *Naučna konferencia 60 godini Landšaftna arhitektura 21.04.2011*. Lesotehničeski universitet, Sofia: 84–92.

Mihova K. (2011). Konceptualni osnovi za landšaftnata arhitektura v načaloto na XXI vek. . In: *Naučna konferencia 60 godini Landšaftna arhitektura 21.04.2011*. Lesotehničeski universitet, Sofia: 100–103.

Monev Lj., Lebren F. (1991). *Skopje vo zapisite na francuskite patnici.* Ogledalo, Skopje: 126 pp.

Nikolovski T. (1955). *Pridones kon poznavanje otpornosta na egzotite i nekoi avtohtoni vidovi drvja i grmovi sprema niskite temperaturi vo zimata 1953/1954 godina.* Šumarski pregled, Skopje 3(2): 22–41.

Popovski P. (1989). *Parkovi so zaštita na čovekovata sredina*. Skopje: 32–35.

Rizovska Atanasovska J. (2002). Retki vidovi od alohtonata dendroflora na zelenite površini vo Skopje. *Godišen zbornik. UKIM, Šumarski fakultet, Skopje* 38: 85–89.

Simonov D. Ristevski B. Popovski P. (2002*). Ureduvanje i koristenje na dvorni površini. Zemjodelski fakultet,* Skopje: 37–42.

Šojlevski D. (1970). *Istražuvanje za Gradskiot park – Skopje*. Zavod za urbanizam i arhitektura, Skopje: 7–23.

Sažetak

Gradski park u Skoplju je osnovan početkom 20. veka. Nema puno istorijskih podataka o njegovom osnivanju. Za period između dva svetska rata vrlo malo dokumenata u vezi toga se može naći.

Početkom 20. vijeka u Skoplju je bilo podignuto nekoliko avenija i zelenih površina. Najveća zelena površina se nalazila na lokaciji gde je danas podignut Gradski Park. Bila je nazvana "Islahane" po zanatskoj školi u čijoj se okolini nalazila. Njeno osnivanje je povezano sa Hafiz Mehmed Pašom i periodom Otomanske vladavine Makedonijom. Podignuta 1905, ona se prostirala na 16 000 m^2 i bila je uređena u klasičnom, geometrijskom stilu, sa drvećem, grmljem, cvetnim kompozicijama i stazama. To je bila osnova na kojoj je kasnije podignut današnji Gradski Park.

Kroz godine se ta površina menjala, menjajući tako svoje dimenzije i granice. Najveće strukturne promene su nastale tokom sedamdesetih godina 20. veka kada je napravljen glavni projekat gradskog parka. Poslednjih desetak godina se radilo na njegovoj rekonstrukciji tako da je sada više podataka o njemu.

Osim na njegovom osnivanju, akcenat je stavljen i na njegovo sadašnje stanje, funkciju i karakteristike koje ga obeležavaju. Dati su podaci o vegetaciji i drugim parkovskim elementima kao i današnje stanje i promene koje su nastale tokom godina do današnjih dana.

Ključne reči: cvetne kompozicije, drveće, Gradski Park, grmlje, parkovski elementi, vegetacija, zelena površina