

URBAN GREEN SPACE - ENVIRONMENT AND CULTURE

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Abstract

The paper aims to be an interdisciplinary approach to green spaces in Bucharest with special reference to the Cișmigiu Garden. It is divided into two parts: scientific, in which the existing data emphasize environmental, economic and social benefits, and literary, in which examples of representative writings highlight the aesthetic and cultural dimension of the green spaces.

Key words: green space, urbanization, benefit, garden, literature.

INTRODUCTION

There is an inner desire to live close to nature, accompanied by a tendency of urban infrastructure modernization in terms of maintaining and improving the quality of soil, air, water, health and life. Urban lifestyle is common for more than 50% of global population, which has also been reached in Romania. This has led to overcrowding and associated issues as traffic increase, air pollution, housing crisis, waste accumulation, diminishing of green space surface.

“Unfortunately, most cities in the world are reducing the amount of green space within their territory. Cities in the eastern United States of America lost 30% of trees over the last 20 years. Buildings and roads have priority, making some areas to become ‘asphalt ecosystems’, being even more lifeless than deserts.” (Stephens and Stair, 2008).

GREEN SPACE MEANS BENEFITS

Studies carried out during the period of excessive urbanization reveal that green space provides benefits, such as:

A. ecological, by:

- chemical purification – through photosynthesis 1 ha forest produces 10 t O₂ and consumes 14 t CO₂ per year (Bernatzky, 1978);

a leaf area of 25 m² provides O₂ required for a person (Iliescu, 2006);

- physical purification – a grass lawn holds 3-6 times dust than a bare surface; a mature tree holds 10 times more dust than a lawn with an area equal to the horizontal projection of the tree crown (Iliescu, 2006);

- bacterial purification – some microorganisms are destroyed by the release of oxygen and ozone, especially in conifers (Iliescu, 2006);

- microclimate change, through the shading effect and increasing air humidity;

-noise pollution damper.

B. economic, by:

- creation of a favourable image for the urban centers, contributing to their attractiveness for investors and job emergence (Baycan, Nyjkamp, 2004);

- increase of the urban area value and neighbouring properties (Petus, 2008);

- growing tourist attraction for the area with green space, or the green space itself becomes of tourist interest (Sendi, Aalbers, Trigueiro, 2010).

C. social, by:

- providing space for active lifestyle, without requiring high costs (walking, jogging, biking);

- inducing well-being by offering opportunities to relax and stress reduction; answering to the human need for recreation and leisure;

- favouring social inclusion, promoting direct interaction between people from different

social backgrounds, providing a venue for cultural events;

- giving identity and sense to a certain area for the community, as part of a unique town profile; giving colour, personality and consistency to the built environment.

BUCHAREST IN FIGURES

World Health Organization has established that green space of 50 m² per capita is an optimum, while the minimum value allowed is 9 m² per capita. The average is 26 m² per capita in the EU and about 18 m² per capita in Romania, with large variation between cities (Chiriac, Huma, Stanciu, 2009).

Bucharest hosts up to 3,000,000 persons daily and is the tenth city within the EU, with an area of 228 km², 70% built, and a density of approx. 8500 inhabitants/km². Since 1990 the green space of Bucharest has been under huge constant pressure from the real estate investors; the most known case is Bordei Park. Moreover, the pressure coming from the lack of parking spaces could be added. Thus, although Bucharest was considered a city of gardens, in 2009 it recorded a green space of about 12.39 m²/capita (EPA, 2010) while in August 2013 the Green Space Register of Bucharest reported 23.21 m²/capita. In addition, traffic is very intense, air pollution is high, sanitation condition is poor, outdoor recreational opportunities are reduced.

Out of the entire green space [(definition includes any space whose specific is determined by woody, tree, shrub, floricultural or herbaceous vegetation) (RP, 2007)], only about 20% represents parks and gardens; the difference results from housing estates and street alignments. In Bucharest, there are 36 parks; they have landscaping value, are habitat for rare dendrological and fauna species, unusual for urban area. They have historical value, some of them having their name related to events, personalities and writings.

Cișmigiu, the oldest public garden in the country, made as an English park, is located in the centre of the city, on a former marshy land with underground springs, where a public fountain was built in 1779. Its name comes from the Turkish word 'cișmegiu', i.e. the chief of the water supply schemes. In 1830 it was

decided to dry the pond, which occurred in 1847, when Cișmigiu became a park under the coordination of Wilhelm Friedrich Carl Meyer, the former director of the Vienna Imperial Garden. In 1848, it was decided to dig a pond (2.65 ha, 1.25 max depth, 0.44 mil m³ water volume) and a channel linking the Cișmigiu lake with the Dâmbovița river (Alpab, 2011). It was officially opened in 1854. In 1883, the mayor purchased 1.5 ha from private individuals and added it to the garden, thus reaching the current surface of 14 ha.

Its present appearance is the merit of Friedrich Rebhun, the Austrian landscape architect who designed a rug of uninterrupted alleys along which a double row of linden tree is planted, cut in geometric shapes rising in elevation. He chose huge ceramic pots with flowers for decoration. Vegetation has a unique diversity and disposal, and includes: *Platanus x aceriflora*, *Torrey nucifera*, *Cedrus atlantica*, *Picea excelsa reverse*. The green colour of the park is wonderfully projected against the white walls, terraces and balconies of the former Lady Crețulescu's Palace.



Figure 1. Lady Crețulescu's Palace seen from Cișmigiu Garden

LITERARY CIȘMIGIU

In Romanian literature, the green architecture of Bucharest has captured the writers' imagination, generating a remarkable amplitude of subjective responses. Among them, some of the most memorable pieces are dedicated to the oldest and most cherished public garden of the Romanian capital. The exemplary novel 'Cișmigiu et comp' by Grigore Băjenaru (1907-1986) brings an original praise to the open

space where the impetuous spirit of adolescence can express itself free of any constraints.

The autobiographic best-seller of the 1940s is still highly popular with today's high-school students, owing to the unrivalled ambience created around an environment whose sympathetic nature allows the re-mapping of identity. In its chapters, Cișmigiu becomes itself a character whose recognition is secured by the playful interwar adventures in their innocent exploration of the transition from childhood to adulthood. The opening lines introduce the scenery, setting the perfect place for spiritual cleansing and the peaceful recollection of the pre-WWII teenage years:

"Lord, the wind is making the leaves tremble in the trees of Cișmigiu!

It sounds like the same sleep inducing rustle I used to hear 15-20 years ago, when wandering with my mates in certain morning hours on the somewhat secluded alleys that hosted dozens of... strollers!

How odd! The rusty or pale leaves seem to be rustling even more strongly and nostalgically than the still green ones..." (Băjenaru, 1968)

The comparative metaphor of the leaves prefigures the stage for unfolding the memories that are still so vivid in the protagonist's mind. The key word, 'nostalgically', alludes to his longing for the past doubled by certain serenity and deep understanding of life at maturity, in contrast with the 'green leaves' suggestive of youth, the time of becoming.

The flow of memories occasions a sentimental reverie about the sympathetic companion from innocence to the age of reason brutally induced by the reality of the Second World War. The profound inward-oriented experience of bringing past experiences back to mind requires a spectacular landscape, similar to the lost paradise, a personal microcosm of plenitude and harmony:

"In the thin autumn shadow of the park, all the trees are snowing with golden spots: branch-leaving leaves are waving the momentary life of a drifter and, like in a fairy tale by Walt Disney, they fall into a soft carpet under the tardy steps of the passers-by bored with the routine of everyday life!

The lake is shivering like it used to; the boats are swaying like they used to, forgotten under

the weeping willows and smiling tenderly to the whispers of the lovers walking their thrills on these alleys." (Băjenaru, 1968).

The personal Eden seems to link personal experience to universal values, showing the juxtapositions and layers of the unknown to be discovered behind the seemingly familiar, "in the bushes of Cișmigiu, the dear and welcoming companion of the high-school students looking for refuge under the vaults and garlands of its fragrant flowers" (Băjenaru, 1968).

The development of the stories sketches a circular pattern of inclusion: the self within the group, the group within the human-created landscape, which competes in articulating a mythical scene of natural richness where nature and human are in perfect communion. The public garden thus becomes a living participating involved in the rite of passage, facilitating the separation from the early stage of life and accompanying the transitional stage of early youth to the subsequent character development into maturity.

In fact, the very special union seems to function both ways as the garden advances through its seasonal stages energized by human greenness while the teenagers absorb nature's vigour in their daily journey to individual ripeness. Their coming of age occurs in a realm of plethora where they find spiritual balance and a natural peace of mind.

Even in full maturity, the garden remains a place of refuge from habit and convention, its unspoiled wonders being perceived as a private space that secures personal recovery and restores normalcy.

However, return is often postponed:

"Oh, how rarely Cișmigiu has seen me after graduation!..."

And how many times have I sworn that I would come and rest under its baldaquin of blooming branches which it offered with such generosity! 'Oh, why am I not free now?' I said every time I walked on its alleys on my way to school. ,I would sit in Cișmigiu all day long, it's so beautiful!" (Băjenaru, 1968).

To Băjenaru, Cișmigiu will always stay "our enchanted fairy-tale garden" (Băjenaru, 1968), a place that helped him and his schoolmates forge a particular sense of identity and

direction, easing their expansion from their private to their social universe.

The protagonist's pure relationships evolved against the natural setting of Cișmigiu, a truthful recorder of the physical growth and emotional development of the human characters. In the end, they say goodbye to one of the most untroubled and expansive times in life, in a lighthearted farewell tribute to one of the most beloved open spaces in Bucharest:

"...let us clear up our minds looking towards Cișmigiu! The place that was for you, I believe, what the forest was for the outlands." (Băjenaru, 1968).



Figure 2. Northern side of Cișmigiu Garden

There is a particular symbolism of the Romanian capital's public garden that, in the delicate lines of the symbolist poets Alexandru Macedonski and Ion Minulescu, two different lyrical temperaments, becomes a place for self-regeneration and retrieval of personal harmony. Wrapped in either sensorial exaltation or bitter-sweet sentimentality (with a tinge of jocularly), the memorable hymns dedicated to the green heart of the city subtly advocate a hedonistic *carpe diem* philosophy.

In his poem 'Useless spring' ('Primăvară inutilă'), Ion Minulescu (1881-1944) describes a playful search for spring, in an atmosphere reminiscent of Băjenaru's beginning of meaningful life, symbolically linking adolescent disposition with the first season of the life cycle. The underlying tone of the humorous story of the rebellious spring obliquely reveals the desire for a nostalgic recollection of the no-longer attainable time of promised plenitude, rising against routine, the alien intrusion in anyone's personal universe:

*"Suffocated by the scheduled life
And the same old daily strife
Of the scientists in glasses, beards and loafers–
Ancient teachers and professors
Of piano, earth and maths–
Spring
Punched her first through the glass
And escaped from boarding school..."*

(Minulescu, 1989, 1-8)

The act of defiance seems to urge the being to retrace its origins by strong emotions and purify itself by unmediated organic reaction, aiming to reconcile the self with its present in an earthly reconnection with the memories of an earlier stage in life:

*"Learning that from my agenda
I went out in search of traces
On the Cișmigiu old alleys
Or perhaps some other places,
Like I used to do each year
When I was like her, a youngster..."*

(Minulescu, 1989, 10-15)

What the poet admits is not a simply nostalgic awareness of the lost paradise but also a perception of a new universe waiting to be discovered and incorporated within personhood.

The irregular metre of the following stanza accentuates the gap between past and present, further marked by the contrastive conjunction 'but' that changes the rhythm of events, as the poet contemplates the purpose of his quest (already advanced by the title of the poem):

*"But this time, I don't know why,
Couldn't find her, faraway or nearby
Maybe I was tired of the chase...
Maybe we both went on separate ways..."*

(Minulescu, 1989, 17-20)

Urban identity seems to inscribe solitude into the inherent features of character, as a self-regulatory mechanism whose strict hierarchy alienates humans, distancing them from interpersonal communication, fully acknowledged by the poet:

*"Or maybe spring could meet no heart
To wish her welcome from the start..."*

(Minulescu, 1989, 27-28)

The anaphoric recurrence of the possibility-suggesting adverb 'maybe' and the couple of negations further accentuate the impossible interaction between the season of rebirth and the urban community:

*“Or maybe her escape just wasn’t true,
And her punching fist couldn’t get through
The window glass...”*

(Minulescu, 1989, 29-32)

The lines seem to echo Grigore Băjenaru’s deferred return to the garden and, consequently, the recovery of real spiritual quintessence.

In an opposite manner, Alexandu Macedonski (1854-1920) pictures the deeply human immediacy of the place in ‘The Cișmigiu Rose Rondel’ (‘Rondelul rozelor din Cișmigiu’), a visual poem celebrating floral abundance and dedicated skills:

*“Pinkish, golden, silver flame,
Crazy orgy everywhere
Roses climbing on the wall
Or from trees seeming to fall.”*

(Macedonski, 1987, 1-4)

The stanza exhibits an extraordinary assiduousness of details that translates emotional reaction into an intricate network of complex and varried polychrome. The ample discourse, its agglomeration of complicated verbal and imaginative structures, intensifies emotions. The roses, suggestive of vitality and exuberances, occasion a meditation on the spectacle of nature placed in a bewildering setting, a natural context where the human element unconditionally submits to the plant domain. Affection dissolves in dependence, for the roses exert an abstruse power on their observer’s senses:

*“Persian rhythms, arranged in stanzas,
Colourful extravaganzas...-
Pinkish, golden, silver flame,
Crazy orgy everywhere.”*

(Macedonski, 1987, 5-8)

Oriental music adds to the tantalizing dance of the flowers and the uncommon experience generated by the sensorial encounter transcends everyday concerns to a momentary escape in lyrical intimations of self-abandonment. Detached from routine and the effect of self-sufficiency imposed by the engagement with the immediate environment, the self becomes able to respond to the alluring charm of the instant natural miracle.

The spontaneous response of the senses opens the self to exploration as a way to regain the most intimate spheres of the ego, revealing their essential sacredness, as Cișmigiu becomes a momentary personal natural temple. By the

agency of the eye, the self passes beyond the material world into a different dimension of knowledge which releases personal freedom, owing to the skills of a committed gardener:

*“Brought to life by German magus
Who worked hard, with grace and goodness,
To save roses from cold greyness.
Made the garden rise in fame,
Pinkish, golden, silver flame.”*

(Macedonski, 1987, 9-13)

The cinquain pays homage to the 19th-century horticulturist Wilhelm Friedrich Carl Meyer whose imagination and capability changed the appearance of the public garden. Perceived as an enchanter with supernatural power over natural forces, the German seems to have turned gardening into a magical sensorial and sensuous participation of the occasional strollers.

The spiritual dimension is given by the very definition of the act of gardening, i.e. cultivating and tending a plot of land, which extends practical significance to feelings and emotions by its reference to tender care and attention. For it is the foreign gardener’s generous talent and affection that has created a metaphysical relationship with the plant world.



Figure 3. Southern entrance to Cișmigiu Garden

The divine simplicity of placing the self inside nature restores, even briefly, the spiritual and timeless values of the original human spirit and the refuge in visions, like a promise of self-salvation as an almost mystical experience.

CONCLUSIONS

It is undeniable that the unmediated relationship of the city dwellers with urban

nature regenerates the human spirit by the participation of the vegetal microcosm situated in the heart of the Romanian capital, which responds – and corresponds – to the personal experience of the municipal everyday life. Therefore, the urban green space has to stand and grow in order to sustain the physical, mental, spiritual and cultural health of the citizens.

REFERENCES

- Baycan-Levent T., Nijkamp P., 2004. La valutazione degli spazi verdi urbani, in *Energia. Belleza, Partecipazione: La Sfida della Sostenibilita. Valutazioni Integrate Tra Conservazione e Sviluppo*, Edited by Fusco L, and Nijkamp P, FrancoAngeli, Ed. Milano, p.151-191.
- Băjenaru G., 1968. Cișmigiu & Comp. Ed. Tineretului, Bucharest.
- Bernatzky A., 1978. *Tree ecology and preservation. Development in agricultural and management forest ecology.* 2 Elsevier Scientific Pub Co, New York.
- Chiriac D., Huma C., Stanciu M., 2009. Green space - a problem of current urbanization. *Quality of life XX* no. 3-4, Bucharest, p. 249-270.
- Iliescu A.F., 2006. *Landscape architecture.* Ed. Ceres, Bucharest.
- Macedonski A., 1987. *Prose and poems*, Ed. Albatros, Bucharest, p. 88.
- Minulescu A., 1989. *Useless spring.* Ed. Minerva, Bucharest, p. 99-100.
- Stephens C., Stair P., 2008. *State of the world 2007. Our urban future*, Ed. Tehnica, Bucharest.
- Sendi R., Aalbers M.B., Trigueiro M., 2010. *Public spaces on large housing estates, in Mass Housing in Europe. Multiple faces of development, change and response. Part II. Diference in place*, Palgrave Macmillan Pub.
- EPA, 2008. *Annual report on the state of the environment in 2007. Chapter 11. Urban environment* http://www.anpm.ro/Mediu/raport_privind_starea_me_diului_in_Romania-15.
- EPA, 2010. *Annual report on the state of the environment in 2009. Chapter 10. Urban environment*, <http://www.anpm.ro/upload/16086-10%20MEDIUL%20URBAN%202009.pdf>.
- Romanian Parliament - RP, 2007. Law no. 24/2007 regulating and managing urban green space. *Official Gazette of Romania* no. 36/18.01.2007.
- ***www.alpab.ro, 2012. <http://alpa.ro/index.htm>.
- ***www.petus.eu.com, 2008. *Practical evaluation tools for urban sustainability. section Green Blue.*