Relationship between Landscape Design and Art in the Work of Roberto Burle Marx

Tanja Trkulja
Dubravko Aleksić

Subject Review

UDC 712.4:7.01
Fig. 1. Front page picture: Portrait of younger Roberto Burle Marx (at left of the picture), surrounded by panels giving a very good idea of his style, 1954.

Through artwork elaboration of Brazilian artist and self-taught landscape architect Roberto Burle Marx the text answers the questions drawing attention to the relationships and connections of Art and Landscape Design: how can Art be embedded into Landscape Design and when does Landscape Design become Art? Burle Marx artwork points out to the creation of interdisciplinary art and landscape projects and was characterized as a picture with plants.

Članak kroz elaboraciju opusa brazilskog slikara i samoukog krajobraznog arhitekta Roberta Burlea Marxa odgovora na pitanja koja ukazuju na povezanost likovne umjetnosti s perivojnim oblikovanjem: kako se likovna umjetnost može ugraditi u perivojno oblikovanje i kada perivojno oblikovanje postaje likovna umjetnost? Djelo Roberta Burlea Marxa ukazuje na interdisciplinarno stvaranje umjetničkih i perivojnih projekata pa je okarakterizirano kao slika s biljkama.
INTRODUCTION

**Uvod**

Roberto Burle Marx (1909-1994) was Latin America’s most influential 20th century landscape architect and an internationally renowned figure in the modern arts. Together with Isamu Noguchi and Luis Barragán, he is among three of the most provocative landscape architects. Though vastly different in their expression, all of the three shaped landscapes of extraordinary freshness, power, mystery and beauty, and produced surrealist work both in its forms and spaces.

In his youth, Burle Marx was first educated in music, but when in 1928 he traveled to Berlin, in Flechstein Gallery he visited the retrospective of Van Gogh’s works that left a deep impression on him and led him to the decision to enroll painting studies. Many times he said in interviews: “of that day, I said to myself: I want to be a painter. However, it did not stop me to continue […] identifying myself more with the plants”. In Berlin he visited the Dahlem Botanical Garden where he got his first knowledge of the flora of his native Brazil, began to appreciate it and saw the possibilities for creative design provided by it.

After returning to Brazil (1930), at the suggestion of his friend and neighbor Lucio Costa (1902-1998), he returned to study at the National School of Fine Arts in Rio de Janeiro. He began collecting plants in the vicinity of his home. The flora of Brazil was at that time little known and undervalued. With a group of colleagues Burle Marx made an inventory of the plants of the virgin forest.

Discovering new species, out of which nearly 20 were named after him, enabled him to significantly contribute to the development of botanical science.

Therefore 3 spheres of activity arose in Burle Marx early life: music, visual arts, and the world of tropical plants. He integrated elements of song, art and sculpture into his gardens and created a style of landscape design that is only essentially Brazilian and entirely of the 20th century. All his creations each show a desire for synthesis, to display the plants to their full potential.

Burle Marx collaborated with great architects of his time, and some of them are: Pier Luigi Nervi, Richard Neutra, Rino Levi, Lucio Costa, Marcel Breuer, Oscar Niemeyer, etc. During his lifetime he had about 100 solo exhibitions and undertook over 2,000 landscape projects in different regions of the world.

However, majority of his projects were done in Brazil, especially in Rio de Janeiro it is an open-air museum of works displaying his unique style, and entirely his own. In 1985 he donated his assets to the state of Rio de Janeiro. Today, the Roberto Burle Marx Foundation continues the work through conservation and education.

LANDSCAPE DESIGN OF BURLE MARX

PERIVOJNO OBLIKOVANJE BURLEA MARXA

Roberto Burle Marx returned to Brazil at a time when Brazilian architects were struggling to throw off the academicism and eclecticism and were studying the designs of the European avant-garde, the Bauhaus and above all Le Corbusier. However, they did not ignore the local legacy of 18th century Portuguese Baroque and indigenous architecture.
Burle Marx joined this modern architecture movement because he identified himself with its ideas.\textsuperscript{14}

Impressed by the Burle Marx family’s garden, Lucio Costa invited Burle Marx to design the garden terrace of the Alfredo Schwartz residence in Rio de Janeiro (1932), designed by Costa and Gregori Warchavchic.\textsuperscript{15} In the first garden design, sadly no longer in existence today, he planted “a terrace with beds of American canna, hitherto considered to be common banana trees”.\textsuperscript{16} This project ushered him into the field of modernist professionals and among them he became a leading figure a few years later (Fig. 3).\textsuperscript{17}

With this design Burle Marx drew attention to himself and he got the first job as Director of Parks and Gardens in Recife in 1934. He remained in Recife for three years and created several projects for private residences and the needs of the city.\textsuperscript{18} In 1937 Burle Marx left his job and returned to Rio de Janeiro. Then his long career began.

In his gardens Burle Marx applied the following principles: analogy (he grouped different plants with common visual features in order to highlight their similarity), contrast (he juxtaposed surfaces with contrasting colours or textures in order to highlight their complementarity), repetition (he grouped plants with similar texture, form and colour for emphasis), isolation (he used certain plants with distinctive features for a single, solitary planting), expansion-reduction (he added or took away landscape elements in order to achieve the desired effect) and rhythm (he used different variations in the light, the noise of water, the wind in the leaves, the smell and the time of blossoming of flowers - the rhythm is changed as the visitor walk).\textsuperscript{19}

In his gardens Burle Marx applied the following principles: analogy (he grouped different plants with common visual features in order to highlight their similarity), contrast (he juxtaposed surfaces with contrasting colours or textures in order to highlight their complementarity), repetition (he grouped plants with similar texture, form and colour for emphasis), isolation (he used certain plants with distinctive features for a single, solitary planting), expansion-reduction (he added or took away landscape elements in order to achieve the desired effect) and rhythm (he used different variations in the light, the noise of water, the wind in the leaves, the smell and the time of blossoming of flowers - the rhythm is changed as the visitor walk).\textsuperscript{19}

Burle Marx was a prolific artist. In Rio de Janeiro and Sao Paulo he created the largest number of projects. They can be divided into: private gardens, public gardens and public green spaces.

His first landscape design is not the most celebrated private garden. His most glorious gardens are the ones made for a private residence of his friend Odette Monteiro in Rio de Janeiro (1948),\textsuperscript{20} designed by Wladimir Alves de Souza, and a garden of Olivo Gomez residence in Sao Paulo (1950), designed by Rino Levi and Roberto de Cerqueira César. Motifs that are repeated in both gardens are meandering paths and large curved surfaces of the soil with rugs of different colors and textures (Fig. 2). In the first project he showed a predilection for placing herbaceous plants, shrubs, or trees in homogeneous groups,\textsuperscript{21} while the peculiarity of the second project was the fact that the house and the garden were designed at the same time and formed an integral whole.\textsuperscript{22} These gardens are ideal examples that demonstrate Burle Marx’s ability to incorporate elements of the existing microclimate, apart from integrating the organizational logic of contemporary painting, into his compositions.\textsuperscript{23}

Motif of meandering paths in the garden is not repeated throughout all his projects. Specifically, the central area of the garden Mangrove Fazenda Rio de Janeiro (1974), designed by Iván Gil de Mello e Souza, is a lawn with strong, tough grass resistant to trampling as there are no paths. This project Burle Marx created in situ, without any previous plans. The house is located in a shallow sloping valley surrounded by Tijuca Forest with a stream directed towards house slowly falling over a series of locks and supplying the large pool in front of the house with water.\textsuperscript{24} Burle Marx believed that a well-ordered garden was the best way of reconciling the opposites of architecture and nature (Fig. 5).\textsuperscript{25}

Many critics believed that Burle Marx created the garden of the Francisco Pignatari resi-
Burle Marx created hundreds of residential gardens in cooperation with many well-known architects. For some of them he designed gardens of their residences. He created a garden of Raul de Souza Martins residence in Rio de Janeiro (1983), located on a rather tilted slope prevailed with a series of intermediate terraces. There are two swimming pools on the lowest terrace, and the space around them is paved with red and white ceramic marble, while the highest terrace near the house has an aquatic garden, surrounded by a lawn (Fig. 4). In addition to private gardens Burle Marx has done a large number of public gardens, in collaboration with Lucio Costa and Oscar Niemeyer. All three were inspired by the landscape and history of Brazil. While Costa achieved a blend of contemporary and traditional ideas, Niemeyer developed a whole aesthetic around reinforced concrete. Somehow between the two Burle Marx developed garden design inspired by colonial and indigenous motifs, playing with form and materials and combining different native species of plants.

In 1938 Costa and Niemeyer became a part of design team for a radically designed building of the Ministry of Education and Health (MES) in Rio de Janeiro (Fig. 7) for which Le Corbusier came to Brazil to serve as an advisor. Burle Marx developed drafts for both the garden terrace of the new ministry building and for the small park at the ground level. Design of the garden terrace consists of curvilinear lawn, plants controlled in form and texture and stones. The small park at the ground level was decorated with Modernist sculptures. The walls, in the shady area under the pilotis, displayed a cubist design in blue Portuguese-style tiles (azulejos) designed by Cândido Portinari with Burle Marx assisting him. The success of this 18-storey white block, which is supplemented by sinuous lines of Burle Marx, "spearheaded the acceptance of Corbusian modernism in Latin America".

The President of Brazil Juscelino Kubitschek in 1950 decided to move the capital of Brazil from Rio de Janeiro to the country’s uninhabited place Brasilia. Overall plan by Lucio Underwood, 1994: 20

---

26 MONTERO, 2001: 35
27 MONTERO, 2001: 47
28 ADAMS, 1991: 9
31 MONTERO, 2001: 170-172
32 MONTERO, 2001: 21
33 MES building, Rio de Janeiro - designed in 1956 by a team consisting of Lucio Costa, Carlos Leão, Jorge Moreira, Oscar Niemeyer, Affonso Reidy and Ermarni Vasconcelos, Le Corbusier, who was invited to work on the project as consultant, a painter Cândido Portinari and a landscape architect Roberto Burle Marx (WILLIAMS, 2009: 8-10).
34 CURTIS, 1986
35 STEPAN, 2000: 82
36 *** 2011: 39
37 UNDERWOOD, 1994: 20
Costa, buildings of contemporary architecture designed by Oscar Niemeyer and public gardens of Burle Marx defined the unique space of the city.38 Burle Marx applied different concepts in defining his gardens. Therefore, the building of the Ministry of Foreign Affairs (Itamaraty Building, 1965) stands on a large rectangular lake with floating garden while for the building of the Ministry of Army (1970) he created a dynamic triangular garden with a lake in the center of the composition (Fig. 9).40

Although Burle Marx participated in designing some of the parts of Brasilia he is especially known among Brazilians also for his ambitious projects in Rio de Janeiro. Lauro Cavalcanti said that "the face of this city bears his mark".41 The removal of the morro Santo Antônio left 30 hectares of land in the most valuable area of Rio free for development. At this place the Petrobras Building (1969) was made with green texture in garden’s composition.42 A pedestrian walkway connects this building with the building of BNDES43 (1974, 1985) for which Burle Marx built a garden on the parking lot roof mimicking the primitive form of the hill (Fig. 10).44 Following the Japanese gardens, producing balance between natural and artificial elements, Burle Marx designed a roof garden of Safra Bank in Sao Paulo (1983).45 Mineral materials maintain and emphasize the color contrast throughout the year, so that the garden looks exactly as it was on paper (Fig. 12).

Some of Burle Marx’s favorite projects were the projects of public green spaces. He designed the main and the biggest parks in Sao Paulo, in 1953 Ibirapuera Park, and in Rio de Janeiro, in 1961-1965 Flamengo Park. He created parks in an abstract style with a range of amenities.46 Burle Marx created complex plant compositions that he called artificial ecological associations47 where a number of different types of plants found its expression in many combinations (Fig. 11).

In the design of Flamengo Park Burle Marx applied a wave motif on the grass for the first time. This motif was later used (1970) for the pavement design of Copacabana beach in Rio de Janeiro. Geometric wave, consisting of black and white Portuguese mosaic tiles,48 prevails over scattered native plant species that are adapted to winds of Atlantic.49 These two of his projects are the two paradigms of his work. One is soft, the other one is hard, and both provide a spectacle of perpetual motion – be it slow or fast, horizontal or inclining (Fig. 13).50

On the basis of the above in this chapter it can be concluded that English, Arab, Chinese and Japanese gardens are connected. The first ones are characterized by the formal and structured arrangements, the second ones focus on the naturalistic landscapes, and the third and last ones are a hybrid between those two patterns.
Japanese gardens as well as Cubist interpretation of landscapes had a great impact on his landscape design. His first gardens, their dynamics and combination of different elements, which should provoke surprise and discovery, resemble the English gardens. As Arab gardens, his gardens have emphasized the importance of water but they also reach the visitors’ senses visually, through sound and smell and create an emotional resonance in them evoking different memories. Similarity with Chinese and Japanese gardens is reflected in the use of minerals, beautifully sculpted shapes of stones and trees with special shapes of trunks and branches, as well as interminable spiral paths. Cubist gardens displayed a plastic composition of lines and surfaces, built with contemporary and inert materials, but they are subordinate to the architecture. However, Burle Marx’s gardens were fundamentally different from the Cubist gardens because they did not subordinate to architecture but stood equally with it.

**Painting of Roberto Burle Marx**

**SLIKARSTVO ROBERTA BURLEA MARXA**

Roberto Burle Marx, while residing as a young man in Berlin, was introduced to contemporary art. He was fascinated by the works of Van Gogh and Pablo Picasso, but especially “unconventional” expressionist artists. Inspired by European art, he wanted to be a painter and began studying painting. As an assistant to Cândido Portinari in shaping the cubist mural design on the building of the MES he earned a sort of informal graduate degree in painting.

Burle Marx was a versatile artist. He was a painter, draftsman, engraver, sculptor, ceramic artist, set designer and jeweler. Moreover he was inspired by the artwork of great painters. His interest in water and aquatic plants was taken from Claude Monet. In the paintings of Van Gogh he found that intensity and contrast of color can express emotion. In the search for form, he researched ethnographic art like Georges Braque and Pablo Picasso had. Like Joan Miró, he developed a language of pictorial signs and experimented with different scales and materials. He understood luidic approach by Paul Klee whom he identified with in that the artist should not be limited by any kind of formula. Following the idea that “the need for self-expression must precede a work of art” his aesthetic is reminiscented of the Lyrical Abstraction by Bram Van Velde and Vieira da Silva.

His work was influenced by movements in European art: Expressionism, Cubism and Constructivism. Furthermore, his awareness of these movements was central to his art, not merely a stimulus. In his early paintings, from late 20s to early 40s, Burle Marx was influenced by Expressionism. This was modelled in the motifs of his images, in the setting of figures into composition, in stylised or simplified shapes and intensive colors. A rejection of academicism led him to choose popular scenes and Brazilians as his themes which, at the time when only European themes were considered significant, was a radical method.

During the 40s he was influenced by Cubism and applied the innovations of it in his work:

51 Montero, 2001: 44-46
52 *** 2011: 32-33
53 He was a painter, draftsman, engraver, sculptor, ceramic artist, set designer and jeweler (*** 2011: 33).
54 Montero, 2001: 36-37
55 Montero, 2001: 34
56 Montero, 2001: 34
57 Walker, Simo, 1996: 57
59 Montero, 2001: 38
60 Montero, 2001: 34
perceptive simultaneity, volumetric interpenetration, transparency, asymmetry and the use of collage.\textsuperscript{60} His attention moved from the narrative to the purely visual, subject became subordinate to composition and area of colors became separated from descriptive outline.\textsuperscript{61} However, the colorful paints and Burle Marx's geometry were far from the theoretical rules of this movement and showed considerable distance from Cubism. A break with the analog representation of shape was what linked him the most with this art movement.\textsuperscript{62}

At the beginning of the 50s he introduced pure geometry with emphasis on plans into his paintings.\textsuperscript{63} Some of his works flirt with Constructivism, which was then taking its early steps toward becoming a mainstream movement in Brazilian art. Yet a rigid geometry was not the designer's preferred mode.\textsuperscript{64} His compositions contained of more organic geometry. Although at this time he approached abstraction, his artwork was not associated with any of the currents within the abstract art.\textsuperscript{65}

During the 60s, looking for a form, he began to combine real and curved lines and to use collage. Paintings became totally non-figurative and his drawing increasingly suggestive. During the 80s he began to paint more and to do less garden design. His eyesight became increasingly poor and the colors in the paintings became ever more vibrant and violent, yet sensual and seductive. In his last days it was painting that gave him great pleasure (Fig. 15).\textsuperscript{66}

Finally, we can conclude that painterly oeuvre of Burle Marx was varied. But generally it was his vigorous abstract painting that ranked him amongst the greatest artists of Brazilian art.

**INTERACTION BETWEEN LANDSCAPE DESIGN AND PAINTING OF ROBERTO BURLE MARX**

**INTERAKCIJA IZMEĐU PERIVOJNOG OBLIKOVANJA I SLIKARSTVA U DJELIMA BURLEA MARXA**

If we compare the painting and the landscape design in the Artwork of Burle Marx it would be wrong to refer to his landscape design as a simple transposition of painting. During the 1930s and the 1940s figuration was predominant in his canvases, while abstract organic forms were predominant in his garden. In 1950s he approached abstract painting, but then he introduced pure geometry in landscape design, trying to harmonize it with the Rationalist architecture. From the 1960s parallel could be drawn between his painting and his landscape design because he began to combine curves and orthogonals in both. However, his concept of painting theory would have been useless in landscape architecture without the knowledge of botanical species and their characteristics.\textsuperscript{67} Therefore, painting and landscape design are intertwined in his artwork, without one taking precedence over the other, and his work was characterized as a *picture with plant*.\textsuperscript{68}

Burle Marx combines the love of a modern painter and the passion of a naturalist, in a study of the role of natural forms, and achieves a more sophisticated expression of space landscapes. His artwork shows how much a skill of a modern painter, who loves plants, can create spectacular landscapes.\textsuperscript{69} As a painter, he understood the logic and the shapes of the artistic avant-garde and transplanted them into his garden, thereby shaping a singular and modern aesthetic for the visual organization of space”.\textsuperscript{70}
Visual expression of Burle Marx in the Abstract Style is inclined to the abstract lines and free forms applied when using native Brazilian plants while creating the colored blocks of a garden. This concept was applied in Latin America for the first time in the design of a roof garden for the building of MES. Abstract landscape design is successfully integrated into the framework of modern architecture as well as verified by landscape architect Lawrence Halprin who said that “his early work with Master architects Le Corbusier and Niemeyer forged a remarkable synthesis between public buildings and their gardens.”

Also, the boundary between art and landscape design, set in this paper, is so minute that it almost does not exist.

Burle Marx’s compositions were built on a combination of unusual curvilinear areas with different colors and textures. This statement was confirmed by his projects of the Ibirapuera Park and Flamengo Park. These parks indicate that he did not see the garden design only as a botanist, but as a painter. Free forms and curvilinear lines created playful horizontal rhythms in his gardens. If we look at them from the bird’s-eye view, these gardens seem to be equally related to the abstract painting as well as to certain spatial reality. He himself confirmed this thesis when he said that it seemed that the principles, on which the construction and decoration of his gardens were based, were the same in many points as the principles that were in essence of any other form of artistic expression.

“Art needed to be reinserted into the urban process.” Remodeling of Avenida Atlantica with Copacabana Beach is a “fantastic piece of urban architecture in scale, in popularity and in critical status.” In this project “the city became landscape; landscape became architecture.” From an artistic point of view, the composition of wave seems as if Burle Marx was painting a canvas about 3 km long. Motive of waves experienced a further exploitation through tattoo-, book cover-, shoe-design, etc. In this manner the production of art based on pre-defined urban and landscape design was confirmed once again.

The best critical commentary on the Artwork of Burle Marx was, perhaps, the catalogue essay which accompanied the exhibition of Burle Marx’s work held at the Museum of Modern Art in New York in 1991. The author of this exhibition, William Howard Adams, suggested that “the thing about him that really stands out is that he regarded landscape design as an equal partner with architecture, not as a backdrop or decoration, and elevated it to that level.”

Roberto Burle Marx died in Rio de Janeiro on June 4, 1994 at the age of 84. In 2009 an exhibition which marked the centenary of his birth was organized in the Paco Imperial Museum in Rio de Janeiro (Fig. 14). Lauro Cavalcanti, the curator of an exhibition, in his report about Burle Marx said: “By organizing native plants in accordance with the aesthetic principles of the artistic vanguard, especially Cubism and abstractionism, he created a new and modern grammar for international landscape design.” The goal is to show how his work in one field is linked to his work in the other field. This idea is directly related to the topic and the issues that are raised in this paper. Burle Marx always thought of himself first and foremost as a painter. He once wrote that the landscape design “was merely the method he found to organize and compose his drawing and painting, using less conventional materials.”

Concluding Remarks

Roberto Burle Marx epitomizes a different way of perceiving landscapes by means of his gar-
den design. He introduced new concepts of public spaces design, presenting his unique and modern style in landscape architecture which is a combination of ecological principles and art. On one hand, he was inspired by nature and culture of Brazil and, on the other hand, by modern Europe. As a great connoisseur of tropical flora and a researcher he put a large number of plant species in the urban landscape, with emphasis on colors and forms of native vegetation, producing genuine small ecological communities out of his gardens.

Gardens of Roberto Burle Marx are designed for the future and for future generations. His artistic experience helped him to skillfully combine shapes and vivid colours of rich tropical vegetation, to create fantastic tiled mosaics from Portuguese stone and to play with water and adjust it to vegetation.

On the other hand, the knowledge and experience he acquired in landscape architecture greatly influenced his artwork. It was a cause-effect relationship and his artworks showed complexity of interrelationships and mutual causality between landscape architecture and art.

The boundary of permeation of the creative principles is thus trivial that art defines landscape design and landscape design defines art.

[Translated by: ANDREA BEKIC-SUKALO, BA in English and Literature]

**INTERNET SOURCES**


**ILLUSTRATION SOURCES**

2. Fig. 1
3. Fig. 2, 4 (LEFT), 5, 6 (LEFT), 9, 10, 11 RIGHT
4. Fig. 3, 7 (LEFT)
5. Fig. 4, 6 (RIGHT), 8
7. Fig. 7 (RIGHT), 11 (LEFT)
9. Williams, 2009: 11
10. Fig. 12 (RIGHT)
11. Fig. 13 http://egardens.blogspot.com/2009/01/grass-patterns.html [5.10.2012.]
Odnos perivojnog oblikovanja i likovne umjetnosti u djelu Roberta Burlea Marxa


Boraveći godinu dana u Berlinu (1929.), cesto je odlazio u Galeriju Flechstein, gdje su ga djela modernih slikara potaknula da upiše studij slikarstva, i Botanički vrt Dahlem, gdje je stekao prva znanja o florani rodnoga Brazila i uvidio mogućnosti za kreativno oblikovanje koje ona pruža.


Biographies
Biografije

Tanja Trkulja, Dipl.Eng.Arch., research assistant at the Chair of Architectural Design at the Faculty of Architecture and Civil Engineering, Banja Luka University since 2009. In her doctoral studies at the Faculty of Architecture in Belgrade she is conducting research on the possibilities of revitalization and redesign of devastated public space (brownfield locations).

Dubravko Aleksić, Dipl.Eng.Arch., research assistant at the Chair of Urban Planning at the Faculty of Architecture and Civil Engineering, Banja Luka University since 2009. In his doctoral studies at the Faculty of Architecture in Belgrade he is conducting research on the improvement of organization of urban structure by redesigning open public spaces.
Rudolf Klein
Judaism, Einstein and Modern Architecture

UDC 72.01:72.036