Introduction
The public park emerges in the metropolitan centers in Europe and the United States after the first quarter of the nineteenth century. A response to the crowded and unhealthy living conditions of the industrial city, it was conceptually understood as representations of rural or wilderness landscapes located outside the city. The naturalistic landscapes that were thereafter built throughout American and European cities became the centerpiece of a recreational program that sought to restore and protect the individual's physical and spiritual life against the impersonal forces imposed by the extreme densification of the urban environment.

When the first public park was built in Caracas in 1875, the Parque El Calvario on the western edge of the colonial town, Caracas was far from being an industrialized society, and Venezuela remained a poor agricultural country, still suffering from the ravages of a protracted internal war that began after independence in 1821. During the next 90 years after the opening of El Calvario, the city would build at least 2 more major public parks--Los Caobos in 1924 and Parque del Este in 1961--although it remained an example of what Dutch architect Rem Koolhaas terms "lite urbanism." The fact that these three parks were not a response to industrial urban conditions, and that they are not mere naturalistic scenes, but that each one has a very distinct character and design, suggests that the public parks of Caracas played a very different role in the urban history of the city. As the country evolved from a poor agricultural to an oil-rich nation, so did its capital city, radically changing as it became the ground for new urban practices. From the refined French urbanism of the turn of the 20th century Belle Époque to the exuberant tropicalness of the modern era of the 1950s, the parks of Caracas were sites for the construction of identity, marking the evolution of the city from austere colonial town to wealthy oil metropolis (Fig. 1).

In what follows, I will focus on the design of Parque del Este (1956-1961), the most intensely used public park in Caracas, with three and a half million visitors per year, and an area of about 200 acres. The park was designed by the Brazilian landscape architect and artist Roberto Burle Marx (1909-1994), and is, along with Parque do Flamengo in Rio (1957-1964), considered Burle Marx’s most significant
public work. A versatile artist who practiced in multiple media, including painting, printmaking, jewelry, fabric design, and mosaic, Burle Marx designed gardens and public landscapes that were an unprecedented synthesis of a modernist aesthetic sensibility, Brazilian cultural traditions, and an evocative and inventive use of tropical plants. His work offered a vision for gardens and public landscapes that was unquestionably unique to the Latin American tropics, and an ecological approach to the practice of landscape architecture that became widespread throughout the continent.

Parque del Este

Parque del Este is comprised primarily of three spaces (Fig 2). The first is an open, fluid landscape of grass fields with a subtle and gently undulating topography and loosely laid-out canopy trees, popularly used for picnics and games. The second is a forested, spatially dense landscape with meandering paths, used primarily for strolling and quiet contemplation. The third is a sequence of paved, intimate, courtyard gardens that reference the Spanish colonial past of Venezuelan culture and display plants, tiled murals, and water works. Within each of these spaces visitors are confronted with the rich variety and exuberance of tropical flora, with a small but significant zoological collection of species from different regions of Venezuela, and with places that afford a broad spectrum of social activities and recreational programs.

The process of combining types, modes of representation, and technologies in ways that lead to new aesthetic practices, ones that are inclusive of the old and the new, the foreign and the local, the traditional and the modern, is by now understood as a defining trait across all artistic practices in the 20th century culture of Latin America. Such is the case with the work of Roberto Burle Marx and it is especially evident in his design for Parque del Este. Landscape is a complex medium that involves not only the disposition of plants in an aesthetically powerful way, but the organization of space, program, circulation, the coordination of multiple scales of intervention, and, unique to the art of landscape, the use of time and its expression as a fundamental condition of the medium. As a result, hybridization at Parque del Este is manifest in its multiple aspects, reflecting the complexity of the landscape as simultaneously cultural, ecological, and social milieu. For this paper, I will focus only on three kinds of hybridity, choosing those that address current antinomies in contemporary landscape architectural practices in the U.S. The first is formal hybridity, or the combination of landscape types that are not traditionally known to belong together. Parque del Este follows neither the contemplative, picturesque, nineteenth-century park type, nor the recreational, heavily programmed, twentieth-century park, although it shares some qualities of each. The second locus for hybridity is ecological, and involves the combining native and non-native species in the plant assemblages. The third kind of hybridization is methodological and it has to do with combining formalism, the inscription on the land of non-site-specific forms, with process, a working method that works with visual phenomena and time, allowing changing relationships between color and light, and ecological processes to create their effects on the site. (1)

1. FORMAL HYBRIDITY: Combining types

Burle Marx projected the plant collections in the park as complex plant assemblages, each one devoted to the representation of a Venezuelan ecosystem. There is the xerophytic garden with its collection of euphorbias, aloes, agaves, and yuccas; the hygrophytic garden for the display of aquatic plants, such as Nymphaea and Thalia; the garden representative of the tropical rain forest; the palmetum,
for the display of palms; the arboretum, for the display of autochthonous trees, and, the garden of the urban courtyard, the patios. Amid these collections are an aviary, a terrarium for the display of reptiles, and sunken gardens for the display of tigers, monkeys, crocodiles, and other representative fauna. Each collection is spatially and experientially autonomous, and connected by a fluid network of meandering paths. I will focus on the patios to explain how Burle Marx brings together multiple sensibilities to create a hybrid space that brings together a centuries-old tradition of courtyard gardens with a modern spatial sensibility.

For the patios, a reference to the Spanish colonial house, and the Moorish gardens before that, Burle Marx used generously scaled concrete walls, lined with tile on the interior side only, to enclose a series of three interconnecting rooms (Fig 3). The first patio in the sequence is a calm, aqueous, cool garden. The focus here is the walls, each one of which is an elaborate surface of blue, yellow, and white glazed, 4” x 4” tiles. Water cascades from concrete trays cantilevered from the walls, and falls into rectangular reflecting pools at the base of the walls. Plants and benches are used sparingly in this room, as free-standing sculptural forms on the paved ground. The second room, the red and white garden, is a powerful and dramatic contrast to the first. The bright red, 1” x 1”, tiles on the walls are backdrop to a rich collection of plant material, including Dracaena, agave angustifolia, lantana camara, euphorbia leucocephala, that either blooms in white or has variegated green and white foliage. The white flowers and leaves are further emphasized by the use of rocks of similar color and the paving pattern (Fig 4). A meandering path that leads around the plant and rock assemblages unfolds a rich display of shapes, textures, and surfaces. The third garden in the sequence, the largest, is not bounded by concrete walls and opens outward to a flat lawn terrace and a stage backed by a dramatic water curtain. While in principle this lawn is the spectator space where visitors sit to watch performances, it was not conceived as a flat, empty lawn. Instead, the surface was animated, and thus objectified, through the use of two species of grass, the darker green Stenotaphrum forming a grid of circles against a lighter variety, giving the surface a hybrid function of program surface and graphic parterre. The backdrop for this hybrid lawn-parterre is a colossal water curtain that forms the north boundary of the space. The water curtain, about ten meters high and 60 meters wide, is the backdrop for a performance stage that floats on a reflecting pool.

In the courtyards Burle Marx did not follow the traditional spatial configuration which distinguishes between the perimeter, devoted to circulation, and the symmetrical space of the center, typically occupied by a fountain. Instead, in the courtyards these relationships are reversed: water is displaced to the perimeter, and circulation is free, unstructured, and through the center. These are courtyards radically transformed into strolling gardens. The use of tiles in the walls reference Spanish and Portuguese architecture, but their disposition and color reflect Burle Marx’s modern sensibility. Furthermore, the walls of the traditional patios, conceptually a definitive boundary, are here
dissolved and dematerialized into light, deep shadows, water, reflections, and sound. Finally, the traditional domestic and refined scale and
texture associated with the courtyard garden are replaced by an abstract, graphic, tough, urban language. The patios are, in effect, the
conjunction of the domestic courtyard of the Spanish and Portuguese colonial house, the urban plaza, and the promenade of the modern
house and of the English landscape garden.

2. ECOLOGICAL HYBRIDITY: Native and Non-Native
One of the important contributions of Burle Marx's work was the application of ecological principles to the design of urban sites. A life-long
environmentalist, he insisted on the use an appreciation of native flora, criticizing the introduction of the more fashionable European species
in the gardens of the urban elite. With ecologists, he traveled to the rain forest, collected, acclimatized, and propagated plants in
greenhouses before introducing them into urban areas. Forty species of tropical bear his name. Likewise, Burle Marx thought of the plant
collections at Parque del Este as ecological gardens of autochthonous Venezuelan plants. However, his use of ecological principles at
Parque del Este is varied and heterogeneous, combining approaches to achieve a didactic agenda as well as his own aesthetic effects.

Burle Marx departed from the original ecological model, as he saw it in each plant's native habitat in two ways. The first is through the
introduction of non-autochthonous species to increase the visual and didactic richness of the collection. For example, in the xerophytic
garden, Burle Marx introduced exotic species that, although botanically very different, were biological forms that were adapted to similar
environmental conditions. Thus, there are cactuses from the Venezuelan, African, and American desert displayed together. Similarly, in
the palmetum, there are both native and exotic palms, from as far away places as China, Africa, Hawaii, and California. A shrub variety of
erythrina, (Erythrina abyssinica), a primary species growing on the site as canopy for the previously existing coffee plantation, was imported
from Africa for its beautiful red flowers. The examples are numerous, and include many species brought from Brazil by Burle Marx himself.

(2) Burle Marx also introduced plants to create zones of vegetal transition at the edge of each garden in order to create a gradient of
textures between one type of landscape and an adjacent one. These transitional plants were chosen for their morphological characteristics
only, and not for their ecological associations. For instance Hemerocallis fulva (daylily), a non-native species, was introduced at the edge of the
hygrophytic garden to provide a scale transition from the aquatic plants to the lawn areas around it. And at the edges of the xerophytic
garden he planted specimens of Spondias purpurea (Ciruela de huesito) because its contorted branches and coarse texture would provide
a transition between the coarse xerophytic plants and the finer texture of the trees in the adjacent arboretum. Burle Marx also displayed
the same plant in different growing conditions, showing the plant's adaptability to changing environmental conditions. For example,
Philodendron melinonii grows typically as an epiphytic in its natural environment in the rain forests, but can also grow in soil, both conditions
of which are displayed at the park (Aristeguieta, 1974, 112). Burle Marx engages plants and ecology, then, as a material practice. By this I
mean that he does not merely place plants on the site, he engages their biological capacities, pointing to their adaptive performance as
living material. Like an engineer who stretches a beam to its maximum structural capacity, or a painter who explores the thinnest (or
thickest) possible layer of pigment to cause various effects, so does Burle Marx work with plants in normal and extreme conditions,
displaying the limits of their ecological performance.

3. METHODOLOGICAL HYBRIDITY: Form + process

Roberto Burle Marx is known equally well for his unprecedented use of tropical flora and for the highly developed formal vocabulary of his work.
Burle Marx imposed non-naturalistic, abstract, non-representational, arbitrary forms on the land, composing them according to an apriori
formal logic that, while inflected slightly by site conditions, remains distinct from its context. His extensive use of the curve to structure the plan
across all scales and in the great majority of the work of the early decades of his career became his hallmark. However, for Burle Marx, the plan
was merely a way to enter a project. The way the plan works, what it enables spatially and materially in the real space of the park, is as
important, if not more, as the way it looks as a composition on paper. More fundamentally than merely a "curvilinear plan," it can be described as a
study of the distribution and densities of the curves--smaller, tighter, and denser in the eastern half of the site, larger and more
transparent in the western half. The curves work as a series of formal configurations that operate in a system-like way, that is, as a field of self-
similar forms that vary in size and density to enable local conditions of difference to emerge
Further, the curves are the primary field or unifying matrix in the plan, within which emerge the intricate and complex spatial and material effects mentioned earlier. A secondary field, the existing forest of *Erythrina* on the eastern half of the site, works to produce further conditions of difference at several scales. Together, the two fields are a frame against which multiple material and visual complexity in the park will unfold.

For example, the curvilinear interlocking shapes of the plan are not perceived as such in space. Layering and juxtaposition, along with the viewer’s own movement, make the curves always fragmented and partial. From any given point, the curves’ tight radii make it impossible to perceive the entire form completely. The forms are revealed through movement and time. With regards to the use of color and texture in the planting design, Burle Marx engaged color to produce shifts in the perception of depth, color, and background and foreground. “The value of a plant in a composition, like the value of color in a painting, is always relative. The plant’s value is for its contrast or its harmony with other plants, with which it is in relationship.” (Burle Marx, 1967) For example, the contrast of the blue-green tone of the *Agave americana* with the yellow-green tones of the *Agave cocui* in the xerophytic garden play with each other as the day progresses, shifting visual dominance with regards to each other, foreground to background, as the position of the sun and the light’s intensity changes (Fig 5).

Similarly, the deep shadow patterns on the *Euphorbia abyssinica* blur the crisp outline of the (cardones) to produce a field of shadow and light. At Parque del Este, nothing exists on its own; everything is always considered and perceived in relationship to something else. With regards to mass, or weight, Burle Marx conceptually transformed things themselves into unexpected material conditions that have to do with lightness in the physical sense. We see this in the large rocks that were transported from creeks elsewhere in the valley, where they were deposited into the coarse, rocky channel by gravity, that is, weight, onto the soft lawns of the park. Here, on the delicate, smooth, surface of clipped grass, they appear weightless. This juxtaposition of materials in “illogical” relationships (lawns cannot handle rocks of that scale without being ruined) makes some of their natural (logical) attributes recede, in order to bring out others, such as shape, texture, or color. The concrete curves floating over water are another instance where a heavy material is rendered weightless by its supporting surface (Fig 6). In the patios, the severe, rough concrete walls that enclose the first garden are dissolved, inside, into reflections, water, sound, and shadows. The solid ground that is meant to support the wall is also rendered immaterial, as it disappears on the surface of the reflecting pool.

This kind of relational thinking, derived both from an ecology of environment as well as an ecology of visual perception permeates his work, making the initial solidity of forms dissolve through the continuous unfolding of the virtual. The park is an event hinged on temporal duration, whose actual experience is continuously being produced and, with each pace, each turn, and each visit, reinvented anew. In this sense, form is just a pretext, a starting point from which, and against which, the plenitude of spatial and temporal phenomena exist. In spite of the potential singularity of his forms, we have multiple readings. Alongside open-endedness, we have a vision.

**Conclusion**

With Parque del Este Roberto Burle Marx gave caraqueños a public space that became a signature of their city, a representation of their recently, and successfully, established democracy, a microcosm of their national territory. Through a long established tradition of hybridizing foreign cultural influences with local practices, he achieved a unique urban space that contains a palimpsest of
ambitions and identities, one that stands for a cosmopolitanism that celebrates difference and open-endedness, contradictions, and multiplicities. Oscillating between a critical formalism and a critical naturalism his work sustains a meaningful contemporaneity beyond Caracas and into the world at large.

Notes

2. Of the 335 species, 45% are native to Venezuela, 22% native to Asia, Africa, and the Pacific Islands, and the rest native to other regions of the Americas. See the Appendix in Berrizbeitia, op.cit.

Works cited
