

Sustainable Landscape Design

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Does non-sustainable landscape design exist? Wouldn't the gesture of designing the landscape, which has nature as support and substratum, be 'sustainable' in principle? What is understood by sustainability when vegetation, in addition to the environmental conditions that intertwine soil and climate, also reveals the identity of places?

Concerns about environmental issues were officially established in 1972, at the United Nations Conference on the Human Environment and in 1987 with the Brundtland Report, entitled *Our Common Future*, the concept of "sustainability" was consolidated, associating it with development that considers the needs of present and future generations.

Later, other instruments expressed the expansion of understanding, connecting sustainability to the commitment to natural resources preservation, aiming to ensure biodiversity and life on the planet.

The Charter of the Landscape of the Americas, for example, published in 2018, is based on environmental ethics as a condition for thinking aesthetically the landscape. Here, in the fourth Principle, among the five that define it, there is the condition of understanding what aesthetics is, linked to environmental ethics (Veras, 2021).

This condition results from the understanding that the "*natural world, in a sharp process of disintegration, paradoxically forced aesthetics to resume a reflection on the fundamentals that it had long lacked, linking both the mundane dimension and human existence*" (Serrão, 2013, p.136).

The aesthetics, characteristic of the landscape design gesture, is conditioned in this Charter to environmental ethics, when the landscape associates aesthetic qualities with the understanding that the natural world – which is not inexhaustible – is also endowed with moral value.

Being sustainable implies considering the conservation of biodiversity, which requires careful maintenance of ecosystems to make them less degraded, guaranteeing a healthy future for life on the planet. With this comprehension, designing with the landscape, understanding its needs, possibilities, openings and limitations, has in *Sustainable Landscape Design* one of its strong aspects. For landscape design, being sustainable implies designing with nature and

with the nature of places, with vegetation as the protagonist.

The importance of vegetation's knowledge for the proper use of species as a defining element of a landscape design thought – whether native or exotic that give identity to the place – is a recurring discourse in the testimonies of Brazilian landscape designers, such as Roberto Burle Marx, Fernando Chacel and Rosa Kliass, as well as the botanist Luiz Emygdio de Mello Filho.

It comes from Burle Marx, from a perspective of Brazilian modern landscape design in the 1930s in the city of Recife, the understanding of nature as a condition for his gardens design, a principle that he adopted as a social function in a way of design that he used throughout his life.

The respect for nature and the struggle he waged to defend it, making several denunciations about deforestation in the main newspapers with wide circulation, mainly in the 1960s and 1970s, made architects and botanists unite in a preservationist vision, where sustainability passes to be part of landscape design thinking.

From this perspective, in 1983, financed by the National Council for Scientific and Technological Development – CNPq, Burle Marx brought together architects and botanists to discover the Brazilian biomes landscape potential, or as Aziz Ab'Saber called it – the domains of nature. This expedition was a landmark for landscape design, which in addition to revealing the ornamental potential of our forests, favored the discovery of countless species, many of which are widely used in its projects and which are now part of the IUCN Red List of Threatened Species.

In this conjecture, is no longer appropriate thinking about the landscape design dissociated from a sustainable perspective. The use of native or naturalized exotic plants that compose and give identity to our many landscapes, that is, our culture, requires an understanding of their local production and, consequently, their use, from an economic, social and environmental perspective.

Starting with Burle Marx, there is a lineage of landscape design with a sustainable principle, also found in Fernando Chacel and Rosa Kliass, who assume the nature and culture of the place as conditions for defining the vegetation, the main component of their projects. In this condition, the notion of *Ecogênese* by Chacel arises, which has as its

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principle the reconstitution of partially or totally degraded ecosystems, making use of a reinterpretation of the ecosystem through the use of representative plant species.

Also, Rosa Kliass, within a relationship of the landscape as a whole, sees vegetation as an element that goes beyond environmental constraints, understanding it as culture, breaking boundaries that reveal identities. In Recife, Pernambuco, for example, the Capibaribe Park Project can be highlighted, which brings together, within a systemic

vision, the principles of sustainability by looking at nature and culture as a single object (Silva, 2021).

Thus, by conquering the definition of sustainability as a gesture that privileges native species as opposed to imported exotics, for centuries used in our landscape projects, it is understandable that incorporating the notion of culture into this concept opens up to understanding that certain species adapted and already incorporated into our landscape and identity, can also compose *Sustainable Landscape Design*.

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