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Chapter

# Introductory Chapter: Landscape Architecture - The Gatekeeper of Sustainable Development

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## 1. Introduction

The connection between man and the natural world is no more that of a harmonious accord, but it is often a relation of contrast which has caused and which still causes two big problems that sometimes look not being solvable: the problem of the environment pollution and the problem of the progressive exhaustion of the resources, thus imposing to the community high social costs [1–3]. This results in a new attitude towards the environment, which is not a utopic return to the past but, instead, the attitude of identifying the meaning of a sustainable development as a process of change, in which resource utilization, investment, technological development, and institutional changes are in a reciprocal harmony, increasing current and future potential of satisfying human needs and aspirations [4–6]. This repurposes a renewed connection man-nature, according to an ecosystem approach, meant to promote the identification, protection and enhancement of natural resources, in order to reinstate the necessary equilibrium between the built and the natural environment.

This necessary equilibrium, coupled with the impossibility of an unlimited growth in a world of limited resources and the extensive diffusion of sustainability as a crucial conceptual approach towards development, constitute a distinctive mark that led countries to operate sustainable development as one of the main planning paradigms of the last decades. Thus, landscape must be understood as a global entity, which have several components, that must be analyzed, managed and protected in order to achieve sustainable development though the application of specific planning and design strategies based on landscape architecture principles. Still, regardless of the conceptual approach used, the fact that the landscape constitutes a dynamic structure in constant transformation, highlights the fact that any intervention aiming at its management, planning and/or alteration must be based on a deep knowledge of its characteristics, history, structure, and services.

This reality is increasingly acknowledged, in a society in which, production and consumption patterns have become completely unsustainable, accelerating the exhaustion of natural resources, fostering environmental pollution and promoting landscape loss, thus hastening problems that impose high social costs to citizens and communities all over the world. It is therefore necessary to take up a new attitude towards landscape and the environment, by using and implementing sustainable design principles and approaches, anchored in landscape architecture as gatekeeper of sustainable development, therefore promoting the coordinates for environmental management and protection, social equity and economic prosperity, as the base for landscape sustainability.

In this regard, considering that landscape is the visible expression of the physical and biological components and of human activities and settlements in a given territory, immediately reflecting changes in their occupation and use (**Figures 1–3**), and that, for this reason, it is continuously changing as a result of multifaceted and cooperating natural processes coupled with planned and unplanned actions by man [7, 8], global concerns raised by landscape transformation processes worldwide, highlight the need to rethink landscape while protecting the environment. This is evident in each and every single landscape, but, especially true for previously developed ones which are currently derelict and abandoned [9], posing different but complementary challenges not only to the society but also to landscape architecture as discipline.

In fact, the relevance and popularity of landscape architecture approaches and projects in an increasingly changing environment are progressively recognized as



**Figure 1.**
*Natural intermittent river – Caia, Portalegre. Photo credits – Luís Loures – All rights reserved.*



**Figure 2.**
*Agricultural landscape – Elvas, Portugal. Photo credits – Luís Loures – All rights reserved.*

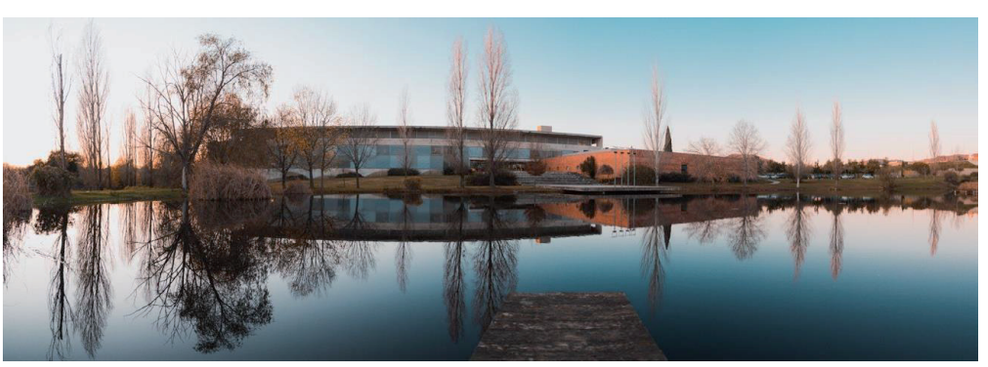


**Figure 3.**
*Artificial lake – Polytechnic Institute of Portalegre – Campus, Portugal. Photo credits – Nuno Bilé – Used by permission, all rights reserved.*

an adequate discipline to answer specific development questions such as: Which are the crucial ecological functions that any project should account for? What makes landscapes valuable and appealing? What constitutes good design? What is the contribution of landscape architecture to sustainability? What makes landscapes underutilized? What obstacles keep derelict and abandoned landscapes from being recovered or transformed? Who should be responsible for landscape planning and management both at local, regional and national levels? Still, new methodologies and frameworks are needed, in a period when "*(…) that seemingly old-fashioned term landscape has curiously come back to vogue*" [9–11], it is urgent to reinvent the way in which landscapes are planned, managed, recovered or transformed, considering sustainability as a basis for development in which environmental issues, historic and cultural values, economic opportunities, and social needs are considered at the same level.

## 2. Landscape architecture – Integrating knowledge towards sustainable development

Considering that landscape architecture, landscape planning, landscape reclamation, landscape management and landscape preservation are part of the same process [1–3], existing knowledge on the biophysical character of a landscape, and on the way this character restricts or favors the implantation and the development of human activities, is essential to achieve its sustainability. This idea is also valid to the cultural and esthetic characters, because history, previous land use, people's culture, and landscape scenic and biological values, constitute essential factors for the acceptance of new landscapes by the population.

This idea explains how important it is to integrate all the landscape components, not only in planning and management activities, but in any kind of project concerned with the creation or change of the public space, because one may never forget that the main idea of any kind of project, must be "public space is for the public", and that's the reason why their needs, wishes and aspirations are one of the most important aspects in landscape architecture project and planning activities [12–14].

Anyway, landscape planning, design, management and/or redevelopment activities, provide constant new opportunities for those who have the desire and the ability to seize landscape, regardless of its nature [15–18], for this reason landscape architecture is considered to be, a significant resource for achieving sustainable development contributing as well to improve life's quality. In this regard, landscape design processes need to be thought in terms of sustainability and/or sustainable development, "*terms that get used a lot these days, and which since their appearance have been faced as new development paradigms introduced in land-use matters, merging social, economic and environmental dimensions*" [9], pushing regions and nations to work together in the establishment of new principles, frameworks and methodologies towards sustainable development.

The present book addresses the importance of the environmental, cultural, esthetic and economic contributions in landscape analysis, planning and design, while creating the common ground for enabling a broad understanding of the relationship established between landscapes, territories and human occupation along time. Consequently, aiming at the total understanding of landscape architecture domains, the envisioned book adopts a holistic vision of landscape, integrating its various components: the environmental, which includes both physical and biological parts of the ecosystems; the cultural, where both historical factors, genius loci, identity, sense of belonging, and the narrative qualities of the landscape

are considered; the socio-economic, referring not only to the social factors and economic activities determining the human action permanently constructing and changing the landscape, but also the regulations and legal instruments which affect these activities, approaching the contributions that the each component has in landscape design, planning, management and/or redevelopment.

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