

# Environmental Ethics and Pedagogy for the Landscape Redevelopment

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## Abstract

*In the context of the complexity of the Environmental Education and Ethics for the Pedagogy of the redevelopment and enhancement of the landscape, an efficient and innovative perception of the sustainability is required to make an integrated and multifunctional approach tending to the environmental restoration and valorization of the landscape and therefore to the improvement in life quality. Humanistic knowledge and scientific knowledge must interact because this connection can contribute to overcome the challenges of the scientific research. The implementation of innovative methodologies for the functional analysis of the multiform complexity of the environment and landscape systems and the effective decision-making processes must be able to identify a cognitive matrix of the complexity investing the critical improvement of the life quality in planetary terms. The expected results must introduce innovative algorithms that have the burden of decoding the states of complexity of the territories by organic interconnections and a new systemic method.*

## 1. Introduction

Currently we are over seven billions of people and the challenges of the sustainability are required to develop the state of the implementation of the globalization [8].

The substantial transformations of the human landscape have given rise to some interventions as to urban ecosystems and different buildings without creating appropriate and flexible interconnections among the urban design, the territorial planning and the respective building complexity.

The ecological protection of the landscape and the conservation of the land biodiversity and urban areas require a significant degree of analysis of the planet's ecosystem complexity to promote the implementation of some integrated programs capable of ensuring a sustainable and harmonious new trend of the man-landscape balances. These programs and balances can help to improve the quality of life in cities and rural areas. Therefore, it's necessary for the people a high degree of an integrated scientific

and legislative protection of plants, trees, vegetable species of the urban green, habitats and interconnected territories.

Moreover it's necessary for the cities and metropolitan areas to promote a Territorial Environmental Control System (TECS) that is able to ensure an enhanced level of sustainable protection of the Environment - Landscape - Territory - Man - System (ELTMaS). This new system should be ergonomically related to the analytical values of the biodiversity and the man - city - region systems, the land planning and management, ecosystem services, biotechnology, and a new vision of the environmental laws.

Within this innovating framework the concepts of protection and ecological planning of the landscape mark out the dimensions of the foundations of the protection of the citizens, the ecosystems and the urban and peri-urban biodiversity. The sustainable building production and the protection of the energy efficiency are inseparable elements in relation to the sustainability of systemic relationships among cities - landscape - population, urban ecological management and management of the landscape [10].

With regards to the protection of building structures and the quality of the production of effective building materials, it is necessary to acquire advanced levels of interdisciplinary knowledge of building systems, in urban and metropolitan zones, and to improve their interactions and a remarkable degree of critical awareness, to be acquired through the development of the environmental education. Therefore, within the environmental learning the goal of the pedagogy is the implementation too of the consciousness in relation to the sustainable valorization of the "continuum" City - Building - Environment - Suburbs - Landscape [2, 11]. An efficient and innovative perception of the sustainability is required to make an integrated and multifunctional approach tending to the environmental restoration and valorization of the landscape and therefore to the improvement in life quality.

The humanistic knowledge and the scientific knowledge must interact each other because only this

connection can contribute to overcome the challenges of the scientific research [4]. It's necessary the establishment of an innovative and strategic system that is able to perceive in an interdisciplinary way the deep fragmentation of the Italian and European society. There's the necessity of new information and training processes in order to set up a new University degree course endowed with training and education courses to increase the skills for the integrated planning and the urban-environment design, joined in the protection of regeneration and restoration and energy efficiency process in connection with the building production [5], [7], [10]. The revision of the methods of protection of energy efficiency in Europe requires an urgent change of the systems of design and use of buildings and urban, suburban and rural areas [1], [8]. In relation to the environmental planning the considerable consumptions joined in the social and economic development of human activities and energy efficiency must be able to determine the improvement in the life quality of cities and territories, to secure an innovative standard of living to the people. In this context the building production must be closely joined in the urban and territorial regeneration.

Different styles of life joined in an innovating Environmental Education and Ethics for the Pedagogy of the redevelopment and enhancement of the landscape are essential to determine the different cycles of transformation of the territory and a fundamental audit of the standards, in order to implement the reduction of the energy consumption and the use of the resources, as recently stated also in Expo 2015, for the whole planet [12].

Some extensive programs of Environmental Urban and Rural Education (EUREd) need to be carried out with advanced levels of interdisciplinary and technical knowledge of the environmental systems, their interactions and a remarkable degree of critical awareness.

Their aims are the spread of innovating values of an ecological Smart City and new dimensions of knowledge to be inculcated and the people have to acquire through the development of an Integrated Environmental Education (IntEnEd) on a large scale.

## 2. Methodological lines

The urban, peri-urban and rural ecosystems in keeping with the complexity of the building macrosystems and historic centres must be properly taken into account for the environmental rehabilitation [10]. In the present work, as far as the interaction between environmental restoration and enhancement of the landscape is concerned, the interdisciplinary dimension is fundamental.

Therefore, in the overall context, the implementation of innovative methodologies

functional to the analysis of multiform complex systems of environment and landscape and the creation of effective decision-making processes should find an array of cognitive complexity that invests the critical improvement of the life quality in planetary terms [3].

The expected results must introduce powerful algorithms that have some interconnections with a new systemic method and the burden of decoding the states of the ecosystemic complexity of the territories and landscapes.

The features of this methodological contribution are axiomatic elements of the concrete environmental restoration and enhancement of the landscape.

With regard to the pedagogy of these elements it's necessary that the professionals should link up with the values of the sustainable environmental education articulating interactive programs as to biodiversity, complexity and values of the urban ecosystem, building organism and population [17], [20].

In order to carry out the effective redevelopment and the integrated valorization of the landscape the pedagogy must mark out the foundations through a study by new parameters relative to the environmental and building system education.

For this purpose the processes of analysis and information offer a suitable contribution, together with the subsequent activities of training, applications, workshops and the dynamics of the scientific research into the integrated planning design. In this way it's possible that the professionals will create new methodologies and scientific outlines of an innovative professionalism, for the building production and design with the view of the redevelopment [15], [16].

In this context an innovating quality of the material characteristics of the Environmental Architecture, the safety legislation, the environment protection and the pedagogy of the environmental ethics can determine a pattern of strategic interrelationships to allow the optimization of environmental and building resources within the integrated environmental design, [18]. In the planning of soil conservation, landscape architecture, environmental design and culture of the beauty, the Environmental Culture is a cardinal element. The natural Parks and the protected areas, the historic Gardens and the Urban Parks in our country give rise to various ecosystems and patch mosaics that produce fascinating scansions of landscapes imbued with extraordinary beauty that need to be better protected; these precious environments are rich in biodiversity and represent important points of reference for the activities of an Integrated Environmental Education and the Scientific Research in order to spread the Culture of the Environmental Protection. As to the environmental restoration and

enhancement of the landscape it's opportune to provide for the appropriate implementation of methodological lines that promote for every area:

- the redevelopment and a new qualification of the building organism in an urban environment;
- the defence from pollution;
- the redevelopment of the building within the soil protection and the seismic engineering;
- the building audit inside the mountain areas and their environmental regeneration;
- the redevelopment and an integrated defence against the fire; the planning of the forest fires;
- the revision of the urban-territorial planning and building deficiencies and the subsequent sustainable redevelopment;
- the strategies in the building industry to improve the life quality;
- the audit of the standards of quality of the materials;
- the revision of parameters to warrant the quality of building construction; - studies and researches into the Ethics and the Pedagogy of the Landscape;
- Polythematic Laboratories with reference to the environmental complexity and sustainable building industry [10], [13], [17].

The recovery of the sense of the naturalism and the harmony of the beauty by the public urban Gardens and urban forests is of vital importance in order to plan the defence of the soil and the strategies to zero the soil consumption and to carry out the urban regeneration.

These works must be designed with the criteria of the Integrated Environmental Planning and the Landscape Architecture and must be considered as spatial dimensions to search for a relation between the man and the nature, the human and the spiritual energies. The harmony between man and nature is increasingly sought after inside Urban Green Zones, Urban Forests, Gardens and in general green areas. The wooded territories and urban green areas are important elements in order to set up Green-economy and mobility and to improve the life quality of people in the cities and rural areas. It is necessary for our country to promote a new culture of life and the Protection of Biodiversity by some plans of Culture of the Environmental Protection and Enhancement of the Landscape. In this context the Environmental Education and Ethics for the Pedagogy of the redevelopment and Enhancement of the Landscape and the Culture of the Environmental Protection are very important elements of the system Building - Territory - Redevelopment and Regeneration of the Landscape [9], [11]. The landscape regeneration and valorization need to be carried out by the Pedagogic Plan of Environmental Culture where the Musical Education, the Musictherapy and the Sonorous Landscape are

factors of a great importance because they can contribute to develop the awareness of the sonorous pollution too. The new methodology of Musictherapy / Gardentherapy, Environmental Education and the Environmental Musictherapy Plans by the Authors are very useful particularly inside the urban suburbs and nursing home and for the health management in general [6]. In this context the Pedagogy and the Ethics explore new ways of education and exceed unilateral and one-dimensional pedagogical theories laying their foundation to a method of scientific work that allows professionals to progress in the knowledge critically. The Pedagogy and Ethics enable the professionals to learn, explore and apply new educational horizons with the people and the patients too that benefit by these scientific findings. The professionals as the musictherapists, the pedagogists and the environmental specialists can help the people on with some safe hooks to develop the motivation to learn to overcome the distress and the psychological weakness facing up the difficult environmental situations too. Therefore the aims of the Pedagogy and Ethics are to strengthen the people identity and mental and physical abilities and resilience too. The environmental redevelopment and the enhancement of the landscape can be carried out also by some musical concerts in the open air. This musical experience can inculcate the children and their families, the adults and the elderly with a new environmental awareness [6], [14], [19].

### 3. Results and future developments

The macro-environmental systems as the building structure of cities and suburbs and peri-urban areas require a sustainable environmental protection that is joined to the consumption production of the man-made systems, the lack of maintenance, inadequate ecological-urban management, incorrect land use, metropolitan and urban decay, ineffective enforcement of the law in relation to the new technologies.

Such interconnections of texture-systems can allow of multiform values of energy exchanges and essential information for the design and planning of the numerous factors that characterize the matrices of the sustainability and a desirable new law about the landscape too [10], [11], [19].

In relation to the landscape and the polychrome building sector, the complexity of the systematic processes for the Environmental Regeneration and Improvement of the Landscape (ERIL) requires a remarkable planning of innovating programs, the active implementation of the Environmental Education and Ethics for the Pedagogy of the Redevelopment and Enhancement of the Landscape (EEEPREL), advanced knowledges, a wide multi-

dimensional planning of urgent objectives such as the recovery of the housing, urban and rural and environmental patrimony, the restoration of environmental goods, the redevelopment and regeneration of existing buildings, habitat and geographical areas which are interconnected with the extraordinary and wonderful landscape of the world. These methodological lines are the fit elements for a concrete environmental restoration, still somewhat limited. Therefore by these paradigms the urban ecosystems, joined in the peri-urban and rural zones, can be in keeping with all of the existing building ecosystems and their various complexity and the historic centres that aren't taken into account adequately [7],[11].

A degree course in Environmental Regeneration and Enhancement of the Landscape based on efficacious methodological lines can provide results that are fundamental elements for concrete activities to achieve a sustainable development of the territory and landscape [9].

Thus, among the results of this methodological research, the professionals can seize the opportunity in order to acquire a valuable preparation pertaining to the Environmental Regeneration and Enhancement of the Landscape and the awareness of the necessary systemic complexity [3]. The perceived perceptions are an integral part of the awareness of the ecosystemic services, biodiversity and irreplaceable multifunctionality of the energy efficiency, to be interconnected with the peculiarities of building production and a desirable evolution of the advanced research. The strengthening of environmental education, scientific associations, centres of academic learning and study and scientific research can promote the recovery of the values of man and nature and beauty.

These actions can contribute greatly to improving the quality of the individual and collective life.

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