

## Chapter 6

# The Landscape Cultural Construction: A Recognition of the Roman Tradition

**Isabel Sousa Rosa**

*University of Lisbon, Portugal*

**Joana C. Lopes**

*University of Lisbon, Portugal*

**Ricardo J. Ribeiro**

*University of Lisbon, Portugal*

### ABSTRACT

*The interdependent relation between urban settlements and their environment has been broadly neglected over the last two centuries, particularly near major urban centers. This reflects in an unbalanced and often inadequate occupation of the territory, leading to the deterioration of quality of human life by loss of ecological and cultural diversity. In this sense, it was carried out a research to develop a Potential Land-Use Plan for the Portuguese territory to assess the land suitability for the installation of multiple human activities. The concept proposed for this chapter, will be based on a reinterpretation of tradition, following the current concepts of ecological and cultural sustainability, concerning the historical occupation of the Portuguese territory focusing on the Roman period using a GIS environment.*

### INTRODUCTION

The base from which this chapters subject its built on, is an investigation carried out about the Portuguese urban settlements process at national level through the Geographic Information System analysis tools focused in the Roman occupation period. This subject was developed by the research team at Faculty of Architecture - University of Lisbon (FAUL) within a research project called “Potential Land-Use Ecological Plan. Application to Portugal”, funded by the Science and Technology Foundation (FCT). The work

DOI: 10.4018/978-1-4666-9845-1.ch006

developed aims to lead to a development of a new proposal for a Potential-Land-Use Plan for Portugal under the concepts of the *ecological land suitability* related with the *cultural significance* of landscape.

The approach of the research team is mainly related with analysis how the relation between ecosystems and its cultural recognition processes work. This lies upon the principle for landscape recognition rooted in the context of societies: not considering human action only as causality interfering on the environment, but as an active principle of responsibility, while being part of a community. Understanding such processes require a thorough research for alternatives that can go beyond the current challenges by integrating human activities in its territory. For instance, the management plans made in recent decades have experienced this difficulty in handling with several expectations and needs of human activities without jeopardizing natural resources, hence resulting in inadequate land-use.

In this sense, the following texts make a general description of the European Landscape Convention principles in land-use planning system, enabling to understand the compatibility between management tools towards environmental resources.

By approaching *landscape* while a dynamic interaction between ecosystems and human cultural expression, it's proposed an integrative methodology which enables the analysis of land settlements evolution based on landscape transformation and its cultural significance processes. In Portugal, this interaction had a relevant expression in the territory by Roman occupation tradition. In order to achieve it, the Geographic Information Systems have an important role making possible to organize a set of historical and cartographic data, joining information into only one interpretative database, for easy access and a fast management by different research areas.

## **BACKGROUND**

The landscape, like a dynamic entity, expresses itself according to the relationships that occur in the territory. These relationships emerge on the land by the complex interaction between biophysical and human systems, which result from the ongoing actions of communities upon their efforts to survive (Ingold, 2011; Barnet, 2013).

However, the recent unilinear vision of economic development that has been broadly adopted is currently being challenged by the territory's inability to endure the transgression of its limits. It is crucial to be aware of the extent of consequences associated with the various modes of resource exploitation and the landscape intervention, which couldn't jeopardize the survival of communities. The increase of incompatibility between human activities and ecosystems that support them means that must be find alternative approaches that contribute to the maintenance of the territory integrity.

In Portugal, from a legal standpoint, the answer to this problem has been explored through a series of actions implemented under the classification, management and safeguarding of resources form, though without an integrating framework of concerning the landscape dynamics. This lack of holistic knowledge leads to a constant questioning of measures taken to classify elements are the most appropriate to meet the current human needs involving the future of spatial planning.

## **The Landscape Recognition in Territorial Management Instruments**

In Portugal, the territorial management instruments feature problems in terms of interest, scope and scale compatibility, particularly regarding Territorial Special Plans, such as Protected Areas Management

25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/the-landscape-cultural-construction/149492](http://www.igi-global.com/chapter/the-landscape-cultural-construction/149492)

## Related Content

---

### We Know Where You Are: In Space and Place - Enriching the Geographical Context through Social Media

Xining Yang, Xinyue Ye and Daniel Z. Sui (2016). *International Journal of Applied Geospatial Research* (pp. 61-75).

[www.irma-international.org/article/we-know-where-you-are/146549](http://www.irma-international.org/article/we-know-where-you-are/146549)

### Activity-based Modeling and Microsimulation of Emergency Evacuations

Xuwei Chen (2015). *International Journal of Applied Geospatial Research* (pp. 21-38).

[www.irma-international.org/article/activity-based-modeling-and-microsimulation-of-emergency-evacuations/122802](http://www.irma-international.org/article/activity-based-modeling-and-microsimulation-of-emergency-evacuations/122802)

### Semantic Web and Geospatial Unique Features Based Geospatial Data Integration

Ying Zhang, Chaopeng Li, Na Chen, Shaowen Liu, Liming Du, Zhuxiao Wang and Miaomiao Ma (2019). *Geospatial Intelligence: Concepts, Methodologies, Tools, and Applications* (pp. 230-253).

[www.irma-international.org/chapter/semantic-web-and-geospatial-unique-features-based-geospatial-data-integration/222901](http://www.irma-international.org/chapter/semantic-web-and-geospatial-unique-features-based-geospatial-data-integration/222901)

### Using Volunteered Geographic Information to Assess the Spatial Distribution of West Nile Virus in Detroit, Michigan

Kevin P. McKnight, Joseph P. Messina, Ashton M. Shortridge, Meghan D. Burns and Bruce W. Pigozzi (2011). *International Journal of Applied Geospatial Research* (pp. 72-85).

[www.irma-international.org/article/using-volunteered-geographic-information-assess/55374](http://www.irma-international.org/article/using-volunteered-geographic-information-assess/55374)

### Traditional vs. Machine-Learning Techniques for OSM Quality Assessment

Musfira Jilani, Michela Bertolotto, Pádraig Corcoran and Amerah Alghanim (2019). *Geospatial Intelligence: Concepts, Methodologies, Tools, and Applications* (pp. 469-487).

[www.irma-international.org/chapter/traditional-vs-machine-learning-techniques-for-osm-quality-assessment/222912](http://www.irma-international.org/chapter/traditional-vs-machine-learning-techniques-for-osm-quality-assessment/222912)