BOOK REVIEW: Coastal Scenery Evaluation and Management. Nelson Ranguel-Buitrago eds

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| Corresponding Author: | Ilaria Rodella  
                    Universita degli Studi di Ferrara  
                    Ferrara, ITALY                      |
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| First Author:      | Ilaria Rodella                                                                  |
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| Abstract:          | The book Coastal Scenery Evaluation and Management, edited by Nelson-Ranguel Buitrago, compiles a wealth of information and experiences useful to researchers involved with beach scenery and management. Therefore, the target audience for this book is primarily those in coastal management who have any dealings with landscape, from geologists, architects, engineers to beach operators. The content of this book opens perspectives for analysis of the potential for coastal tourism development in natural areas and for landscape quality improvement in current coastal tourist developed areas. |
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Ilaria Rodella

University of Ferrara, Department of Engineering, Via Saragat 1, Ferrara 44122, Italy


This book describes an easy to apply methodology to determine the “scenery” or “scenic value” of a coast. Scenery may be defined as “the appearance of an area” (Council of Europe, 2000; Rangel-Buitrago et al., 2013) and it is a very important component for beach tourism because drives the economy of many coastal countries (Ergin et al., 2006). The evaluation of coastal scenery is an important instrument for coastal preservation (identifying the value to society of particular areas/views), protection (identifying high quality landscapes and controlling development) and improvements (identification of components that can detract from views), as evaluation outcomes provides a scientific basis for any envisaged management plan (Ergin et al., 2004).

True to its title, the book Coastal Scenery Evaluation and Management, edited by Nelson-Rangel Buitrago, compiles a wealth of information and experiences useful to researchers involved with beach scenery and management. Therefore, the target audience for this book is primarily those in coastal management who have any dealings with landscape, from geologists, architects, engineers to beach operators. The content of this book opens perspectives for analysis of the potential for coastal tourism development in natural areas and for landscape quality improvement in current coastal tourist developed areas.

The book contains 7 chapters written by 6 authors from different states of world (Columbia, Italy, Malta, Turkey and Wales), which discussed different aspects of Coastal Scenery: “Coastal Scenery-An Introduction” (Chapter 1); “The Concept of Scenic Beauty in a Landscape” (Chapter 2); “Some scenic evaluation techniques” (Chapter 3); “Coastal Scenery Assessment by means of a Fuzzy Logic Approach” (Chapter 4); “Coastal Scenery Assessment Definitions and Typologies” (Chapter 5); “Examples of Class divisions and Country Synopsis for Coastal Scenic Evaluations” (Chapter 6) and “The Management of Coastal Landscapes” (Chapter 7). Over a time of a decade or so, the authors of this book have assessed more than 950 global locations using the technique of “Coastal Scenic Evaluation Scheme” given in this book.

The introduction on Coastal Scenery of Chapter 1 provides a general overview of coastal tourism and illustrates the importance of scenery in this context. Scenery, in fact, is strongly related to several coastal features that directly affected coastal tourism. Among these features, authors report the quality of environments, recreational activities, services, nature and wildlife conditions, presence of cultural attributes, ecotourism and others. As a consequence, the exploitation of natural and cultural resources on the coastal zones for coastal development, induces an impact on scenery value. At the same time, the impact of coastal scenery on tourism market is great and influence the touristic movements.

In Chapter 2, author provides a contribution of the concept of coastal beauty, as a primary aspect of an area, answering to the questions: “What is beauty in landscape?” and “How we can quantify the beauty?”. After a brief summary of landscape definitions, the concept of landscape as the union of aesthetic, cultural and historical elements is finally explained. In this definition, scenery is not only the
physical presence of geological, archaeological, ecological aspects but it is the consequence of other
senses like smell, joy, comfort evoked in the observer. With other words, this attribute is that quality
or assemblage of qualities which gives the eyes or other senses intense pleasure (Cassel dictionary
1997). The concept of beauty is an experience of a person with the environment and therefore, it cannot
be clearly defined it because is the result of a perception. The term perception is strictly related to
beauty and to scenery especially after the World War II and, more recently (2017), politics gave more
attention to the perception of an environment instead of their knowledge. In this context, beauty can be
related also to quality of landscape, from a legal point of view, clarifying the meaning of “natural” and
“human settlement” landscape. This is the reason why authors of this book report field testing of views
of many beach users.

Chapter 3 describes a review of scenic evaluation techniques. The assessment of landscape quality and,
scenery as part of the landscape, is necessary to induce correct and specific conservation, protection
and improvement measures. Many scenery evaluations reported by author consider subjective analysis
considering perception assessments or public preference inventories. Other assessments consider both
subjective and objective analysis, using for instance questionnaire with photographs and images. The
main problems of these evaluations are the subjectivities of the related results which in some cases
affected the analysis and the replicability of the researches. After the review of about 30 years of
researches in this fields, author focuses on the method mainly used in this book and explained in
chapter 4. This method, Coastal Scenic Evaluation System (CSES), aims to fill in the shortcomings of
the literature methods identified.

Chapter 4 is the core of the-book, because it presents one of the main tools for coastal scenic
evaluation, the Coastal Scenic Evaluation System (CSES). One of the main aims of this method is to
point out how scenic areas may be improved by judicious intervention relating to physical and
anthropogenic parameters chosen for assessment. Twenty-six parameters were choosing as a results of
several public surveys (485 validated surveys) and they were not arbitrarily identified by experts. These
parameters can be used to classify any coastal scene, which have then been sub-divided into five
attribute categories, weighted and subjected to fuzzy logic mathematics to obtain a decision number
(D). This number D represents the coastal scenery at that point, and Five D classes are then presented
(from I-excellent, to V-poor). Heritage areas, like National Parks should lie in Class I, which infers top
scenic quality. The chapter described the main step of the methodology, identifying the importance of
each parameter and its weights, the mathematical model developed by the authors (a fuzzy logic), the
evaluation index D, its relation with the five classes of the classification and an example of CSES
application. A brief discussion is need for the parameters’ weights. Each weight was assessed by the
perception questionnaire results of public surveys and normalized in a final weight matrix. Physical and
human parameters have different weights in the 5 classes of the scenery classification. In fact, the
dominant grades for class I and II are due to human parameters, while for other coastal sites, physical
parameters slightly prevail. In general, the method attributes the greatest grades for human parameters
than for physical parameters, as checked by experts and public surveys. Author emphasizes that not
only weights parameters but also the attributed scores for each parameters will change D value
especially for human parameters. Therefore, the effectiveness of human parameters on D values is a
forcing function for planners and coastal managers that work with human inputs. Weighted average
histograms of physical and human parameters and membership degree graphs are the data presentation
outputs of the CSES. These graphs are very useful to immediately understand the scores’ plotting and
their importance in the scenery final assessment. The case studies of Çirali Karaburun and Kizkalesi Mersin are well described thanks also to the graphs. CSES method, as indicated in the final paragraphs of chapter 4, is implemented in MATLAB in a recent study of Ergin et al., (2018) and make it available in an open-source computational tool.

Chapter 5 presents a field guide for the application of CSES method and includes the steps to follow, definitions and examples of each parameters. These brief definitions and examples of parameters are very useful, especially when CSES is applied in beaches with different morphologically and human features. Users that use the checklist can therefore consider the definitions given in this chapter to actually understand the beach features. This aspect is useful both for experts in the coastal sector, and for those who are not very familiar with different types of beach. Furthermore, the chapter shows Photo-Atlas that helps researchers and coastal planners for the correctly attribution of parameter grade.

Examples of each class of 952 coastal locations all around the world are presented in Chapter 6. These CSES evaluations cover large areas of Caribbean coast of Colombia, the Mediterranean coasts e.g. Marocco, Spain, Turkey, Malta and the entire coast of Wales, Cuba and Bonaire. Other less investigated sites are located in New Zeland, Australia, Japan, South America, Antartica ect. As easily observed, the comparison of beaches of the same class is possible even if we consider coastal sites very far, especially if they are located in different continent or geographical basin. Therefore, readers could better understand differences from a beach to another also inside the same class. The aforementioned large scale evaluation is also described with a summary of scenic assessment and specific beach examples. At the end of the chapter is also presented a list of all the beaches assessed worldwide and their classification. These data are useful for those wishing to apply the CSES in the same beaches, as a reference to be compared, or in neighboring beaches to evaluate entire littoral stretches.

Chapter 7 discusses the aim of coastal landscape management, exploring its importance in preservation of scenery integrity and cultural authenticity. Here the authors have provided the reader with examples of coastal management application reflecting a compilation of material intended to support the coastal management processes outlined in previous chapters. Authors present, in addition to some literature contributes, also a summary of the main guidelines, conventions and regulations in landscape management, such as UNESCO World Heritage Convention (UNESCO, 2005), Pan-European Biological and Landscape Diversity Strategy (Conrad, 2010) and others. These chapter and range of ideas presented makes for an impressive resource that I can envision being extremely useful and necessary for coastal managers who may lack access to basic and fundamental information.

In summary, the authors have produced a comprehensive reference text that should become a source of information for coastal scenery management experts. The diversity and number of methods presented, besides CSES, reflects in many ways the complexity and difficulties that society faces in attempts to implement coastal landscape management. An analysis of this volume, approaching 250 pages in length, makes a statement as to the challenge that is faced in many coastal regions. By providing fundamental and necessary information the authors have gone a great length in promoting the need for scenery management and the utility of learning from the experience and practices carried out in decades of scenery applications. It is my hope that anyone involved actively in the field of coastal policy or management would seriously consider obtaining a copy of the Coastal Scenery Evaluation and Management Book. I also suggest that given the potential audience and importance of the subject matter the authors and publisher consider future editions in order to incorporate data and policy
updates. I highly recommend this handbook as a standard reference for those concerned with scenery, and efforts at landscape management and planning.

References

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