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

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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. |
| Suggested Reviewers: | |

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

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Nelson Ranguel-Buitrago (2018). *Coastal Scenery Evaluation and Management*. Coastal Research Library, Volume 26. Dordrecht, The Netherlands: Springer International Publishing, 244p., ISBN: 978-3-319-78877-7 (eBook), € 83,29.

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6 1 **BOOK REVIEW: *Coastal Scenery Evaluation and Management*. Nelson Ranguel-**
7 **Buitrago eds.**
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13 5 This book describes an easy to apply methodology to determine the “scenery” or “scenic value” of a
14 6 coast. Scenery may be defined as “the appearance of an area” (Council of Europe, 2000; Rangel-
15 6 Buitrago et al., 2013) and it is a very important component for beach tourism because drives the
16 7 economy of many coastal countries (Ergin et al., 2006). The evaluation of coastal scenery is an
17 8 important instrument for coastal preservation (identifying the value to society of particular
18 9 areas/views), protection (identifying high quality landscapes and controlling development) and
19 9 improvements (identification of components that can detract from views), as evaluation outcomes
20 10 provides a scientific basis for any envisaged management plan (Ergin et al., 2004).
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24 13 True to its title, the book *Coastal Scenery Evaluation and Management*, edited by Nelson-Ranguel
25 14 Buitrago, compiles a wealth of information and experiences useful to researchers involved with beach
26 14 scenery and management. Therefore, the target audience for this book is primarily those in coastal
27 15 management who have any dealings with landscape, from geologists, architects, engineers to beach
28 16 operators. The content of this book opens perspectives for analysis of the potential for coastal tourism
29 17 development in natural areas and for landscape quality improvement in current coastal tourist
30 17 developed areas.
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34 20 The book contains 7 chapters written by 6 authors from different states of world (Columbia, Italy,
35 21 Malta, Turkey and Wales), which discussed different aspects of Coastal Scenery: “Coastal Scenery-An
36 21 Introduction” (Chapter 1); “The Concept of Scenic Beauty in a Landscape” (Chapter 2); “Some scenic
37 22 evaluation techniques” (Chapter 3); “Coastal Scenery Assessment by means of a Fuzzy Logic
38 23 Approach” (Chapter 4); “Coastal Scenery Assessment Definitions and Typologies” (Chapter 5);
39 24 “Examples of Class divisions and Country Synopsis for Coastal Scenic Evaluations” (Chapter 6) and
40 25 “The Management of Coastal Landscapes” (Chapter 7). Over a time of a decade or so, the authors of
41 26 this book have assessed more than 950 global locations using the technique of “Coastal Scenic
42 27 Evaluation Scheme” given in this book.
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46 29 The introduction on Coastal Scenery of Chapter 1 provides a general overview of coastal tourism and
47 29 illustrates the importance of scenery in this context. Scenery, in fact, is strongly related to several
48 30 coastal features that directly affected coastal tourism. Among these features, authors report the quality
49 31 of environments, recreational activities, services, nature and wildlife conditions, presence of cultural
50 32 attributes, ecotourism and others. As a consequence, the exploitation of natural and cultural resources
51 33 on the coastal zones for coastal development, induces an impact on scenery value. At the same time,
52 34 the impact of coastal scenery on tourism market is great and influence the touristic movements.
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56 36 In Chapter 2, author provides a contribution of the concept of coastal beauty, as a primary aspect of an
57 36 area, answering to the questions: “What is beauty in landscape?” and “How we can quantify the
58 37 beauty?”. After a brief summary of landscape definitions, the concept of landscape as the union of
59 38 aesthetic, cultural and historical elements is finally explained. In this definition, scenery is not only the
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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

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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

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updates. I highly recommend this handbook as a standard reference for those concerned with scenery, and efforts at landscape management and planning.

References

Cassel dictionary 1997. Orion, UK

Conrad, E., 2010. People and landscape... Coming in from the cold. In: Conrad E, Cassar LF (eds). Perspectives on landscapes institute of earth systems. University of Malta, la Valeta, pp 23-31

Council of Europe, 2000b. European Landscape Convention. Rep. Conv. Florence ETS No. 17, 8. doi:http://conventions.coe.int/Treaty/en/Treaties/Html/176.htm

Ergin, A., Karaesmen, E., Gezer, E., Ucar, B., Karakaya, S.T., 2018. Development of an Open-Source Computational Tool for coastal scenic assessment based on fuzzy logic. 9th Coastal Engineering Symposium Proceedings, Turkish Chamber of Civil Engineers, Adana, Turkey.

Ergin, A., Williams, A. T., Micallef, A., 2006. Coastal Scenery: Appreciation and Evaluation. J. Coast. Res. 224, 958–964. doi:10.2112/04-0351.1

Ergin, A., Karaesmen, E., Micallef, A., Williams, A.T., 2004. A new methodology for evaluating coastal scenery: fuzzy logic systems. Area 36, 367–386. doi:10.1111/j.0004-0894.2004.00238.x

UNESCO, 2005. Basic Texts of the UNESCO World Heritage Convention. <http://whc.unesco.org/uploads/activities/documents/activity-562-4.pdf>