

BOOK REVIEW: DIGITAL REPRESENTATION OF THE IMPACT OF THE 1755 LISBON EARTH QUAKE

Mihaila Marina

*Lecturer Dr. Architect - Synthesis of Architectural Design Department,
Faculty of Architecture, Ion Mincu University of Architecture and Urbanism
Bucharest (ROMANIA)
marina.mihaila@arhitectonik.ro, arh_marina@yahoo.com*

Abstract

Following an interesting and contemporary approach, the book Digital representation of the impact of the 1755 Lisbon Earth quake presents in a creative and interactive thinking, based on several models of 3d city, directions and meanings of the seismic impact on the cities. A comparative model of investigation based on geometrical visualization and its semantic enrichment with non-geometric information is developed within the presented research, and the results are highlighted on Lisbon landscape application referring to 1755 earthquake.

The book addresses to landscape and architecture professionals, academics and students, but also to everybody who might be interested in new investigation methods and nuanced results on landscape disasters research, likewise possible evidence and marks within the city patterns.

Keywords: Urban planning, landscape, research projects, book review, Maria Bostenaru Dan, Thomas Panagopoulos, EUIM, UAUIM.

Main Text

1. SYNTHETIC DATA ABOUT THE REVIEWED BOOK

Book Title: Digital representation of the impact of the 1755 Lisbon Earth quake

Year: 2014

Pages: 118 | about 40 illustrations

Authors: Maria Bostenaru Dan & Thomas Panagopoulos

Publisher: "Ion Mincu" University Publishing House, together with University of Architecture and Urbanism "Ion Mincu Bucharest and Center for Architectural and Urban Studies | <http://editura.uauim.ro/en/> | <http://www.uauim.ro/>

Online pdf: [http://www.uauim.ro/anunturi/digital-modeling-of-the-1755-lisbon-earthquake/](http://www.uauim.ro/anunturi/digital-modeling-of-the-impact-of-the-1755-lisbon-earthquake/)

ISBN: 978-606-638-085-0

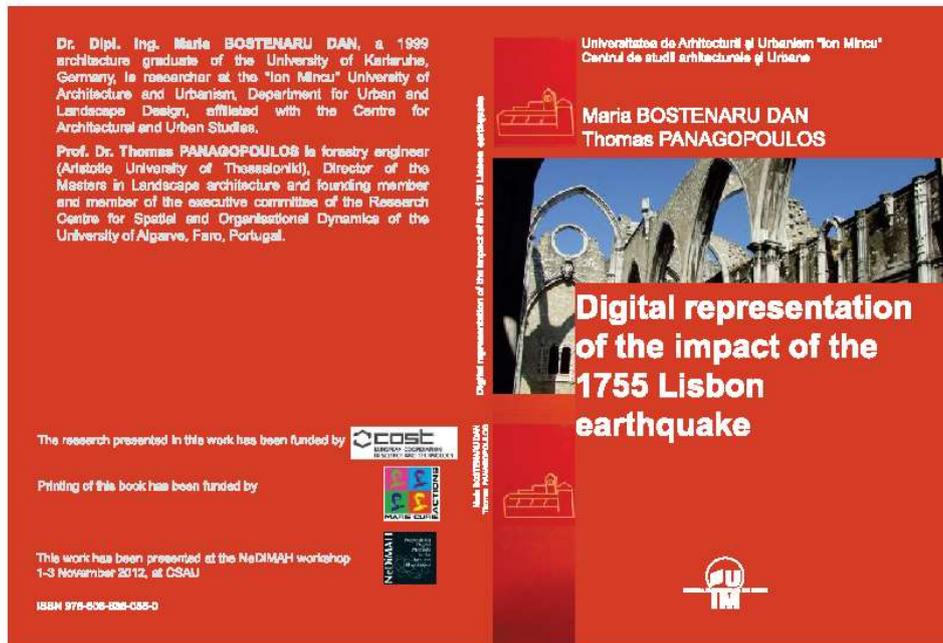


FIG.1. Front and back cover by Maria Bostenaru Dan, book *Digital representation of the impact of the 1755 Lisbon Earth quake*, authors: Maria Bostenaru Dan & Thomas Panagopoulos

2. BOOK REVIEW: Digital representation of the impact of the 1755 Lisbon Earth quake

Following an interesting and contemporary approach, the book *Digital representation of the impact of the 1755 Lisbon Earth quake* presents in a creative and interactive thinking, based on several models of 3d city, directions and meanings of the seismic impact on the cities. A comparative model of investigation based on geometrical visualization and its semantic enrichment with non-geometric information is developed within the presented research, and the results are highlighted on Lisbon landscape application referring to 1755 earthquake.

The book addresses to landscape and architecture professionals, academics and students, but also to everybody who might be interested in new investigation methods and nuanced results on landscape disasters research, likewise possible evidence and marks within the city patterns.

The content of the book *Digital representation of the impact of the 1755 Lisbon Earth quake* is the result of the research of two academic members involved in the COST European Action TU0801, presentation and publication being supported by Marie Curie Action and Nedimah network: Maria Bostenaru Dan, Researcher in architecture and landscape, Dr.Dipl.Ing. at University of Architecture and Urbanism "Ion Mincu" Bucharest, Faculty of Urbanism, Urban and Landscape Design Department, Doctor in Architecture, and Thomas Panagopoulos, Forestry Engineer, Prof.Dr., Director of the Masters in Landscape Architecture and member of the

executive committee of the Research Center for Spatial and Organizational Dynamics of the University of Algarve, Faro, Portugal.

The book presents successively in the beginning: an abstract with authors' motivation in developing the research based on 3d modeling approach and analyzes their own model for investigating the impact of 1755 earthquake on Lisbon urban and architectural landscape; an introduction regarding the review of architecture and urbanism games, the context of the disaster event of 1755 earthquake and following tsunami in Lisbon, the previous research on the theme of the first author; and the methodology and the vision of the authors regarding this subject, starting with the research projects connected with this book subject they were involved, their applications on some previous models of similar evaluation, meetings and collaboration with research networks which provided valuable further information, a literature survey on dedicated analyzed case study – photos of damages of Lisbon, European Architecture History Network papers on urban layers of Lisbon, different documents regarding the subject among which some of them from Getty library, followed by an announced, but undisclosed, discussion with specialists, and a mentioning of the 3d models supporting the demonstration development within the book – GIS, Google Earth and Second Life.

The Chapter 3 of the book, *Datascares*, presents the former mentioned supports of the study, and develops an applicable methodology for the dedicated case study on GIS and Google Earth analysis models, and a combination between, establishing the usability, usefulness and use of the information of both correlated. In similar thinking, Chapter 4, *More forms of the action*, is showing an already established route of strategic and semantic closeness, investigating CAD and Second Life dates, proposed concept and suggests a new way of using conclusions on the dedicated subject. Both Chapter 3 and 4 reveals the experience of the authors (mainly the first author) in dealing with classifications of information and dates, but also forms and applicable notions in the field of architecture, engineer, construction and urbanism, and also the connections of the present revealed study with the former ones (of the authors). And it is a very interesting observation to be made here: that somehow the authors have put together a lot of knowledge to establish a new kind of applicable method of investigation for landscapes that were the subject of a disaster. Anyway, a further evaluation of the results of this method should be evaluated when applicable to various sites. Chapters 5 and 6 present the Results and Discussion and Conclusion. The two reveals the pleasure of the author for investigating the complete overview of the studied announced issue in the title, and has to be discovered directly by the reader.

Illustrations (about 40) belong mostly to Maria Bostenaru Dan, first author, and to other authors that gave permission to the authors for publishing them in this book. References totalize 83 titles, (from which 17 are self references: 16 to Maria Bostenaru Dan and 1 to Thomas Panagopoulos), and presents the areal of the sources of information from which the research demarche is constructed, and specify books, articles and documents from seismic new trends and perceptions, strategies and management of risks disasters, geographical information, architecture, urban and transformation in the city, models of investigation from professional and academic worlds, augmented reality, virtual and cyberspace models and applications, but also research results from different projects and network actions. The reference mix tells the reader more about the interdisciplinary thematic approach the authors follows to weave a possible method possible to be extended in the future. Annex 1 lists the 72 landmarks the texts

refers to in pointing the demonstration on landscape approach proposed by the book. Annex 2 presents successive 26 photographic cataloging of the remained present landmarks, and their presentation boards for cultural tourism, for each building noting the specific names, successive construction and reconstruction years, and their architectural iconic, former or volumetric shape, to investigate the identity of the urban landscape form.

My general laudable regards on the book is dedicated especially on the motivation on finding new paths, directional or interdisciplinary, or even creative playful ways between methods to discover new meanings and interesting results (even partial) for further applications on the city, but also academic, touristic or socio-economic ones, even in searching for difficult subjects landscape disaster underlines. Also, another important recommendation is for the professionals and students in architecture and landscape design who could find a lot of interactive information in applying the method developed by the author within the book Digital representation of the impact of the 1755 Lisbon Earth quake, but also information about using creative software, games, and to put in common their knowledge.

Article distributed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND).

Received February 23, 2015

Accepted March 24, 2015