

Architecture Anthology I: Education, Research, and Practice

Edited by

Dr. Judith Urbano

Universitat Internacional de Catalunya, Spain

Athens Institute for Education & Research (ATINER)

2015

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Preface

Stavros Alifragkis and Nicholas Patricios

The papers contained in the series *Architecture Anthology I* are selected from those presented at the Conferences in Architecture, Urban Studies & Planning, Construction and Civil Engineering organized by the Athens Institute for Education and Research (ATINER) held in Athens. The chosen papers have been divided into categories and published in five separate volumes: 1 - Architectural & Urban History & Historiography; 2 - Architectural and Urban Theory; 3 - Architectural Construction, Materials & Building Technologies; 4 - Architectural Education, Research & Practice; and 5 - Sustainable Design. Further series will be published from papers presented at future ATINER Architecture Conferences. The selected papers are those that have been peer reviewed and approved for publication by referees, editors of each volume, and the general editors. It is hoped that the series will be both of interest and of value to academics, scholars, researchers, and practitioners.

The work of the referees and editors is much appreciated for without their volunteer efforts and time expended on reviewing papers and the re-writes by authors the *Architecture Anthology I* series would not be possible. Sincere thank you to the editors of Volume 1: Arthur Chen & Stavros Alifragkis; Volume 2: Nicholas Patricios; Volume 3: Jamal Khatib; Volume 4: Judith Urbano; and Volume 5: Fatih Rifki.

Thank you also to the referees for Volume 1: Stylianos Giamarellos, Mark Breeze, Simone Shu-Yeng Chung; Volume 2: Bahga Surinder, Amanjeet Kaur, Aarti Grover, Pankaj Chhabra; Volume 3: Marta Molina Huelva, Hugo Rodrigues, Elisabetta Carattin, Ksenia Piatkowska, Antonella Violano; Volume 4: Sergiu Petrea; Volume 5: Adrian Moleavin, Nirmita Mehrotra, Elham Madadi Kandjani, Christian Kersten Hofbauer.

The process of producing the volumes could not have been undertaken without the valuable assistance of Olga Gkounta, Research Assistant at ATINER.

General Editors

Stavros Alifragkis

Nicholas Patricios

Architecture Anthology I: Education, Research, and Practice: An Introduction

Judith Urbano

In the 17th Century, with the birth of the Academies, architecture was associated with the other liberal arts, sculpture and painting. In France the *Académie d'Architecture*, created in 1671, came to be renowned eminently for its classical and traditional teaching methods. The inauguration of the *École des Ponts et Chaussées* in 1741 and the *École des Ingénieurs de Mezières* in 1748 increased the pace of progress. In these schools education was basically technical and scientific; in fact, this was the beginning of the division between architects and engineers that still exists today.

The Enlightenment brought about an intellectual revolution, with Voltaire and Diderot in France and the *Sturm und Drang* movement in Germany. They were among the first detractors of the Academies which were seen as places of norms and restrictions that prevented artists from exercising their creativity and as conservative institutions, very traditional, where new ideas were not welcomed.

The 19th Century brought important changes and improvements with new materials and technology experiments giving birth to fresh architectural typologies for a new époque. Claude Navier who taught at the *École Polytechnique* in Paris, created in 1795, is known as the father of materials and construction disciplines. Jean-Nicolas-Louis Durand, who led the school, had a very practical and logical approach. He was the author of *Précis de leçons d'architecture* (1823) in which he wrote that architects were free to include variations and additions to the classical elements of architecture. Gaspard Monge taught classes in descriptive geometry. Viollet-le-Duc explained his refusal to join the Academy as he did not agree with apprenticeships being focused on the classical idea of beaux-arts and with technical matters being resolved by engineers. His idea of a study plan was to include the teaching of the new construction techniques for architects. The Academy, however, would not accept this modern idea. It was not until 1867 that a law consolidated the position of the architect as a professional, linking academic aspects with necessary scientific attributes.

Today architecture is a more comprehensive discipline that requires interdisciplinary knowledge in a very broad sense: calculations, history of architecture, urban planning, art, construction, design, materials, sustainability, drawing, informatics, and computer software. The teaching of architecture has also changed throughout the years and now the challenge is to prepare our students for the 21st Century with all the responsibility that this requires.

After the controversial Bologna Process for European Higher Education, Schools of Architecture have revised their study plans and improved their education systems. They have also implemented the means to facilitate the recognition of degrees and academic qualifications, and mobility and exchanges between institutions. The changes have also been important for the teachers, who are at the center of the organization and play a vital role. For this reason this book is dedicated to different proposals for education and research in architecture in which teachers try to keep students interested and motivated, and to improve their skills connecting architecture with other disciplines like the visual arts, urban planning and design.

Architecture Anthology I: Architectural Education, Research & Practice includes selected papers on special topics in relation to the teaching of architecture: different experiences of studios, projects and works that teachers have carried out with their students looking for new approaches. These papers were presented at the 3rd Annual International Conference on Architecture, in June 2013, in Athens, and show us interesting innovations in terms of methodology, creativity and technology. This conference provides a good opportunity for architects all over the world to meet, explain and share their ideas. I would like to thank all the participants and the authors of these papers and, of course in a very special way, the Athens Institute for Education and Research for offering me this opportunity to collaborate with them.