

Richard Etlin Giuseppe Fallacara Luc Tamborero

STEREOTOMY Acrobatic Stone Vaulting Past and Future

Edited by

Giuseppe Fallacara

Images

All 3d-models are realized by Giuseppe Fallacara during his research program at the ICAR Departement of Politecnico di Bari, directed by Prof. Claudio D'Amato Guerrieri.

The sketch on the right side is made by Giuseppe Fallacara. The sketches on page 13 are made by Luc Tamborero. The hand-made sketches on page 26 are made by Luc Tamborero and Luca Fraccalvieri.

The image on page 27 (LMGC90) is made by Ali Rafiee. The images on page 27 (lower) and page 34 are part of a study for stone and iron vaults that Maria Rita Campa has experimented during her doctoral thesis at the ICAR Department of Politecnico di Bari (EE Viollet-le-Duc innovation and tradition: language of form and connection between form and structure in the conception of polyhedral vaults).

The images on page 27 (lower) are realized in collaboration with Stella De Paola, Enrica Leonardis, Vincenzo Minenna, Francesco Peschechera, Rossella Refolo and Nicola Sacco during their fi nal workshop in architecture degree thesis (2007–08) at the Politecnico di Bari (Professors: C. D'Amato Guerrieri, G. Fallacara). All the images of the chapter *Projects* are rendered by Domenico Di Nardo.

The image on the cover is made by Giuseppe Fallacara and represents *Sphera*.

Photos

The photos accompanying the text are made by the authors except for: 20 (top), 21 (top) and 23 (left) are made by Richard Etlin; 23 (right) is made by José Calvo López.

Projects

All the projects are made by Giuseppe Fallacara.

Constructions

Abeille vault is made by the company "Leopizzi 1750" of Parabita (Lecce – Italy) for the 2006 Venice Biennale directed by C. D'Amato Guerrieri.

Truchet vault is made by "3d Pierre" of Nanterre (France) for the Summer School of Madrid.

Flat wault is made by "3d Pierre" of Nanterre (France) for the Stone Construction Stage of Isle d'Abeau (Lyon).

Sphera is made by "SNBR" of Troyes (France) for the 2008

MarmoMacc of Verona.

All the costructions are made with the supervision of Mécastone.

Editing and graphic design Maria Rita Campa

Editor

Copyright © MMVIII
ARACNE editrice S.r.l.
www.aracne-editrice.it
info@aracne-editrice.it
via Raffaele Garofalo, 133 a/b – 00173 Roma (IT)
editorial office: 0039 06 72672222
fax: 0039 06 72672233
administrative offi ce: 0039 06 93781065

ISBN 978-88-548-2044-9

Copyright © R. Etlin, G. Fallacara, L. Tamboréro

All right reserved. This book may not be reproduced, in whole or in part, in any form without permission from the Editor.

I edition: September 2008

TABLE OF CONTENTS

Stereotomy Revisited

Claudio D'Amato Guerrieri	11
José Carlos Palacios	12
Stereotomy	
Acrobatic Stone Vaulting Past and Future	e
The Acrobatic Tradition	18
Stereotomy: The Art of Cutting Stone	19
Stereotomy: Masterpieces	22
Stereotomy Today	24
Projects	37
Constructions	
2006_Abeille Vault	57
2007_Truchet Vault	63
2008_Flat Vault	69
2008_Sphera	75
Credits	81