

1. Record Nr.	UNINA9910792450403321
Titolo	Creating shapes in civil and naval architecture : a cross-disciplinary comparison // editors, Horst Nowacki, Wolfgang Lefevre
Pubbl/distr/stampa	Leiden ; ; Boston, : Brill, 2009
ISBN	1-282-60172-5 9786612601729 90-474-2691-6
Descrizione fisica	1 online resource (470 pages) : illustrations, plates
Collana	History of science and medicine library, , 1872-0684 ; ; v. 11
Altri autori (Persone)	NowackiH (Horst) LefevreWolfgang <1941->
Disciplina	623.8/1
Soggetti	Naval architecture - Design and construction - History Hulls (Naval architecture) - Design and construction - History Shape theory (Topology) Structural optimization Shipbuilding - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preliminary Materials / H. Nowacki and W. Lefèvre -- Colour Plates I–LII / H. Nowacki and W. Lefèvre -- Chapter One. Shape Creation Knowledge In Civil And Naval Architecture / Horst Nowacki -- Chapter Two. On The Use Of Design In Ancient Mediterranean Ship Construction / Patrice Pomey -- Chapter Three. Were The Hittites Able To Build A Replica Of An Egyptian Ship According To Their Own Drawings? / Lucien Basch -- Chapter Four. Markings And Pegs: Clues To Geometrical Procedures Of Roman Naval Architecture? / Ronald Bockius -- Chapter Five. Ancient Greek And Roman Architects' Approach To Curvature — The Corinthian Capital, Entasis And Amphitheaters / Mark Wilson Jones -- Chapter Six. "To Design" And "To Build" Mediaeval Ships (Fifth To Fifteenth Centuries) — The Application Of Knowledge Held In Common With Civil Architecture, Or In Isolation? / Eric Rieth -- Chapter Seven. Boat And Boat House. The Conceptional Origins Of Clinker Boats And Boat-Shaped Halls Of The Fourth To Eleventh Centuries In Scandinavia / Ole Crumlin-Pedersen -- Chapter Eight.

Gothic And Renaissance Design Strategies In Stonecutting / Enrique Rabasa Díaz and José Calvo López -- Chapter Nine. On Late-Gothic Vault Geometry / Jos Tomlow -- Chapter Ten. The Shipbuilding Text Of Michael Of Rhodes / David Mcgee -- Chapter Eleven. Naval Architecture Digitalized Introducing Arithmetic And Geometry Into Late Mediaeval Shipwrihty / Ulrich Alertz -- Chapter Twelve. Pregnant Columns. From Word To Shape / Antonio Becchi -- Chapter Thirteen. From One Curve To Another Or The Problem Of Changing Coordinates In Stereotomic Layouts / Joël Sakarovitch -- Chapter Fourteen. The Squinch Of Anet / Martina Lenz -- Conclusions / H. Nowacki and W. Lefèvre -- Appendices / H. Nowacki and W. Lefèvre -- Appendix A. From Words To Technical Practices: Moulds And Naval Architecture In The Middle Ages / Eric Rieth -- Appendix B. The Rare Traces Of Constructional Procedures In "Practical Geometries" / Jens Høyrup -- Appendix C. Draughting Curves Used In Ship Design / Jobst Lessenich -- Appendix D. Bibliographical Notes On Historical Metrology / Compiled and Jobst Lessenich -- Index / H. Nowacki and W. Lefèvre.

Sommario/riassunto

The design, construction and verification of complex two- and three-dimensional shapes in architecture and ship geometry have always been a particularly demanding part of the art of engineering. Before science-based structural design and analysis were applied in the construction industries, id est, before 1800, the task of conceiving, documenting and fabricating such shapes constituted the most significant interface between practitioner's knowledge and learned knowledge, above all in geometry. The history of shape development in these two disciplines therefore promises especially valuable insights into the knowledge history of shape creation. This volume is a collection of contributions by outstanding scholars in their fields of study, archaeology, history of architecture and ship design, in classic antiquity, the Middle Ages and the early modern period. The volume presents a comparative knowledge history in these two distinct branches of construction engineering.
