

1. Record Nr.	UNINA9910545196503321
Autore	Mascarenhas-Mateus João
Titolo	History of construction cultures : proceedings of the 7th International Congress on Construction History (7ICCH 2021), July 12-16, 2021, Lisbon, Portugal . Volume 1 // edited by Joao Mascarenhas-Mateus, Ana Paula Soares Pires
Pubbl/distr/stampa	Taylor & Francis, 2021 Boca Raton : , : CRC Press, , 2021
ISBN	1-00-317335-7 1-000-46875-5 1-003-17335-7 1-000-46878-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (1414 pages)
Disciplina	624.09 690.09
Soggetti	Building - History
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Half Title -- Title Page -- Copyright Page -- Table of contents -- Introduction: History of Construction Cultures -- Committees -- ORGANIZING COMMITTEE -- SCIENTIFIC COMMITTEE -- LOCAL COMMITTEE -- Organizing institutions -- Open session: Cultural translation of construction cultures -- On the construction of Byzantine vaulted systems through the eyes of the 19th century French rationalists -- 1 INTRODUCTION -- 2 BYZANTIUM RECONSIDERED BY WESTERN EUROPE -- 3 THE RATIONAL STUDY OF COUPOLE AND PENDENTIFS -- 4 CONCLUSIONS -- REFERENCES -- Style and stone - Stonemasonry in Switzerland between the Gothic and Renaissance -- 1 INTRODUCTION -- 2 THE GOTHIC FRANCISCAN CHURCH IN LUCERNE -- 3 LUX RITTER'S PALACE IN LUCERNE -- 4 THE TOWN HALL OF LUCERNE -- 5 SANDSTONE AND LIMESTONE IN SOLOTHURN -- 6 CONCLUSION -- REFERENCES -- Stability and construction of the 16th century Mexican rubble masonry vaults in Jiutepec Morelos -- 1 INTRODUCTION AND RESEARCH SCOPE -- 2 THE CONVENT OF

SANTIAGO APOSTOL: GEOMETRY AND STABILITY -- 3 CONCLUSIONS -- REFERENCES -- The construction of the vaults in the cathedrals of the Viceroyalty of Peru -- 1 INTRODUCTION -- 2 HISTORICAL BACKGROUND -- 3 THE CONSTRUCTION OF THE VAULTS -- 4 CONCLUSIONS -- REFERENCES -- Conception, materiality and development of coffered vaults in the churches of Goa -- 1 INTRODUCTION -- 2 BACKGROUND -- 3 THE FORMATION OF THE TYPOLOGY -- 4 THE CONSTRUCTION OF THE FIRST COFFERED VAULTS IN GOA -- 5 THE EVOLUTION OF THE TYPOLOGY -- 6 CONCLUSIONS -- REFERENCES -- The domes in piperno stone of San Giacomo degli Spagnoli in Naples -- 1 OVERVIEW OF THE RESEARCH -- 2 INVESTIGATIONS -- 3 CONCLUSIONS -- REFERENCES -- Local interpretations of classical models: The architecture of San Antonio mission churches, Texas -- 1 INTRODUCTION -- 2 EUROPEAN DESIGN INFLUENCE -- 3 REINTERPRETING RELIGIOUS MODELS. 4 MEANING OF THE DECORATION -- 5 LOCAL CONSTRUCTION PRACTISES -- 6 CONCLUSIONS -- REFERENCES -- The transfer of thin wood vaulting from France to America -- 1 INTRODUCTION -- 2 ORIGINS -- 3 TRANSFER -- 4 PROLIFERATION -- 5 CONCLUSION -- REFERENCES -- Tradition and invention in domestic construction in the Caribbean region: The case of Southern Puerto Rico -- 1 INTRODUCTION -- 2 PEASANT AND TOWN HOUSES IN THE EARLY PERIOD -- 3 THE EVOLVED CASA CRIOLLA -- 4 THE CASITA -- 5 CONCLUSIONS -- REFERENCES -- Translating the "Chinese roof": Construction culture hybridization in West China Union University -- 1 INTRODUCTION -- 2 FRED ROWNTREE AND THE ARCHITECTURAL DESIGN OF WEST CHINA UNION UNIVERSITY -- 3 TRANSLATION: WESTERN ARCHITECTURAL TECHNOLOGY VS. THE "CHINESE ROOF -- 4 CONCLUSION -- ACKNOWLEDGEMENTS -- REFERENCES -- Creating an American Methodist college in China: A building history of Soochow University, 1900-1937 -- 1 INTRODUCTION -- 2 AMERICAN INFLUENCE -- 3 "NEW" LOCAL TRADITION -- 4 CONCLUSIONS -- ACKNOWLEDGEMENTS -- REFERENCES -- Imposing and provocative": The design, style, construction and significance of Saint Anthony's Cathedral, Xinjiang (Shanxi, China), 1936-40 -- 1 INTRODUCTION -- 2 HISTORICAL CONTEXT: MISSION AND WARS IN SOUTH SHANXI -- 3 SOURCES AND METHODOLOGY -- 4 DESIGN AND STYLE OF THE CATHEDRAL -- 5 CONSTRUCTION OF THE CATHEDRAL -- 6 CHINESE ROOF, WESTERN TRUSSES AND INGENIOUS BUTTRESSING SYSTEM -- 7 MODELS AND SIGNIFICANCE -- 8 CONCLUSION -- REFERENCES -- 1950s housing in Milan: Façade design and building culture -- 1 INTRODUCTION -- 2 ARCHITECTS, BUILDERS, MANUFACTURERS AND TECHNICAL REVIEWS: THE ACTORS IN THE MILANESE EVERYDAY LABORATORY -- 3 FAÇADE DESIGN AND BUILDING CULTURE -- 4 CLADDINGS: LITOCERAMICA, MOSAICS, MARBLE -- 5 WINDOWS, BOW-WINDOWS AND LOGGIAS -- 6 ANGELO MANGIAROTTI AND THE PREFABRICATED FAÇADE -- 7 CONCLUSIONS. REFERENCES -- Technological development in the construction of Kasumigaseki Building: Japan's first super high-rise -- 1 INTRODUCTION -- 2 OUTLINE OF THE KASUMIGASEKI BUILDING -- 3 CHARACTERISTICS OF CONSTRUCTION -- 4 DISCUSSION -- 5 CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES -- The skyscrapers of Milan: From experiments to recent constructive challenges -- 1 INTRODUCTION -- 2 STEEL FRAME VERSUS REINFORCED CONCRETE STRUCTURES -- 3 A BRIEF HISTORY OF THE STRUCTURES OF SKYSCRAPERS IN MILAN -- 4 FROM THE SIXTIES TO THE NEW 'VERTICAL FEVER' -- 5 CONCLUSIONS -- ACKNOWLEDGEMENTS -- REFERENCES -- Thematic session: Form with no formwork (vault construction with

reduced formwork) -- Brick vaulting without centering in the Mediterranean from Antiquity to the Middle Ages -- 1 INTRODUCTION -- 2 A LATE BRONZE AGE BRICK VAULT IN CYPRUS -- 3 EARLY BRICK VAULTING IN HELLENISTIC TIMES -- 4 LIME- AND GYPSUM-MORTARED BRICK VAULTS IN ANTIQUITY -- 5 GYPSUM MORTAR AND TILE VAULTING. THE CONTRIBUTION OF THE ALMORAVID BUILDERS -- 6 CONCLUSIONS -- REFERENCES -- Geographic and chronological extent of brick vaults by slices -- 1 INTRODUCTION -- 2 ORIGIN OF THE TECHNIQUE. FRAMEWORK SAVING -- 3 LATE ANTIQUITY TO MIDDLE AGES DEVELOPMENT: BYZANTIUM -- 4 OCCURRENCE IN THE MEDIEVAL IBERIAN PENINSULA -- 5 RELATED CASES IN LATE MEDIEVAL EUROPE -- 6 A PARTICULAR EARLY MODERN PERIOD OUTCOME. OCCURRENCE IN THE NEW WORLD -- 7 CONCLUSION -- REFERENCES -- On the origin of certain vaults without formwork: Iranian timber vaults -- 1 INTRODUCTION -- 2 THE VAULTS OF THE MASJID I-JAMI OF ISFAHAN -- 3 YAZD VAULTS -- 4 CONCLUSIONS -- ACKNOWLEDGMENTS -- REFERENCES -- Types and uses of vaults and timber vaults in Interior Alentejo: Data for a typological study -- 1 INTRODUCTION -- 2 DEFINITIONS AND TIMEFRAME -- 3 RESULTS -- 4 DISCUSSION -- REFERENCES.

Forging the link among shape, formwork, and mortar assemblies in Guastavino vaulting -- 1 INTRODUCTION -- 2 NO TWO ARE ALIKE -- 3 VAULT FORM -- 4 CASE STUDIES -- 5 DISCUSSION -- 6 CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES -- Thematic session: Understanding the culture of building expertise in situations of uncertainty (Middle Age-Modern times) -- A building expert without building training: The city of Lisbon vedor of works (14th-19th centuries) -- 1 INTRODUCTION -- 2 THE DUTIES -- 3 THE MEN -- 4 CONCLUSION -- ACKNOWLEDGMENTS -- REFERENCES -- Maintaining/repairing Paris through expertise (1690-1790) -- 1 INTRODUCTION -- 2 THE TECHNICAL DIMENSION -- 3 THE ECONOMIC VALUE OF REPAIRS -- 4 THE LEGAL REGULATION OF REPAIRS -- REFERENCES -- To repair, renovate, or replace: A maintenance history of Virginia's state buildings -- 1 INTRODUCTION -- 2 METHODOLOGY -- 3 TO REPLACE -- 4 TO REPAIR -- 5 TO RENOVATE -- 6 CONCLUSION -- REFERENCES -- Conflicts in the Brussels construction sector (1957-59): Judicial expertise of architects, engineers and contractors -- 1 STUDYING CONFLICTS IN THE CONSTRUCTION SECTOR -- 2 CONSTRUCTION CONFLICTS: CATEGORIES, REASONS AND ACTORS -- 3 BACKGROUND OF CONSTRUCTION EXPERTS -- 4 EXPERT PROCEDURE: BUILDING AND TRANSFER OF KNOWLEDGE -- 5 CONCLUSIONS -- REFERENCES -- Thematic session: Historical timber constructions between regional tradition and supra-regional influences -- Timber floors made with elements shorter than the span covered in treatises and technical literature -- 1 INTRODUCTION -- 2 FIRST REFERENCES TO FLOORS MADE WITH BEAMS SHORTER THAN THE SPAN TO BE COVERED -- 3 "IL PRIMO LIBRO DI ARCHITETTURA" BY SEBASTIANO SERLIO -- 4 INTEREST IN THE SERLIO FLOOR BETWEEN 17TH AND 18TH CENTURIES -- 5 APPLICATIONS OF SHORT BEAM FLOORS BETWEEN THE END OF THE 18TH AND THE BEGINNING OF THE 19TH CENTURIES.

6 FLOORS WITH SHORT BEAMS OUTSIDE FRANCE IN THE 19TH AND 20TH CENTURIES -- 7 CONCLUSIONS -- REFERENCES -- Historic bell frames - regional traditions and transregional influence -- 1 INTRODUCTION -- 2 TYPICAL DESIGNS -- 3 REGIONAL TRADITIONS -- 4 TRANSREGIONAL INFLUENCE -- 5 CONCLUSION -- ABBREVIATIONS -- REFERENCES -- Large span timber roofs in Italy between the 16th and 19th centuries -- 1 INTRODUCTION -- 2 THE ITALIAN TRUSS -- 3

LONG SPAN TRUSSES IN ITALY -- 4 THE ROOFS IN BOLOGNA -- 5 FROM THE 18TH TO EARLY 19TH CENTURIES -- 6 CONCLUSIONS -- REFERENCES -- Design-Fabricate-Assemble-Marvel - 18th and early 19th century bridge models in the construction process -- 1 INTRODUCTION -- 2 EARLIEST MODELS -- 3 THE OLDEST EXISTING MODELS -- 4 MODELS AROUND 1750 AND LATER -- 5 BISHOP HERVEY'S COMPETITION -- 6 EARLY NORTH AMERICAN MODELS -- 7 CONCLUSION -- ACKNOWLEDGEMENTS -- REFERENCES -- Late 18th-century innovation: The first Mediterranean purlin roof truss in German-speaking Switzerland at Embrach ZH -- 1 THE ARCHITECT DAVID VOGEL -- 2 THE REFORMED CHURCH AT EMBRACH -- 3 CONCLUSION -- REFERENCES -- Philibert De l'Orme roof constructions in Leiden and The Netherlands, innovation versus tradition between 1800 and 1900 -- 1 INTRODUCTION -- 2 INTRODUCTION OF THE PHILIBERT TRUSS -- 3 TRANSFER OF KNOWLEDGE -- 4 THE SHAPE OF PHILIBERT TRUSSES -- 5 CONSTRUCTION AND JOINTS -- 6 DECLINE -- 7 CONCLUSIONS -- REFERENCES -- Timber roof structures of 19th-century military riding halls in Switzerland -- 1 INTRODUCTION -- 2 TWIN RIDING HALL IN FRAUENFELD -- 3 RIDING HALL IN SOLOTHURN -- 4 RIDING HALL IN THUN -- 5 CONTEXT -- 6 CONCLUSION -- ACKNOWLEDGEMENTS -- REFERENCES -- Thematic session: Historicizing material properties: Between technological and cultural history -- Comparative analysis of bricks manufactured in the NewWorld (1494-1544) -- 1 INTRODUCTION. 2 BRICKS IN HISPANIOLA ISLAND.

Sommario/riassunto

History of Construction Cultures Volume 1 contains papers presented at the 7ICCH - Seventh International Congress on Construction History, held at the Lisbon School of Architecture, Portugal, from 12 to 16 July, 2021. The conference has been organized by the Lisbon School of Architecture (FAUL), NOVA School of Social Sciences and Humanities, the Portuguese Society for Construction History Studies and the University of the Azores. The contributions cover the wide interdisciplinary spectrum of Construction History and consist on the most recent advances in theory and practical case studies analysis, following themes such as: - epistemological issues; - building actors; - building materials; - building machines, tools and equipment; - construction processes; - building services and techniques; - structural theory and analysis; - political, social and economic aspects; - knowledge transfer and cultural translation of construction cultures. Furthermore, papers presented at thematic sessions aim at covering important problematics, historical periods and different regions of the globe, opening new directions for Construction History research. We are what we build and how we build; thus, the study of Construction History is now more than ever at the centre of current debates as to the shape of a sustainable future for humankind. Therefore, History of Construction Cultures is a critical and indispensable work to expand our understanding of the ways in which everyday building activities have been perceived and experienced in different cultures, from ancient times to our century and all over the world.
