Contents

Preliminaries

Amirhossein

Campbell, James WP.	Introduction	i
Keynote Lecture		
Holzer, Stefan M.	How to erect a large timber roof truss	3
Middle Ages		
Lengenfeld, Jonas	The complex masonry of the Schönburg Castle Keep chimney system (1201 CE) in the context of contemporary examples	23
Wendland, David & Gielen, Mark	The Design and Construction of the Vaults in Notre-Dame in Paris and the Development of Medieval Vaulting and Stereotomy: Surveys, Analyses and Experiments	39
Maira-Vidal, Rocío	English Master Builders in The Iberian Peninsula in The 13th Century: The Construction of The Sexpartite Vaults of Lincoln Cathedral and Their Influence on The Monastery of Las Huelgas Reales in Burgos	57
The Sixteenth Century		
Nazari, Soheil& Mahmoudnejad,	Documentation and Analysis of The Free- Handed Vaulting Technique at The Toor	75

Yeomans, David &	Tudor King Post Roofs	89
Riall, Nicholas		

Caravanserai, Iran

Song, Lei & Campbell,	The Depiction of Water Technology in	101
James WP.	Ramelli's Le Diverse et Artificose Machine	
	and Its Influence on Engineering Treatises in	
	China in the 17th Century	

The Seventeenth and Eighteenth Centuries

Knobling, Clemens	From model to reality – a case study on the timber bridge of Baden (CH)	117
Gantner, Martin	Innovation and Tradition: 'Signature' roof constructions and master builder's networks in the late eighteenth and early nineteenth centuries in in the catholic regions of central, northern and eastern Switzerland	129
Schmitt, Rebecca Erika	Geometric design and construction of a Late Baroque brick vault: Kilian Ignaz Dientzenhofer's Benedictine Church of the Holy Cross and St. Hedwig at Legnickie Pole	143
Romano, Lia & Falcone, Marika	Wooden vaults in Naples between survey and construction knowledge: the case of the church of Santa Maria Egiziaca all'Olmo	157
Motta, Martina	The Wood Sector and the King's Works. A Different Perspective for the Study of 18th Century Royal Construction Sites in the Kingdom of Sardinia	171
Prosser, Lee	Some Experimental Trussed Floors at Kensington Palace, London	185
Vandenabeele, Louis	The Paduan ties of Poleni	197
Diaz, Martina & Vandenabeele, Louis	The eighteenth-century timber trade towards the Basilica of St Anthony in Padua through archives, shipping marks and dendrochronology	209
Mair, Raimund	The Renovation of the Waterworks at the Rotes Tor in Augsburg by the Well Master Caspar Walter	221

The Nineteenth Century

Prisco, Gian Marco	Iron bridges and the influence of international models in 19th century Spanish architecture	237
Bill, Nicholas A.	From Carpentry Manuals to Engineering Textbooks (1792 – 1870)	249
Chrimes, Mike	Thomas Telford and the construction of Canal Tunnels 1794-1830	261
Hays, Benjamin J.	Water for the University: An Early History of the University of Virginia's Water supply, 1817-1885	275
Franz, Hannah & Rinke, Mario & Lepretre, Emilie & Dieng, Lamine	The gap between theory, practice and regulations in design criteria for iron and steel structures in 19th century France: the example of train sheds	287
Russnaik, Kylie	Timber Roof Structures of 19th-century Casinos in Switzerland	301
Jacobs, Jamie	Pugin's role as Superintendent of Woodcarving	315
Maissen, Manuel	Early Iron Bridges in Switzerland 1850-1875: A Primer	329
Melsens, Sarah & Sahasrabudhe, Chetan	Technical Writings as Political: Building Manuals and Pattern Books From British India (1880-1947	343

Early Twentieth Century

Korensky, Vladimir	Early Reinforced Concrete Shells in Russia	361
von Behr, Nick	The patent war between François Hennebique and Armand Considère: competing reinforced concrete systems in 'fin de Belle Époque'	373

France

Reyniers, Lara & Van de Voorde, Stephanie & Wouters, Ine	Capturing the Practice of Deconstruction in Brussels (1903 – 1939): Photographic Heritage Collections as A Starting Point for Construction History	387
Haddadi, Roshanak & Rinke, Mario	National, traditional, scientific – the formation of a multifaceted early glulam identity	397
Ladinski, Vladimir B.	Contribution of Early Women Architects in North Macedonia	411
Angillis, Jelle & Bertels, Inge	Voices from the Post-War Belgian Building Industry: A Study of a General Contractor and its Involvement in Building Practices via Oral History	427
Kuban, Sabine	The Livestock Auction Hall in Riedlingen – Regional Timber Construction in the 1930s in the South-West of Germany	439
Lucente, Roberta & Canestrino, Giuseppe	Technical manuals in the years of Reconstruction after World War II in Italy: Mario Ridolfi and the "Manuale dell'Architetto".	453
Late Twentieth Century		
Marfella, Giorgio	Alfred Picardi and the Tubular Structure of Chicago's Standard Oil Building: Engineering for Holistic Efficiency	469
Schmid, Benjamin & Weber, Christiane	From physical to digital – the form-finding and measuring models of the Mannheim Multihalle	485
Burchardt, Jørgen	Systems for Standardised Precast Concrete Elements: The Case of the Larsen & Nielsen System	497
Frommelt, Konrad M.	Algorithm or experience – The search for objective design methods for serial structures in the GDR	515

Greco, Laura & Spada, Francesco	The Palazzo Galbani by Eugenio and Ermenegildo Soncini and Pier Luigi Nervi (1956-59). A case of building prefabrication in Milan	529
Parein, Marylise & Wouters, Ine & Van de Voorde, Stephanie	Fibre Cement Slates: An Industry Reinventing Itself (1970-2000)	541
Ferreira Crevels, Eric	A Joint of Many Worlds: Entangled Stories in Battaile en Ibens's 78+ Construction System in Timber	551