



8ICCH

8th International Congress on Construction History Zurich 2024

CALL FOR ABSTRACTS

The 8th International Congress on Construction History (8ICCH) will be held June 24-28, 2024, at ETH Zurich, Switzerland.

The 8ICCH will bring together researchers from different disciplines and continents to exchange recent advances, results and insights in the vast and expanding field of Construction History. Special topics will be discussed in dedicated Thematic Sessions organized and chaired by leading international experts, while the whole scope and diversity of Construction History will be reflected in the Open Sessions.

Researchers from all fields connected to Construction History are invited to submit abstracts of contributions for 8ICCH.

Abstracts must be submitted in English and must not exceed 400 words. All abstracts will be reviewed and selected for presentation by at least two members of the 8ICCH Scientific Committee, which includes the world's most respected researchers in the field. All papers will be published in an edited open access proceedings volume and will be available at the congress and as print-on-demand hardcopies.

Abstracts must be submitted exclusively via the website www.8icch.ethz.ch. Abstract submission will open on March 15, 2023. Abstracts submitted by other ways of communication (paper, e-mail, etc.) cannot be considered. When submitting your abstract, please indicate the relevant thematic sessions or general conference topics as listed below or on www.8icch.ethz.ch.

Abstracts have to be submitted until April 30, 2023 (midnight CET). Delayed submissions cannot be considered. The decision of the scientific committee will be announced by August 1, 2023. Full papers are expected to be submitted by November 2023. Full papers will again be reviewed by members of the scientific committee. Only papers fully meeting the scientific and language quality criteria will be accepted. Please note that only papers presented in person at the conference will be included in the proceedings.

Stay informed about 8ICCH by regularly visiting our conference website www.8icch.ethz.ch! We look forward to your contributions and to meeting you in Zurich in June 2024.

OPEN SESSIONS

- **The Discipline of Construction History:** Contractors, Architects, Engineers, Master Builders, Craftspeople, Trade Unions, Guilds, Institutions, Organisations, Surveyors, Experts, Companies, Building Actors, etc.
- **Building Materials:** Timber, Earth, Brick, Tiles, Iron, Steel, Binders, Concrete, Plaster, Mortar, Glass, Composite Materials, Reclaimed Materials, etc.
- **Construction Sites and Processes:** Scaffoldings, Cranes and Lifting Devices, Tools, Machines, Temporary Structures, Transport and Supply of Materials, Standardisation, Prefabrication, Site Management, Logistics, etc.
- **Building Services and Techniques:** Lighting, Heating, Ventilation, Comfort, Hygiene, Water, etc.
- **Structural Theory and Analysis:** Computing, Simulation, Applied Sciences, Material Testing, Relation between Theory and Practice, etc.
- **Hydroengineering:** Dams, Canals, Reservoirs, Water Supply, Wastewater Disposal, Hydraulics, etc.
- **Economics, Politics and Society:** Laws, Patents, Regulations, Standards and Norms, Financing, Policies, Marketing, Public Works, etc.
- **Construction Cultures:** Traditions, Colonial History, Hybridisation of Cultures, Cultural Appropriation, Adaptation of Construction Cultures, etc.
- **Traffic Infrastructure:** Railways, Roads, Airports, Tunnels, Bridges, Canals, Harbours, etc.
- **Construction & Design:** Preliminary Designs, Foundations, Superstructures, Roofs, Finishing, Drawings, Trusses, Stereotomy, Models, etc.
- **Knowledge and Knowledge Transfer:** Technical Literature, Education, Scientific Dissemination, Innovation, Experiments, Events, Fairs and Exhibitions, etc.

THEMATIC SESSIONS

- **TS1** Building Services and Living Comfort in Medieval Residences and Places of Leisure in the Mediterranean Region (Kai Kappel, Klaus Tragbar)
- **TS2** Challenging concrete structures in East Central and Southeastern Europe from the second half of the 20th century: from foreign inspirations to local solutions (Iva Stoyanova)
- **TS3** Collaboration in historical buildings: self-evident but intangible (Laurens Bulckaen, Rika Devos)
- **TS4** Construction contractors. New perspectives on the culture of construction from the 18th to the late 20th century (Inge Bertels, Mike Chrimes)
- **TS5** Construction History of the second half of the 20th and early 21st century (Orkun Kasap, Silke Langenberg)
- **TS6** Construction labour in times of crisis (Nick Beech, Linda Clarke, Christine Wall)
- **TS7** From Foundation to Rooftop: Architectural Engineering Drawings Between 1400 and 1700 (Krista De Jonge, Merlijn Hurx)
- **TS8** How Construction History shaped Globalisation: The 19th and 20th century Eurasian cases (Chang-Xue Shu)
- **TS9** How might Prosopography help Construction History? (Michela Barbot, Robert Carvais, Emmanuel Château-Dutier, Valérie Nègre)
- **TS10** The history of deconstruction, salvage and reuse in a larger perspective (Ine Wouters, Stephanie Van de Voorde, Maxime L'Héritier, Philippe Bernardi)
- **TS11** The importance of patents in the development of building structures in the 19th century (Francisco Domouso De Alba)
- **TS12** Transnational Bridges: Construction History through the Eyes of Migrants (Jana Keck, Karl-Eugen Kurrer, Eberhard Pelke)
- **TS13** Vaulting into the Future: Narratives of Brick Vaulted Housing in the 20th Century (Wesam Al Asali, Alejandra Albuerne Rodríguez)

THEMATIC SESSIONS

TS1 Building Services and Living Comfort in Medieval Residences and Places of Leisure in the Mediterranean Region

Questions of residential culture, the use of representative and private rooms and their furnishings have traditionally played a central role in research on residences. Until now, however, the focus has tended to be on the floor plan and the artistic furnishings; technical building installations such as baths, sinks for manual cleaning and toilets, as well as the water pipes and ventilation shafts required for them, which were often integrated into the masonry, have long been ignored, as have questions about their origins, origins and development. The related questions of the relationship between residence and garden as well as the intended relationship of the buildings to the landscape can only be mentioned here.

Particularly in southern Italy and Sicily, there are numerous medieval buildings that exhibit an extraordinarily high degree of living comfort. The Norman

palaces in Palermo, the Hohenstaufen Castel del Monte or the Domus in Lagopesole are representative examples. All these buildings are an expression of processes of hybridisation or amalgamation that already characterised the Norman kingdom of Sicily in the 12th century and can be traced back in architectural history both to Roman antiquity or to Byzantium as the preserver of Roman culture and to Islamic architecture such as the Umayyad so-called desert castles. The section will discuss the building services relevant to the living comfort of medieval residences in the Mediterranean region and pursue the question of their origin against the background of transcultural processes of exchange and interconnectedness in the Mediterranean region.

(Session Chairs: Kai Kappel, Klaus Tragbar)

TS2 Challenging concrete structures in East Central and Southeastern Europe from the second half of the 20th century: from foreign inspirations to local solutions

This session aims at filling a knowledge gap in construction history about concrete design/construction (1950-2000) in East Central and Southeastern Europe. Local designers sought to replicate foreign architectural/structural tendencies. Reconciling those foreign inspirations with local capabilities often resulted in technological innovations or skillful adjustments of traditional solutions.

The session invites papers on any structures whose design/construction overcame local challenges with the architectural/structural use of concrete: large-scale structures, large-span cantilevers, column-free spaces, structures with elements difficult to cast/prefabricate/assemble or others. Authors are encouraged to set their work within international framework by relating their study cases to influential foreign examples/tendencies (e.g. Brutalist, Modernist). They should illuminate those local factors that conditioned

domestic concrete design/construction: seismic activity, financial resources, availability of qualified designers/trained workmen, political/ideological demands, established teaching/building practice or others. Against the background of international and local context, authors are welcome to discuss their study cases in different terms: construction system, techniques or details, building materials, execution technology, etc. Material/structural features (e.g. material properties, load management, mechanical connections) can be further argued. Authors are strongly encouraged to define those technical solutions/features, whether innovative or traditional, thanks to which domestic challenges were successfully overcome and foreign tendencies were locally interpreted in concrete.

(Session Chair: Iva Stoyanova)

THEMATIC SESSIONS

TS3 Collaboration in historical buildings: self-evident but intangible

The practice of collaboration between professionals of designing and building in historical building projects is considered self-evident in construction history, but its mechanisms, conditions and tools remain understudied. Research tackling this practice faces two important challenges. Firstly, authorship is often solely attributed to a single architect or engineer, cloaking the contributions of other parties. Secondly, literature tends to artificially separate the profiles of architects and engineers and ignores many slippages, for instance between trainings and profiles, or between contractual duties and skill.

This session sets out for a more precise understanding of issues of authorship, tools and processes. Collaboration is orchestrated by both tangible sets

of rules (legislation, contracts) and information (training, know-how, networks), but also by intangible aspects such as tacit knowledge (technical, managerial, personal), contacts and personal preferences. This session invites papers that engage with the challenge of studying intangible aspects of human interaction and collaboration in historical building by considering how they have been mediated by tangible outcomes and which actors were involved in the knowledge exchange of which they are a trace. We welcome case-study based approaches which develop a critical account of archival materials, demonstrating insights in historical creative and bureaucratic procedures of building.

(Session Chairs: Laurens Bulckaen, Rika Devos)

TS4 Construction contractors. New perspectives on the culture of construction from the 18th to the late 20th century

Contractors are key players in the construction process. The culture of contractors and the milieu in which they operate is in part created by them, and in part influenced by others in the construction process, as well as by the socio-economic environment in which they operate. Different geographies, different religions and politics, different stages and speed of transformation of economic, educational and technological development, different participation of actors, all influence the culture of contracting. Building up a holistic as well as layered understanding of the history of the contractor is a vital element in understanding construction history and culture more generally. Recent improved discovery and access to archives (through, among other innovations, digital technology) and new methodologies (eg. oral history or GIS implementation) have

encouraged investigators to develop new research into the world of the contractor/building entrepreneur. To that end this session will bring together researchers that study new revealing perspectives on the history of construction contractors and elaborate on the culture of construction from different (inter)national perspectives, different chronological emphases, discussing broad societal themes (such as gender, migration and diversity, building organization or economic and political influences and ties) and more personal achievements. This session devoted to the culture of contracting provides an opportunity to bring together a range of otherwise disparate research and act as a springboard for further comparative work in this area.

(Session Chairs: Inge Bertels, Mike Chrimes)

THEMATIC SESSIONS

TS5 Construction History of the second half of the 20th and early 21st century

From the 1950s onwards, architecture and construction processes witnessed a rapid succession of paradigm shifts. The need for the fast-paced production of housing and further infrastructure as a result of the exponential economic and population growth in the post-war era was replaced by efforts towards the efficient use of materials and the emergence of sustainability as a notion by the 1970s following the energy crisis. The advent of computers and computational design and fabrication in the 1980s and 90s resulted in diverging tendencies ranging from increased standardization in construction to bespoke design and manufacturing. Today, the climate crisis and scarcity of resources challenge us to explore new and efficient materials and construction methods which focus not only on building anew

but also on enabling the repair and reuse of existing building stock.

This session explores different construction approaches, the ideas and contributing factors which led to their emergence, their impact and legacy on today's architecture, as well as the ever-increasing number of actors involved in their development and realization. From system buildings to various efforts in streamlining construction in different countries and regions, high-tech architecture to robotic construction, the contributions demonstrate and analyze recent construction history and reflect on the future of construction through lessons learned.

(Session Chairs: Orkun Kasap, Silke Langenberg)

TS6 Construction labour in times of crisis

The subject of construction labour is under-represented in construction histories. This is often justified as the result of a lack of empirical sources. The session provides for this lacuna by focusing on specific historical moments, times of crisis—war, colonisation, and periods of environmental, economic and political change—when documentation on construction labour is found in archival sources. The administrative records of states engaged in warfare and programmes of colonisation retain traces of those mobilised for construction work. Economic crises, giving rise to disputes and strikes, worker organisation and counter measures—surveillance and blacklisting—result in documentation of individual workers. Industrialisation, technological change, and changes in government policy induce

crises for construction labour, including in vocational, education and training (VET). Environmental crises result in displacement and migration of construction workers—and with them knowledge, practices, and networks. The session's aim is to highlight how construction labour has been a driver of change in social relations of building production at different periods and locations. It presents historical papers that offer valuable insights into how current crises can be addressed, for instance through greater participation of women, improved employment and working conditions and VET, and a transformation in labour-nature relations.

(Session Chairs: Nick Beech, Linda Clarke, Christine Wall)

THEMATIC SESSIONS

TS7 From Foundation to Rooftop: Architectural Engineering Drawings Between 1400 and 1700

Architectural drawings from the early modern period have generally been studied from an art historical perspective. As a result, presentation drawings have received much more attention than architectural engineering drawings. However, we know that structural drawings were valued in their own time; they were crucial for the construction of complex buildings, but also for the exploration of new building technologies. Thanks to the efforts of Antoine Desgodetz and the establishment of French engineering schools, international standards for architectural engineering drawings were established from the late seventeenth century. However, such drawings were not invented in this period and have a much longer history. Despite their importance,

engineering drawings have hardly been treated as a separate subject, and their use and development remain largely unknown. The session hypothesizes that technical drawings were an essential part of the design and construction process before 1700. They were used in the pursuit of new structural solutions and technological advances. The session aims to explore the function and significance of engineering drawings in this period, focusing on differences in notation systems across geographical areas and possible evidence of exchange with other scientific cultures such as China.

(Session Chairs: Krista De Jonge, Merlijn Hurx)

TS8 How Construction History shaped Globalisation: The 19th and 20th century Eurasian cases

Did construction only play a role as applied science/practice following political, economic and institutional powers in the 19th and 20th century globalisation, as the enormous body of literature in World History and History of Technology has seemingly generated such an image? How should Construction History—as a disciplinary domain—investigate into construction activities differently?

This session seeks to advance the discourse on construction history by considering construction as a historical actor in shaping globalisation. Construction is both process and practice shuttling between knowledge and material with its own rationale and culture. In the last two centuries, the building industry interacted with, for instance, trade, agriculture, mining, railway, immigration and missionary worldwide. It deployed a global range of natural-human resources, and (re)constructed social-material systems including sets of equipment, techni-

ques, ideas and institutes.

While Eurasia is the point of departure in this session empirically, studies may also cover other geographies provided that they address the viewpoints above. We welcome papers showcasing how construction intensified/impeded exchange of knowledge, (re)configured materialisation, and engendered new technical/societal problems in a global-local context. We stress gateways, paths and mechanisms that are less visible in source material. An eligible proposal should articulate its research question, sources and methods.

(Session Chair: Chang-Xue Shu)

THEMATIC SESSIONS

TS9 How might Prosopography help Construction History?

As the study of the shared features of a community, prosopography “aims to identify the common characteristics of a group of historical actors based on systematic observation of their lives and careers.” In recent years, digital technology has transformed the use of this type of data by increasing the possibilities for calculating and searching sources. International projects based on the use of prosopographical data include for example Mapping the Republic of Letters, the study of the Origins of the Modern State in Europe or the Tudor Network. In the field of history of architecture, Werner Szambien advocated the production of a prosopography of architects as early as 1988. This project was never pursued, despite the continuation of research carried out with the Allgemeines Künstlerlexikon, and several abandoned initiatives in France. The prosopographical approach mainly involves moving from biography to “a vision that allows collective

portraits to emerge, by going back and forth between individual and collective careers”. Thus, as practised in economic and social history, prosopography has both a quantitative and a sociological dimension.

Prosopography enables the study of careers, trajectories, life cycles and longitudinal studies to identify collective histories. Which is why this historical method seems particularly relevant to the field of construction history. In particular, this approach

- highlights the history of the actors’ career paths with respect to each other and to their communities and surrounding institutions;
- goes beyond heroic figures to look at all the actors;
- and can be used for international comparative collective surveys.

(Session Chairs: Michela Barbot, Robert Carvais, Emmanuel Château-Dutier, Valérie Nègre)

TS10 The history of deconstruction, salvage and reuse in a larger perspective

The process of demolition and the salvage and reuse of construction materials is increasingly gaining attention in the field of construction history. However, the focus is often on specific projects, periods, tools, actors, practices and materials. We encourage scholars to broaden the scope: by going beyond the level of individual case studies and creating larger, interconnected narratives on deconstruction, salvage and reuse, we aim to add a new layer to recent scholarship in this particular field. In addition, by recognising deconstruction/salvage/reuse as an inherent part of the common construction practice, opportunities arise to recalibrate research in Construction History at large.

We invite papers that focus on, for instance, long-term evolutions over time, from medieval times up to the twentieth century; a comparison between

different countries, regions or cities; the complete trajectory from construction, demolition to reuse for a specific construction material; the relationship between deconstruction and reuse to the construction practice and building culture in general; the networks of actors and professions involved; etc. For more information, and possible research questions on this topic, please visit www.vub.be/arch/project/8icch-deconstruction.

(Session Chairs: Ine Wouters, Stephanie Van de Voorde, Maxime L’Héritier, Philippe Bernardi)

THEMATIC SESSIONS

TS11 The importance of patents in the development of building structures in the 19th century

The aim of this thematic session is to highlight the importance of patents in the innovation and implementation of new materials, technologies and structural systems in the 19th century. The contributions of these patents were hugely important for construction in Europe and the United States in the early decades of the 20th century.

Patents provided a “product” that worked. For example, the first reinforced concrete structures were not calculated and built according to a standard; they were “bought”. The result was, in most cases, satisfactory for the intended use. The best patents provided innovative materials and structures, vouched for by the experience and knowhow of their inventor, but obscure in their calculations and technical assumptions.

The development of the second Industrial Revolution consolidated the legal and economic foundations of intellectual protection. Patents served to finance the

theoretical, technical and constructive development of new materials and structural systems, which initially had little or no theoretical support.

In the early 20th century, structural materials such as reinforced concrete ceased to be a patented product and became a technology, regulated by an incipient set of regulations within the reach of any engineer, architect or builder.

Patents played a fundamental role in this transition from “product” to “technology”, which took place across the latter decades of the 19th century and the first decade of the 20th century. For this reason, it is important to study their contributions to the building process of structures: materials, new typologies, theory of structures, industrialisation, prefabrication, etc.

(Session Chair: Francisco Domouso De Alba)

TS12 Transnational Bridges: Construction History through the Eyes of Migrants

In the 21st century, globalized knowledge exchanges between engineers have become common practice through international collaborations, publications, and conferences. Increasing nationalistic movements, however, show how diverse actors try to place the national assessment of construction techniques above its scientific characteristics. Looking back at the 19th century, Europe was characterized by political liberation movements, repressive regimes, socioeconomic crises, a growing population, and the long and onerous transition from agrarian into industrial states that generated unemployment and pauperism. These diverse factors triggered a mass migration movement. Civil engineers, who emigrated, were accompanied on their travel by a multitude of excellent ideas for designing and building bridges and structures. Once these migrants arrived, they spread their knowledge, expanded, or supplemented existing designs and constructions and profitably implemented projects for their new home-

land. Many immigrating engineers kept in touch with friends and families, but also with their professional communities. Through letters, journals, and reports, but also travels to first international congresses and the founding of international associations, civil engineers exchanged ideas, construction plans and units. In this thematic session, we want to focus on the social, economic, and political factors, types, causes, routes, and consequences for transnational collaboration and exchange of ideas, main actors and their contributions as well as widely shared and implemented building techniques and theories. Civil engineers, architects, preservationists, and historians are gladly invited to present a paper about the long history of transnational communication and collaboration in civil engineering that was pushed by migrants.

(Session Chairs: Jana Keck, Karl-Eugen Kurrer, Eberhard Pelke)

THEMATIC SESSIONS

TS13 Vaulting into the Future: Narratives of Brick Vaulted Housing in the 20th Century

Since the emergence of architecture as a modern profession in the 20th Century, brick vaulting techniques have occupied the imagination of many designers interested in affordable housing solutions. Architects such as Hasan Fathy (Egypt), Carlos González Lobo (Mexico), and Eduardo Sacriste (Argentina), to name a few, experimented with brick and adobe vaults to build houses in contexts of scarce resources and materials. Their heritage of ideas and projects, and patents emphasizes contemporary uses of traditional building techniques. This session aims to explore approaches of projects and architects of vaulted affordable housing in the 20th Century not only to highlight them as individual narratives but also to think of the idea of vaulted

affordable housing as a global phenomenon. We seek papers that trace how and why architects used vaults and domes in their housing designs, how this use was developed along with, or away from, vaulting traditions, how it was related to notions of technology and identity or skilled and unskilled labour, and how such a focus can reframe today's praxis of architecture under the pressure of climate emergencies. While we welcome stories from around the globe, we specifically encourage narratives of projects and architects from the Global South.

(Session Chairs: Wesam Al Asali, Alejandra Alberne Rodríguez)