

TICCIH Historic Bridge Session/International Historic Bridge Special Interest Group

TICCIH is the International Committee on the Conservation of Industrial Heritage and has been in existence for more than 30 years. It meets tri-annually to discuss world industrial and technological heritage. This year, TICCIH was hosted by Italy (September 14-18, 2006) in Terni, the ancient "Interamna Nahartium", the land between two rivers - the Nera and Serra. In the second half of the 19th century, Terni was the heart of Italy's industrial revolution, the "Manchester of Italy"

A record number of 450 delegates attended. During the conference, I chaired the historic bridge session. Though there have been papers on historic bridges, this was the first stand-alone bridge session in 33 years. Eight speakers, consisting of five engineers, an architect, historian and former museum director gave presentations ranging from early-Italian suspension bridges to forming an historic bridge special interest group.

The purpose of the bridge session was to get a sense of global historic bridge scholarship, preservation and practice, and to explore the possibility of setting up an international special interest group on historic bridges. Interest in historic bridges was attested by the participation of five engineers in a non-engineering conference, and the 20-30 people who attended the bridge session. 14 people indicated an interest in an international group.

The session, ARecent scholarship and best practices on historic bridges,≡ featured Roberto Parisi, an engineer teaching architects at the University AFederico II,≡ Napoli,

who spoke on early suspension bridges in Italy including the recent rebuilding of the Maria Christina suspension bridge, designed by Luigi Giura over the River Calore in Campania (1835). Leonardo Fernández Troyano, one of Spain's foremost bridge designers, gave an overview of Spain's historic bridges, efforts to save them, ending with Puente Vizcaya, the most recent bridge to be inscribed to World Heritage. Troyano's book, *ABridge Engineering: A Global Perspective*, was translated into English and reprinted by Thomas Telford in 2003. Michael Mende, an architecture and history of technology professor at Braunschweig University, is one of the German scholars who have been mining the recently-discovered Roebling archive in Berlin (*Bd&e*, Second Quarter 2006). He presented a paper on John Roebling's pre-Brooklyn suspension bridges designed, but never built by the Bavarian government, prompting Roebling's exit to the USA. Sir Neil Cossons, former director of the Ironbridge Gorge and Science Museum in London, presently Chairman of English Heritage, spoke on future prospects of British bridges being designated World Heritage beginning with Brunel's bridges on the Great Western Railway. Joseph Pullaro, principle of Lichtenstein Consulting Engineers, one of America's foremost consulting engineering firms on rehabilitating historic bridges, reviewed several of his latest works. Matt Reckard, an engineer who worked with Jim Barker Engineering in Bloomington, Indiana, another lead American consulting engineering firm specializing in the rehabilitation of historic bridges, spoke on a Smith truss-covered bridge recently restored. Roberto Gori, engineering professor at the University of Padua, was not able to attend, but his papers on Italian bridges will be

published in the proceedings. I spoke about creating an international historic bridge special interest group.³

Two international organizations - TICCIH and ICOMOS, the International Council on Monuments and Sites - are interested in forming such a group. One suggestion is that the historic bridge group might want to work with *ICARSAH*, the International Committee on Analysis and Restoration of Structures of Architectural Heritage, whose objective is related to structural aspects of all built objects, but mostly buildings. Joining with ICARSAH is a possibility though others have suggested that bridges have a strong separate following.

In America, there are two overlapping historic bridge organizations: the Historic Bridge Foundation (<http://www.historicbridgefoundation.com/>), and the Abridge mafia,≡ an informal group of more than 400 engineering educators and consultants, historic bridge scholars and enthusiasts. Though there are few engineers in TICCIH, I sense that there is great enthusiasm for historic bridges in America, Europe and Asia – an interest that is growing rapidly.

Since TICCIH-Terni, the idea to form an international historic bridge organization of engineers, scholars and enthusiasts has been informally discussed; nothing has happened to date. Much effort will be required to form an international historic bridge group.

Each speaker adhered to their 20-minute time slots resulting in 30 minutes of discussions. The primary issues raised was whether European engineers were more

sensitive to historic bridges than the US, and whether European countries have had better success preserving historic bridges. Each country has its strengths and weaknesses on how they manage historic bridges were the conclusion, but this could be elaborated further if the international historic bridge group is formed.

In addition to emphasizing the importance of historic bridges and their contribution to the historic built environment, the intention of the bridge session was to further involve engineers in the preservation of historic bridges and the field of industrial heritage. Engineers have much to contribute.

A Schism is probably too strong a word, but engineers, architects and historians agree that there are differences between the professions. These differences have existed since structures became too complex requiring the expertise of engineers. Today, none of the professions will admit the split, but we know it exists. We live in a specialist world with each profession protecting its turf. However, things are changing.

Though interest in engineering heritage has expanded - just about every engineering profession has history and heritage committees - engineers and educators involved in preserving historic structures are rare. There are many reasons for this but the one most critics point to is that little in engineering education prepares students to deal with issues such as aesthetics, much less cultural landscapes, preservation, and restoring historic bridges.

Engineering educators maintain that course requirements already are overloaded just to get across the basics of sound engineering. Anything having to do with aesthetics,

he evolution of the profession, much less rehabilitating historic bridges, must be found outside the curriculum and, most likely, on the students own time.

Clearly, the bridge engineering profession, contractors, historians, architects and preservationists need to cooperate more closely. Hence, the idea of an historic bridge/infrastructure/public works special interest group. Whether cooperation between these various disciplines is globally possible remains to be seen.

Bridges are engineered structures requiring the input of engineers. In the larger context, it would improve our cultural landscapes, life=s quality, and mutual understanding - something sorely needed in our troubled world.

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