BUILDING KNOWLEDGE: CONTRIBUTIONS TO AN EPISTEMIC HISTORY OF EARLY MODERN ITALIAN ARCHITECTURE: AN INTERNATIONAL CONFERENCE, ROME, 10–20TH SEPTEMBER 2003* (HENTIE LOUW)

This conference, the first major public event of the new joint research initiative of the Max Planck Institut, Berlin and the Bibliotheca Hertziana, Rome, 'An Epistemic History of Architecture', was held in Rome, 18–20 September 2003. The project, directed by Professors Elizabeth Kieven, of the Herziana and Juergen Renn of the Max Planck Institut, aims to collate the available evidence about historic building practice and theory residing in European buildings and archives from the early-modern period (up to the eighteenth century), and to put this information into the public domain. In the process, it is hoped that the hitherto neglected 'building knowledge' of the pre-industrial era, largely transmitted orally and through learning-by-doing, but still deducible from the surviving records, can be recovered to take its rightful place amongst other major fields of human knowledge. The programme, which is reminiscent of the Baconian 'History of Trades' project of the late-seventeenth century natural philosophers, seeks to achieve its objectives through a series of exemplary case studies, symposia and related publications – the recently produced digitalized record of the building accounts for the Florentine Dome (1417 – 36) by Margaret Haines, mentioned elsewhere in this *Newsletter*, is another of the ventures supported by this organization.

The Rome event – a cross between a workshop and a conference – focused mainly on Italian building practice from the fifteenth to the eighteenth centuries. It seems an appropriate starting point for the larger research project aimed at formulating an epistemological history of architecture. Not only has Italy played a seminal role in creating the theoretical and practical framework underpinning the development of a modern building world, the Italian archival base for the period is also more comprehensive and varied than elsewhere in Europe. Moreover, Italian Renaissance and Baroque studies are probably most in need of corrective action after one-and-a-half century of over-emphasis on aesthetic issues as the basis for architectural historical interpretation.

The papers gave a good indication of the range of material available to the scholar of Italian building history. The opening session on Thursday evening was held in the historic Accademia di San Luca. The lecture by Giovanna Curcio (IUAV Venezia), which opened the proceedings, took as a theme the transmission of practical knowledge, based on an anonymous mid-eighteenth century manuscript recently discovered in the Museo di Roma. This work, apparently a final draft for a treatise on, what in Britain would be called, 'quantity surveying', is regarded as an early manifestation of the trend towards a more rational system of controlling building costs on site. The day was rounded off by a buffet reception in the gardens of the Villino Stroganoff, one of the home-bases of the Bibliotheca Herziana.

The conference-base for the rest of the time was the Netherlands Institute, on the edge of the Borghese Gardens. Werner Szambien (CNRS, Paris) opened the first day's proceedings by posing the question: 'Was the Italian Renaissance an invention or a reality?' His own research into the transmission of architectural ideas between Eastern and Western cultures prior to the Renaissance, especially the spatial and formal concepts dependent on geometrical configuration, has led him to conclude that very little original came to pass in the fifteenth and sixteenth centuries other than the new elevated social status of the artist in society. In Szambien's view the style-based analyses of art historians since the nineteenth century, essentially serving didactic objectives, have established an artificial framework for knowledge not helpful to current and future study of the reality of architectural development during this period. Hermann Schlimme (Hertziana/ MPI) explored the early manifestations of scientific interest in practical building knowledge, following Francis Bacon's programme for the codification of craft knowledge. He compared the approach of sixteenth century Italian architects like Rusconi and Scamozzi to craft knowledge with that of seventeenth century Italian scientists like Galileo, Torricelli and Noferi – searching for the link between these and the resolution achieved in the late-eighteenth century technological encyclopaedia.

The other papers of Day One concentrated on questions regarding logistics and technology that were faced by the Italian builders from the early fifteenth to the eighteenth century: Margaret Haines (Harvard Center for Italian Renaissance Studies, Florence) gave an insightful talk on the heroic organizational feat of the Opera di Santa Maria del Fiore in achieving the construction of Brunelleschi's dome, as revealed by recent research; Maria Grazia D'Amelio and Nicoletta Marconi of Rome University explored technical and organizational progress in the Roman building industry centred on the Reverenda Fabbrica di San Pietro; Vitale Zanchettin (IUAV, Venezia) demonstrated the importance of working drawings and specification as controlling mechanisms in the realization of the complex building projects of Francesco Borromini, and revealed the crucial role played by the latter's assistant and site manager, Francesco Righi, in the process.

The papers on Day Two were more open-ended. Klaus Tragbar (Fachhochschule Augsburg) demonstrated the value of medieval and early modern depictions of religious events in Italian mosaics, paintings and manuscripts as a source of information on the practical details of building technique and organization. Filippo Camerota (Instituto e Museo di Storia della Scienza) discussed Caramuel de Lobkowitz's, theoretical work on stereotomy, its relation with both the practices of stonemasons and the emergent science of projective geometry. Antonio Becchi (MPI-Berlin) looked at how Italian architectural treatises from the period dealt with the problem of static interpretation of construction, showing how an analogical language was developed to help simplify the communication of complex (and improperly understood) mechanical concepts. Finally, Peter Russell (RWTH Aachen) wittily exploded the 'myth of precision' pervading the CAAD revolution, undermining the modern building industry's capacity to control change and to accumulate specific knowledge. The digital revolution thus poses a very special challenge to a traditional characteristic of the world of construction, as demonstrated once again by the presentations at this meeting, namely the remarkable consistency of its methodology as a slow process of physical transformation – a point made by Elizabeth Kieven in her concluding remarks.

To conclude: I found this a stimulating and enriching experience. I particularly liked (and envied) the presence of so many young researchers amongst the audience. The disappointment of missing so much of the content of the deliberations due to a lack of Italian, was more than made up by the generous hospitality of the hosts, the making of new contacts and a chance to renew an acquaintance, after thirty years of absence, with Rome and especially the buildings of Borromini. Regarding construction history and its future well being, I came away with the following positive reaffirmations:

- The vibrancy of the Italian research community, their sense of discovery.
- The expanding horizons for exploration in the field, in general as well as in the particular.
- The benefits of comparative study and the need for international collaboration.
- The important enabling role of public institutions in the facilitation of both research and its dissemination.
- That historical study in the field has contemporary relevance.

*Note: An edited compilation of the conference papers, in English, is in preparation and will be published early in 2004.

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