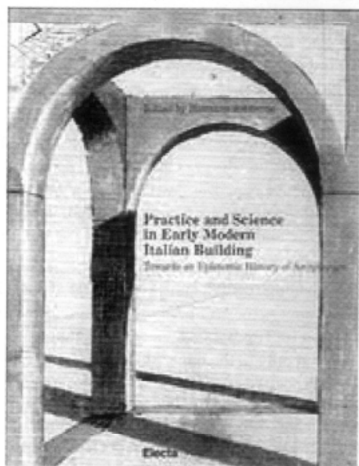


Book Reviews

Practice and Science in Early Modern Italian Building: towards an Epistemic History of Architecture



Edited by Hermann Schlimme.
Milan: Mondadori Electra
314 pages. Many illustrations in b/w and colour.

This lavish book appears as the first publication resulting from a major international multidisciplinary research project on the "Epistemic History of Architecture", supported by the Max Plank Institute for Art History and the Bibliotheca Hertziana in Rome and the Max Plank Institute for the History of Science in

Berlin, dedicated to "investigating knowledge involved in architectural movements from the first constructions of the Neolithic period to modern, science-based building technology". The volume is in two parts.

The first comprises contributions (in English) from nine contributors to the conference Building and Knowledge: Contributions to an Epistemic History of Early Modern Italian Architecture, held in Rome in September 2003; with one exception (Hentie Louw of Newcastle University, on fenestration practices) the authors are German or Italian. The main emphasis in these essays is on the practical matters of the engineering and construction of buildings and they are refreshing to the English reader because they are unfamiliar and stimulate interesting comparison with the better known events in France and England. The nine essays are preceded by two chapters of a few pages each outlining the overall aim of the research project, and building practice and science in early modern Italy. While useful, as far as they go, these short chapters do not adequately prepare the reader for the nature of knowledge relating to building, science, engineering and mathematics, nor even refer the reader to other authors who have discussed such matters. Nevertheless, the introduction and the main essays have certainly whetted the appetite for the other publications that will appear from this bold research project.

The second part of the book is a translation of a 154-page Italian manuscript dating from 1662, recently rediscovered in the Biblioteca Nazionale Centrale in Florence by Hermann Schlimme. This edition includes his critical comments on the content and colour reproductions of 36 plates. The work was produced by academicians of the Accademia della Vachia in Florence and addresses forty nine problems faced by builders and engineers. This was one of many academies that flourished in Italy from the 1560s to the late seventeenth century and were forerunners of the Royal Society in London (first meetings 1645, Royal charter 1662) and the Académie des Sciences in Paris (first meetings 1640s, Royal charter 1699).

To convey the range of problems, it is worth citing a number of their titles:

- Various geometrical constructions, including 'Dividing a rectangle into four equal areas in the form of a rectangle and three trapezia'.
- Determining the weight of statues in clay and stone.
- Centring for the Ponte di mezzo in Pisa
- Joining two vaulted spaces to form a single vaulted space without removing the storeys above.
- Construction of a roof truss without a tie beam, thereby allowing vaulting of greater height in the roof space.
- Hoisting pre-assembled trusses to the roof of a building.
- Defending a fortress.
- Fixing an asymmetrically cantilevered stone slab on the top of a wall.
- Water cannon for fire fighting.
- Direct water supply to the upper storey of a palace.

This manuscript is certainly a wonderful find, and the author has done an excellent job in presenting and commenting on it. As with transactions of other learned societies, such as the Royal Society and, much later, the Institution of Civil Engineers, there is a great vitality and immediacy that comes across that is absent from books. While some problems were rather academic and almost set as brain-teasers, others were clearly related to the very practical matters on a construction site.

Review by Bill Addis