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DESIGN AND CONSTRUCTION IN ROMAN IMPERIAL ARCHITECTURE
THE BATHS OF CARACALLA IN ROME



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ABSTRACT

My thesis is a study of the generating processes of Roman imperial architecture - the processes of design and construction - and of their economic and socio-political ramifications. The study concentrates on a single structure, the Baths of Caracalla in Rome (AD 211-216), regarded as one of the major achievements of the mature phase of Roman architecture and illustrative of the most sophisticated building technology available to Roman architects and builders.

A detailed survey of the standing remains forms the basis for a set of reconstruction drawings. By following the progress of the building from the architect's initial design to the production of materials, the actual construction, and finally the decoration which forms an integral part of the architect's concept, it has been possible to move away from traditional approaches to Roman architecture, based on the building as fact - a work of art or a compendium of construction techniques - and concentrate on the connections and interactions between the manifold elements of the building process. Furthermore the survey supplies the data which allows the building to be broken down into fixed quantities of materials and specific actions by builders. From this it has been possible to estimate the man-power required for both the materials and construction of the Baths, based on ethno-archaeological parallels from pre-twentieth century non-mechanised modes of materials production and construction in Europe. By applying the related prices and wages given in the Prices Edict of Diocletian to the man-power and materials some idea of the cost of the project can be obtained.

This analysis thus allows for the first time a detailed assessment of the economic and social impact of a major public building project in terms of the amount and type of labour required over a given period and distributed over the city, its immediate periphery, and more distant sites. In addition,

the position of public building can be examined with respect to other calls on imperial resources,
and the economics of this particular form of euergetism explored.