

Ancient marble studies: recent research

Hazel Dodge

J. C. FANT (ed.), *ANCIENT MARBLE QUARRYING AND TRADE* (Papers from a colloquium held at the annual meeting of the Archaeological Institute of America, San Antonio, Texas, December 1986) (British Archaeological Reports, Oxford, S453, 1988). Pp.163. ISBN 0-86054-582-2. £11.

J. C. FANT, *CAVUM ANTRUM PHRYGIAE. THE ORGANIZATION AND OPERATIONS OF THE ROMAN IMPERIAL MARBLE QUARRIES IN PHRYGIA* (British Archaeological Reports, Oxford, S482, 1989). Pp.268. ISBN 0-86054-619-5. £20.

N. HERZ AND M. WAELKENS (edd.), *CLASSICAL MARBLE: GEOCHEMISTRY, TECHNOLOGY, TRADE* (Nato ASI Series, Series E: applied sciences, vol.153, 1988). Pp.482. ISBN 90-247-3793-1. £79.

Introduction

Since the pioneering article by Ward-Perkins on the Roman marble trade appeared 40 years ago,¹ interest in marble, its quarrying, handling, distribution and application, has steadily increased, and over the last 10 to 15 years there has been a positive explosion of interest and research. This has for the most part borne out Ward-Perkins' belief that the study of marble should not just be carried out from an artistic point of view, but also from commercial, scientific and constructional standpoints.² The three volumes reviewed here represent the fruits of the most up-to-date research into all aspects of decorative stones and constitute invaluable collections of new research material. Fant's edited volume comprises 5 papers: Tony Kozelj on Greek, Roman and Byzantine quarries in general; Marc Waelkens, P. de Paepe and L. Moens on the extraction and production of white marble in the Mediterranean; Susan Walker and Keith Matthews on isotopic analyses of marble sculptures in the British Museum, including some from the Mausoleum at Halicarnassus; Susan Kane on results of isotopic analyses of sculpture from Cyrene; and Amanda Claridge on the effects on Roman statuary of the supply of stone. Fant's second volume is a study of the Roman imperial quarries at Docimium (modern Iscehisar) in Phrygia, the results of a mainly epigraphic survey carried out at the quarries themselves and at Altıntaşovasi, discussed alongside inscriptions on Docimium products found outside Turkey. The volume collects together all new quarry-inscriptions on *pavonazzetto*, the famed coloured marble of Docimium, and provides concordance tables for those already published. Fant discusses the context of the inscriptions in detail, and clearly demonstrates how they elucidate the organisation of the quarries at their height. He identifies 3 main types of inscription among the 350 or so known from the Phrygian imperial quarries. The volume edited by Herz and Waelkens (henceforth referred to as the *Nato Papers*) is a collection of papers, based on those given at an Advanced Workshop held at Il Ciocco (Castelvechio Pascoli, Lucca), Italy in May 1988, sponsored by NATO's Scientific Affairs Division. It is divided up into 10 parts: general geology and technological matters, specific quarry studies, production of artifacts, the mechanisms of the marble trade, provenance studies by scientific analytical methods, the application of those methods, and, finally, the problem of the decay and conservation of ancient marble — a total of 49 papers, the first being a fitting tribute to John Ward-Perkins. In the light of these 3 books it is possible to up-date our picture of marble, its quarrying, transport, and application in antiquity.

Quarries and geology

There are basically two aspects to the archaeological study of marble: firstly the material itself, its provenance and characteristics, and secondly the quarrying and handling of the stones — activities very much determined by geology.³ Both these aspects are influential factors determining the uses to which the

1 Ward-Perkins 1951.

2 Ward-Perkins 1980b, 325, in response to criticisms expressed by Wiegartz 1974.

3 Waelkens *et al.* 1988a, 81.