J. Clayton Fant, Cavum Antrum Phrygiae. The Organisation and Operations of the Roman Imperial Marble Quarries in Phrygia. British Archaeological Reports, International Series, Band 482. Oxford 1989. 268 Seiten, 152 Abbildungen im Text.

This book reports a field study made by the author from 1982 to 1986 of inscriptions found in the imperial marble quarries at Docimium in Phrygia. The violet and cream pavonazzetto marble beloved by the Romans has in very recent years become fashionable again, and Fant's study has thus assumed some of the dramatic urgency of rescue archaeology. Many new inscriptions have been recorded: of those mentioning officinae (p. 36) fourteen of nineteen were previously unknown, and many more have been read anew. The result is an improved understanding of inscriptions on quarried blocks, especially of those texts devised as an internal recording system which bedevil clear interpretation. The primary goal of this book, to provide a platform to work at the next level (p. 249) has been achieved, and for this Fant's efforts are of fundamental importance.

The author's Type IA and B texts, comprising the formula *ex ratione cuiusdam* followed by a consular date and a unique serial number are not found in the quarries but mostly at Portus, whence the blocks entered Rome. Fant supports HIRSCHFELD's view, expressed in "Die kaiserlichen Verwaltungsbeamten" (1905), that these represent a record most likely applied in the procurator's office at Synnada to blocks approved for export. Most of these inscriptions date to the AD 90s, when the import of marbles to Rome was dramatically increased, and it apparently became possible to cut and move blocks of marble of considerably greater volume and number than before. These developments do not appear to result from technological innovation, but from managerial response to increased demand: the texts studied here are a surviving indication of stricter control, in the sense that the name of the contractor and the date of the contract were henceforth recorded at Rome.

Fant's Type II texts, which form colonies of inscriptions rather than a single entry, are all found near the quarries, and are here interpreted as a system of internal record, most likely of a provisional nature. Of diverse content, and sharing nothing with Type I beyond approximate contemporaneity (the texts include at least one date), Type II texts are inscribed on blocks long exposed to weathering and thus probably stockpiled at or near the quarries. Fant suggests that they represent the rejected produce of the quarry's first century of production, checked more than once by supervisors. "The intense scrutiny of the Domitianic and Trajanic periods suggests an eager hunt after usable material, and many pieces set aside as marginal decades earlier were probably pressed into service" (p. 29), a view to be compared with evidence now emerging from the imperial granite quarries at Mons Claudianus in Egypt, where recent excavation suggests an overwhelming exploitation under Trajan.

The Type III inscriptions begin in the 130s, and for the first time below the date record the name of an officina, here surely rightly interpreted as a dressing workshop. Also named is the man responsible for the caesura (the cutting operation as determined by managers at the quarries); the site of the cutting (locus) is numbered, as is the bracchium (the branch or area of the quarry in which the cutting took place). These texts represent a revised system of management in which named individuals were held responsible for their sections, and held their posts for a working lifetime, and in which the officina became a lasting institution. It may well be that the officinae had existed previously, but only now was it thought appropriate to record their operations on blocks travelling to Rome. Thus "administrators closely supervised the entire process of preparing blocks instead of merely logging in the finished products, as happened under the ex ratione regime" (p. 31). While the increased control is clear, private financial relationships between the administrators and the caesura chiefs remain obscure (p. 72).

"Given the large scale of their operations, the chiefs should not be pictured covered with marble dust under the hot sun but giving overall direction to a number of foremen. In this light the chances of reasonable longevity improve considerably." This verdict on the *caesura* chiefs' job description is one of many instances of Fant's engaging and often witty style. The narrative is, however, marred by several instances of careless proofreading, by the intrusive layout of the illustrations, and by the inclusion of drawings surely intended for the field notebook which should have been prepared for publication by a professional illustrator. Happily the catalogue of texts is reproduced separately from the plates, which illustrate only the more doubtful or interesting texts. It would have been preferable to print these on art paper, but many texts are legible. The volume is shoddily bound, but makes accessible a wealth of information at low price.

The thrust of Fant's research is to suggest a twofold division of quarries into those producing marmi preziosi and others producing marble for more general use to which access by private citizens was less restricted. Even at Docimium a division is apparent between coloured pavonazzetto, the subject of the inscriptions catalogued here, and the fine white marble, much prized for columnar sarcophagi and large statuary, on which no texts appear (p. 250). Our understanding of ancient recording operations remains incomplete: only a few inscriptions have been discovered at Proconnesus, perhaps the quarry with the greatest productive capacity in imperial times, and none is known from the extensively exploited Pentelic quarries near Athens. With regard to the latter, Fant is rightly dismissive of a text suggesting Herodes Atticus' ownership of the quarries (p. 8, n. 35: no explanation is clear in the garbled footnote. For the text, wrongly interpreted, see also W. AMELING, Herodes Atticus II. Die Inschriften [1983] p. 216 no. 199).

An overview of recent research on the exploitation of marble in antiquity, including an assessment of Fant's work and an extensive bibliography, has been provided by H. DODGE (Journal Rom. Arch. 4, 1991, 28–50). As a working hypothesis in need of amplification and refinement, Fant's view offers scope for the revision of earlier visions of the Roman imperial marble trade in which perhaps too great an emphasis was placed on modernising commercial enterprise and insufficient weight was given to the Roman passion for coloured stone. Fant's work, coupled with the excavation of the granite quarries at Mons Claudianus in Egypt, in which large quantities of ostraka have been recovered, will provide the epigraphic framework for the years to come.

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