

area of Hitan Rayan which date to the early period; also, above the village at Shenshef lies a hilltop fort, of two distinct structural phases, originating in the late Ptolemaic-Early Roman period.

The route network in the area of Hitan Rayan and Shenshef and beyond is also under investigation, with the possibility that the road, which must continue west-southwest as far as the fort at Abraç, ultimately lead west to the Nile at Aswan. While sites are known beyond Abraç, evidence for a road has, so far, proved elusive. Surface material from the hilltop site at Abraç suggests that it dates to the Ptolemaic-Early Roman period, broadly contemporary with the primary hilltop phase at Shenshef and with another hilltop fortification at *Vetus Hydreuma* (Wadi Abu Greiya) on the Edfu-Qift road. A pattern appears to be emerging here, but its significance is not yet apparent. Nor is the reason for the siting of Abraç known. It is not near any known settlement or mine or quarry. A well in the wadi below has produced late Roman pottery, but not material contemporary with that from the fort. Ongoing fieldwork may resolve some of the issues concerning the chronological and functional relationships of these sites.

The above comments can give but a flavour of what is a multi-faceted project. Sidebotham, Wendrich and their team (18 collaborators are acknowledged on the title page of the 1995 report) are to be congratulated for what they have so far achieved — and achieved in adverse circumstances. Just as the Ptolemaic and Roman inhabitants of Berenike had substantial logistical problems to overcome in the supply of food and water to the site, so too have its 20th-c. investigators in mounting a major expedition 300 km distant from what is now the nearest source of food and drinking water.

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Ostraca from the Egyptian stone quarries

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JEAN BINGEN, ADAM BÜLOW-JACOBSEN, WALTER E. H. COCKLE, HÉLÈNE CUVIGNY, FRANÇOIS KAYSER, WILFRIED VAN RENGEN, *MONS CLAUDIANUS. OSTRACA GRAECA ET LATINA II* (Institut Français d'Archéologie Orientale, Documents de Fouilles de l'IFAO 32, Cairo 1997). Pp. 312, 62 plates. ISBN 2-7247-0198-4.

When the first volume of ostraca from Mons Claudianus appeared in 1992, the excavations were still in progress.¹ By the end of the seventh and last season in 1993, more than 9000 ostraca in Greek and Latin had been found, of which Jean Bingen has estimated that 3000-4000 are suitable for publication.² In publishing this second volume, the editors now have the advantage of seeing this body of texts in its entirety, and they have made good use of this, citing unpublished texts on practically every page to elucidate a wide variety of subjects. The reader, however, is not so blessed, and can only hope that future volumes of this fascinating material will appear at an accelerated pace; for at a rate of 226 ostraca per 5 years (vol. 2 contains nos. 191-416), it would be another 57 years before 3000 of these texts will have seen the light of day. And this is not all, for some of the excavators have gone on to dig at the small way-stations of the Eastern Desert, finding these equally generous with inscribed potsherds; we may thus hope at least for volumes for Maximianon and Didymoi. In the preface, Bingen notes that the present volume has deliberately focused on some of the smaller dossiers found in the excavations, because that

1 J. Bingen, A. Bülow-Jacobsen, W. E. H. Cockle, H. Cuvigny, L. Rubinstein, W. Van Rengen, *Mons Claudianus. Ostraca graeca et latina I* (IFAO, Documents de Fouilles 29, Cairo 1992). On the excavations, see now D. P. S. Peacock and V. A. Maxfield, *Mons Claudianus: survey and excavation, 1987-1993* (IFAO, Fouilles 37, Cairo 1997), with review in *JRA* 12 (1999) 721-36 by P. Pensabene.

2 J. Bingen, "Dumping and the ostraca at Mons Claudianus," in D. M. Bailey (ed.), *Archaeological research in Roman Egypt* (*JRA* Suppl. 19, 1996) 29-38 at 31.

was more expeditious than waiting until the larger ones could be brought into order, given that new texts relevant to them were found "jusqu'aux dernières heures de la dernière campagne."

The excavations in question concern the fort at Wadi Umm Hussein which was the central base for the quarrying operations nearby, and in the immediate environs of that fort. The quarrying was focused on the gray granodiorite so desired for imperial Roman building projects. Quarrying operations were not continuous; they became dormant after materials for a major building had been produced, and resumed only when another project was undertaken. The ostraca range from Trajanic to (approximately) Severan,³ but are naturally clumped in the periods of quarrying activity, with a mass of Trajanic material, then a late Hadrianic group, and a substantial Antonine cluster. Most have no year dates and are dated only by archaeological context or prosopographical links to dated ostraca. The laudable ideal of linking the written texts to the archaeological remains has been pursued in the publication, which always notes findspot; but it is a little sobering to find that most of the ostraca come not from primary accumulations but from dumps, even secondary dumps. Dated ostraca found in context thus help date other ostraca found in the same locus and stratum, but only rarely is the context itself of any significance for our understanding of the relationship of the texts to their original place of use or even their place of discarding.⁴

The material is organized here in 10 chapters of a thematic character. The first (191-223), by H. Cuvigny, deals with death and illness; it follows a similar section in volume 1 (*O.Claud.* I 83-123). A first subsection contains lists which Cuvigny identifies as enumerations of the ill (*aegri*), basing this view in part on the fact that one individual also occurs in a notice of death dated to the day after the last date preserved on one of these lists (211). Similarity to the more informative lists in the next subsection also plays a part in assigning some lists to this section. In the second subsection, the maladies are listed with the names in many cases; unsurprisingly, the men were mainly suffering from injuries. The only common disease is eye infection; there is one case of fever, as well as a scorpion bite. Craft names are also given; the accumulation of these terms is beginning to give us a remarkably detailed view of the specialties of Roman quarrying work. The last subsection here contains 4 private letters referring to illness or injury.

Chapters 2-5 contain private correspondence.⁵ In chapt. 2 Bülow-Jacobsen publishes correspondence (224-242) from the SE corner of the fortified village, mainly written by one Dioskoros. One of his correspondents, Ammonianos, is called *curator*, which the editor takes to mean *curator praesidii* of Mons Claudianus. Dioskoros was located elsewhere, evidently at another desert station which had enough water from its well to support the growing of vegetables, part of which were shipped to Mons Claudianus. Cabbage, lettuce, endive/chicory, beets, and mustard are all mentioned. The nature of the gardening is not made clear, nor is its location. Dioskoros shows that he expects an acknowledgement of receipt of goods within three days of dispatch, and on this basis the editor suggests that he cannot have been more than a day's journey from Mons Claudianus. One possibility is a site just 2 km southwest; another site 25 km away seems equally possible. The correspondence has many interesting sidelights: Dioskoros eventually becomes a *dromedarius*, it seems, perhaps suggesting that vegetable growing was not

3 On p. 13 Bingen notes that the SE corner has activity from roughly the reign of Alexander Severus.

4 See the article by Bingen (*supra* n.2) and his remarks on pp. 11-17 of the volume under review. The West Dump ("Sebakh"), for example, contains largely material from years 21-22 of Hadrian.

5 There is much of specifically philological interest in the accumulating body of published letters from Mons Claudianus, but in this venue I will pass over almost all of it. For a couple of examples, see my "Two linguistic notes on ostraka from Mons Claudianus," *CdÉ* 72 (1997) 341-44. But something must be said of the statement on p. 44 of the present volume by Bülow-Jacobsen about the language of Dioskoros's letters: "Since his Greek is too faulty for a Greek and his name too Greek for a Roman, we have to assume that he was a hellenized Egyptian, although the errors he makes are not particularly Egyptian either." Native speakers of any language are quite capable of writing it very poorly, and the quality of the Greek in Dioskoros's letters tells us nothing about his origin.

really his main job; he worries about whether the vegetables will get to their destination safely, evidently mistrusting the carrier. There is a mention of buying vinegar, which the editor argues shows that *posca* (vinegar and water mixed) was not part of the regular rations but an object of commerce. Fresh fish travel in the reverse direction, coming from the Red Sea — as the finds of bones at Mons Claudianus have confirmed (see 241). In an appendix, the information about the deities mentioned in *proskynema* formulas in the letters is collected. Most striking perhaps is the formula with Sarapis in 386, which is unlikely to have come from Alexandria. Although this hardly means that the identification of Alexandria as the place of writing of most papyrus letters with a *proskynema* to Sarapis is wrong, it does show that we cannot routinely exclude other possibilities.

The next dossier (243-254, chapt. 3) is that of Petenephtotes, who was for some time a *kibariates* (provisions manager) at Tiberiane (Wadi Barud), some hours by foot southeast of Mons Claudianus. We learn that he earned 47 drachmas a month, not a bad income but hardly princely for a hardship post; that he had a wife in the valley; that his brother (the term is to be taken literally, according to the editor) was in Mons Claudianus. Among points of interest here are the references to the *poreia*, "the regular caravan that connected Mons Claudianus with the Nile-valley" (254, introd.). It continued on from Mons Claudianus to Tiberiane, but only after a stop. Petenephtotes could get his provisions faster, it seems, if his own messenger picked them up in Mons Claudianus and set out at once. There is a valuable note (250.4n) on the uncertainties of getting letters delivered.

In chapt. 4, Bingen publishes private correspondence from Raïma (255-278). This was a *praesidium* in the zone between Mons Claudianus and the Nile, but its exact location is undetermined. The correspondence from Raïma is both professional and personal; it is the latter that appears here (but cf. below for some of the professional letters, 360-376). The editor notes the obsessive concern of the writers with the safe arrival of goods they have sent and shows that the expressions of the letters make sense only if one supposes that the goods and letters were sent by different carriers, even if more or less at the same time. A donative is mentioned in 258.

Other private letters (279-303) are published in chapt. 5 (also by Bingen). Various points of interest again emerge. In 280, the writer says, "Receive the basket which you sent to us full of excrement, so that, if you find an opportunity, you may send us some again." An interesting note discusses the use of dried human waste in desert agriculture. In 295 we learn that a half-mation of salt cost 3 obols. If (as 294 suggests) we are dealing with a 7-obol drachma here, that would put an artaba of salt at 8 dr. 4 ob. We have only a few other prices for salt. The closest in time (2nd c.) shows a price of a little over 10 dr. per artaba, and one a century later still shows the same price. It is perhaps surprising that transport cost has not driven the price up more.⁶ In 297 the writer mentions that he has put the recipient's name on a cloak "in broad letters" (πλατέοις γράμμασιν) as a kind of address-label. In 299, Serapion asked his like-named father to buy papyrus, go to Didymos the *kathegetes*, and pay him to have a prose work — it seems not to matter which — copied for him. As the editor says, "on voit mal le père de Sarapion trouver ici un professeur et une bibliothèque," and he suggests that this is a draft or copy of a letter sent from Mons Claudianus to the valley. This hypothesis also explains the curious absence of any greetings at the end of the letter. But see below on the presence of some ostraca interpreted as coming from an educational milieu.

6 H.-J. Drexhage, *Preise, Mieten/Pachten, Kosten und Löhne im römischen Ägypten* (St. Katharinen 1991) 41, lists only three prices. *SB XIV 11960.26* (Oxyrhynchite, second half of the 2nd c.) shows 2 metra (1 metron = $\frac{1}{10}$ artaba) for 2 dr., 2 chalkoi. *P.Lond. III 1170 verso* (p. 193) 124 (A.D. 258/9) gives a price of 1 metron for 1 dr. The ostrakon also gives a price of 24 obols for a *sitarion*; if this is for an artaba of wheat, it seems unconscionably cheap for any period after the reign of Augustus, and probably the amount at stake is smaller.

With chapt. 6 we come to a small group of duty rosters (304-308), the closest parallel to which is *O.Amst.* 8. The first three are in Latin, and the first of these is written on a good-sized piece of amphora (41.5 cm high at maximum). The editor (Cuvigny) remarks (p. 142) that while the base of the jar appears to have broken accidentally, the neck was cut off deliberately to shape the piece. She goes on to remark, "la pratique du découpage des ostraca est très répandue au Mons Claudianus et, à ma connaissance, propre à ce site." Every papyrologist has been brought up on the maxim that the use of ostraca was fostered by the universal availability of already-broken potsherds on the ground. In any case, I know of no publication of ostraca in which the hypothesis of deliberate cutting of pottery with a chisel is even considered as a possibility. Were our quarry-men simply fastidious about sherd shape, or did they use ostraca in such quantities that natural breakage could not keep up with them?

In 304 we have a roster covering days 1-27 of a month, with bits missing here and there. For each day we have four names under the heading *sco*, for *sco(pelos)*, *sco(peloi)*, or *sco(pelarii)*, then four headings numbered I-IV (sometimes with the initial letter of the Latin ordinal instead of a numeral), the first of which is preceded by *an*, *ang*, or (once) *angl*. What this stands for is anything but clear. Cuvigny ultimately opts for taking it as short for *angaria*, referring probably to the transport of mail or goods in shifts. This explanation requires taking the *l* in the one instance of *angl* as an error for *r*, although she admits (148 n.11) that she can find no other instance of this interchange (commonly enough attested in other words, mostly in the Fayum). It seems to me, as to another of the editors (see 168 n.8), a very improbable explanation. Because the men who rotate through these posts (see pp. 146-47 for the rotation scheme) are barely attested otherwise in the ostraca from Mons Claudianus, these provide no help. I wonder if we might be dealing with *anguli* or *angularii*, with reference to the corners of a fort (that at Mons Claudianus is most likely, but hardly assured) or to men stationed on them. Towers, *σκόπελοι*, were often (including at Mons Claudianus) located in the middle of walls as well as at the corners, and the *sco()* here could perhaps refer to these mid-wall towers.

In chapt. 7 (309-356), Bülow-Jacobsen edits some smaller duty rosters, which are lists of *vigiles*. These provide a fascinating look at practices otherwise hardly known except from Vegetius, whose account they confirm handily. One scribe wrote the names on a sherd, then a second one added in the margin the numerals, evidently after casting the lots (see 379 for a reference to this practice). This practice thus divided the tasks and perhaps limited the possibilities for favoritism or collusion. The second scribe then wrote *σίγνεν* for the Latin *signum* and added the password. A list of these is given on p. 167; to no one's surprise, it includes *fortuna*, *concordia*, *Mars*, *Minerva*, *pax*, *pietas*, *Salus imperatoris*, *Vesta*, and *Victor* (or *Victoria*), in various cases. (The Greek transcription represents these forms literally, like *πακε* for *pace*.) One other point of interest in these lists is the occurrence of men called *φρυγονατοι*, evidently to be taken as a new and slightly mis-spelled formation (comparable to Polyaeus's *φρυγανιστήρ*, noted in LSJ) from *φρυγανίζω*, to gather firewood — an activity the importance of which can hardly be doubted.⁷

More military correspondence (357-387) fills chapt. 8 (Van Rengen). A lot of this originates from *praesidia* along the road from the Nile to the quarry (especially from Raïma, 360-376), and as more of it is published there will be much more to be said, but the editor rightly remarks it is too soon for a synthesis. These *praesidia* were under the supervision of the centurion at Mons Claudianus, as it seems, and he felt free to give orders to their curators. Although it was presumably well-travelled, the *ὁδὸς Κλαυδιανοῦ* (sc. *μετάλλου*) was not a pleasure jaunt and could never be treated as routine. The military was very concerned to control traffic on it as tightly as possible (371 is a good, if trivial, example), and everyone travelling had to have a pass from a responsible official; in many cases a *tabellarius* was also sent along for an escort.

⁷ The form actually looks as if it has been generated under Latin influence, but that may be taking its spelling with excessive seriousness.

Notes to commanders *en route* often mention even the hour at which someone was departing, presumably allowing anyone along the way to determine if he had kept to the straight and narrow path or spent his time less purposefully. The need to manage water supplies undoubtedly was connected to this tight control (cf. 380); so too, perhaps, was the perennial threat of nomadic marauders (see 357 on soldiers sent ἐπὶ διωγμόν).

In chapt. 9 (Kayser; 388-408) we get lists of soldiers, drawn up each day and evidently in duplicate. These are written in an awkward, but not unpracticed, hand with some Latinate character, including the pervasive use of interpuncts. Rather than a poorly educated person, this may have been someone at home in Latin who still found writing in Greek script rather awkward. The editor points out the substantial number of Thracian and Dacian names in these lists (list p. 233) and, more generally, the diversity of the origins of the names.⁸

The final chapter publishes 8 texts (409-416) categorized by the editor, Cockle, as "School Exercises." (See *O.Claud.* I 179-190 for an earlier group.) This is perhaps surprising (Bingen's scepticism about the likelihood of finding a *kathegetes* at Mons Claudianus has already been quoted), but in vol. 1 Cockle argued that "the ostraca and the surviving leather shoes show that children as well as adults were present at the site" and "that a school master was giving elementary instruction at Mons Claudianus" (169). The items published in vol. 2 are by no means elementary, however, and the implications of this fact are not really discussed. Most of the texts in vol. 1, in fact, are also not elementary. Not all ancient education was of children, and it seems premature to assign all non-documentary texts to the education of the young.⁹

The preceding pages, in all their miscellaneous character, give only the briefest of impressions of the areas in which the texts published in this volume make contributions to our knowledge of the society of the Eastern Desert in the 2nd c., as the imperial government organized large-scale quarrying works and all of the supply and communications support services necessary to make quarrying possible in a hostile environment. The standard of editing is excellent throughout, and the photographic documentation is extensive and of high quality (even if, inevitably, plates seem occasionally to be missing just when one wants to check a reading). The growth of our knowledge of the Egyptian deserts during the past two decades has been remarkable,¹⁰ and the prospect of more volumes of ostraca from Mons Claudianus offers the happy thought of a great deal more to come, built on a secure foundation of strong philological scholarship coupled with first-hand knowledge of the site. The time for a real synthesis is indeed not yet at hand, but with each volume of these ostraca the outlines of the picture grow clearer, and our gratitude to the excavators and editors more profound.

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8 I doubt that the Σιγίλεν in 408.9 is, as the editor suggests, a diminutive Σιγίλη formed from σιγή, "silence", which is attested as a name. The ending -εν is reminiscent of the σιγνεν with which *signum* is rendered in the lists of *vigiles*. Could this be *sigillum*, in the sense of sealing? *Signa* occurs as a name (e.g., SEG 34.475), and the name could be a rendering of Σφραγίς, an attested slave name (*P.Cair.Zen.* I 59003; cf. H. Solin, *Die griechischen Personennamen in Rom* (Berlin 1982) 1188.

9 J. Clackson publishes a papyrus with Greek written in Armenian characters (BnF Armenian 332), which he considers a testimony to adult education, in *ZPE* 129 (2000) 223-58.

10 See O. E. Kaper (ed.), *Life on the fringe: living in the southern Egyptian deserts during the Roman and early-Byzantine periods* (Leiden 1998), conference proceedings dealing with both eastern and western deserts, which includes contributions on Mons Claudianus.