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The Imperial Roman Site of the Mons Claudianus (Eastern Desert of Egypt)

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In March 1955, a member of the English expedition that was devoting a second campaign of excavations to the study of the quarries of the Mons Porphyrites in the Jebel Dokhan (Egyptian Eastern Desert) walked off down a path whose existence had never previously been noticed. Along it, he came across the remains of rudimentary dwellings; it quickly became clear to him that this was a site that had never been visited again since it had been abandoned nearly 2,000 years before. In the most elevated of the basic shelters found on the site, a black porphyry stele lay on its side near a niche. It was a stele in the Egyptian style bearing at the top the traditional winged disc and two cobras. There was also engraved on it an image in the Egyptian mode of the god Pan, the god of fear who protects the fearful, or possibly the traditional image of the Egyptian phallic god Min, the protector among others of people setting out across the desert. This sacred engraving was accompanied by an inscription in Greek, which revealed that the stele was a votive offering, dedicated to the god by a prospector of quarries to assure the safety of his children whom he had in all likelihood left far away. The inscription is dated to the day in the fourth year of the emperor Tiberius, specifically the 23rd July of the year 18 CE. The man, one Gaius Cominius Leugas, presents himself without excessive modesty: it was he who had located quarries of porphyry, of *knetikes* (an unidentified yellow stone), of the extremely rare black form of porphyry and of a multi-coloured stone, probably a type of granite: at all events these were stones which he must have found much further to the south, in the mountainous desert region that extends between the Nile and the Red Sea (Van Rengen, 1995).

Rarely has one been able to date with such precision the, at first sight, purely technical success of a vigorous imperial policy of exploitation of conquered territories. And what a territory this was! A desert of unforgiving mountainous terrain with a maze of dried-up riverbeds. It was separated from Rome by three-quarters of the Mediterranean and three-quarters of Egypt. The only way to get there from Alexandria was to go up the Nile past Dendera, then add to that nearly 150 km across the desert. Just like the south of Egypt or the Red Sea coast, it was one of the farthest points of the Empire from Rome.

The little Roman fortified settlement in the wadi Baroud is so isolated that it was rediscovered only in 1943, probably as a result of a close survey of the Eastern Desert undertaken in prospect of a potential retreat by the British army towards the Red Sea and India. In 1992, during a brief dig which turned up a few inscriptions, and thanks to the discovery of the remains of ancient quarries by Professor David Peacock, the settlement was able to be identified as being the Roman outpost of Tiberiane, a place-name which we had often found mentioned in the ostraca of the Mons

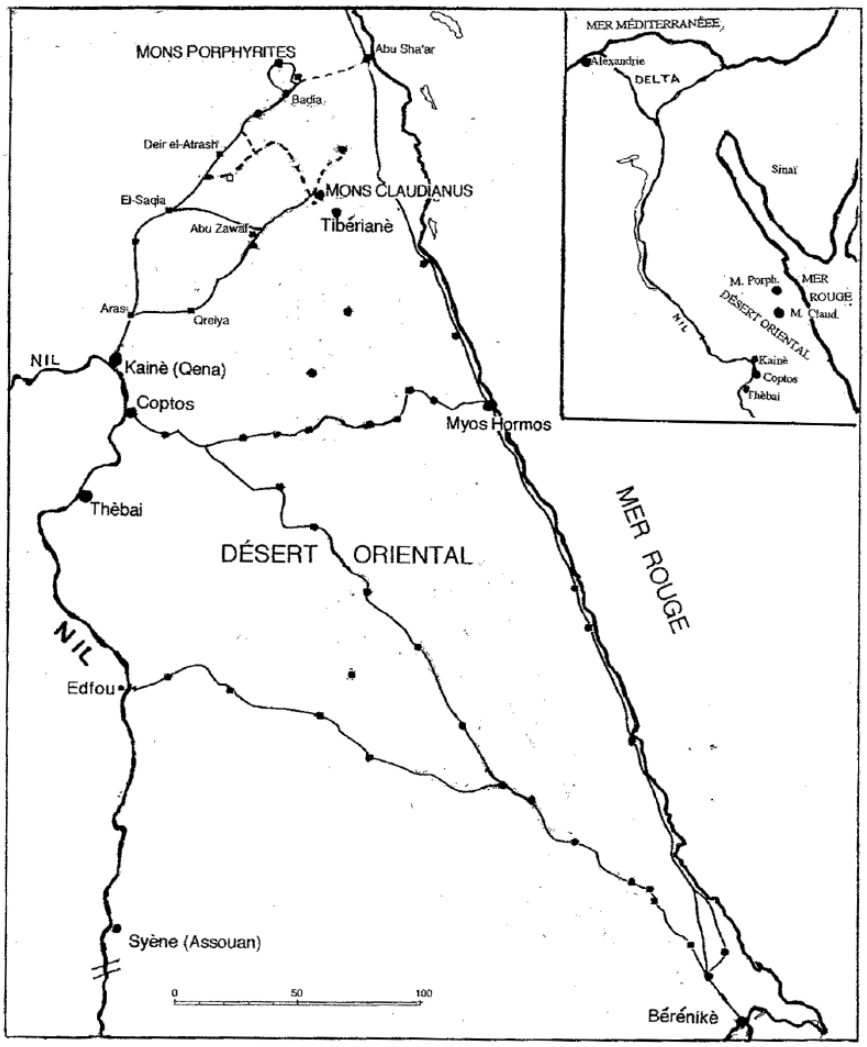

Figure 1. Map of the Eastern Desert.

Claudianus (Peacock and Maxfield, 1997: 275–286). As the name was clearly given in honour of the emperor Tiberius, and also since the site yielded a very particular form of quartz diorite, the zone was clearly one of the first in the region to be exploited by the Romans. Its quarries produced 'granito bianco e nero', a very dark stone mottled with broad white crystals, described by Pliny the Elder as 'Tiberian marble'; in Rome it was used, among other places, in the Domus Tiberiana and, highly symbolically, on the Palatine. What is interesting here is firstly the intense thoroughness of a wide-ranging geological survey of the desert by the Romans which was successfully undertaken less than half a century after the annexation of Egypt by Augustus. This achievement furthermore parallels the contemporary adoption of other routes through this same desert by Italian merchants and traders who wasted no time in heading for the Red Sea and the port of Berenike, situated much further to the south, which opened up to them the trade route to India and the Horn of Africa (De Romanis, 1996). Of even greater interest is that this search for quarry-sites which would produce

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Figure 2. Wadi Baroud. The little fortified settlement of Tiberiane.

heavyweight shipping cargos meant that, for Rome, the Mediterranean was capable of assuring the most uncertain if not the most awkward aspect of the shipment of stone to Ostia. In this trade, Rome was rediscovering the Phoenician measure of the great enclosed sea, but after having also mastered the ship-building problems that the new mission required of her ships.

Tiberiane presents a characteristic that we will rediscover on the nearby site of the Mons Claudianus and which is perhaps a general one in the Eastern Desert of Egypt for the exploitations arising out of the initial Roman prospection: there remain very few traces of the original installations. On the contrary, in its present state, the tiny fortified settlement of Tiberiane and the inscriptions that our archaeological team found there belong to the second century and specifically, for the inscriptions, to the era of the Antonines. This, as we will see, corresponds at the Mons Claudianus to the third phase of intense occupation of the large settlement in the wadi Umm Hussein, when this was re-established from the 21st year of the emperor Hadrian (138 CE). The few soldiers guarding Tiberiane formed a tiny detachment (*numerus Tiberianae*) of a military contingent (*arithmos Porphyritou*) protecting the two main tracks to the quarries which came under the command of the unit stationed at the Mons Porphyrites. The Greek-inscribed ostraca provide evidence that the regular caravans which, as we shall see, brought men, stores, and equipment to the Mons Claudianus by the *via Claudiana* which linked the settlement to the Nile, may well have carried on as far as Tiberiane. The impression left by these inscriptions is that the outpost was no longer a pioneering one for the exploitation of the desert's resources, but rather depended entirely on the Mons Claudianus of which it was now only a satellite station: it was actually in a distressed state through a shortage of water, stores, and pack-animals and through a lack of protection against the marauding Bedouin of the desert. Tiberiane was gradually slipping back over the edge of the world.

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The site of the Mons Claudianus, of which the most imposing element is the fortified settlement in the Wadi Umm Hussein, was recognized in 1823 by John Gardner Wilkinson, who drew up a first sketch of the site.[1] But it remained rarely visited until the 1960s when a German mission carried out a more systematic topographical survey. An international team of English, Belgian,

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Danish, and French archaeologists and papyrologists excavated the site from 1987 to 1993 under the auspices of the French Institute for Middle Eastern Archaeology in Cairo and with the cooperation of the Organization for Egyptian Antiquities (Bingen, 1993). During this time we partially laid bare an archaeological complex that was impressive in its extent, detail, and state of preservation. David Peacock identified more than one hundred quarries on the site.

We recovered from it more than 9,000 Greek and Latin ostraca, and those modest texts inscribed on fragments of amphorae are progressively revealing to us more about the daily life of this centre for the administration, maintenance, and protection of the quarries (Bingen et al., 1992; 1997).

One is right to be impressed by the huge distance separating the Mons Claudianus quarries from Rome, the ultimate trans-Mediterranean destination for the monstrous blocks of granite extracted from them. Even more impressive is the size of the workforce and the quantity of materials that had to be brought together in such an isolated place in the desert to satisfy what to all appearances were the whims of potentates. This would be particularly striking in the second century.

Probably during the reign of the emperor Claudius (41–54),[2] some quarries of grey granodiorite[3] were worked over a restricted area that the Greek documents were already calling the *Klaudianon*[4] and which the reports of the archaeological excavations commonly call the *Hydreuma*, the 'water tank' or 'cistern'. The early encampment had very modest living conditions. The surroundings are marked in particular by slipways hewn out of the mountain-side to bring down the blocks of stone from the quarries to the bottom of the valley, which is a characteristic element of the landscape of the Mons Claudianus. At the top of one of these slipways, in the midst of sundry rocks from the quarry, sits a large granite bath-tub (intended perhaps for some empress) which split while it was being shaped. Later on, a little fort was added to this initial worksite to guard the cistern in particular, at a time when the early village was already falling into ruin and its dwellings filling with rubbish.

Towards the end of the first century, probably under Domitian, it was discovered that the imposing massif looming over the northern side of the wadi Umm Hussein was capable of providing much more voluminous blocks of stone than those being cut out of the *Hydreuma* quarries. It could well have been also that these latter were becoming exhausted. The main extraction site was therefore moved further to the east, to the northern bank of the broad dried-up wadi, and over time, this site grew to an exceptional size. We have nothing that we are absolutely certain has been preserved from this first phase of development, which the tragic death of Domitian brought momentarily to a close. But at least it is definitely known that the workings had begun then because, outside of the second century fortified settlement, fragments of pottery were found bearing a dedication to that emperor which had been duly smashed after a curse may have been placed on his memory. The most important thing to note is that imperial Rome, that of Domitian possibly, but certainly that of Trajan, considered that neither the Mediterranean nor the working conditions in the desert constituted an insurmountable obstacle to the extraction and shipment of such ponderous materials.

Certainly, during the course of his reign (98–117), Trajan decided to install in his forum and basilica columns of that rare form of granodiorite which he alone was powerful enough to bring to Rome. This marked the resumption of the quarrying enterprise. In one aspect, this second phase was simply a continuation of the first, but distinguished by the construction of a village on the western half of the new site.[5] Its walls have been preserved only to a very low height, as they were later knocked down to provide stones for other developments of the living space. Few datable pieces of evidence have been found concerning the extent to which these constructions were used, and of the oldest discarded objects found in the rubbish dumps, all date from the reign of Trajan. Only one group of buildings, which include baths and what appear to be administrative offices, have been relatively well preserved to the north of the village, along the path leading to the temple of Serapis, to which I will return. To the west of the village, the broad excavation of a well

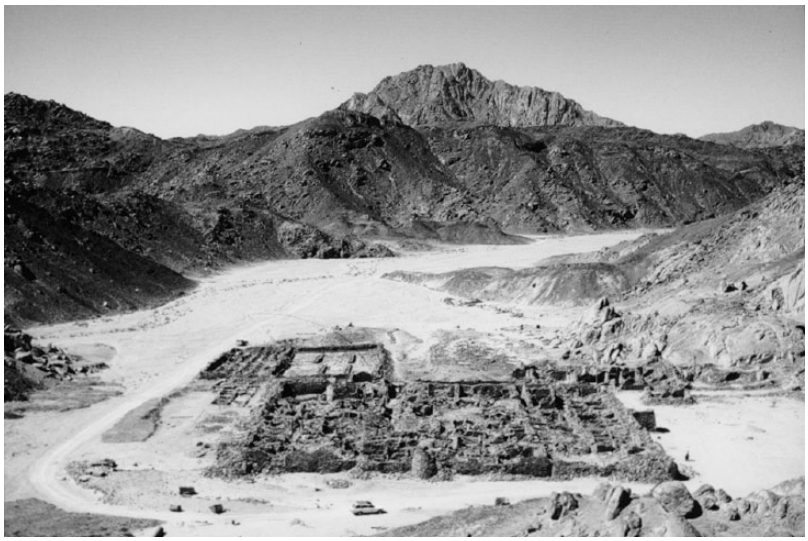

Figure 3. The wadi Umm Hussein complex seen from the east.

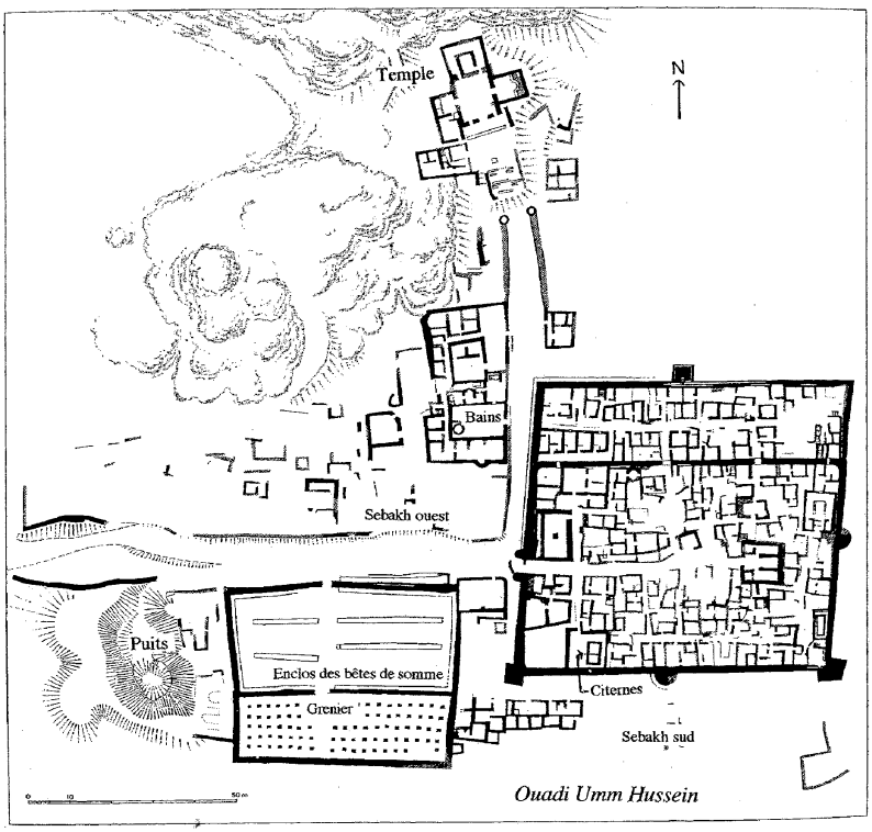

Figure 4. Mons Claudianus. Lay-out of the settlement in the wadi Umm Hussein in its final phase.

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constituted the nearest reservoir of water; but it rapidly proved to be insufficient for the needs of the humans and animals present and for the work in the quarries.

But this second phase also incorporated a considerable enlargement of the enterprise, associated with a new organization of the military presence in the Eastern Desert.

The most tangible evidence of this was the construction of a village enclosed by a fortified perimeter wall and incorporating a prominent network of streets and an associated zone which, together, provided control and accommodation areas with their associated dependencies (water reservoirs, bakeries, latrines etc.). This large, square lay-out, to which were later added a number of towers in the corners and along the sides, is the most characteristic feature of the Mons Claudianus landscape. The site of this 'fort' was no doubt fixed from the very beginning, perhaps already under Domitian, for the eastern boundaries of the open village seem to take this into account. However, construction dragged on over a long period, and probably was never totally completed. This was probably due to the fact that the labour force, brought up with considerable difficulty from the Nile valley, would have had more urgent tasks to attend to, such as bringing down from the mountain the columns, column capitals, bathtubs, and stone bowls for fountains that were expected in Rome. But more important parts, particularly the administrative control quarters in the south-west corner with its double cistern, were definitely in use from the time of Trajan. A bilingual inscription on the lintel of the door leading to the cisterns described this modest reservoir as a *Fons abundans aquae felicis*, an 'abundant source of healthy water', naming its spring, which probably gave its name, 'Traianus Dacicus'[6] to this particular sector of the *Klaudianon*.

Outside of the fort, another significant element shows up in the landscape. This is the temple of Zeus Helios Serapis, erected on a natural platform in the granite heights overlooking the village and the 'fort' on the northern side. It also dates from Trajan's reign and perhaps replaced original cult sites. It too was never completed. In the early months of Hadrian's reign, the powerful imperial slave Epaphroditos, who was the overlord of Eastern Desert quarries, had a dedication inscribed on a broad lintel which was intended to make clear that it was he who had financed the new outfitting of the temple. But the planned portico was never erected onto the columns the capitals which lie unfinished on the ground, and the lintel was never installed above what was to become the monumental doorway of the sanctuary.

As mentioned earlier, the wadi Umm Hussein settlement was reactivated at the end of Hadrian's reign. The period immediately following, extending over the reign of Antoninus Pius, is the richest for the provision of written documents; however, this wealth of material does not necessarily suggest that the quarrying activity was more intense then than under Trajan.

However extensive the variations undergone by the site at this time, let us pause at this first half of the second century to take measure of the huge effort represented by an enterprise which, at its most active moments, must have mobilized well over a thousand men on the site, in the quarries themselves and on the access ways.

These latter would have already implied a significant mobilization of men and equipment: the construction and maintenance of a road intended solely for the exploitation of isolated quarries situated 140 kilometres from the Nile.[7] That which the documents rather pompously call the *via Claudiana* was modelled on the trade roads which linked the Nile at Coptos to the two Red Sea ports of Myos Hormos (Quseir al-Qadim) and Berenike, that is to say, roads with intermediary stations to protect water cisterns. For anyone travelling down from the Mons Claudianus to the Nile via the wadi Fethiri el-Beida, the route offers an alternative at a particular point between a direct but difficult track to Qena and one continuing down the wadi Fethiri on a continuous gentle grade. It was this one that was followed by the heavy stone-cart trains until they reached the other quarry road, the one linking the Nile with the Mons Porphyrites along another string of intermediate fortified posts. These roads were

constantly guarded: except if on a routine maintenance caravan or with a military detachment, one could travel only with special passes, of which a certain number have been rediscovered.

The human and material resources required for the organization and working of the site were even greater by a considerable margin. The *curator* of the settlement had to watch over the proper order of a very complex community in which some came under the military or civil authority of Rome, but where the majority were *pagani*, or paid local workers.[8] The workings in the quarries themselves brought together skilled workers in stone and metal, strictly categorized according to particular tasks. These naturally included Egyptian quarrymen, attracted by wages that were comfortable on the scale of the period and of that populace, who made their professional experience available to the imperial undertaking. Among them the most highly rated were the *sklerourgoi*, specialists in working hard stone who in large part came from the red granite quarries of Syene (Aswan). But there were also quarrymen in great numbers from Alexandria, no doubt those to whom the fine finishing work on the stone was entrusted. Indeed, to reduce the weight of the monstrous blocks cut out of the mountainside, they were reduced as much as possible *in situ* to their final intended shape and dimensions. This practice at the same time diminished the risk of having faulty stones break after their long shipment rather than before.

An ostracon (inv. 1538) reveals that at one particular time during the reign of Trajan, 130 quarrymen from Syene and 210 from Alexandria were engaged in tasks relating to the distribution of water. Alongside the stonemasons, teams were charged with permanently ensuring the good condition of the stone-cutting tools which constantly had to be tempered and hammered. Those teams were specialized as well: even the bellowsmen had their title recorded as such on the ostraca. These latter are now able to enlighten us on the technical aspects of the stone extraction alongside the observations made in the quarries themselves. But the quarries also demanded the presence of non-specialized workers, the *ergatai*, who were handy for all the general labour and who were heavily called upon when it was time to shift a fully finished block away from the rock wall in which it had been embedded, manoeuvre it on to the slipway that had been previously cleared with great difficulty by them, and slide it slowly down to the loading ramp at the bottom. The whole job was overseen by an *architekton*, a Greek geological engineer who was certainly the person responsible for the choice of the spot to be cut into in the rock massif as well as for the distribution of the work and the tools, for the extraction of the cut stones, and their loading on to the heavy multi-axled stone-carts.

One particular type of provisioning was a permanent cause for vigilance and even anxiety: water, vital for both men and animals and indispensable for the tempering of the metals. Under Trajan, the water of the large well proved to be insufficient: the long columns of men who, bringing a coupon to exchange, came daily to get a water-skin filled for their team, quickly exhausted the capacity of the underground stream which trickled deep under the wadi. As a result it became necessary to organize a special service of water-carriers with camels, of which there were 124 at one point. Their caravan regularly made rounds of the nearby wells to bring back water, with four water-skins per camel. The texts show that the water thus collected did not always reach the outlying post satisfactorily, and that sometimes these posts were sent water-skins that leaked or were simply rotten, making the water foul-smelling and undrinkable. A missing water-skin was a very serious matter. To the concerns of the underlings corresponded the anxieties of the managers at the top of the hierarchy, ever fearful of a sudden breakdown in the water supply to the settlement or along the road. One can well understand the haste with which an officer who had returned to the Nile announced in his best Latin to a colleague remaining at the Mons Claudianus that a very abundant supply of water had risen in one of the wells along the track, which should provide his 'dear Calinius' with a great sense of security, *non minimam securitatem*, an understatement whose elegance was perhaps surprising so far from Rome (*O. Claud.* I, 2); certainly the word *securitas* conveys well the abiding worries of those in charge in the outpost.

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Figure 5. Mons Claudianus. The broken column of the 'Pillar wadi'.

One final detail shows the extent of the social upheaval occasioned by such a workplace in which men were stationed so remotely in the desert for a long period of time in demanding conditions. Near the Nile, the village of Kaine, often mentioned in the ostraca and today the city of Qena, was in reality a new settlement at the departure point of the communications tracks, brought about by the exploitation of the distant quarries at Mons Claudianus and Mons Porphyrites (Cuvigny, 1998). Some workers' families were housed there. Women came there often from very far away to be closer to a son, a husband, a brother. They could not go with them into the desert; it remained the privilege of only a very few to be able to bring their family to the encampment. But at Kaine, they continued to fulfil at least one of the traditional tasks of women. Each month, the local *pagani* would tell the provisioning clerk who was going back down the valley the way they wanted their wages and their food rations applied. They often insisted that their wheat ration be passed on to their wife or their mother, and for the bread that these women cooked to be brought back to them.

It was nevertheless from Rome that there permeated to this remote spot the ideological underpinning for all this activity: love for the emperor. For us it is almost farcical to imagine how such a powerful man, whose whims could create so much suffering, could be the object of such adoration. But in fact it was this feeling which gave a sense to the daily labours of these workers far from their homes, from the highest official to the most humble bit worker, and justified the dangers implicit in the undertaking. For work injuries and even deaths are attested in our documents. But Trajan was very highly regarded as emperor. An inscription discovered on the load-bed of a large broken piece of stone informs us that the columns not only had a number but also a name, and this column no 3 of the worksite of one Myrismos bears the pleasant name of 'lover of Trajan' (*Philotraianos*) (*SEG* XLIII 1121; Bingen and Jensen, 1993: 64–65). The ideology certainly came down from on high, but it must have penetrated the lives of all.

The last phase of the existence of the Mons Claudianus dragged on from Marcus Aurelius to Alexander Severus. The Empire had changed markedly. Ravaged by the plague, it was suffering on too many of its frontiers a pressure which it was not in a position to resist on such a broad front. Furthermore, the luxury of acquiring a rare granite reserved solely for the emperor's use no longer corresponded to the mentality of the times.

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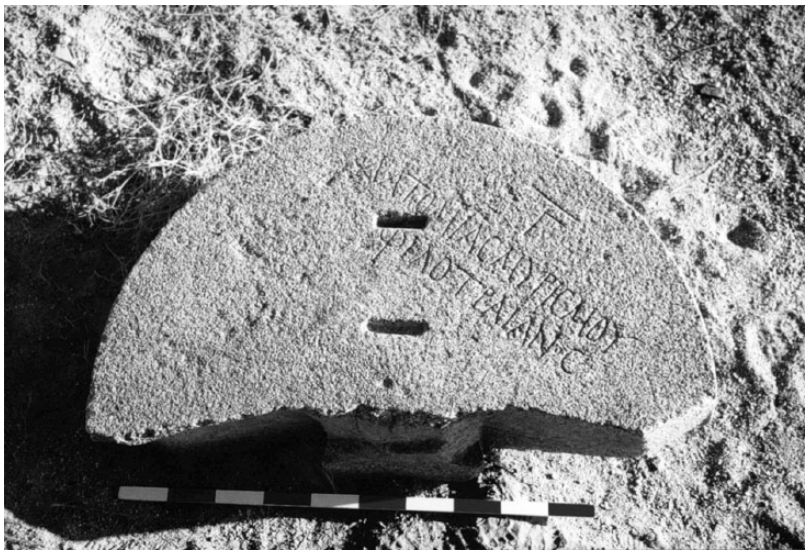

Figure 6. The column named 'Philotraianos'.

Paradoxically, this period of decline also corresponded to a new series of works destined to give to the Mons Claudianus complex the impressive appearance it has when observed from the top of the watchtowers that surround it. The old unenclosed village, completely in ruins, was razed on the southern side of the access way to the 'fort', to be replaced by two large rudimentary covered structures. Along the access way, whose trajectory had been altered as a consequence of the new building, a large enclosure was created for holding the pack-animals which were not admitted to the dwelling areas. Parallel to the main walls, lines of low long sheds were built while others were extended out from the walls themselves. These were intended to store the harnesses of the donkeys and camels to keep them from being trampled by the animals. Beside this animal enclosure, and built in a similarly rough and ready manner, there extended a long barn, a *thesauros*, made of pilasters of dry stones which seem to have once supported a light roof made from wooden beams, matting, and palm-fronds. It appears that the provisions brought up from the valley by caravans and which had been unloaded in the nearby enclosure were stacked there. But judging from the surface state of these two late spaces, they were either little used, or used for only a short time.

The fort then underwent its final adjustment. On the inside, the rooms necessary for basic survival were set up by clearing out the rubbish without expending too much effort. The rubbish was piled up in neighbouring dwellings that were no longer habitable when it wasn't simply thrown out into the alleys whose level grew inexorably higher (cf. Bingen, 1996). The dimensions of the main gateway in the surrounding wall were reduced and it was provided with a semi-circular screen which would have allowed a controlled surprise effect to operate in the case of an armed sortie against attackers. For pressure from the desert nomads was indeed becoming ever greater. The outposts beyond the fort lived in a state of justifiable fear, if we can judge by the way in which they were sometimes abandoned to the enemy. Besides, the garrison was often reduced to a few unfortunate defenders left behind as a rearguard.

What is striking about this ultimate phase is no longer the extent of the imperial demands and the near-inhuman efforts that they required, but, on the contrary, the strange obstinacy of the Roman administration to keep alive a complex fallen into ruin that had lost its reason for existence. No doubt,

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the distance from Rome explains that sight had been lost of the fact that the maintenance of an active military presence in a zone devoid of any strategic interest arises essentially from a sort of routine of history: the Mons Claudianus had been established, not to contain the pressure of nomads on its lands but to produce stone columns for which there was now no longer the means to ship them to Italy.

The heart of the issue was that the Mediterranean was now recovering its measure as an empty space between Alexandria and Ostia that was too significant for overly onerous commitments of men and means to be made to keep that space open. The Empire's new dimensions that were beginning to be drawn and which would become solidly fixed throughout the fourth century no longer paid heed to the unitary parameter that the enclosed sea had at one point represented over its entire transcultural length, a unity that was symbolized, one might say, by the long journeys undertaken by the heavy columns of grey granodiorite. And yet, they would remain a privilege of empire. Our excavations incited David Peacock to ponder this fundamental question: why that inhuman quest for the *granito del foro*? For that stone is not especially beautiful. It even proves disappointing when, in the light that bathes old Rome, you look at the ever-so-dull columns of the portico of the Pantheon. Why this search in a region far from the inhabited world for a particular stone when in Asia Minor and even on the island of Elba plutonic rocks could be found that presented the same appearance? After lengthy research, over the course of which Peacock tracked 'grey granite' to many corners of Europe and even beyond, he arrived at an irrefutable conclusion. The Mons Claudianus 'granite' was reserved strictly for imperial buildings; only the 'replacement' grey granites were available to ordinary people, inasmuch as they could afford them, however. The deep underlying reason for which the emperors would have cast their priority over the stones of the Eastern Desert was the very difficulty in shipping them to Italy (Peacock, 1992). This is particularly true for the granodiorite of the Mons Claudianus: its true value lay in the fact that only a great emperor was powerful enough to have it erected in Rome. Within the parameters of this power, there was the right to expose so many men, so far away, to suffering and death. There was also a second parameter: the mastery by that emperor of long-distance navigation in the Mediterranean applied to extraordinary cargos.

Without the Mediterranean, there would not have been any Mons Claudianus. But, in return, this shows us the limits of the mastery of long distance. The exceptional effort required could only be encompassed by exceptional powers. When the emperors reverted to the norms of their times and felt the pressure of their political engagements, the measure of things returned to normal. And the Mediterranean, which for a few decades had been stretched to satisfy the immoderate demands of an emperor, reverted to offering what it could more modestly assure to its ordinary seafarers.

Translated from the French by Colin Anderson

Notes

This article appeared for the first time in a slender volume published in 2001 by the Instituto Italiano di Studi Filosofici under the title *Tre scavi archeologici come misura del mondo mediterraneo*. Three authors, Giovanni Garbini, Marcello Gigante, and Jean Bingen, had as their dual goal the reconstruction of a particular human habitat and its integration into a broader social, historical, and geographic context – in their case the Mediterranean conceived as a single cultural, economic, and political network. Arising out of an idea of Jean Bingen and compiled following a general meeting of the International Council for Philosophy and Humanistic Studies, this little book has remained in part confidential. We are making an exception to the general practice of *Diogenes* in reproducing Jean Bingen's study here. This has been made possible thanks to the technical support of Wolfgang Kaltenbacher and Michelangelo Costagliola of the Istituto Italiano per gli Studi Filosofici. [Editor's Note]

1. A very clear satellite image of the site can be obtained on Google Earth by entering the co-ordinates 26° 48' 32.7' N, 33° 29' 12.1' E. The amount of detail visible is surprisingly good. [Translator's note]

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2. The oldest document found in this area dates from the reign of Nero.
3. The exact nature of this stone was established by Professor David Peacock and his team (Peacock and Maxfield, 1997: 315–337). It turned out to be the stone referred to as grey granite or 'granito del foro' arising from the discovery during the Renaissance of its use in Trajan's Forum in Rome.
4. The Mons Claudianus, which is the height overlooking the *Hydreuma*, has been and still often is wrongly identified with the Jebel Fethiri. This latter mountain is in reality to be found further to the west and on the other side of the wadi Fethiri el Beida into which the wadi Umm Hussein opens and which provides the natural access towards the valley of the wadi Qena and thence to the valley of the Nile.
5. These are the sectors named South Sebakh, South-East Sebakh, and West Sebakh, and the parts adjacent to the granary and the enclosure for the pack-animals.
6. *SEG* XLII 1574, Bingen (1992: 15–16). The Greek noun [….] reveals that this does not refer to the emperor so much as to the water source, […] being neuter in gender. This noun also figures on the dedicatory altar inscription *SEG* XXXVI 1399.
7. Nothing has been able to confirm the old idea (arising out of an erroneous identification of the port of Myos Hormos) that the road had a commercial importance and had been planned to link the area around Coptos with the mouths of the gulfs of Suez and Aqaba. Beyond the Mons Claudianus, there is no extension which can be considered as other than tracks providing access to the wells of Umm Anab and Umm Dalfa or a link with the area around the Mons Porphyrites, on which the Mons Claudianus depended from a military point of view.
8. There is no evidence in the written documents of any use of 'convict' labour.

References

Bingen, J (1992) Mons Claudianus. Rapport préliminaire sur les cinquième et sixième campagnes de fouille (1991–1992), *BIFAO* 92: 15–36.

Bingen, J (1993) Sept campagnes de fouilles au Mons Claudianus (désert oriental d'Égypte, 1987–1993), *Bull. Acad. Belg.* 6e s., 4: 143–157.

Bingen, J (1996) Dumping and the ostraca at Mons Claudianus, in: DM Bailey (ed.) *Archaeological Research in Roman Egypt*. Ann Arbor, MI: Journal of Roman Archaeology, pp. 29–38.

Bingen, J and Jensen, SO (1993) Mons Claudianus. Rapport préliminaire sur la septième campagne de fouille (1993), *BIFAO* 93: 53–66.

Bingen, J, Bülow-Jacobsen, A, Cockle, WEH, Cuvigny, H, Rubinstein, L and Van Rengen, W (1992) *Mons Claudianus. Ostraca Graeca et Latina*, I *(O. Claud. 1 à 190)*. Cairo: Institut Français d'Archéologie orientale.

Bingen, J, Bülow-Jacobsen, A, Cockle, WEH, Cuvigny, H, Kayser, F and Van Rengen, W (1997) *Mons Claudianus. Ostraca Graeca et Latina*, II *(O. Claud. 191 à 416)*. Cairo: Institut Français d'Archéologie orientale.

Cuvigny, H (1998) Kainè, ville nouvelle : une expérience de regroupement familial au IIe s. è.chr., in: OE Kaper (ed.) *Life on the Fringe: Living in the Southern Egyptian deserts during the Roman and early-Byzantine periods*. Leiden: Research School CNWS, pp. 87–94.

De Romanis, F (1996) *Cassia, cinnamomo, ossidiana. Uomini e merci tra Oceano Indiano e Mediterraneo*. Rome: L'Erma di Bretschneider.

Peacock, DPS (1992) *Rome in the Desert: A Symbol of Power.* Southampton: University of Southampton.

Peacock, DPS and Maxfield, VA (1997) *Survey and Excavations. Mons Claudianus 1987–1993* t. I: *Topography & Quarries*. Cairo: Institut Français d'Archéologie orientale.

Van Rengen, W (1995) A new Paneion at Mons Porphyrites, *Chr. Eg.* 70: 240–245.

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