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A PUBLIC COLUMN DRUM FROM A CORINTHIAN QUARRY

ABSTRACT

This study presents a two-letter inscription, ΔA, an abbreviation of the Greek word meaning "public," carved on the lifting boss of a drum abandoned in a Corinthian quarry. The inscription constitutes the first epigraphical evidence for public ownership of Corinthian limestone quarries and adds to our understanding of the legal status of quarries in pre-Roman Greece.

The marly terraces above the west bank of the Longopotamos River, south of the modern village of Assos in the northern Corinthia, preserve at an altitude of 112 masl a pocket of limestone extensively quarried in antiquity (Fig. 1).[1] The quarry site comprises an area of ca. 25,000 m^2 and includes contiguous pits of a maximum visible depth of 3 m (Fig. 2). Some quarrying also took place along the edge of the cliffs toward the Longopotamos gulley to the east and the lower terrace to the north. The area is now cultivated with olive trees, while the surrounding area, where there are no visible signs of quarrying activity, is planted with vineyards. It was manifestly an important quarry of oolithic limestone.[2] Despite the size of the quarry, it has escaped the attention of surveyors of the Corinthian countryside.[3]

On the northern side of the quarry stands an unfluted column drum with three lifting bosses preserved (Fig. 3). The diameter of the drum is 1.29 m and its height 0.98 m. A fourth lifting boss is not preserved; the corresponding part of the drum has been removed by an irregular cut, triangular in section, ca. 0.34 × 0.30 m, extending throughout the height of the stone. Part of the remaining surface of the drum shows considerable weathering in the form of cavities and holes—a sign of the friability of the stone. Perhaps because of this deficiency, the quarry operators decided to abandon the drum; at a later date someone apparently came and cut a small section of it from its least weathered side. One of the lifting bosses (H. 0.27, W. 0.26 m) preserves two carved letters: ΔA (Fig. 4). The inscribed surface is 0.12 (H.) × 0.21 m (W.). The delta is 0.12 × 0.12 m, the alpha 0.12 (H.) × 0.08 m (max. W.). The strokes of the letters are ca. 5 mm wide and 3–4 mm deep. Based on the form of these letters, the inscription can be dated to between the 5th and 2nd centuries B.C.[4]

1. I would like to thank the three anonymous *Hesperia* reviewers of this article for their helpful comments and suggestions. I am also grateful to Leda Costaki and Jeannie Marchand.

2. In July 2001, I showed the quarry to Chris Hayward, who will include it in his geological study of the oolithic limestone quarries of the Corinthia.

3. Neither Sakellariou and Pharaklas (1971) nor Wiseman (1978) make any reference to it.

4. More indicative for dating purposes is the form of the alpha, with a horizontal, rather than slanted, crossbar. In this form it commonly occurs in Corinthian inscriptions from the mid-5th century down to the Roman period, when it is increasingly replaced by the alpha with a broken cross-bar.

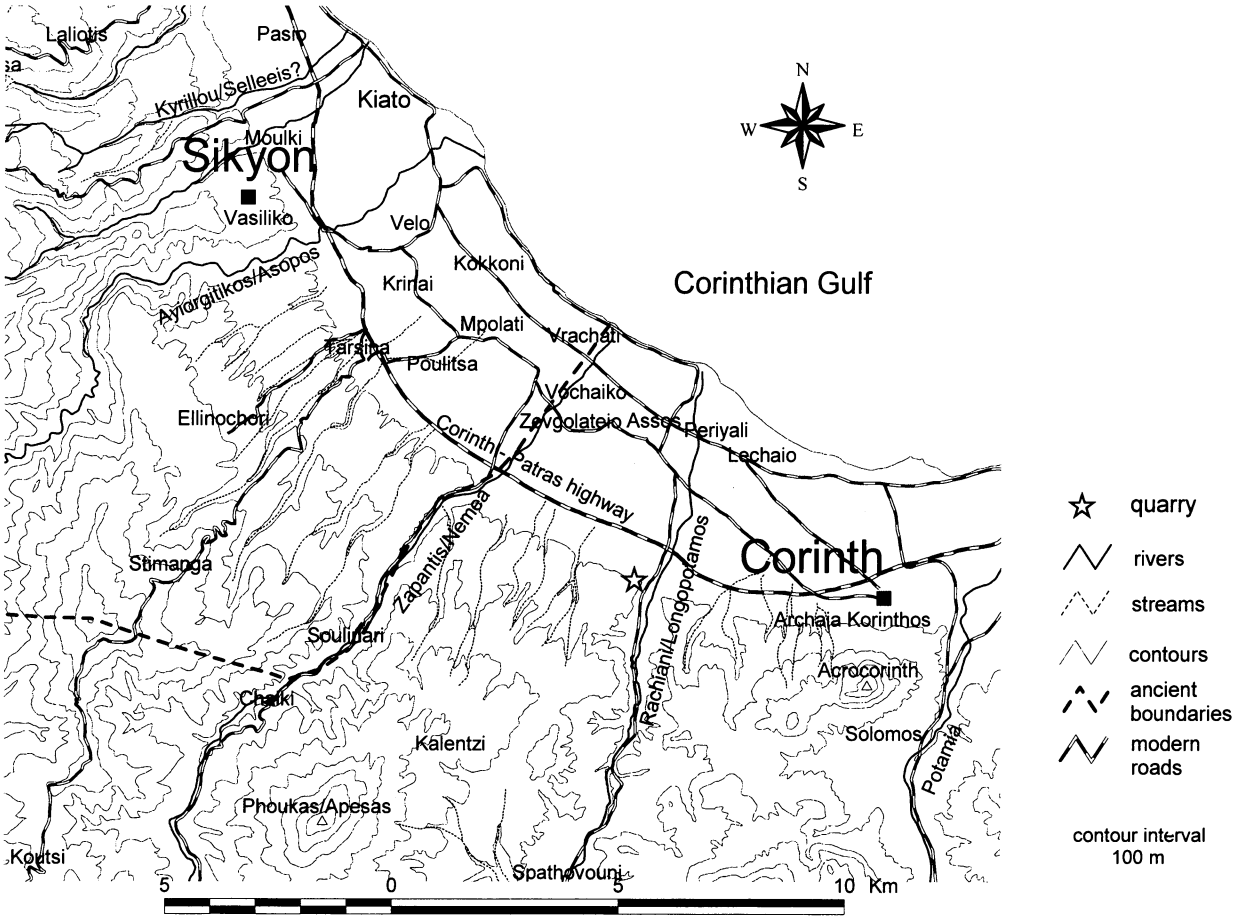

Figure 1. Map of the area based on the 1:50,000 sheets of the Hellenic Army Geographical Service. Y. A. Lolos

Figure 2. Partial view of limestone quarries south of the village of Assos. Looking north, toward the Corinthian Gulf and Perachora. Photo author

Figure 3 *(above)*. **Column drum with inscribed lifting boss. The Corinthian Gulf is in the background.** Photo author

Figure 4 *(right)*. **Detail showing the inscribed lifting boss.** Photo author

It is clear that we are dealing here with a typical abbreviation of the word for public (ΔΑΜΟΣΙΟΝ) in the Doric dialect. Many examples of "public inscriptions" are known, often found in abbreviated forms, on potsherds and roof tiles; one example was recently discovered on a vertical rock-cut surface in the Sikyonian countryside.[5] No such inscription, however, has been previously reported from a quarry site, or from a quarry block elsewhere. Although hundreds of lifting bosses on ancient monuments were left untrimmed, perhaps the most well known being those on the Athenian Propylaia, again no inscription such as that found in the Corinthia has been reported. The rare pre-Roman inscriptions (as opposed to graffiti) that we do know from quarry sites are names or initials of individuals, such as a certain Pytharchos who claims ownership of a quarry not far from Persepolis: ΠΥΘΑΡΧΟ ΕΙΜΙ. Guarducci dated this inscription to the 5th century B.C., and maintained that Pytharchos was a contractor directing work in the area of the quarry.[6]

5. For examples in the Doric dialect, see *SEG* XLVI 568: δα(μόσιον) carved on a vase from Hyampolis; *SEG* XL 298bis: δα(μόσιον) stamped on storage amphoras found in the temenos of the Temple of Aphaia; Pagano 1995: stamped tiles from Pallantion (Arcadia), all belonging to the roof of Temple C (cf. *SEG* XLV 364–383); Themelis 1969, p. 352: ΔΑ inscribed on roof tiles from the 6th-century B.C. Sanctuary of Poseidon near Kalamata; Lolos, forthcoming: ΔΑΜΟΣΙΟ, rupestral inscription.

6. Guarducci 1974, pp. 378–379. Contractors' marks carved on blocks of the Argive Heraion and the Temple of Apollo at Delphi have been dated to the 5th and 4th century, respectively (Pfaff 2001). Pfaff (2001, p. 152) raises the possibility that the names of the contractors who supplied the material for the Argive construction site "survive from the time the blocks were first extracted from the quarry."

From the Roman period in Greece we have at least two cases of a personal name carved on the side of a quarry. Ober (1981) presents two rock-cut inscriptions located in an area of ancient marble quarries on Mt. Hymettos. They both read ΚΕΘΗΓΟΥ, the genitive form of Κέθηγος, which Ober rightly takes as the Greek form of the Latin cognomen Cethegus, who was perhaps a member of the Roman patrician branch of the Cethegi. Ober (1981, pp. 68–73) makes the attractive suggestion that Kethegos was either the owner or the lessee of this plot of land, possibly during the Augustan period, and that he intended to exploit it as a quarry. The second name associated with a quarry and dated to the Imperial period is ΔΙΟΚΛΗC, inscribed on the wall of a quarry outside Karystos. Lambraki (1980, pp. 46–47), who published the inscription, does not discuss the status of Diokles, who was presumably the contractor of the specific quarry.

The uniqueness of the inscription from the Corinthian quarry makes its interpretation difficult. The main question that we need to address is whether the drum only or the quarry as a whole was public. In the former case the state of Corinth would have ordered a certain number of blocks, each of which was labeled "public," from the private quarry. The second possibility is that the entire quarry belonged to the state and that the blocks coming out of it bore the "public" signature. The lack of published comparanda from the Greek world does not allow for a definite answer. During the Roman Imperial period, official inscriptions (*dittacia*) in quarries belonging to the emperor were carved or painted on extracted blocks.[7] One is tempted to believe that a similar practice was common in earlier periods. Accordingly, our column drum would have been the product of a public quarry.

This suggestion should be checked against what we know about the legal status of quarries before the arrival of the Romans, a longstanding issue in the scholarly discussion of ownership of mineral lands in Greek antiquity. We have very few literary sources and inscriptions containing explicit or implicit reference to ownership and administration of quarries for the Classical and Hellenistic periods. The extensive stone quarries of Syracuse served as a prison for the defeated Athenians and their allies, which indicates that they were owned by the state (Thuc. 7.86.2). A similar fate was later decreed for the Syracusan prisoners who "were immured in stone quarries in Peiraieus" (Xen. *Hell.* 1.2.14). Once again the quarries in question must have been state property. Quarries of Peiraieus appear in epigraphical documents of the 4th century. In a decree concerning the administration of the Sanctuary of Asklepios, the demos resolved that the administrators of the sanctuary should use the money generated from working the quarries in order to pay for the preliminary sacrifices and the construction of the sanctuary.[8] A second public document, which contains records of confiscated properties, refers to "another surety for a stone-quarry in Peiraieus."[9] Here again, the quarries in question were not in private hands.

Two decrees, also of the 4th century, indicate that quarries at Eleusis belonged to the sanctuary.[10] These decrees deal with the lease of quarries (μίσθωσις λατομείων) sacred to Herakles-in-Akris for a period of one or two years. The monies of the lease were collected by the demarch and subsequently used for the festival of Herakles-in-Akris. This procedure indicates further, as pointed out by Koumanoudis and Gofas, that quarries belonging to sanctuaries located in the territory of a deme were administered by that deme. Quarries are mentioned in one more case in the context of leasing sacred property, this time from the town of Herakleia in

7. See Dworakowska 1983, pp. 99–104; Fant 1989, passim.

8. *IG* II² 47 (cf. *Syll.*³ 144), lines 28–32: ἐψηφίσθαι τῶι δήμωι τοὺς ἐπιστάτας τοῦ Ἀσκληπιείο θύεν τὰ προθύματα ἃ ἐξηγῆται [Εὐ]θύδη|μος ἀπὸ τοῦ ἀργυρίο τῶ ἐκ τῶ λιθοτομε[ί]ο[. . .]ο.ι[.]ο ἐξαιρουμένο, τὸ δὲ ἄλλο ἀργύριον [κα]τα[βά]λλ[ε]ν ἐς τὴν οἰκοδομίαν τοῦ ἱερῶ.

9. Meritt 1936, p. 401, no. 10, lines 138–140: καὶ ἑτέρ[α]ν ἐνγύην λιθοτομ[ίαν ἐμ Πειρ]αεῖ τετάρτην κ[αὶ] πένπτην δύο ταύ[τας ἑκάσ]την τὴν καταβολήν.

10. Koumanoudis and Gofas 1978; the decrees date to 332/331 B.C.

southern Italy, in a 4th-century inscription concerning lands sacred to Dionysos (*IG* XIV 645). According to one clause of the contract (lines 137–138), the lessee is not to open any tufa quarries in the sacred land (οὐδὲ τοφιώνας ἐν τᾶι ἱαρᾶι γᾶι ποιησεῖ οὐδὲ ἄλλον ἐασεῖ); otherwise, he will be held responsible for having damaged the land. Similar prohibitions are found in a record of the lease of public land from Ephesos (*I.Ephesos* 3). According to that contract, which dates to ca. 290 B.C., the state rents out the land but keeps the quarries (hard stone and poros) that exist within the area in order to exploit the stone for building roads: λαψόμεθα δὲ λατόμια, ὅσα ἔνεστιν | ἐν τῆι γῆι ταύτηι, ἢ σκληρὰ ἢ πώρινα (lines 11–12). Such prohibitions and reservations should not surprise us, given the constant need of Greek states for a supply of stone. When stone was not available in public lands, the state tapped private estates. Thus, an inscription from Troizen, dating to the mid-4th century B.C., records that stone used for the city walls was extracted from private land.[11]

The rarity of leases of publicly owned quarries in official documents of Greek cities indicates that renting out quarries was not a normal practice.[12] As Burford observed, "there could after all be little point in leasing out quarries to private contractors if the stone they were to extract was to be used for public works in the city."[13] Indeed, large quarries yielding sizable blocks could hardly serve any other purpose in Greek antiquity than to be used in state-commissioned projects for the erection of religious and secular monuments.[14] The drum inscribed "public" from the Corinthian quarry must have been destined for a large building, such as a stoa, propylon, or temple.[15] It does not fit any known building at Corinth,[16] although most of pre-Roman Corinth was destroyed by Lucius Mummius, and we therefore do not have many Greek buildings with which to attempt to associate the drum. It is possible that the drum was meant for export, for example to a Panhellenic sanctuary—Delphi, Epidauros, or Olympia.[17] The 4th-century accounts of the *naopoioi* of the

11. *IG* IV 823, line 33: - - - τ]ῶ[γ χ]ωρ[ί]ων τῶμ Πυθοδώρου, ὧι οἱ λίθοι ἔτμηθεν.

12. As argued by Osborne (1985, p. 104), who makes the observation that even in the case of the Eleusinian quarry sacred to Herakles-in-Akris, "the quarry certainly had not been rented out before, since the deme honored the man who suggested the leasing for making the suggestion."

13. Burford 1969, p. 174.

14. Cf. Burford 1969, p. 174: "there is nothing to show what charges or controls were imposed on quarries at Corinth. The quarries were very likely state-owned, having been exploited from the first chiefly for public works."

15. The fact that the drum is labeled "public" does not necessarily mean that it was made for a secular monument; temples were also considered part of the public domain. Thus, fragments of roof tiles inscribed ΔΑΜΟΣΙΟΣ ΑΘΑΝΑΣ were found at the Menelaion of Sparta: Catling 1975, p. 267; cf. the "public" tiles of Temple C in Pallantion and from the Sanctuary of Poseidon near Kalamata mentioned above, n. 5.

16. The diameter of the drum is significantly larger than that of any column found at Corinth, with the exception of the monolithic columns of the Temple of Apollo and the column fragment of what Dinsmoor (1949) called "the largest temple of the Peloponnese," found rebuilt into the Venetian fortifications ca. 500 m northwest of the Temple of Apollo.

17. We should exclude the neighboring cities of Kleonai and Sikyon as potential importers of the stone. Kleonai has in its territory an enormous quarry, situated on modern Mt. Drymoni and recently mapped and studied by Marchand as part of her dissertation research (Marchand, in prep). Sikyon also possessed ample sources of limestone and conglomerate quarries; I am currently studying these quarries and plan to include a discussion of them in a monograph on the topography of that city.

Temple of Apollo in Delphi and the Tholos accounts of the Asklepieion in Epidauros come readily to mind: payments made to Corinthian stonecutters (λατόμοι) and stone carriers (λιθαγωγοί) of poros stones are mentioned in four Delphic inscriptions, while transportation of stone from Corinth to Epidauros is mentioned in two Epidaurian inscriptions, proof that Corinthian limestone did travel extensively abroad.[18]

Burford suggested that Greek states "may have retained quasi-regalian rights over all quarries"; the examples of Herakleia, Ephesos, and Troizen point in this direction, and also bring to mind the status of mines claimed by the state.[19] Burford's suggestion may also apply to the status of quarries under the Roman Empire. From the reign of Augustus onward the most important quarries came increasingly into the emperor's possession.[20] The inscription presented here from Corinth constitutes the first epigraphical evidence for public ownership of Corinthian limestone quarries.[21] At the same time, the fact that the column drum was marked as public suggests that there was private activity in quarries as well, at least in the Corinthia. Such activity presumably took place in smaller quarries, and certainly not in a large quarry such as that in which this drum was found.

18. Bousquet 1989, no. 31, lines 98, 101–102; no. 56 III, lines 15–19; no. 59; no. 62 IIA, lines 1–2. For Epidauros see *IG* IV² 103, lines 10–11, 40–41, and an inscription found in the mid-1980s and briefly reported by Kritzas (1987, p. 14). Moreover, Burford (1969, passim) records several occasions, not only in the Sanctuary of Asklepios but also in the Sanctuary of Apollo Maleatas, in which Corinthian limestone was used. The formulas used in the Delphic inscription for quarrying and transporting the Corinthian poros (τομὴ καὶ κομιδή) have been understood by Francotte (1900) as indicating public ownership of the Corinthian quarries since no price (τιμή) for the material is mentioned. References to price and transportation (τιμὴ καὶ κομιδή) of quarried stones appear in the accounts of the *epistatai* of the sanctuary at Eleusis (*IG* II² 1672, lines 53–54; 1673, lines 2 and 5). According to Francotte (1900, p. 180), the specific Eleusinian quarries were private whereas Corinth owned the quarries and charged the sanctuary at Delphi only for the cutting and transportation of the stone.

Francotte's argument has been shattered by Ampolo (1982), who showed that the price of the stone was included in the price of its quarrying: whenever the price of the stone (τιμή) is mentioned, the price of the quarrying (τομή) is omitted, and vice versa. Even more persuasive is the evidence of *IG* II² 1672, lines 49–50: the cost of purchasing each of the 304 stones (τιμὴ τοῦ λίθου) is given, and then the total cost of their quarrying (τομή), which corresponds to 304 times the price of the stone. In other words, the cost of quarrying includes the price of the quarried stone: Ampolo 1982, p. 255, n. 31. We still, however, do not know why a few inscriptions mention τιμή and κομιδή while the majority refer to τομή and κομιδή.

19. Burford 1969, p. 174. The whole region of Laurion was owned by the Athenian state, and mining sites were let to private entrepreneurs for a stated number of years: see Francotte 1900, p. 177; Michell 1957, pp. 104–107.

20. See Dubois 1908, pp. 99–133; Larsen 1938, pp. 462–465; Ober 1981, p. 71; Dworakowska 1983, pp. 27–28; Marc 1995, p. 34.

21. Glotz's thesis (1926, p. 152), that "hard-stone quarries [such as marble] were worked by the state, while pits of soft stone [such as conglomerate and limestone] belonged to the owner of the ground," should now be put to rest.

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