THE AIGALEOS-PARNES WALL

Not the least service of R. L. Scranton's recent *Greek Walls* is to focus attention on the neglected 2⅜-mile wall which runs from Aigaleos to Parnes [1]—"one of the most amazing and mysterious monuments of Greek antiquity." Dating it in the eighth century B.C., he adds to its inherent interest by claiming that it is "the most ancient example of the art of fortification as practiced by the classical Greeks." His treatment is necessarily brief, but all others have been briefer; [2] nor can a full publication be

[1] Some scholars have called it by the name under which it is known to the modern natives, (τὸ) δέμα; they are said to call it also (ἡ) δέσις. Scranton calls it "the Epano-Liosia wall," after the nearest modern settlement, which however is three kilometers away. The ancient deme in or very near which the wall lies was Κρωπία (Thucydides, II, 19).

[2] The following descriptions are referred to hereinafter by the names of their authors:

W. M. Leake, *Demi of Attika* (*Topography of Athens*, II; ed. 2, London, 1841), pp. 143-144, drawing on 144.

A. de Rochas, *Revue générale de l'architecture et des travaux publics*, XXXVII, 1880, col. 54.

E. Curtius und J. A. Kaupert, *Karten von Attika* (Berlin, 1881-1903), map VI; A. Milchhoefer, Erlauternder Text, Heft II, pp. 44-46, 49. A certain Hauptmann Siemens made a careful study of the wall for Milchhoefer, who quotes him extensively. This military inspection resulted in the best all-round account thus far published.

A. Skias, Ἀρχαιολογικὴ Ἐφημερίς, 1919, p. 35.

G. K. Gardikas, Πρακτικά, 1920, pp. 66-71.

L. Chandler, *Journ. Hell. Stud.*, XLVI, 1926, pp. 19, 21, and figs. 13 and 14 on p. 20. Pl. I is the best map of the forts of Attica, but the wall itself is inaccurately shown.

W. Wrede, *Attische Mauern* (Deutsches Archäologisches Institut, Athens, 1933), pp. 11 and 43, nos. 28 and 29 (the two photographs are excellent for the best parts of the wall, but they show only the front face).

R. L. Scranton, *Greek Walls* (Cambridge, Mass., 1941), pp. 39-42 and 154-155, with mentions on pp. 147, 161, 186. (Reviews by L. T. Shoe, *Am. Journ. Archaeol.*, forthcoming; S. Dow, *Class. Week.*, XXXV, 1941/2, pp. 104-107.) It is to be hoped that the author's knowledge of comparative materials from other cultures—hinted at once or twice in *Greek Walls*—may have more scope in his further studies. Similar problems were faced elsewhere. I happen to have before me at the moment a panoramic photograph of the fairly stupendous Inca fortress of Sacsahuaman (near Cuzco, Peru). The triple wall, when its extent and the size of the blocks are considered together, surpasses anything the Greeks ever did; but apart from its scale, the masonry is a familiar-looking polygonal, and the whole has a certain resemblance to the Aigaleos-Parnes wall, since the plan makes full use of the system of "indented trace," with the accompanying (and natural) omission of towers. It is notable further that this system as used at Sacsahuaman, just as in the Aigaleos-Parnes wall (*infra*), is designed for enfilading the right flank of the attackers.

The following references give opinions but do not add information:

J. Beloch, *Griech. Gesch.* I, 1² (Strassburg, 1912), p. 207, note 3.

A. R. Burn, *The World of Hesiod* (London, 1936), p. 196.

S. Solders, *Die ausserstaedtischen Kulte und die Einigung Attikas* (Lund, 1931), p. 104, note 2 pp. 128-9.

expected soon.[3] It may be useful meanwhile to add a few photographs to the two good ones (Wrede's) which have thus far been published, and to discuss the date in connection with such descriptive notes as are available.[4]

I. PERIODS FROM WHICH THE WALL IS EXCLUDED

Throughout its length the wall varies somewhat in height, in plan, and (if it can be said to have style) in style of masonry. For the masonry, there is only one side of

Fig. 1. Western Face of Part of the Wall on Aigaleos. Lesbian Masonry with Stack Work and Small Fillers

the wall to consider, namely the exterior, i. e., the western face. Scranton, whose opinion must supplant all others, takes the fundamental pattern of the joints to be Lesbian—i. e., a system of curvilinear joints (Fig. 1; Wrede, nos. 28, 29). He knows no significant example of this style after 480 B.C.; a presumption therefore exists that the wall belongs in the pre-Persian period. But as Scranton makes clear, the wall is not carefully constructed, thorough-going Lesbian. Rather it displays throughout signs of cheap and hurried workmanship. "Stack work," i. e., thin stones piled like bricks, to fill spaces, is common. Odd corners are cheaply filled by small stones. In places there is a tendency toward horizontal courses; but that too may be due to haste, and anyway some approximation to courses is likely to appear in any low wall.

[3] Wrede announces such a work, but his method of dating is such as to suggest that a discussion is needed prior to the publication; and neither Wrede nor any other scholar has tried to envisage the whole strategic situation which the wall presupposes.

[4] Excavation is desirable, needless to say, but significant fill may be hard to find. The absence of an exact surveyor's plan is also regrettable.

At the corners especially parallel horizontal joints are probably the easiest and best (Fig. 2).

From these cheapenings of the Lesbian style, it could perhaps be argued that the wall was built after 480. It could even be urged that the wall is really not, as Scranton terms it (I think accurately), "rubble with Lesbian influence," but just rubble with joints; that some joints *happen* to be curved, merely because some stones when found had rounded contours; in short that any hastily built wall of any period whatever would look much the same. In some of the less easily accessible parts, the wall is hardly better than mere rubble (Figs. 3 and 7). Yet if Scranton's work has any meaning at all, surely that meaning is that general habits of constructing military walls underwent changes, successively from Lesbian to polygonal and then to trapezoidal and ashlar. Scranton has raised a strong presumption that any military wall which was not mere rubble—and in its better sections (Wrede, photographs 28 and 29) the Aigaleos-Parnes wall certainly is far from being *mere* rubble—would be built in parallel horizontal courses if the time of construction were after *ca.* 400 B.C.[5]

Fig. 2. Outside Corner at a Jog, i. e., Northern (left) and Western Faces

Before examining other aspects of the wall itself, we may conveniently glance at the general strategic situation in relation to the whole range of possible dates. We must first anticipate the closer study by noting that the wall, whenever it was built, is definitely not part of any general scheme of fortification, designed to protect all the approaches to the Athenian plain, carried out at leisure in time of peace when no definite threat was in sight. The situation before 600 B.C. will be treated presently. After 600 B.C., when Attika was certainly united, any scheme of fortification would call, not for the defense of the Athenian plain alone, but for forts on the frontiers, e. g., beyond Eleusis. In the latter half of the fifth, and in the

[5] The situation would be almost the same if the wall *were* considered to be rubble. The fact that a wall is of (dry) rubble "gives a strong indication of, if it does not prove, an early date" (*Greek Walls*, p. 155).

fourth, century such forts were in fact built.[6] After they were built, the Aigaleos-Parnes wall would have no meaning *except* in some emergency after the frontier forts had fallen (or been abandoned) and when it had been decided to defend the plain of Athens rather than to retire behind the city walls themselves. The Peloponnesian War had shown that except after a catastrophe, Athens was difficult to capture when the city walls were intact. The route north of Parnes and down through Dekeleia is surely too wide and open ever to have been effectually blocked. A decision to defend the Athenian plain at the Aigaleos-Parnes pass would therefore have to have been

Fig. 3. Western Face of Part of the Wall on Aigaleos. Rubble Masonry. (The same part appears also in Fig. 7.)

reached under quite extraordinary circumstances. It would be a difficult task absolutely to exclude the possibility that such a peculiar contingency did arise in some year between the extreme limits conceivable, viz., 400 and 88 B.C.,[7] but it is so unlikely that we may omit further consideration of it.

From 403 until they were conquered in 401, the remainder of the Thirty Tyrants and their followers were settled in Eleusis. It has been conjectured by Skias that the wall was built against them. They were too few, however, to call for the building of four kilometers of wall even if in 403 the other Athenians had been able to pay for such a work.

[6] J. H. Kent, *Hesperia*, X, 1941, pp. 343-350, is the most recent study bearing on them; his references to older studies will be found in p. 343, note 1. See also Scranton's index.

[7] Wrede assumed that this was quite possible, but he suggests no occasion, nor has any other scholar done so. Beloch thought such a date unlikely enough to be excluded. In the period 400-394 Athens lacked city walls, and the frontier forts were impaired, but there is no reason to believe that any invasion of the Athenian plain took place or was threatened in these years. During several crises in the Hellenistic period (Kent, *loc. cit.*, p. 347 gives a convenient list), Athens itself, not the frontiers, was defended.

Thucydides and Xenophon make no mention of the wall or of any action in its neighborhood. By itself their silence may not exclude the bare possibility that the wall was built during the war years 431-403, and Wrede has lightly assumed that that could have been the case. The wall, to repeat, was not part of a permanent system of defense: unlike the Long Walls, it was not suitable for being held by a garrison, but was merely a field-work for a single action. An Aigaleos-Parnes wall built in those years would have meant the abandonment of the strategy which had led to the building of the Long Walls. The Athenians never reversed their decision not to face the Peloponnesian army in Attika. Hence the wall is excluded from the years 431-403.

Indeed on this reasoning the Aigaleos-Parnes wall is virtually unintelligible not only in 431-403 but for the whole first period during which the Long Walls existed, viz., *ca.* 457-403, since in building those walls, the Athenians certainly contemplated the abandonment of the Athenian plain to the enemy. *If* the Athenians had nevertheless determined, during some emergency in 457-403, to defend their plain, an occasion was provided in 446 when King Pleistoanax led the Spartan army to Eleusis, hesitated, and withdrew from Attika without a battle. Back in Sparta, Pleistoanax and the ephor who had accompanied him were exiled on the charge that they had accepted bribes from Perikles. An argument might be made (and I confess that for long it seemed to me persuasive) to the effect that the real reason why the Spartans retreated when, so far as can be judged from our sources, they could have menaced Athens gravely, was that the Athenians threw up the Aigaleos-Parnes wall. After their recent ten years besieging Ithome, the Spartans, never good at sieges, probably hated the very sight of a wall. This argument cannot be demonstrated to be false; but apart from the reasons given *supra*, I doubt whether the Spartans would have punished their leaders if the real reason for a retreat was a substantial military obstacle. (Conceivably Perikles tricked Pleistoanax, detaining him with negotiations—later described as bribery—while the Athenians raised the wall.) On the other hand, if, as will be argued, the wall already existed, the Athenian army was probably posted behind it. Something like the earlier situation (*infra*) may have obtained, with this difference, however: namely, that in 446 the Spartans must have known that the wall was there, and they must have taken it into account before they decided to invade Attika via Eleusis.

In the years 480-457 Athens and Sparta were at peace; there is not the slightest reason to believe that the plain of Athens was menaced. Thus strategic and historical considerations have brought us to the same conclusion which, as we have seen, Scranton reached on the evidence of the style of the masonry, viz., that the wall is pre-Persian.

Seeking a date, then, earlier than 480 B.C., we are met first of all by the historical argument put forward by Milchhoefer, Beloch, Solders, Burn, and Scranton. This argument is simple. Athens and Eleusis, it runs, were separate states, and doubtless at times hostile states, until *ca.* 700 B.C. (Solders would say 600 B.C.). *Ergo*, the wall

belongs before 700 B.C., and hence probably in the eighth century. This is not the place, even if the material were fully prepared, to argue for or against this view concerning the uniting of Attika, a view which at the moment, so far as published works go, is almost universally held. But the evidence is far from being decisive in favor of the view that Eleusis was independent as late as 700 B.C., and there is, I think, some reason for believing that a thorough and unbiased study would move the date of the union of Attika back indefinitely. If this is ever accomplished, then this historical argument for dating the Aigaleos-Parnes wall earlier than 700 or 600 B.C. will vanish.

But there is no inducement to cling to a very early date. According to Scranton no other wall can be positively dated as early as the eighth century, nor does he date any in the seventh. Athens before Peisistratos was not a major power. It is hard to imagine the citizens of this second-rate city, at a time when fortifications of stone were something of a novelty—and when the Akropolis itself still relied on its old Mycenaean wall—undertaking to build 4200 meters of wall out in the open; and to man those walls with the thousands of hoplites which they require. For we shall see that the wall was built against hoplites; yet regular hoplite forces probably do not ante-date the second half of the seventh century.

A city which had a hard tussle in the sixth century to take Salamis from little Megara surely had a force of only modest size. Expansion began under Peisistratos; but his policy was one of friendship toward the neighbors of Athens: the wall may be excluded from his reign. Again, in the years 490-480 no need for the wall is known, or is likely to have arisen. The years 528-490 remain; but it would be encouraging to find in just those years a particular occasion which was suitable in itself, quite apart from the negative considerations thus far proposed.[8]

II. DESCRIPTION OF THE WALL AND ITS OUTWORKS

Before seeking such an occasion, it will be helpful to examine the wall itself and the particular reasons for its location. It may not be amiss to state positively first of all that the outer face of the wall is the face toward Eleusis, i. e., the western face; it was not built to be defended, and for the most part it could not be defended, by a force posted on its westerly side, against an attack from the east. It was built, un-

[8] There is not much comparative material, but one famous field wall is now known. The wall of the Phocians at Thermopylai, repaired and used by Leonidas in 480 B.C., has recently been excavated (Marinatos in *Am. Journ. Archaeol.*, XLIII, 1939, pp. 699-700 and 698, fig. 2; Scranton, pp. 147, 161, 186; Herodotus, VII, 176). In general this wall is similar: the masonry is rubble influenced by Lesbian, chinks are filled by small stones, and more or less rectangular blocks appear on corners; it is fairly low; it has jogs.

Fig. 4. Photostat of Part of Curtius-Kaupert, Map VI. North at Top. The Heights at the North are Foothills of Mt. Parnes; at the South, Mt. Aigaleos. Scale 1/25,000 (0.01 m. = 250 m.)

doubtedly by Athenians, to defend the plain of Athens against an enemy in the Thriasian plain.[9]

There are two passes between the Thriasian (Eleusinian) plain and the plain of Athens. One pass is that of the Sacred Way, immediately south of the northern half of Aigaleos. A narrow, easily defensible route winding between Aigaleos and what is now called the Σκαραμαγκᾶ ὄρη, and usually known as the pass of Daphni, it will require only brief notice *infra*. The other pass, if it can be called a pass, is immediately north of Aigaleos, between Aigaleos and Parnes. Midway in this gap there are two hills. One of these hills, the northern, reaches a summit at 231 meters above sea level (map, Fig. 4); the other, the southern hill, at 227 meters. Three possible routes lie open through the pass: (1) between Aigaleos and the southern hill; (2) between the two hills; and (3) between the northern hill and Parnes. Routes 2 and 3 are off the direct route from Eleusis, the terrain is rough, and they could more easily be blocked. Route 1 is the easiest and most direct route. Nearly all the way it consists of an open and fairly wide valley. This valley slopes up gently from the east on the Athenian side and descends with no perceptible break at the watershed down into the Thriasian (Eleusinian) Plain on the western side. (The southern hill and part of the down-slope of the valley are visible in Fig. 6.) A force of cavalry could ride through the pass with greater speed than that of the modern train, which crawls up the grade slowly to save coal and not because the slope is steep. Here then, in this valley, also of course on the immediately adjoining slopes (viz., the lower part of the northern slope of Aigaleos, and across the valley on the southern slope of the southern hill), was the area where the strongest defenses must be built. The other hill, the other valley, and the slope of Parnes must also be defended. It was a long stretch of terrain, but there is no narrower stretch between Parnes and Aigaleos which could be considered.

Fig. 5. Southern End of Wall: Looking South Toward Summit of Aigaleos

In fact everywhere in the whole area of the pass the slopes are fairly gentle, and the problem was to select the line which best took advantage of what slopes there

[9] A glance at a map will show that it is much too far to the west to have any relation to the most direct route from Thebes to Athens, the road which ran past Phyle.

were. The line actually selected was chosen because it offered slopes which in the main are westerly throughout: it is west of the descending northern ridge of Aigaleos, west of the watershed in the valley, west of the crests of the two hills; but fairly near all these high points, so that the enemy were forced to climb almost to the top before attacking.

The wall begins on Aigaleos as a rampart which never consisted of more than three or four low courses and which originally stood no higher at most than a man's

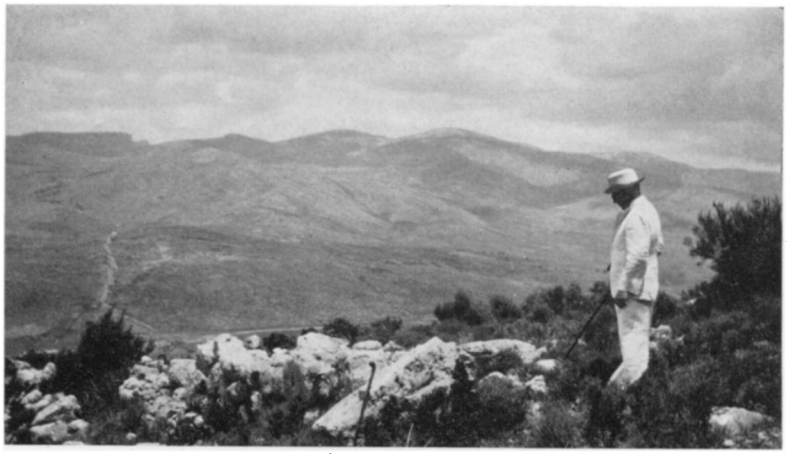


Fig. 6. Southern End of Wall: Looking North Toward Parnes.
Continuation of Wall on Southern Hill in Middle Distance

shoulders (Figs. 5, 6, 7). In fact the wall peters out as one ascends, though a definite end can be fixed. The fact that so low a rampart was built shows that no (or almost no) soil then existed in that spot; otherwise a wall so low would protrude only a little above the ground. If this reasoning is correct, whenever the wall was built, the trees had already gone and the soil after them. Aigaleos was then as it is today: barren, rough, rocky. The wall begins at a considerable height on the slope.[10] Cavalry could never reach this point, in fact cavalry could not operate on any of the terrain facing any part of the wall except in the valley alone. The wall was built for defense by foot-soldiers against foot-soldiers.[11]

[10] The wall has the appearance of having been carried, with waning enthusiasm, as far up the slope as seemed necessary. A force of men willing to take a few easy steps further could out-flank the wall. Since there are no cliffs (*pace* Scranton) it could be out-flanked no matter where on Aigaleos it ended.

[11] Though he admitted its value for infantry defenders, Col. Leake wrote, "It is obvious that such a rampart was an effectual defense against incursions of cavalry from the Thriasian Plain." The wall *could* serve against cavalry, of course; but there is no reason to suppose that it was built for that purpose or ever served it.

From the point of view of construction, the wall may be divided into two parts. One is the part in and adjacent to the principal valley, as already mentioned: this will be described presently. The other is the entire long remainder of the wall, in two

Fig. 7. Face of Wall at Southern End (Visible Also in Fig. 6). Rubble Masonry

Fig. 8. Section of the Wall on Aigaleos, Part Way Down. In Middle Distance, the Principal Valley with Modern Road and Railroad

sections: (1) the section high on Aigaleos, of which we have just examined the unimpressive beginning; and (2) the whole stretch, roughly the northern half of the entire wall, from the summit of the southern hill to the end on Parnes. These two sections may be described together, since in both the wall has the character mainly of a low rampart. On some of the slopes (Fig. 8) it takes the form of a low sloping terrace, a platform on which the defenders could stand, and which afforded no cover.

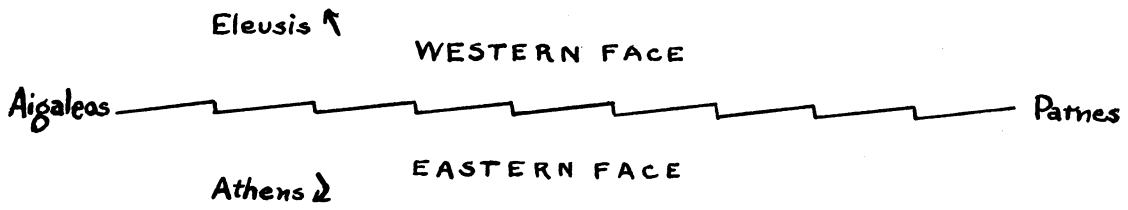
Especially in the northern section, the plan, though not careless, does not follow the contours with all possible exactitude (Siemens). Both sections, but again more especially the northern, are comparatively ill preserved.

The main attack was expected in the principal valley and on its slopes up to the southern hilltop. Here the wall, much of it still well preserved, stands to a height of two to three meters. This part was built to afford good cover for troops, but ramps

Fig. 9. Jog in Wall, on Aigaleos; Return at Left (For Continuation to Right, see Wrede, No. 28)

set against it on the inner side seem intended to enable troops to mount to the top. It is in this part also that the system of jogs, from which Scranton has derived a chronological argument, is most evident. This argument deserves to be studied.

The wall is built not in a continuous line but in a series of straight stretches interrupted by jogs (Figs. 9, 2, 6, 7, 8).[12] The purpose of these jogs, he alleges, was to enable the defenders to hurl weapons from the corners against the flank of the enemy. All the jogs run the same way throughout the length of the wall, thus (the diagram is simplified):



[12] Technically, this is the system of "indented trace" or *tracè à crémaillère* (*Greek Walls*, Appendix II; list of examples, p. 186). The presence of this feature with its invariable and natural concomitant, the absence of towers, increases considerably the probability that the wall is earlier than the Persian Wars (*Greek Walls*, p. 157).

This means that from the corners the defenders would be hurling weapons toward the north, since the jogs all face north. In those parts of the wall where the slope is downward toward the north, this design is advantageous for the defenders, since the range of their weapons will be increased by the slope as they fire downhill. Contrariwise, as Scranton points out, on slopes which face south, the defenders will be firing uphill with consequent loss of range. Accordingly it is argued that the plan of the wall is faulty, that the fault is due to inexperience, and that the inexperience betokens a very early date.

Inexperience, so to speak, is not one but many. The sixth-century sculptors, for instance, were inexperienced in the habits of marble. The builders of the Aigaleos-Parnes wall, if they were really inexperienced, were inexperienced not in anything as difficult as the carving of marble but (for this is what the argument amounts to) in the action of gravity. Quite simply they could have altered the plan at any point to enable the defenders to fire downhill, by the following scheme:

I find it incredible that military engineers of any period, no matter how early, should have been obtuse enough not to do so, if range of fire was what they chiefly wanted.

Seeking, then, some other explanation of the jogs, we may inquire what advantages were secured to the defenders by jogs facing north against the enemy, who were headed east. One great advantage is obvious. The enemy were attacking with their unshielded right sides exposed to flanking fire throughout the entire length of the wall. The slopes along which the wall marches are nowhere precipitous. The advantage of shooting at the exposed side of the enemy may well have outweighed the disadvantage of a certain loss of range.[13] Moreover, only a very few men—some six at most, in two rows of three each—could hurl weapons at any one time from the corners at the jogs, since the amount of projection is small.[14]

Some of the jogs served another purpose. Many of them (unhappily I lack the figure of just how many; Milchhoefer says about 15 to 20) are pierced by sally-ports simply and neatly designed to let the defenders out without letting the attackers in (Fig. 10). These sally-ports give access to the enemy, again, on his undefended side. They also permit the defenders to defile from behind the wall with their shielded side

[13] Scranton points out that most if not all other walls—the facts are not stated with precision because of the scarcity of accurate plans—which are built on the system of indented trace are designed so that the jogs take advantage of the slopes. If this is so, the decisive factors with the Athenians were those discussed *infra* in the following paragraphs.

[14] Milchhoefer gives the average thickness as only *ca.* 1.50 m.

toward the enemy.[15] Jogs facing north were needed to accomplish these ends, though to be sure the sally-ports could not be set in them so as to allow the defenders also to withdraw back within the wall with their shielded side toward the enemey. The plan of the wall should therefore be shown, in simplified diagrammatic form, as follows:

The sally-ports vary somewhat in design; and study is needed to determine why in certain jogs no sally-ports were constructed.[16]

Fig. 10. Sally-Port on Southern Hill. View Looking South. In Middle Distance, Valley, and Continuation of Wall on Aigaleos

But the argument can be still more conclusive. In recognition of the fact that the terrain made attack easiest in the principal valley itself, the plan was altered to provide in this one crucial sector just that which Scranton rightly felt to be a desideratum, namely the opportunity for downhill fire. This was effected by drawing the line of the wall back at an angle near the bottom of the southern hill (visible most

[15] I owe the point in this sentence to De Rochas, whose works on ancient fortifications and siege tactics still have some value because they are based on a knowledge of military architecture in various periods.

[16] The hypothesis which should first be tested is that sally-ports were omitted where the wall was so low that the defenders could easily jump down outside it. (Again it is to be observed that the slopes are so gentle that the ground is nowhere much lower outside the wall than inside.) To Milchhoefer, in fact, it appeared that all the sally-ports were in the well-preserved middle part of the wall. Alternatively, the variation in plan which caused the omission of sally-ports may have been due merely to the different notions of many different builders.

clearly in Fig. 6), so that not the jogs but the whole wall faced down the slope. By itself this is sufficient to prove that the engineers who designed the wall were aware that some advantage could be gained by downhill fire, and that they knew how to secure it where they desired it. More than this: they went on to construct a protrusive angle on the floor of the valley itself (best seen on the map; also visible in Figs. 11 and 12). This gives the effective plan known to military engineers as the *tracè á tenaille.*

Altogether, then, it appears that, as Capt. Siemens specifically concluded, the plan of the wall, so far from attesting stupidity, inexperience, and a very early date, is intelligently conceived. Making due allowance for the simplicity of the plan, we may say that the Athenian engineers worked in the spirit of the great master of fortification, Vauban, who invented and developed the *tenaille* trace, and who advocated flexibility in adapting plans to needs. "One does not fortify by systems," declared Vauban, "but by common sense." [17]

Fig. 11. Wall at Foot of Aigaleos Slope, in Valley, and on Southern Hill

So much for the wall itself.[18] In connection with it three outworks were thrown up which have been even more neglected than the main wall. A prime necessity was a signal post for communication with the plain of Athens. Conceivably either hill might have served as a site; the southern hill was of course nearer the important part of the wall, and its summit was chosen. Here a low round solid tower, little more than a mound, was piled up (Fig. 13). A sort of temenos wall, not visible in the photograph, circled the tower. This wall is low, too low for purposes of defense; probably it merely supported a terrace. Doubtless this whole rude and hasty structure served also as the general's headquarters, since it commands a view of much of the wall.[19]

[17] *Encyclopaedia Britannica*, ed. 11, vol. 10 (1910), pp. 686, 688.

[18] I regret having no reliable opinion, based on my own inspection of the wall, or on anyone's inspection, as to wether the wall at present has the appearance of ever having been attacked. The ruinous condition of the northern half might be due to this cause, but equally it might be due to vandalism through the ages. The fact that much of the most important part of the wall is still extensively preserved suggests that no determined and successful attack on it was ever made. But the part in the main valley (Fig. 10) does seem to have been demolished as if by a tidal wave: more industriously, that is, than if vandals had done it. I suspect that this was done by the Spartans when Archidamos led them through the pass in 431. Surely if the wall were standing at that time, they would not have left it uninjured.

[19] The structure is indicated on the Curtius-Kaupert map; but either because its possible function was not grasped, or because its contemporaneity with the main wall is not proved, it has never

Some three kilometers southwest down the valley toward Eleusis, Siemens located what he described as a *Vertheidigungsmauer ca.* 400 meters long; he thought that it

Fig. 12. Remains of the Wall in the Valley, Looking North

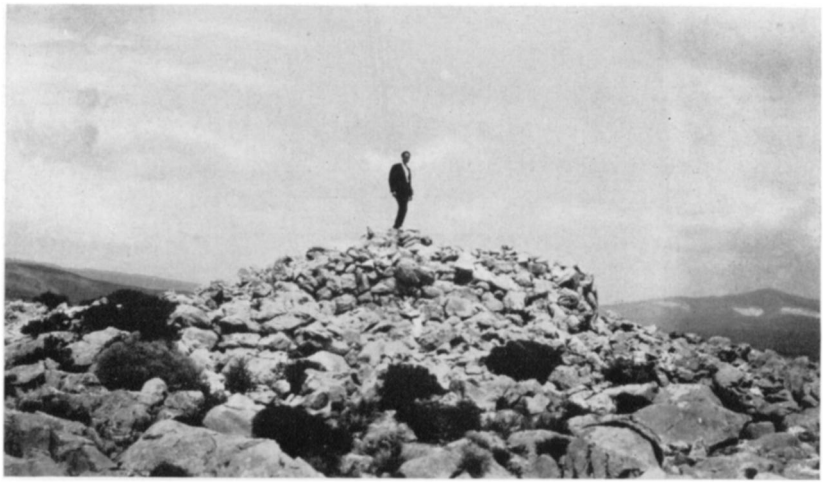


Fig. 13. Watch-Tower on Southern Hill, Looking Northeast. Pentelikon (with Quarries Showing White) in Background

was probably part of the plan which produced the main Aigaleos-Parnes wall. This lesser wall needs further study.

been commented upon except by Gardikas, who perceived its uses. Yet the style of construction is quite similar: a face roughly built up, and loose rock thrown in behind. Since it is precisely located to fill an obvious need, there seems no reason to doubt that it was part of the plan. For the *θαυμασία* view from the tower, see Gardikas, p. 68.

A third set of outworks, according to Milchhoeffer an *unverkennbar* part of the whole plan, is the series of watch-towers and blockhouses built along the crest of Aigaleos and beyond the Sacred Way on the Σκαραμαγκᾶ ὄρη all the way to the sea. On Aigaleos itself Milchhoefer knew no fewer than six such watch-towers and some four blockhouses. Wrede says that the watch-towers are built in the same style as the wall.

III. THE SITUATION WHICH THE WALL ENVISAGES

It may not be amiss to attempt an estimate of the number of troops needed to man the various parts of the defenses. A considerable force was required, since even a small body of the enemy might cause serious damage, might even destroy the value of the wall altogether, simply by entering it through a sally-port, or leaping up and over it, in any stretch of the wall which was left unguarded. We may guess that 4200 meters of wall required at least 4000 defenders. Another force of some size, though smaller, would be needed to defend the pass through which the Sacred Way runs;[20] scouts and garrisons were doubtless stationed in the outposts on the ridge of Aigaleos and in the plain.

It was the opinion of Capt. Siemens, it must be the opinion of anyone who has examined it thoughtfully,—and I trust the description has shown,—that the Aigaleos-Parnes wall was not designed and built as a permanent fortification, in the sense that it was not intended to receive garrisons for long terms. A permanent fortification must have some protective value in itself, must be hard to approach and to scale. The Aigaleos-Parnes wall is mostly a mere rampart, valueless when not manned practically throughout. It is field-works, not a fort; it contemplates a pitched battle, not a siege. It was built, that is, for some particular emergency.[21]

What does the wall itself have to tell us about this emergency? First, that an enemy force of some size and consisting mainly of infantry has occupied, or is about to occupy, the Thriasian Plain. The enemy's route is so well determined, or he is so close at hand, that the Athenians are sure he will not turn and come down through Phyle or round Parnes past Dekeleia. Probably, therefore, the enemy is from Peloponnesos. The wall says that an Athenian force of some thousands has marched out from the city; that the Athenian command has decided that the enemy is too strong for a pitched battle in the Thriasian Plain to be risked, but that a defense of the low open Aigaleos-Parnes pass is feasible.

[20] Doubtless this pass was also firmly held, we do not know how. Near the sanctuary of Aphrodite there is a building (heroön ?) of heavy stone suitable for defense, but it may belong a century later (Wrede, no. 21, p. 9). For other fortifications in this neighborhood, possibly related to the Aigaleos-Parnes wall, see Milchhoefer, p. 49.

[21] For the contrary view, see *Greek Walls*, p. 41.

A large force could not easily get into Attika without some advance warning being given. A certain length of time served the Athenians. They could study the pass, select the site, lay out the line, and design the wall. The slope was of course strewn with material, but boulders of some size (Fig. 14) required to be moved, and some simple quarrying was doubtless necessary. There was time to trim joints on the blocks and to fit them together; and after that, to throw in tons of rock behind

Fig. 14. Blocks of Wall, on Aigaleos

the face. Clearly we may say that the wall was not built overnight: the enemy did not come scurrying across the Thriasian Plain in a single day and rush to the attack.

On the other hand, the wall tells us that there was a motive for doing all these things quickly. The best archaeological observers, Wrede and (*per coll.*) H. A. Thompson, are agreed that the wall has every appearance of having been somewhat hastily constructed.[22] Whether or not a battle took place, the crisis we have to seek was neither instantaneous nor yet long drawn out.

IV. THE INVASION OF 506 B.C.

An invasion of Eleusis was doubtless an event of some importance. It seems not unreasonable to conceive that Herodotus would mention all the major invasions of the Eleusinian plain in the period 528-490. Actually he mentions one, presumably the only one. Be this as it may, his account is worth considering. The date is 506 B.C., or possibly a year earlier or later.

[22] Speaking as a military man, Siemens was misled by his admiration for the plan to declare that it was built at leisure.

Interesting data on how fast—how surprisingly fast—city fortification walls could be built will be found in G. Busolt, *Klio*, V, 1905, pp. 255-279 (a reference which I owe to R. Schlaifer).

Herodotus, V, 74-75 (irrelevant parts omitted):

74. Κλεομένης δὲ – – – συνέλεγε ἐκ πάσης Πελοποννήσου στρατόν – – –. Κλεομένης τε δὴ στόλῳ μεγάλῳ ἐσέβαλε ἐς Ἐλευσῖνα, καὶ οἱ Βοιωτοὶ ἀπὸ συνθήματος Οἰνόην αἱρέουσι καὶ Ὑσιάς, δήμους τοὺς ἐσχάτους τῆς Ἀττικῆς, Χαλκιδέες τε ἐπὶ τὰ ἕτερα ἐσίνοντο ἐπιόντες χώρους τῆς Ἀττικῆς. Ἀθηναῖοι δέ, καίπερ ἀμφιβολίῃ ἐχόμενοι, Βοιωτῶν μὲν καὶ Χαλκιδέων ἐσύστερον ἔμελλον μνήμην ποιήσεσθαι, Πελοποννησίοισι δὲ ἐοῦσι ἐν Ἐλευσῖνι ἀντία ἔθεντο τὰ ὅπλα.

75. Μελλόντων δὲ συνάψειν τὰ στρατόπεδα ἐς μάχην Κορίνθιοι μὲν πρῶτοι σφίσι αὐτοῖσι δόντες λόγον ὡς οὐ ποιέοιεν τὰ δίκαια μετεβάλλοντό τε καὶ ἀπαλλάσσοντο, μετὰ δὲ Δημάρητος ὁ Ἀρίστωνος – – –. Τότε δὴ ἐν τῇ Ἐλευσῖνι ὁρῶντες οἱ λοιποὶ τῶν συμμάχων τούς τε βασιλέας τῶν Λακεδαιμονίων οὐκ ὁμολογέοντας καὶ Κορινθίους ἐκλιπόντας τὴν τάξιν οἴχοντο καὶ αὐτοὶ ἀπαλλασσόμενοι – – –.

It will be noted that the Athenians were faced by a hoplite force, coming from Peloponnesos, and certainly greater than their own. By general consent of the Eleusinians, or through the treason of some of them—the Athenians punished indiscriminately later (schol. Ar., *Lys.*, 273)—the Peloponnesians established themselves in Eleusis. The Athenians had no hope save in defeating their enemies singly. Because of lack of time, or otherwise compelled, they had decided to make their stand not beyond Eleusis but nearer Athens. Kleomenes, for his part, planned no union of the allies outside Attika (i. e., in Boeotia): a three-fold menace promised better results, and there was no likelihood that he would march down past Phyle or Dekeleia. With the force of Kleomenes the Athenians engaged in no fighting. They had evidently taken up a position where they could not be annihilated with ease. Herodotus does not say where the Athenians were stationed: he merely says they took up a position "against," or "in the way of" the Peloponnesians who were in Eleusis (Πελοποννησίοισι δὲ ἐοῦσι ἐν Ἐλευσῖνι ἀντία ἔθεντο τὰ ὅπλα). E. M. Walker, who seems not to have thought of the Aigaleos-Parnes wall in this connection, writes in *C.A.H.*, IV, p. 159, "Herodotus' statement that they advanced against the Peloponnesian force which had already reached Eleusis may reasonably be interpreted as meaning that the Athenian army took up a defensive position on the ridge of Mt. Aegaleos." I am tempted to believe that this is near the mark; but surely they would camp not on the ridge but astride the Aigaleos-Parnes pass. The Corinthians discussed the situation, Herodotus says, changed their minds, and departed. Demaratos also opposed an advance. These dissensions gave the Athenians time to rush to completion—it is hard to believe otherwise—a defensive wall, the extant Aigaleos-Parnes wall, which they had already begun. Indeed it may have been the uncertainties involved in attacking a position already well fortified which helped to persuade the Corinthians that "they were not acting justly." Years later, just before the outbreak of the Peloponnesian War, when the Corinthian orator was urging upon the Athenians the services which

Corinth had done them in the past, he made no mention of the Corinthian withdrawal in 506 (Thucydides, I, 41). Various reasons for the departure of the Corinthians can be given, such as the unwillingness of the Corinthians to ruin Athens and so strengthen Aigina.[23] But these reasons the Corinthians must have considered before joining the expedition in the first place. If the Athenians had made themselves unexpectedly formidable behind walls, then the Corinthians had done no service worth recalling: they had merely saved their own skins. Demaratos also may have felt that the Athenian position was dangerously strong. Be this as it may, the expedition broke up.

Herodotus goes on (V, 78) to chronicle the subsequent defeat in one day of the Boeotians and Chalcidians, and to point out what men freed from tyranny could do. We may conjecture that the reforms of Kleisthenes in 508 had also contributed not a little to Athenian strength.[24] The campaign of *ca.* 506 was the first in which the Athenian army, probably somewhat enlarged, was organized in the new ten tribal regiments. What was virtually a triple victory set the seal of success on the new constitution. If the Aigaleos-Parnes wall is now dated acceptably, it is a monument to the free, well-ordered Athens which it helped to save.

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[23] W. W. How and J. Wells, *Commentary on Herodotus*, II, p. 41.

[24] For the most recent study concerning Athens in this period, see M. F. McGregor, *Athenian Studies Presented to W. S. Ferguson* (*Harvard Studies in Classical Philology*, Suppl. Vol. I; Cambridge, Mass., 1940), pp. 71-95; C. A. Robinson has replied in *Class. Week.*, XXXV, 1941/2, pp. 39-40.