

## ON THE DATING OF THE CITY WALLS OF EPHEOS

(Pl. XXXIII-XXXVII)

The city walls of Ephesos, one of the 12 cities of Ionia, have been well preserved to our day; in many places they are close to their original height<sup>1</sup>. Nine km. long, the walls enclose the port, and pass over the crests of the Bülbül and Panayır mountains. The remains of walls built with mortar, which are to be seen on and to the west of Mt.Panayır, are from the Byzantine period. We can do no more than mention these in passing, for our purpose is not to examine all the Ephesian walls in detail but to approach the dating of the walls on Mt.Bülbül from a different angle.

The important walls of Ephesos are those on Mt.Bülbül and Mt. Panayır. The walls near the port make two bends and then climb the slopes of Mt.Bülbül. This must be the ancient Mt.Koressos, since Strabon says that the terrain extending the length of the heights of Koressos is called "Trakheta"<sup>2</sup>. This means "the stony lands" and the stony areas of Mt.Bülbül far exceed those of Mt.Panayır. In this case Panayır Mountain must be the ancient Mt.Pion (*Lepra Akte*). Bülbül Mountain is 358 m. high, while Panayır Mountain is 155 m. The fortification walls pass through the highest points on the crest of Mt.Bülbül (Fig.1) and are the best preserved walls of the city, having a length of nearly 4 km. and being strengthened by numerous two storied towers. There are also many gates in these fortifications (Fig.6). 2.90 m. wide and 6.5 m. high, the walls on the southeast part of Mt.Bülbül make several bends, assuming a sawtoothed form<sup>3</sup>.

After descending from the southeastern part of Mt.Bülbül, the walls leave no traces above ground on the flat terrain extending up to the Gate of Magnesia. Past the gate the fortifications continue on Mt.Panayır, but the city walls here are not well preserved like those on Mt.Bülbül; only traces can be made out here and there.

When one speaks of the fortifications of Ephesos, it is those on Mt.Bülbül that come to mind, because these are the best preserved and at the same time are the earliest Ephesian walls which have come to light. In order to date these walls it is first necessary to know the date of the city they enclose.

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1. I wish to thank archaeologist Aytekin Erdoğan for his assistance during the preparation of this article.
  2. Strabon XIV, 634.
  3. City walls in a saw-toothed pattern are seen in the following cities near Ephesos: Miletos, Priene, Erythrai, Kolophon, Metropolis and Pergamon. We believe this type of fortification wall to be predominant in the fifth century B.C.

It has been suggested that Ephesos changed its location several times in the course of its history. Up to the present day many suppositions have been made concerning the original Ionian settlement area of Ephesos. One group of scholars has suggested that the old city was on the peak of Ayasoluk hill, whereas J.Keil considered that it was on the top of the Akropolis and the north slopes of Mt.Panayır<sup>1</sup>. Before Kroisos' time, the city was situated around the Athenaion, the Hypelaion and the slopes of Mt.Koressos<sup>2</sup>. As a result of excavations done in the State Agora it has been seen that the *nekropoleis* of the late Archaic and Classical periods were in this area or very close by. As is well known, *nekropoleis* of these periods are generally situated near their respective cities; therefore the Classical and Archaic settlements should not be far from here. It seems reasonable that the city of pre-and post-Archaic times should be located near the port. The earliest dated finds of this *nekropolis* belong to the city of Kroisos' time. In this case the city that Kroisos besieged must be near the port. Herodotos writes that there was a distance of seven stades between the Temple of Athena and the city that Kroisos besieged<sup>3</sup>. In our opinion this measurement is correct: between the temenos area or peribolos of the Temple of Athena and the probable site of the no longer extant fortification walls near the port, the distance is approximately seven stades.

Kroisos took Ephesos in the early years of his reign<sup>4</sup>. According to Strabon the city changed its location at this time, being newly founded near the Artemision, and the city's residents remained here until the time of Alexander the Great<sup>5</sup>. If, however, the city had really changed its location as Strabon says, Herodotos, who lived much earlier (490-425 B.C.) would have mentioned it in his book. Furthermore, the site of this city which was supposedly founded near the Artemision would be overly far from the *nekropolis* which was brought to light in the State Agora and which, chronologically, should belong to this settlement period. Up until now no traces of settlement have been found in the area of the Artemision. Even if Kroisos had wanted to change the city's location it is

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1. G.Langmann, "Eine Spätarchaische Nekropole unter dem Staatsmarkt zu Ephesos", *Festschrift F.Eichler* (1969), 122-123; *RE Suppl. XII* (1970), 1592 ff. Ephesos (Alzinger).
  2. Strabon XIV, 640.
  3. Herodotos I, 26.
  4. Herodotos I, 26; Aelian, *Varia Historia*, III, 26; Polyaeus VI, 50.
  5. Strabon XIV, 640.

doubtful whether he had a chance to do this during his short reign; his period was not long enough for the Ephesians to adapt to a new site. Perhaps a small settlement was made around the Artemis Temple, but it seems to us that Ephesos itself was always on the same site and it was from here that the city developed<sup>1</sup>.

In fact the results of excavations carried out by Langmann in the Commercial Agora in recent years confirm what we have written above. The discovery of pre-Roman remains in these excavations adds weight to our belief that Ephesos never changed its location; the Archaic and Classical period *nekropoleis* became, in later times, areas of settlement.

Once it is established that Ephesos never changed its location, it follows that the fortification walls of its early- that is, its Archaic and Classical periods- must be near this area.

No traces of walls showing the Archaic period style have as yet been found in or around Ephesos. If it is assumed that the city was first founded around the port, then the Archaic city must have been near here and its fortifications around it. The settlements of the Archaic and earlier periods must have been smaller than those of the Classical and Hellenistic times and the fortification walls would thus also be relatively short. In our opinion the pre-Classical walls were, in the course of time, torn down and their stones re-used elsewhere; the walls' other traces being lost somewhere under the present ground level.

Fifth century Persian influence in Ionia is not readily visible. After the battles of Plataiai and Mykale in 479 B.C. the Ionians revolted and declared their independence<sup>2</sup>. In 467-466 B.C. the Athenians under the command of Kimon, son of Milthiades, defeated the Persians on both land and sea at the mouth of the Eurymedon River (Kôprüçay) in Pamphylia<sup>3</sup>. The Ionian cities were thus given a period of tranquillity. According to the terms of the "Peace of Kallias" of 449 B.C. The Persians agreed not to impose their rule upon the

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1. Ö.Özyiğit, "Spätarchaische Funde im Museum von Ephesos und die Lage von Alt-Ephesos", *Ist Mitt.* 38, 1988, 93-96.

2. Herodotos IX, 47 ff., 90.

3. Thukydides I, 100.

Ionians and to keep their armies three days' march distant from the western shores of Anatolia. It is probably not incorrect to think that, at a time when the city had newly gained its independence, there was a building boom and that, parallel to this, the city was surrounded by longer and stronger fortification walls.

It is significant that Herodotos speaks of the settlement of Kroisos' time as "the old city"<sup>1</sup>. In Herodotos' time the old city had been renovated. This renovation must have included the fortification walls as well. In our view there was a great construction activity in many of the Ionian cities after 470 B.C. At this time many of them were re-organized according to the Hippodamic system<sup>2</sup>. Since it was one of the large and important Ionian cities, Ephesos must, have been one of these.

The construction techniques of the fortification walls on Bülbül Mountain are pre-Roman. But since they do not show Archaic period characteristics and since they enclose such a large area they cannot be Archaic. They must therefore be dated after the Archaic but before the Roman periods, that is, they must have been built in the Classical or Hellenistic period. Strabon later states that Lysimakhos had a fortification wall built around the city<sup>3</sup>; for this reason it is generally assumed that the city's walls were built in Lysimakhos' time (290 B.C.).

In Classical times the city and its *nekropolis* must have been bounded by the walls which pass over the Bülbül and Panayır Mountains for if, these walls were built in Lysimakhos' time, where are the walls of the Classical period? In and around Ephesos, on Mt.Bülbül and Mt.Panayır, there is no fortification wall which archaeologists have dated to the Classical period. If one takes into consideration the fact that in the Classical period the city was situated in the port area and had expanded in comparison to the Archaic settlement, then the city walls must have enclosed a correspondingly larger area and should not have completely disappeared. It follows that the walls, of which a large section is well preserved on Bülbül Mountain, must have been first built in the Classical period and then repaired on a large scale in Lysimakhos' time.

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1. Herodotos I, 26.

2.The most detailed recent work on Hippodamic city planning in the Classical period is W.Hoepfner-E.L.Schwandner, *Haus und Stadt im klassischen Griechenland. Wohnen in der klassischen Polis I*, München 1986.

3. Strabon XIV, 640.

Following the historical approach, we wish to examine the Ephesos city walls in the light of other dating criteria. Fortification walls in Anatolia are generally misdated; in particular, walls of the Classical period are attributed to Hellenistic times. The dates of the founding and abandonment of cities are important criteria to be considered in establishing the dates of city walls. In this matter the ancient sources' information is not always reliable, for the ancient writers in giving the dates of events and constructions much earlier than their own time, pass on their own mis-conceptions to us. The role of inscriptions in the dating of fortification walls is certainly very important, but unfortunately such inscriptions are rare indeed, almost non-existent. Because of the paucity of dating criteria, the chronology of styles and techniques of fortification walls have not been well established up to the present day.

The limestone city walls on Bülbül Mountain show two separate and major phases of construction. This fact has been overlooked until now. The top sections of the walls are in places formed of large blocks; in contrast to this, the bottom sections are constructed of narrower courses. This situation indicates that the walls of Ephesos were built in two phases. The first phase of these city walls is also the earliest fortification work on Mt. Bülbül. Examples of the walls' first construction phase are especially to be seen in the wall sections which bend in saw-toothed fashion at a point near the peak of Bülbül Mt. (Fig.2). The first phase walls here are of embossed rectangular blocks and generally of isodomic style. The height of the courses is 25-35 cm. It is observable that in various sections of the fortifications these first phase walls were repaired with larger blocks in a second phase (Fig.3). In addition to this it is readily observable that the ruined towers belonging to the first phase were rebuilt in the style of the second phase (Figs.1 and 4).

The walls of the second construction phase of the Mt. Bülbül fortifications are formed of trapezoidal blocks in pseudo-isodomic style (Fig.5). In some places small rectangular stones from the damaged first phase wall were also used. The height of the courses is 45-65 cm. As mentioned above, this second phase masonry can in places be seen built on top of the first phase fortifications (Figs. 3-4). In many other places the wall was completely rebuilt (Fig.6).

The blocks of the first phase walls are small. But in the second phase, in accordance with the preferences of the period, the size of the stones was changed and the wall was repaired with large sized blocks. Also, the rectangular blocks of the first phase were superseded in the second phase by trapezoidal blocks. In other words, following the style of the times, in the second building phase the

block dimensions and the masonry technique were both changed. The construction of fortifications is no easy task. The renovation of such walls must therefore occur only after major destruction, and the interval between the two construction phases cannot have been brief. Until now the two major building phases in the Ephesian walls were not distinguished from one another; the repair work of the second phase was thought to be the main construction.

We have an important but hitherto not much remarked criterion for the dating of the Ephesian city walls. The walls beside the East Gate of Priene can play an important role in dating Ephesos' fortifications<sup>1</sup>. This East Gate is next to a well-preserved tower (Fig.7). The height of the courses of the stones of this tower and of the walls which join it averages 60 cm., and the masonry must be from a time close to that of the second phase walls on Mt.Bülbül. An inscription carved on a stone of the tower of the East Gate entrance to Priene is of great importance to the chronology of fortification walls. This "Phlios Inscription" is dated to the mid-fourth century or slightly after<sup>2</sup>. It follows that the height of the courses in this type of wall was increased in the years around 350 B.C. to about 60 cm. In other words, in accordance with the understanding of the times, the courses of blocks in fortification walls began to be constructed higher in the second half of the fourth century B.C. and subsequent times. In this case the second, or repair, phase of the fortifications on Mt.Bülbül should not be chronologically distant from the walls beside the East Gate of Priene. This time is in accordance with that of Lysimakhos. Therefore, we think that the conclusion that the second phase of the Mt.Bülbül fortifications was built in the years around 290 B.C. is not incorrect. In this case the original walls of Ephesos were not, as Strabon says, built in the time of Lysimakhos, but instead underwent major repairs then. Further, since they are under the second phase masonry, the first phase walls on Mt.Bülbül, constructed of small blocks, must be of a much earlier date.

We believe that the fortification walls of Larisa, which have survived to our day in good condition, can also be of use in dating those of Ephesos<sup>3</sup>. The most remarkable walls of Larisa are the Lesbian style polygonal walls dated to the Archaic period. We also see that in Classical and Hellenistic times these

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1. Th. Wiegand-H. Schrader, *Priene. Ergebnisse der Ausgrabungen und Untersuchungen in den Jahren 1895-1898*, Berlin 1904, 44 ff., Plate VI. For F.E. Winter's views on the dating of the city walls of Priene and Ephesos, see *AJA* 75 (1971), 413-426.

2. F.H. von Gaertringen, *Inschriften von Priene*, Berlin 1906, 139, No. 196.

3. On the fortification walls of Larisa see J.Boehlau- K.Schefold, *Larisa am Hermos, I.Die Bauten*, Berlin 1940, 44 f.

walls were renovated in places. In the fourth century B.C. the city walls underwent a major renovation and were rebuilt of rectangular blocks in isodomic style. The west walls of the largest building in Larisa, the "New Palace", were at the same time constructed as fortification walls<sup>1</sup>. Since they are all of the same style, the western walls of the "New Palace", the city walls observable behind the Archaic walls on the east, as well as those on the west which were built with the same technique, must all three be of the same date. In other words, at the time of the building of the New Palace the fortification walls were also repaired. The New Palace has been dated by its excavators to the middle of the fourth century, B.C.<sup>2</sup>. But because its floor plan shows characteristics of the transition to the peristyle house plan, it should be dated a little earlier<sup>3</sup>. Thus the date of the New Palace and of the fortification walls' repair work should be the beginning of the fourth century, B.C. The height of the courses of the earlier fortification walls, built of rectangular stones in isodomic style, varies between 40 and 45 cm., whereas the large bastion on the north of the New Palace belongs to a later, early Hellenistic, date. Here the height of the courses is 45 to 60 cm.<sup>4</sup>.

One section of the fortified western wall of the New Palace deserves attention. Under one part of this wall is another wall, built of smaller, rectangular stones and preserved to a length of six meters (Fig. 8). That is, the wall contains two building phases. The upper phase is built of courses of blocks 40-45 cm. in height and, where the wall makes a bend, the blocks are interwoven. Whereas the stones of the lower phase form courses 20-35 cm. in

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1. *Ibid.*, 52 ff. Pl. 15b.

2. *Ibid.*, 100.

3. The houses of Olynthos are dated to the period 432-348 B.C. These houses were built before the destruction of Olynthos by Phillipos II in 348 B.C. Here a limited number of peristyle type houses is seen among those of the pastas type [AA 32 (1977), 173 ff.]. These are the earliest examples of the peristyle type house and were built later than the pastas types; for this reason we believe they must be dated earlier than 348 B.C. and in the first half of the fourth century. The New Palace in Larisa shows a transition to the peristyle type house, therefore it must be earlier than the appearance of the peristyle type proper, and should be dated to the beginning of the fourth century B.C. Also the stones of the fortified western wall are smaller than those of the city walls of Priene, which have been dated to 350 B.C.; it follows that the New Palace must belong to a date before the middle of the fourth century B.C.

4. J. Boehlau-K. Schefold, *Larisa am Hermos*, I, Berlin 1940, 48 ff.

height. This lower wall does not coalesce with the stones of the upper phase wall; the second phase simply rests on the first; for these reasons the lower construction must belong to a period earlier than that of the upper phase. Since we have dated the upper phase to the beginning of the fourth century B.C., the lower phase must be earlier than that. The style of the lower phase does not indicate the Archaic period. Further, in order to build this part of the wall the Archaic polygonal wall was demolished. Thus this six meters long wall of small stones is later than the Archaic but earlier than the fourth century B.C. On the west of Larisa, in front of the temple and immediately behind the Archaic period wall, are other fortification walls showing the same style and technique as the six meter long wall; these also should be dated to the fifth century B.C. (Fig.9).

The examples of fortification walls from Priene and Larisa which we have considered above are of great importance because of their contribution to the chronology of city walls. Fortifications made of rectangular stones consisted of courses 20-35 cm. in height in the fifth century B.C. Also, fortifications which are well dated to the beginning of the fourth century B.C., thanks to the New Palace in Larisa, show that at this time the height of the courses increased, the average height of the courses becoming 40-45 cm. One section of Priene's fortifications, reliably dated by the inscription of the East Gate, indicates that the courses increased even more, reaching a height of 60 cm. After taking all these pieces of evidence into consideration, we can conclude that the first phase Ephesian city walls on Mt.Bülbül should be dated to the fifth century B.C; it is however difficult to establish the date within this century by style analysis. Here it is necessary to look at historical events. We suspect that, following the Ionian victories of 479 B.C. at Plataiai and Mykale and the battle of Eurymedon in 467-466 B.C., Ephesus had won its independence and during the 460's, approximately, the city was surrounded with a great fortification wall. Accordingly, the city walls of which a large section is found on Mt.Bülbül were originally built in the years around 460 B.C. and, in the time of Lysimakhos, i.e., around 290 B.C., they underwent major repairs. Thus we suspect that the opinion of Strabon, that Ephesus changed its location several times and that the city walls were built by Lysimakhos, is false.