

THE BYZANTINE SEA WALLS OF THESSALONIKI *

The plans of the Byzantine harbour and sea walls at Thessaloniki that have been produced in the past¹ are in several respects unclear and it is my purpose in this paper to attempt, in the light of new evidence not hitherto employed in this connection, to make a more accurate reconstruction of their original layout.

The reason for the lack of clarity is that there has been so little information upon which to proceed. The walls along the shore were removed before detailed plans were made. Demolition of the wall along the shore began in 1873;² we hear of part of the harbour wall being taken down in 1874,³ and before long there was very little of the walls in the lower city to be seen apart from a stretch of mid-fifth century wall to the north of the former Top-Hane Ordnance Barracks.⁴ The general outline of the sea walls at Thessaloniki is fairly clear: they ran from the Venetian White Tower in the east to a point south of the church of St Menas where the harbour wall began. This wall ran northwards to Odos Frangon, the line of which it followed westwards as far as Top-Hane.

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1. O. Tafrali, *Topographie de Thessalonique* (Paris, 1913) pp. 14-20, 110-112 and plan *hors texte*, followed by A.E. Vacalopoulos, *A History of Thessaloniki* (Thessaloniki, 1963) p. 83, n. 1. G. Theocharides, *Τοπογραφία και πολιτική ιστορία τῆς Θεσσαλονίκης κατὰ τὸν ΙΔ' αἰῶνα* (Thessaloniki, 1959) p. 9, 12-13 and plan *hors texte*. I. Vasdravelles, *Ὁ λιμὴν τῆς Θεσσαλονίκης* (Thessaloniki, 1959) whose plan (p. 20) is based largely on that of Theocharides and is reprinted in A. Letsas, *Ἱστορία τῆς Θεσσαλονίκης* (Thessaloniki, 1961) p. 224, fig. 81.

2. Theocharides, *op. cit.*, p.13.

3. Tafrali, *op. cit.*, p. 43.

4. *Archaeologikon Deltion* xviii (1963) Chron. xxx 243, fig. 2. For the mid-fifth century date of these walls see: M.J. Vickers, "The date of the walls of Thessalonica" *Istanbul Arkeoloji Müzeleri Yilligi* xv-xvi (1969) pp. 313-318 and my further remarks in the forthcoming *Transactions of the 8th International Congress of Roman Frontier Studies*.

So much is agreed upon, but when it comes to topographical details something less than unanimity prevails.

I The Main Harbour Gate

Modern writers who have discussed the sea wall at Thessaloniki speak of several gates in it. Tafrali⁵ shows on his plan of the city (Fig. 1) a gate in the harbour which he calls τοῦ Γαλοῦ⁶—the Beach Gate (a name which he says lived on in his own day in the area around the church of St Menas). In addition to this he places what he calls a *Porte Maritime*⁷ in the sea wall at the southern end of what is now Odos Venizelou, solely on the basis of a sketch⁸ of the city by the early 19th century traveller Cousinéry, most of whose drawings, however, are more outstanding for prettiness than accuracy of representation. Theocharides⁹ follows Tafrali in principle, though not in detail. He has two gates in the harbour instead of Tafrali's one, and while having a similar Maritime Gate at the end of Venizelou, he calls it Πύλη τοῦ Γαλοῦ, saying that it must have led at one time to a sandy beach in front of the walls.

There is, however, evidence to show that the Maritime Gate posited by Tafrali and Theocharides probably never existed, but before examining this evidence it should be pointed out how very improbable it is that such a strategically unsound gate should ever have been built. It would have stood immediately next to the harbour which was protected by a breakwater which in the 15th century was called the Tzerempoulon,¹⁰ and which could, on occasion, be blocked by means of a chain stretched across its mouth.¹¹ It would seem to be highly unlikely that on the one hand there should have been a heavily defended harbour, while on the other there should have been a gateway so vulnerable to attack from the sea.

The evidence for there not being such a Maritime Gate consists of the accounts of two Turkish travellers who visited Thessaloniki in the 16th and 17th

5. Tafrali, *op. cit.*, p. 18.

6. *Ibid.*, p. 18 and plan *hors texte*.

7. *Ibid.*, pp. 111, 121 and plan *hors texte*.

8. M.E. Cousinéry, *Voyage dans la Macédoine* (Paris, 1831) t.I, opposite p. 23, reproduced by Tafrali, *op. cit.*, p. 13, fig. 1 and Letsas, *op. cit.*, p. 30, fig. 7.

9. *Op. cit.*, p. 12 and plan *hors texte*.

10. John Anagnostes, *De extremo Thessalonicensi excidio narratio anno 1430*, ed. Bonn, ch. 13, p. 508.

11. J. Cameniatas, *De excidio Thessalonicensi narratio anno 904*, ed. Bonn, ch. 25, p. 508.

centuries, two unpublished 17th century manuscript drawings in the Bibliothèque Nationale, and an 18th century English engraving.

Mehmed Aşık completed his geographical work *Menazir ul-Avalim* in 1598.¹² His account of Thessaloniki was based on a personal visit and is written in a clear and precise fashion. In his description he has occasion to mention the various wards of the city and he indicates where each group of wards lay. The Jewish wards, for example, "are all situated at the foot of the city wall, just inside the Harbour Gate." This is the only reference to a sea gate that Mehmed Aşık makes.

One gets far more information in volume viii of the *Seyahatname*,¹³ the *Travel Book* of Evliya Çelebi who visited Thessaloniki in 1668. Evliya was highly connected and was able to inspect and describe castles and military points with complete safety. His personal observations are therefore of particular interest and especially so in the case of Thessaloniki for they can be checked against independent evidence. Evliya tells us that he spent "five whole hours simply going all round the triangular circuit of the walls inspecting it with careful scrutiny." As a result of his observations he was able to give the distances between the various points on the walls measured in paces. The part of his perambulation that is relevant to the argument comes towards the end of his account.

He says that from the Gate of the Girdled (Kuşaklı¹⁴) Tower (the Gate of Anne Palaeologue, in the north-east corner of the city, Fig. 2) "to the Calamaria Gate is 2300 paces down a steep slope to the south... From here, still facing southwards, you go down and on to level ground until you reach the mighty bastion of the Calamaria Tower on a point of land at the edge of the sea, and the distance is 1000 paces."¹⁵ The Calamaria Gate he refers to is the one that originally stood at the east end of the present Odos Egnatia,¹⁶ while the Cala-

12. Cf. *Encyclopedia of Islam*, vol. I, p. 697. I am most grateful to Dr P.A. MacKay for bringing his (unpublished) English translation to my attention.

13. Edited by the Türk Tarih Kurumu, (Istanbul, 1928). See the observations of P.A. MacKay (who very kindly drew my attention to his translation and placed it at my disposal) in *Hesperia* xxxvii (1968) pp. 386-7. His strictures there on the way Evliya treats numbers do not apply in the case of Thessaloniki, for here his figures correspond with reality and there is no reason to reject them. There is a Modern Greek translation of the portions of Evliya relevant to Thessaloniki by N. Moschopoulos: *Ἡ Ἑλλάς κατὰ τὸν Ἑβλιᾶ Τσελεμπίη. Επετ.* xvi (1940) pp. 321-363, but the translator often omits phrases he does not understand.

14. Also known as Zincirli-Kule. For the name Kuşaklı, cf. A. Struck, *Byz. Zeitschrift* xiv (1905) p. 544.

15. *Op. cit.*, p. 147.

16. Destroyed in 1906, G. Theocharides in *Πέτρος Ν. Παπαγεωργίου, Φιλολογικὸν*

maria Tower he mentions is clearly the White Tower at the south-east corner of the city. The distance then, from the Calamaria Gate to the White Tower is, according to Evliya, 1000 paces.

Elsewhere in his narrative Evliya refers to a Records Office being situated just outside the fort at the Calamaria Tower. This is important, for the next stage of his circuit is from the Gate of the Records Office¹⁷ to the Harbour Gate, which measures 2000 paces along the inside of the fortress wall.¹⁸ "The Gate of the Records Office must be the one slightly to the north of the White Tower, known in Byzantine times as the Porta Roma."¹⁹ He says he went "along the inside of the fortress wall" because "it would be difficult to pace out the section from the Calamaria Tower along the sea shore outside the wall, because the sea beats up against that side," and he says that if he had paced out the wall along the shore "along the outer face, there would be 1000 paces more to add on." This indicates that Evliya's walk from the Calamaria Tower to the Harbour Gate took place a fair distance inland, and not literally "along the inside of the fortress wall."

At this point I should like to consider the evidence from two manuscript drawings by Gravier d'Otières from a collection in the Bibliothèque Nationale (MS fr. 7176) entitled *Estat des Places que les Princes Mahométans possèdent sur les côtes de la Mer Méditerranée et dont les plans ont été levez par ordre du Roy à la faveur de la visite des Eschelles de Levant que sa Majesté a fait faire les années 1685, 1686 et 1687; avec les projets pour y faire descente et s'en rendre maître*.²⁰ The text is unfortunately lacking, but one thing should be immediately clear about the drawings: they were prepared from a military point of view and hence are reliable sources of evidence for the defences of the city, at least in the seventeenth century. The two drawings which are relevant to the present argument are No. 27, *Plan d'une partie des murailles de la ville de Salonique, capitale de la Macédoine, du costé du Port* (Plate Ia) and No. 28, *Vue de Salonique, capitale de la Macédoine* (Plate Ib).

It is interesting to note how closely the view of the city and especially the part around the harbour (Plate IIa) corroborates Evliya's account. One can see for example the mosque of Abdurra'uf Efendi "just outside the Harbour

Μνημόσυρον, *Makedonika*, Parartima 3 (1964) 12. For evidence that the present name of Odos Egnatia is a misnomer see Ch. Makaronas, "Via Egnatia and Thessalonike," *Studies presented to David M. Robinson* i (St Louis, 1951) pp. 380-8.

17. Moschopoulos, *op. cit.*, omits to mention this gate.

18. *Op. cit.*, p. 147.

19. Tafrali, *op. cit.*, p. 95.

20. Mentioned by P. Perdrizet, *Mon. Piot* xxxi (1930) p. 58.

Gate" and "built right against the fortress wall."²¹ That this mosque can only be that of Abdurra' uf Efendi is clear from what follows in Evliya's account for he goes on to say "all other public buildings... are inside the city wall."

It will be noted that on the view (Plates Ib and IIa) there is only one gateway on the sea front, and that one inside the harbour. The plan corroborates this and it is clear that the gate in question is set well back from the sea in the north-east corner of the Harbour. This explains why Evliya had to walk quite a distance inland on his way from the Calamaria Tower to the Harbour Gate. What in fact he did was to walk along the hypotenuse of what approximated to a right-angled triangle. Indeed, there would have been little point in walking close to the inside of the sea wall, for the Harbour Gate was the only entrance to the harbour area in the seventeenth century, as the plan (Plate Ia) shows. If one examines plans of the city as it was before the 1917 fire, ²² one can see how easy it would have been to walk directly from the Calamaria Tower to the Harbour Gate. One could take the pre-1917 Odos Tsimiski for the whole of its length (one assumes that it followed the line of an earlier street) and it would bring one to the Harbour Gate just to the west of the church of St Menas. If one compares the actual distance between the Calamaria Gate and the Calamaria Tower (which Evliya puts at 1000 paces) and between the Calamaria Tower and the Harbour Gate (which he puts at 2000 paces) one finds that the latter is in fact twice the distance of the former.

A view of Thessaloniki attached to a chart of the Thermaic Gulf made by a certain Andrew Elton in London in 1780 (Plate IIb ²³) bears out the points made in connection with Evliya's narrative and the French drawings. There is no gate on the sea front near the harbour. The mosque of Abdurra' uf Efendi can be seen in what Evliya calls the Harbour suburb (the Faubourg of Plate Ia) as well as the Egyptian market and the tanning factories which he mentions as being "outside the castle walls on the sea shore."

It is clear then that in the seventeenth century at least there was only one sea gate at Thessaloniki, and that one in the harbour area; Tafrali's *Porte Maritime* and Theocharides' Πύλη τοῦ Γιαλοῦ did not exist.

But is it possible to determine where exactly the Harbour Gate was situated? The seventeenth century drawings give a general idea of where to look—in the eastern corner of the harbour area. One must, therefore, reconstruct

21. *Op. cit.*, p. 142.

22. E.g. J. Ancel, *La Macédoine, son évolution contemporaine* (Paris, 1930) pl. lxiii (opposite p. 296) and *Town Planning Review*, 1922, pl. 33.

23. Plate IIb is reproduced by permission of the Trustees of the British Museum.

the harbour walls and then see what evidence, if any, there is for a gate. Figure 3 shows published sections of the harbour walls. The walls to the west are based on a plan of the Top-Hane district published by Mrs Ph. Drosoyanni²⁴. Tafra-li's plan shows a stretch of wall existing in his day running alongside the Catholic church on Odos Frangon—a street which I take to have run along the inside of the harbour wall when it was still standing. These features have been drawn out against the plan of the city made between 1912 and 1917.²⁵ A small square, Plateia Emporiou, immediately catches one's eye. It is the starting point of the pre-1917 Odos Tsimiski and two streets to the north and south curve round to meet it. Then there are two long, thin building blocks which converge on the square from north and south. Experience tells one that building blocks at Thessaloniki of such a shape often conceal antique walls.²⁶ If one does reconstruct walls along their line, the curved streets just mentioned are easily explained—they, like Odos Frangon, once ran inside the harbour wall and both led to the Harbour Gate. We have already noted how Evliya probably walked along the line of Tsimiski on his way from the White Tower to the Harbour Gate. Then the very name of the square in 1917, Plateia Emporiou, recalls the words of the 19th century German traveller, E. Zachariae: "...eine dritte Mauer... welche am Ufer entlangzieht... und in der Mitte ein Tor hat, das vom Bazar nach dem Hafen führt,"²⁷ though perhaps one should not press this point too hard.

The 17th century drawings also show a tower to the east of the Harbour by the sea (marked *Redoute* on the plan: Plate Ia), the site of which was probably the large block on the corner. The hypothetical eastern harbour wall leads straight towards it; and when the site of the Tower was redeveloped in the 19th century, the whole block would presumably have been built upon at the same time, and indeed, a single building stood on the site until 1917.²⁸ It would be useless, however, to speculate on the name of this tower, for although

24. *Archaeologikon Deltion* xviii (1963) Chron. 242, fig. 2.

25. Kindly supplied by Prof. Ch. Bouras.

26. E.g. the block between two of the streets running between the Arch of Galerius is said by E. Dyggve (*Studia Orientalia I. Pedersen dicata* (Copenhagen, 1953) pp. 60, 64, fig. 4 and p. 65, fig. 5) to be on the line of an arcaded street linking the two structures. Cf. J. Sauvaget, *Bulletin d'Études orientales* iv (1934) p. 100, fig. 8 for the same kind of thing at Laodicea ad Mare.

27. *Reise in der Orient in den Jahren 1837 und 1838*, (Heidelberg, 1840) p. 190.

28. Which served as the Provost Marshal's Office during the Great War (information from Mr V. Rigby of the Imperial War Museum).

several names of sea front towers are known, it is far from clear which names belong to which towers.

II The Gate of Leo

It has been shown that in the seventeenth century there was only one Harbour Gate, and that one in the eastern corner of the harbour area, but that this was not always the case is suggested by an inscribed lintel 3.15m. long found in 1874 "près du Bosniac-Chan, en face de la Banque Ottomane dans le quartier Franc."²⁹ The Ottoman Bank was situated some fifty meters west of the Catholic church on Odos Frangon.³⁰

The inscription³¹ on the lintel refers to renovations carried out under the Emperors Leo the Wise and Alexander by the general Leo Chitzilakes of whom we hear something in J. Cameniates' account of the Saracen attack on Thessaloniki in the 10th century. Cameniates goes into some detail to describe the steps taken by the successive commanders in 904 to improve the seaward defences, which in contrast to the landward side with its "stout" walls, was "low and altogether unprepared for war." He tells of an old tradition that the city had lacked a wall in that part for many years, but that the Romans from fear of Xerxes (*sic*) had built a *φραγμὸς* – a small fence there, which had remained in place until his own day for there was no suspicion of danger in that quarter.³²

The first general appointed to deal with the emergency was a certain Petronas who saw that the sea defences were in a bad condition. His remedy was to fetch sarcophagi from the cemeteries to the east and west of the city and to throw them into the sea so as to provide an underwater obstacle to the enemy's ships.³³

This policy, however, was shortlived, for Petronas was replaced by a new general, Leo (the Leo Chitzilakes of the inscription) who decided to build walls along the sea front instead.³⁴ Leo too was quickly replaced by yet another general, Niketas, whose policy was to build wooden towers since the con-

29. Tafrali, *op. cit.*, p. 43, n. 1.

30. K. Baedeker, *Konstantinopel und Kleinasien* (Leipzig, 1914) plan "Salonique".

31. First published correctly by P.N. Papageorgiou, *Byz. Zeitschrift* x (1901) pp. 151-154, cited by Tafrali who also has an illustration and transcription, *op. cit.*, p. 43.

32. *Op. cit.*, ch. 8.

33. *Op. cit.*, ch. 17, p. 509.

34. *Ibid.*, ch. 18, p. 511.

struction of the walls was not proceeding quickly enough.³⁵ But even though Leo was in office for only a short time, the inscription suggests that he began his wall-building programme at the west end of the shore, in the harbour area. Another possible indication that Leo had managed to erect some walls is to be found in Cameniatēs' description of the sack of the city, when "a few people escaped danger by throwing themselves from the walls in the western part of the harbour."³⁶

The lintel was found at a point some 200 metres to the west of the Main Harbour Gate and must have been placed over the opening of a second gate into the harbour (a gate which, however, had gone out of use by the 17th century). An examination of the pre - 1917 city plan supports this. The findspot of the inscription was opposite the Ottoman Bank, i.e. close to the junction of Odos Frangon and Odos Leontos Sophou. The latter street before 1917 ran straight from the harbour area to the church of Agia Aikatherini, crossing Odos Egnatia and Odos Philippou at right angles. In other words, it followed the line of a street planned in the Hellenistic period.³⁷ The name, Odos Leontos Sophou (Leo the Wise) can hardly be coincidental but was presumably given on the strength of the 19th century discovery of the inscription, for had the name lived on in popular tradition, writers on the topography of Thessaloniki would have made much of the fact. Even so, we can speak with some justification of a Gate of Leo in the Byzantine harbour, in addition to the Harbour Gate proper.

III The Tzerempoulon

One feature that is missing from the 17th century plan and view is the Tzerempoulon, a jetty, which judging by the literary evidence³⁸ projected from the south corner of Top-Hane Tower straight out to sea for a certain distance before making a right-angled turn towards the tower on the east side of the Harbour.³⁹

35. *Ibid.*, ch. W9, p. 513.

36. *Ibid.*, ch. 41, p. 545.

37. See my forthcoming article "Hellenistic Thessaloniki."

38. Assembled by T.L.F. Tafel, *De Thessalonica eiusque agro*, (Berlin, 1839) pp. 208-210 (though Tafel himself misinterprets the word Τζερέμπουλον; cf. Tafrali's observations, *op. cit.*, p. 17).

39. Theodorides, *op. cit.*, plan *hors texte* gives a good impression of the probable course of the Tzerempoulon.

Tafrali thought that O. Dapper referred to the Tzerempoulon when he spoke of a "quai où l'on débarque, qui avance dans la mer,"⁴⁰ but the French drawings, made at much the same time as Dapper's visit,⁴¹ show that the Tzerempoulon had disappeared by then, but they do show several quays of the kind Dapper mentioned⁴² (Plates Ia,b and IIa).

There is only a slight indication of the stump of the Tzerempoulon on the *Plan d'une partie des murailles* (Plate Ia) protruding from the south corner of the western tower at Top-Hane, and since J. Anagnostes describes it as existing in 1430,⁴³ it must have been neglected and allowed to disappear after the capture of the city by the Turks.

The probable date of the construction of the Tzerempoulon is discussed below.

IV The Souda and the Ekklesiastike Skala

In the second book of the *Miracula* of St Demetrius there is an account of an attack (one of several) made on Thessaloniki by the Slavs in the 7th century.⁴⁴ Two extracts throw light on the nature of the city's seaward defences at that time:

"They then dug a ditch near the famous church of the immaculate Theotokos near the harbour, since that place was unwalled, as everyone knows, and the boards pierced with pointed nails were prepared and concealed in the ground. Only a little material had been employed in their construction so that the enemy, about to rush to the attack, might not see these devices and so fall on them. Then on the *molos* leading to the harbour, also unwalled, they built a breast-high wall of planks and logs, and the rest of the defensive ploys and offensive machines were made ready."⁴⁵

"Those of the barbarians who were braver at seafaring and more courageous in battle charged with their ships towards the places they had in view, some to the tower to the west of the *Ekklesiastike Skala* where there was a small door, others to the unwalled part where there was the *souda* and the

40. *Les isles de l'Archipel* (Amsterdam 1703) p. 346.

41. The original edition, *Beschryving der eilanden*, was first published in Amsterdam in 1688.

42. Dapper's own view of "Salonichi", *Les isles*, p. 30, verges on the fanciful.

43. See note 10.

44. For an up to date bibliography of the Slav wars, see R.S. Cormack, *BSA* lxi (1969).

45. Migne *P.G.* cxvi, 1328-9.

device consisting of hidden stakes fitted with nails, called *teila*. The latter hopefully anticipated, in their ignorance of these devices, that they would be able to enter the city that way, the former that they could more easily break down the door and thereby bring about the capture of the city.”⁴⁶

Certain features of this narrative call for comment: the *molos* and the *souda*, the *Ekklesiastike Skala* and the *teila*.

It is clear from the extracts just quoted that two sorts of defensive preparations were made. First of all a ditch was excavated near the church of the Theotokos near the harbour, since a wall was lacking in that quarter. Mines were hidden in the ground, made from a small amount of material in order to make them the less visible, the intention of the defenders being to *tempt* the enemy into attacking at that point. Secondly, a palisade was built on the *molos* leading up to the harbour (ἐν τῷ ἐκεῖσε μολῳ). I.e. a visible feature was constructed with the intention of *dissuading* the enemy from attacking the *molos* (the sea front between the eastern end of the harbour and the eastern land wall. This stretch—the present Leophoros Basileos Konstantinou—was known in the late 19th century as the Μῶλος.⁴⁷ It was presumably a traditional name for this part of the city, retained over the centuries as in the case of the Hippodrome area). Then the enemy attacked. Some of them made for the tower in the west, others, in their ignorance of the hidden mines were tempted to make for the unwall part where the *souda* lay. In other words, they fell for the defenders’ trick and made for the ditch, not the palisade. The *souda* then, must be the ditch,⁴⁸ and not, as Tafrali translates it, the “port,”⁴⁹ nor as F. Dölger would have it, the palisade.⁵⁰

Since a church of the Theotokos was mentioned near the harbour in the first extract, it is natural to connect the *Ekklesiastike Skala* with it. There is no need to assume, as Theokharides does,⁵¹ that the *Ekklesiastike Skala* was a gateway into the harbour. Indeed, in view of the fact that the ditch *souda* was built near the church of the Theotokos “since that place was unwall’d”, a gate is unlikely. The term *Ekklesiastike Skala* probably referred to the harbour as a whole, or perhaps to a landing stage in it. The whereabouts of the eponymous church are unknown. It cannot in any case be, as Theokharides

46. *Ibid.*, 1329.

47. “Ἡ Θεσσαλονίκη πρὶν ἀπὸ τὸ 1912”, *Album of the Thessaloniki International Fair* 1962, p. 193.

48. H. Grégoire comes to the same conclusion in *Byzantion* xii (1937) pp. 297-8.

49. *Op. cit.*, p. 19.

50. “Der Titel des sogenannten Suidaslexikons” *SB München, Phil.-hist. Abt.*, 1936, Heft 6.

51. *Op. cit.*, p. 13 and *plan hors texte*.

suggests,⁵² the church of St Menas, of which the earliest written record is of the 9th century,⁵³ and of which the earliest visible remains were dated by Tafrali to the 8th or 9th centuries.⁵⁴ Nor can it have been the church of the Virgin postulated by Tafrali⁵⁵ on or near the site of the Hamza Bey Camii⁵⁶ (the Alkazar), for it would be too far away. Nor can it have been on the site of the Catholic church, which was probably first used for religious purposes in 1744.⁵⁷ The answer must be that we just do not have enough information.

It is certain that the Tzerempoulon had not been built in the seventh century, for otherwise such an attack on the harbour as that made by the Slavs in dug-out canoes⁵⁸ would have been impossible. A breakwater had, however, been built by 904 when Cameniates describes the harbour as being rectangular⁵⁹ with a wall to keep out rough seas⁶⁰ and when its passage was shut off by means of a chain and sunken ships.⁶¹

The word *τείλα* requires some explanation. There is clearly a connection between the mines mentioned in the first extract and those of the second. The description of the former reads: ἡ τῶν πουλπίτων διὰ γονατίων ἡλωτῶν μηχανή. The word *πουλπίτον* is unusual, but is not too difficult to explain. It is a Latin loan word, from *pulpitum*: a stage made of boards.⁶² There is a post-classical word *pulpitare*: to cover with boards,⁶³ and *πουλπίτον* here probably means simply "board." Boards or planks pierced with pointed nails and hidden beneath a layer of loose earth would be an effective obstacle to a besieger. The same device is referred to in the second extract in these words: ἡ τῶν κρυπτῶν τῶν τείλων λεγομένων ἡλωτῶν ἐτύγχανε μηχανή. Again we learn that it is concealed, again it is fitted with nails, and again we are concerned with an unusual word *τείλον*. My attention has been drawn⁶⁴ to Caesar's arrangements at Alaesia where a similar device was employed:

52. *Ibid.*, *loc. cit.*

53. M. Gedeon, "Βυζαντινὸν Ἑορτολόγιον", *Ὁ ἐν Κωνσταντινουπόλει Ἑλληνικὸς Φιλολογικὸς Σύλλογος* xxvi (1895) p. 289, cited by Tafrali, *op. cit.*, p. 176.

54. *Op. cit.*, p. 177.

55. *Ibid.*, pp. 191-2.

56. See Figure 3.

57. Vacalopoulos, *op. cit.*, (see note 1), p. 96.

58. "ἄσπερ κατασκεύασαν ἐκ μονοδένδρων γλυπτὰς νῆας". *Miracula* ii.

59. *Op. cit.*, ch. 4, p. 491.

60. *Ibid.*, ch. 4, p. 492.

61. *Ibid.*, ch. 25, p. 521.

62. For classical usage, see Lewis and Short, *s.v.*

63. Apollinaris Sidonius (d. A.D. 448) *Epistulae* 8, 12.

64. By Dr E.W. Marsden.

"ante haec taleae pedem longae ferreis hamis infixis totae in terram infodiebantur mediocribusque intermissis spatiis omnibus locis disserebantur; quos stimulos nominabant."⁶⁵

It is interesting to note that Caesar uses the word *taleae*: sticks or stakes, into which nails were stuck. The possibility that there might be a connection between τεῖλον and *talea* surely deserves consideration.^{65a}

V The Constantinian Harbour

In Hellenistic times there had been a Macedonian *neoria*⁶⁶ at Thessaloniki, but according to Zosimus,⁶⁷ writing in the reign of Theodosius II, there was no harbour as such until Constantine built one in 322. There is no reason to doubt Zosimus' statement. He was no friend to Constantine and would hardly give him the credit for something he had not done. What Constantine's building operations involved we cannot say. When Cameniates speaks of the Romans building a φράγμὸς against Xerxes,⁶⁸ did he in fact have activities earlier than the seventh century in mind? It is difficult to tell.⁶⁹ His words that "an attack was never contemplated in that quarter"⁷⁰ are perhaps significant. It seems probable that in early times there were only *ad hoc* arrangements to meet specific threats.

VI The Sea Wall in 1185

Enough has now been said to afford a tentative reconstruction of the plan of the maritime defences of Thessaloniki at the time when they were first built. They were only partly built in 904, but there was undoubtedly an

65. *BG* xii, 73.

65a. Professor P. Lemerle, however, while agreeing that the devices described by Caesar are similar to those of the *Miracula*, tells me that he does not think that there is sufficient palaeographic justification for *taleae* becoming τεῖλων.

66. Livy xlv. 10. Cf. L. Lehmann Hartleben, "Die antiken Hefenanlagen des Mittelmeeres", *Klio*, Beiheft xiv (1923) p. 285.

67. "καὶ τὸν ἐν ταύτῃ λιμένα, πρότερον οὐκ ὄντα κατασκευάσας", *Historia* ii, 22.

68. *Op. cit.*, ch. 8.

69. Cf. A. Struck's observations on Cameniates, *Byz. Zeitschrift* xiv (1905) p. 537: "Seine Kenntnisse von weltlichen Dingen sind beschränkt, was aus seinen geschichtlichen... Vorstellungen hervorgeht."

70. *Op. cit.*, ch. 8.

imposing sea wall in 1185. Archbishop Eustathius ⁷¹ speaks of walls along the shore in his narrative of the capture of the city by the Normans in that year, and Tafel ⁷² suggests that the fact that the Normans did not make their attack from the sea, even though they had at least 200 ships, implies that walls of a suitable height had been erected (though it should also be said that since it was summer the water near the walls was too low for ships to approach very closely).

A rectangular tower and a short stretch of the sea wall were found in 1966 at the corner of Odos Proxenou Koromila and Odos Vogatsikou, some fifty metres from the present shore. ⁷³ The tower consisted largely of re-used marbles, partly worn away by the action of the sea. Among these was a marble slab with a representation of a griffin dated by S. Pelekanides ⁷⁴ to about the 11th century. H. Hunger ⁷⁵ suggests that this implies a repair to a gap in the walls carried out in the 12th century, but it could equally well provide a *terminus post* for the construction of the first permanent sea wall. No information concerning the stratigraphy of the site has been published and since the tower has been demolished, one cannot be sure whether the griffin slab belongs to the original wall or not. In view, however, of the fact that the wall must be 10th century or later, there seems to be no reason why it should not belong to the first sea wall.

Figure 4 shows as much as can be stated with any certainty of the Harbour area as it was in 1185. There are two towers, one to the east and one to the west of the harbour, the mouth of which is protected by a jetty, the later Tzerempoulon. ⁷⁶ A wall with at least two gates runs around the harbour, while inside can be seen something of the more important streets. One street runs just inside the west wall, passing the Golden Gate to the north before turning east at the West Tower. Then after passing the Gate of Leo it continues to the east past the church of St Menas. The Harbour Gate provides the focal point for three more streets. One leads straight off to the east, another goes south

71. S. Kyriakidis, *Eustazio di Tessalonica, La espugnazione di Tessalonica* (Palermo, 1961) ch. p. 59.

72. *Op. cit.*, 189.

73. *Archaeologikon Deltion* xxii (1967) Chron. 397, pl. 301 c-d, and *Makedonika* ix (1969) Chron. no. 59, figs 13-15.

74. In a letter to H. Hunger quoted in the latter's *Die Normannen in Thessalonike* (2nd, ed. Graz/Vienna/Cologne, 1967) p. 160.

75. *Ibid.*, *loc. cit.*

76. I have assumed that there was a tower at the east end of the Tzerempoulon.

to the East Tower, while another goes north where it soon joins streets which were probably first planned in Hellenistic times. It is possible that there were other gates from the city to the harbour (the southern end of the street to the west of the Gate of Leo looks a likely place) but it seems certain that there was no gate of any size on the sea front outside the harbour.

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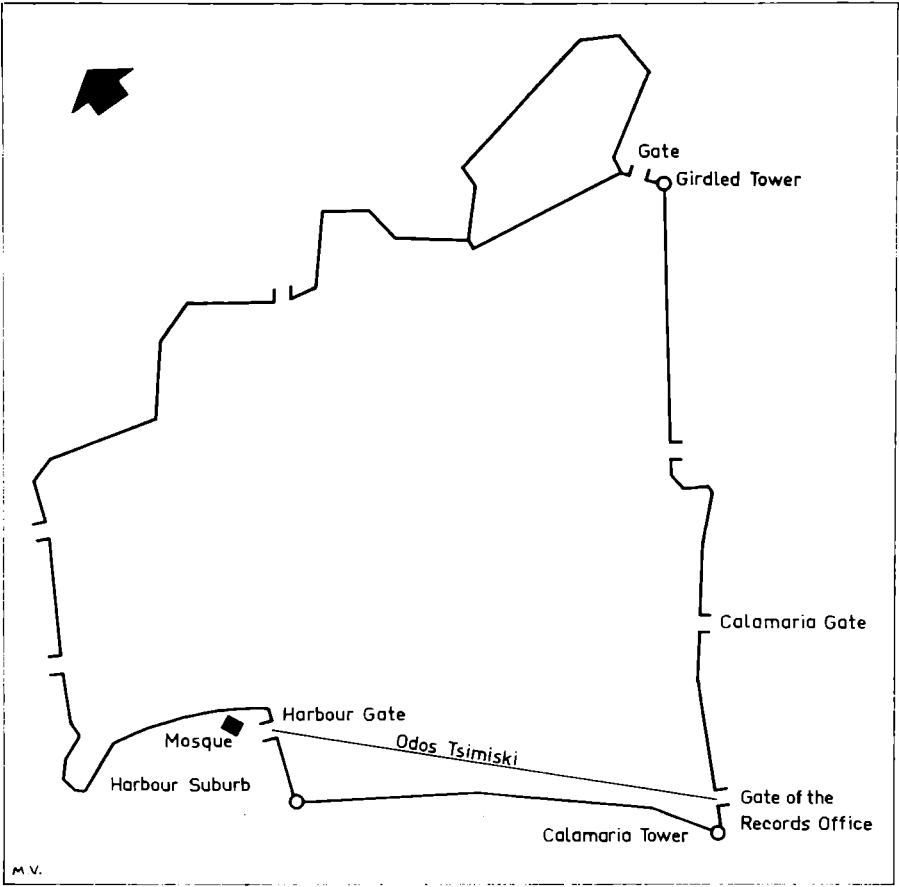


Figure 2.

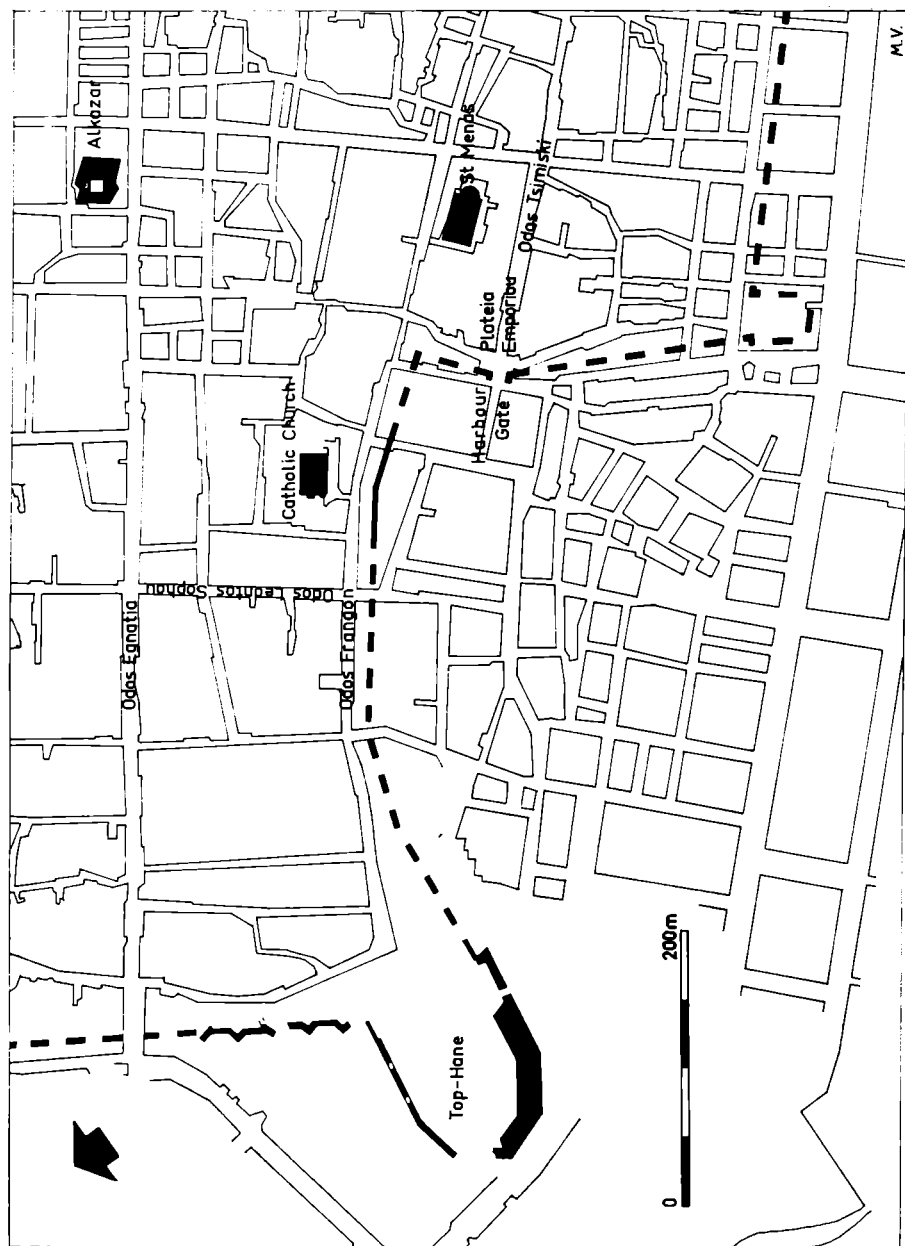


Figure 3

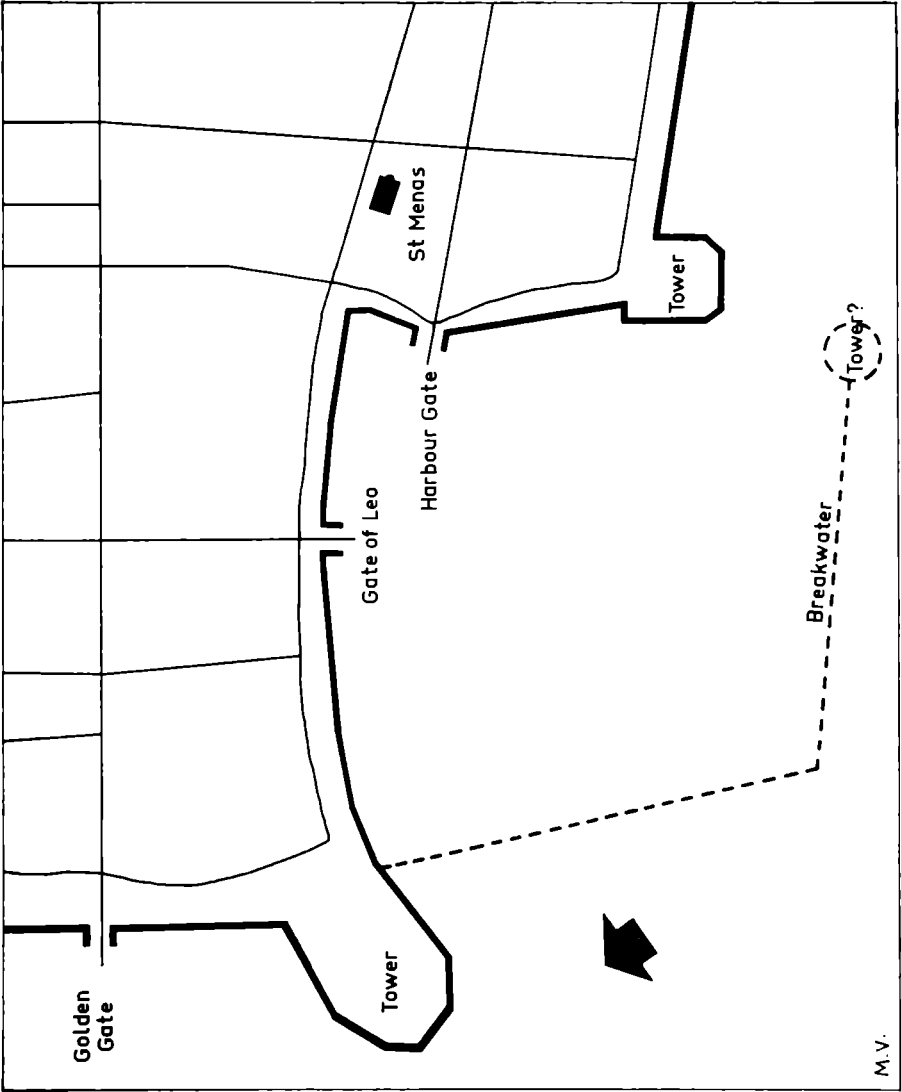
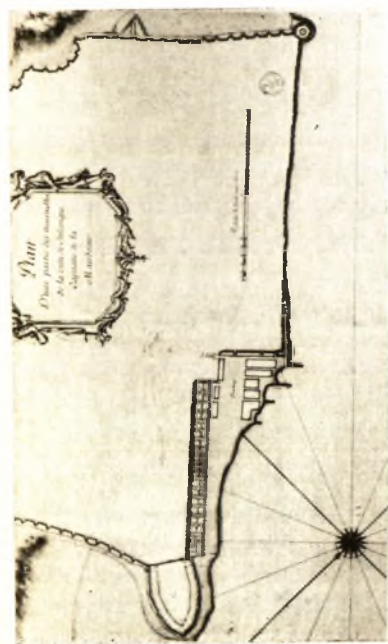
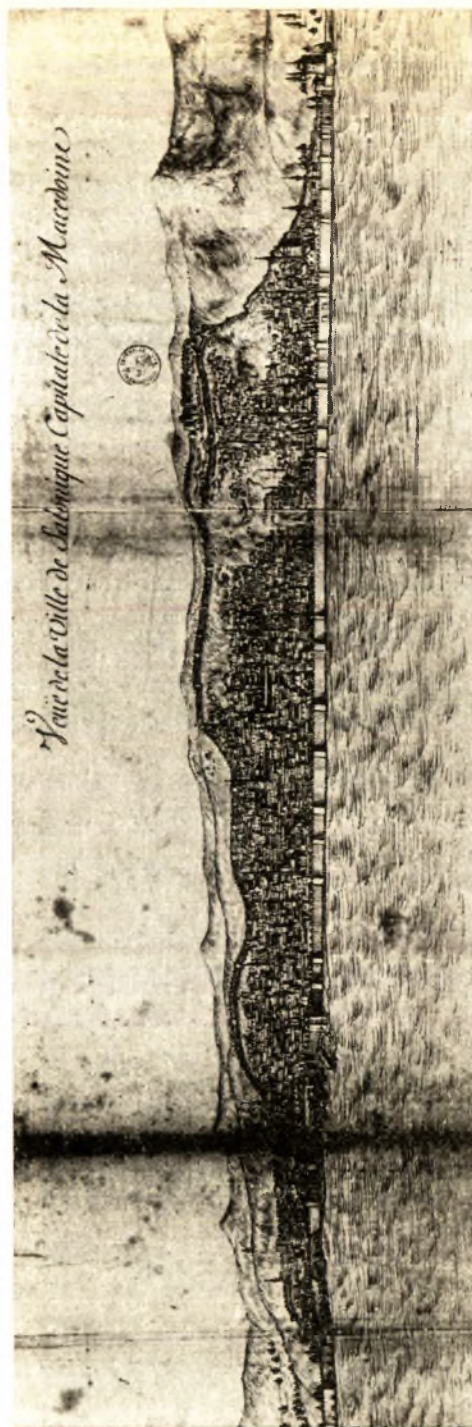


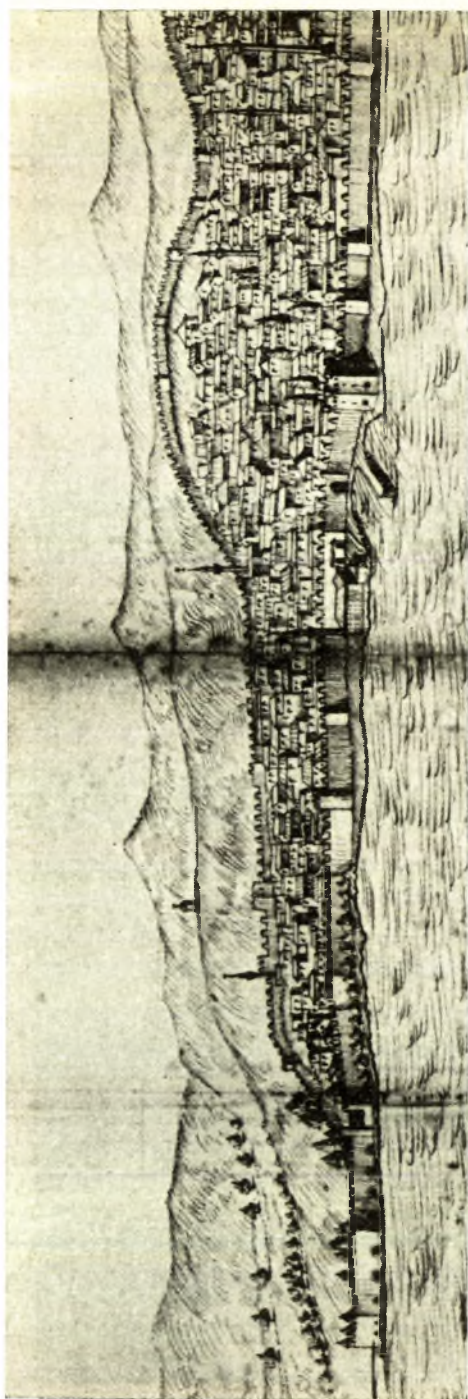
Figure 4



Part of the walls of Thessaloniki.
a. Plan of Thessaloniki in
1686 by Gravier d'Otterès.



b. View of Thessaloniki in 1686 by Gravier d'Otterès.



a. Detail of Plate I b.



b. View of Thessaloniki in 1780 by Andrew Elton.