With the collapse of the ancient world, many famous buildings were destroyed, ransacked and ultimately lost, whether completely or in part, leaving a vacuum, which in many cases now excites considerable historical curiosity and elicits research. As a part of history, archaeology makes strenuous efforts to reconstruct a picture of these lost monuments and the Throne of Apollo at Amyklai is just such a case. The objectives of this article are on the one hand to present the facts relating to the problem of reconstructing the buildings in the sanctuary and on the other to analyze the problem-solving methodology that we are using in the programme. Within the constraints of this article some basic issues, arising not only from reading Pausanias’s text but also from the current interpretation of the evidence provided by the site and the ruins, will be discussed.

The ruins located today on the archaeological site of the sanctuary of Apollo Amyklaios make up a large-scale complex consisting of individual monuments from different periods. The extent of the sanctuary is defined partly by a monumental retaining wall, which constituted its peribolos (enceinte). Within the enceinte and more or less in the middle one can see the part of the structure’s foundations that was uncovered in the well-known excavations of the German Archaeological Institute and which was thought to be part of the crepidoma of the Throne. The remains of structures from Late Antiquity and the Middle Ages with successive phases and repairs and evidence of tombs from various periods cover a large part of the sanctuary. Different carvings on the rock render the picture of the archaeological site even more complex. Stones of various kinds are scattered around. Prominent among these is a group of marbles that have been identified as belonging to the altar, which was probably a round-shaped structure. In terms of size the limestone blocks which have been adapted to fit a structure that postdates the Throne are imposing; they are thought to come from the cult statue of Apollo. The expanse of time covered by the monuments reveals the profound history attached to the site of the ancient sanctuary, while the imaginative way in which the figures have been treated and the impressive stone-carving technique used in creating these reliefs reveal the artistic status of the structures that made up the sanctuary.

Despite the fact that the site attracted scholarly interest from an early stage, on account of the many references in the ancient authors and the importance the celebrated cult centre had for the ancient Spartans, the puzzle as to the original form of the buildings in the sanctuary has not yet been satisfactorily resolved. It is clear that any attempt to reconstruct the original form of the buildings faces an exceptionally complicated state of affairs. In the middle ages, as all the excavation findings indicate, the ancient buildings of the sanctuary or what was left of them were completely dismantled. Indicatively, according to reliable calculations, the peribolos wall was despoiled of about 90% of its overall material (fig. 1). The built structures of the sanctuary were systematically stripped of their stone, which was re-used in buildings that could be a considerable distance away. Remains that survived by chance became buried in the sloping ground. Anything that survived from the Throne structure was incorporated into the post-Byzantine chapel of St Kyriaki. There were...
many reasons for the extent of the destruction. The construction was situated on the top of a hill, so there would in any case have been no silting up if the site were abandoned, leaving the remaining parts exposed. Moreover, proximity to medieval settlements (Sklavochori, Tsaousi etc.) and ease of access exacerbated the damage. Similarly, the presence of lead and iron in the joints of the superstructure and of valuable tufa\(^9\) in the foundation of the Throne was partly responsible for the way it was plundered for spolia. The fact that the site was in continuous use and the ongoing process of alterations made to the various structures resulted in a continual recycling of the stone material. Most of the marble architectural members are in fragmentary condition, requiring careful handling, and making it time-consuming work to compare them. Although the overall dimensions of the Throne are still a matter of conjecture for reasons that will be explained below, there is no doubt that only a very small amount of the architectural members have been preserved. Another real problem faced by archaeological research is the fact that the pieces are scattered.\(^10\) The Amyklaion marbles are currently either in storerooms, or somewhere on the site or even immured in churches. This dispersal makes it difficult to assemble, record and compare the pieces with one another. The problems are getting worse by the unusual structure of the Throne (a building in the form of a seat). Clearly a construction such as this is not subject to the well-known typological rules that govern, for example, a peripteral temple. Its form was unique. This hypothesis is supported moreover by the acknowledged rarity of the form of the architectural members. However, there are problems associated both with the history of research into the site and the issue of the protection of the remains in the previous century. Famous archaeologists (Tsountas, Furtwängler, Fiechter, Massow, etc.) have laboured to save this renowned sanctuary from oblivion, coming to some striking, if not always entirely safe conclusions. Acknowledging the circumstances of what was an early period in
the history of archaeology, we can only say that in the end there was insufficient documentation of what went on, on the site. Nevertheless, we must acknowledge the value of the German scholars’ work. They tried to resist the lure of a one-dimensional theoretical approach, something which still seems to hold sway nowadays in many ambitious reconstruction projects relating to the monument, complicating the Amyklaion question with a vast mass of data. The length of time that has passed since the excavations and the lack of any real protection have undermined the general state of preservation of the site even more. It seems that the ruins uncovered by Tsountas were plundered to supply material for an extension to the first church of St Kyriaki, depriving later scholarship of some important evidence. Many of the marbles that Fiechter found intact are now in fragmentary condition. And there is a number of examples of architectural members, which had either been left on site or were found in the settlement of Sklavochori, being completely lost.

The in situ finds from the material of the Throne resulting from the excavations are limited. We shall attempt to overcome the lack of a baseline, which the discovery of foundations would have provided, by making use of the architectural members and taking a more detailed look at the other evidence. This way of working means not relying on a one-dimensional approach, i.e. just making drawings, to create a graphic reconstruction. Tasks such as the stripping of plaster from surfaces, removing architectural members from walls, the lifting of stones, transportation and re-assembly of fragments are being carried out.
with scrupulous attention to detail and a view to making as careful a study of the marble surfaces as possible. The process of defining the developmental stages includes documenting architectural members, comparing architectural forms on plan, putting together small architectural elements (steps, columns, entablatures, door frames), and the redrawing of a definitive or approximate reconstruction plan. The aim of the operation is to assemble larger units from the individual architectural members, allowing a partial reconstruction of the buildings (figs 2, 3). The form and dimensions of these units must be reliable. To this end some typical stones, capable of representing specific groups of architectural members, have been assembled, conserved and finally put into some initial arrangements or experimental compositions, so as to determine the relative positions of architectural members on the site. Identification of the architectural members from the sanctuary has been confirmed by the documentation project that was carried out beforehand as part of the programme. These pieces are categorized according to type of material, the working of the surfaces and any special morphological or constructional details.

Even in recent times there has been a tendency to rely on theoretical interpretations of Pausanias’s text. This has yielded a vast amount of information and led to some rather contradictory conclusions. The variety of conclusions that have emerged from this line of enquiry bear witness to the folly of basing an investigation on interpretations of this in any case enigmatic text. Some great philologists have interpreted Pausanias in entirely different ways.
In most reconstructions, because they were based exclusively on the ancient traveller’s account, the role of decoration has been most definitely “over emphasized”. It is well known that Pausanias focused on the mythological and symbolic content of the buildings and paid much less attention to the architectural aspects of the structures that had such content. Without doubt the tendency in earlier research to take the easy way out and rely over much on theories and imaginative reconstructions was encouraged by the lack of sufficient ruined foundations to provide strong and fixed Geometric evidence. Moreover the ambiguous words used by Pausanias (θρόνος, ταφός, βομος, ευρυχορία, etc.) have been interpreted accordingly, leading to different models of reconstruction. Even nowadays those interpretations are given equal status as sources of “inspiration”; they cannot constitute the sole means of arriving at a correct, scholarly reconstruction.

Pausanias describes what we might describe as a “speaking” building; a building which depicts many figures and describes many myths through its decoration. That is what impresses him. He describes the figures in detail and with an eye to the art, yet without giving any specific facts about the building. There is no information on the materials. Any information on the building emerges indirectly and in relation to the description of the figures. Thus interpreting Pausanias’s phrases and descriptions turns out to be a risky business. We could divide up the information his text provides into details about the arrangement of space and details about the figures and scenes. From reading the text it emerges that the Throne had four sup-

Fig. 4. Marble lion foot and cushion formed marble covers. Sparta, Ardamis Storeroom.
ports, i.e. pilasters or piers. Then, counting up the figures mentioned, it can be ascertained that the Throne was decorated with 28 figures on the outside and 14 on the inside. The “upper limits of the Throne” had two registers and on “the very top of the Throne” there was yet another. From the description of the parts where “the god would sit” it emerges that there was a symmetrical, probably broad-fronted, arrangement with spaces between the seats, with the central (or middle) seat being the widest. It is not clear whether the seat surrounds the god. Moreover, since Pausanias mentions that the statue is “ancient”, it follows that its base must also be old. Thus Vathykles was not starting from scratch. The statue was a wooden abstract depiction clad in bronze. It is clear that Pausanias is appraising the figures aesthetically and he categorizes them chronologically. Moreover, in noting that: “the base of the statue looks like an altar” and that “Hyakinthos is said to be buried there” it transpires that the statue’s pedestal was probably a structure made up of a base, the main part and an upper part, was cube-shaped or a parallelepiped, large enough to support the statue both in terms of weight and proportions, and big enough to accommodate a funerary chamber, i.e. with an empty space inside the base.

To make sense of the one basic fact Pausanias gives us, i.e. that he was confronted with a throne and one which resembled the throne of Olympian Zeus, it is necessary to analyze the basic elements that characterize a structure of this type. A throne is a cube with a back, with or without arms. An invariable feature of this sort of item of furniture are the zoomorphic terminals on the supports or the...
lower edges. There are an infinite number of variations on this basic formal composition. The cube and the back or arms can be openwork with a great many vertical supports or just a few, or it may be solid. There may be a footrest. The sides of the seat are divided into at least two or three parts. Pausanias states quite clearly that he is looking at a Throne. He is not talking about a functional building. It is a Throne for an upright figure. He states clearly that the god could sit on it. Constructing some initial premises as to what at least the scale of this structure might be, let us start from the only measurement Pausanias gives us: i.e. the height of the cult statue of the god, given as 30 cubits,\(^2^5\) approx. 13.30 m. Based on the usual relative proportions of a chair to its occupant the height of the seat would be about 3.50 m.\(^2^6\) We should stress that the height of the base must be added to the chair, suitably proportioned to give a natural look to the final result. We should also stress that Pausanias emphasizes that it disturbs the
naturalness of the figure. Martin says that Pausanias's descriptions are neither systematic, nor strictly logical and that he is working on first impressions and a succession of images. But could it also be that the structure does not help him organize his description? Might its unusual form and its surprising resemblance to a throne hinder the describing? In commenting on Pausanias's description of the reliefs Martin firstly suggests that he is not writing about the whole composition and that the scenes he describes are part of a continuous frieze. And this is not a random judgement but part of a more general attempt to set the Throne in a particular context on the basis of certain Ionian influences on the Throne, which proceed from the "position that [...] the Throne is entirely Ionian in conception and is directly comparable with constructions such as the Pergamum altar". Yet Pausanias states: "[...] If I were to talk about each of the reliefs in detail, I would tire my readers [so] I will mention them briefly [...]". This could very well mean that he describes them all but with no further analysis. Moreover, we would point out that he refers to the scenes sequentially, in other words he does not relate the depictions one to another or put them together, as would be the case with a frieze or the way he usually describes the compositions on a pediment. Pausanias described a throne, but what do the architectural members suggest? The architectural elements of the Throne (columns, cornices, entablatures, doors, orthostates) are elements that play an entirely functional role in an Archaic building. However, in this building there are some parts that have a visual connection with the components of a 'seat'. These are the lions' feet29 and other components.30 In this respect many people have thought that the consoles are part of the elements associated with the arms.31

Another issue at the heart of the debate is whether or not the Throne was more than one storey high. Usually in buildings with several storeys we see a proportional reduction in the size of similar architectural members.32 There are few exceptions. Massow and Delivorrias have described in situ foundation as "inadequate" to support a series of floors in that particular part of the structure. Massow thinks that the delicate members belonging to the Throne suggest a single-storey structure, while he also notes that certain cornices33 can be supposed to belong to an upper storey. Buschor juxtaposes a reconstruction of an one-storey Throne with an elevation of the entablature. Martin also suggests an one-storey Throne.

Fiechter depicts a two-storey Throne. The double skin wall is 72-78 cm thick, i.e. it exceeds the usual weight-bearing requirements of a conventional, one-storey, stone structure and points to the construction being considerably higher.34 There is another marble stone from the top of a wall which supported beams and is ca 60 cm thick, the back of which is unworked. From this we can conclude that it was part of a wall with a minimum thickness of over 70 cm. We think this wall could have been the 'back' of the Throne. Based on this information and the fact that reference is made to a 'high rise' Throne, it can be deduced with relative certainty that there were levels of the construction above the ground floor. From another fragment of a cornice, which has been discussed in the past, we know there was a small internal open-air space, i.e. a courtyard. Moreover in the 2009 excavations two fragments were found from a small beam which gives us the exact width of a narrow side chamber or passage-way: 95 cm. Furthermore, inside the Throne structure, according to Pausanias's account, was the base of the cult statue, which we can assert with relative confidence measured 3.00 m x 3.00 m.35 And because we know that there was a corner colonette, which must have been in a different place from the lions' feet, which occupied the outer edges of a built structure, it transpires that in addition to the outer shell there was another internal one that surrounded a courtyard, an inner chamber and, of course, the base of the cult statue. The idea of a double shell is entirely in accordance with Pausanias's descriptions of the figures.36 From them it can be concluded that Fiechter's suggestion that the Throne measured ca 6 m x 6 m does not stand up to scrutiny. Valuable evidence is derived from an accurate assessment of the present site of later buildings which are continuations of or at right-angles to the ruined foundations of the Throne. In the middle ages an apse was fitted into the ancient foundation.37 The axis of the apse was at right-angles to the foundation and the lowest extant part of it is made up of conglomerate, which probably came from the underpinnings of the central part of the Throne.38 At the north west of the continuation of the line of the foundations the massive stones of the base form a right angle on the ground plan.39 To the east and at right angles to the extant part of the foundations a tomb has been placed at some unknown later period, consisting of two rectangular chambers. To the north there are the foundations of a strong wall which is also built of con-
glomerate, of the same kind as that in the apse. It is clear that these remains, like others from later buildings to the north or parts of the peribolos to the south and east follow a regular system of alignment based on the Throne, as can be deduced from the direction of the surviving part of the crepidoma. In other words, when these later additions to the Throne were built, the remains of the crepidoma were still standing and were important factors in the alignment of the new structures. The extent and form of the existing ruins are due largely to the fact that the church of St Kyriaki was built over them. By careful scrutiny it can be ascertained that the width of the church was determined precisely by the length of the extant ancient structure. This clearly shows that the fitting together of the various phases of construction is to some extent a determining factor in what will be preserved over time. The most likely scenario is that the ruins of the Throne were dismantled bit by bit in order to build later structures. The process of dismantling of the structure was dictated by what the structure offered at that time, both in terms of its material and its general form. The building that replaced the Throne, which according to Tsountas was a basilica, though this has not yet been confirmed, seems at least in part to have been fitted into the ruins of the Throne, which was at the same time supplying its partial extension with building materials. A later wall, which at one point consisted of stones from the base of the cult statue, was aligned with the pre-existing line of the crepidoma. The suggestion that the crepidoma extended as far as the spot where the recycled stones from the base of the statue were set in the rebuilding establishes the maximum extent of the Throne at the time of the conversion. Furthermore the site of the later tomb, set at right angles to the ruined crepidoma, marks the eastern limit for the development of the original Throne structure. Subsequent research is required to show if these boundary lines are firm indications of the total area occupied by the Throne structure.

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* Our thanks to the Benaki Museum, to the Director of the Amyklaion Research programme, Prof. A. Delivorrias, the archaeologist responsible for the programme, S. Vlizos, and Prof. M. Korres for their invaluable assistance. Thanks are also due to the staff and especially to the former Ephor of the 5th EPCA, A. Vasilogambrou, for their generous support. We must also mention the crucial contribution made in conserving the marbles by marble technician D. Lambros and his colleagues. We would also like to thank our colleagues M. Skoufoglou, P. Gatsopoulos and D. Kesisoglou for their help with architectural drawings.

1. The wall that surrounds and defines the boundaries of an ancient sanctuary. When there is no peribolos the extent of the sanctuary is marked with stone boundary markers. Up to now no such markers have been found at the Amyklaion nor at any monumental structures in the wider area, so this strong wall must be assumed to be the sanctuary’s enceinte. See entries A. Orlandos – I. Travlos, Λεξικὸν ἀρχαίων ἀρχιτεκτονικῶν ὅρων (Athens 1986), s.v. Περίβολος, Όρος.

2. A petrographic survey is being carried out by the Stone Centre of the Ministry of Culture.

3. The foundations of this structure were discovered by Tsountas in the 1890 excavation. See Tsountas 1892, 15. In 1894 Prof. P. Wolters made a printed sketch of this foundation, which was subsequently published by Fiechter, see Fiechter 1918, 132. The remains of the foundation must have been dismantled to get material for the construction of a bench in the church of St Kyriaki, which, as can be deduced from the sequence of published photographs, was built a few years later.

4. See the article by M. Korres in this volume.

5. On the sanctuary’s importance, see Delivorrias 2009, 133-35.

6. A number of cases of stones from the Amyklaion being used in neighbouring monuments are attested, mainly after the 11th c.

7. In Sparta (7 Othonos Str.) fragments were identified by Fiechter (inv. no. Fiechter 55α) built into a house. There is evidence that even at a distance of 15 km stones from the Amyklaion have been found.

8. The chapel was demolished in the early 20th c. to facilitate the archaeological research being carried out by the German Archaeological Institute, see Fiechter 1918, 119 fig. 12.

10. The numbers are revealing. To date the number of marbles from the Amyklaion preserved intact or in fragmentary condition is as follows: 28 on display in the Archaeological Museum of Sparta, 83 in the Ardamis archaeological store-room, 60 scattered on the archaeological site, more than 64 built into the church of St Kyriaki, more than 25 immured in the church of Prophitis Ilias, 4 in the church of the Sts Theodore, 10 in the church of St Nicholas and about 20 built into other sites. From the 2009 and 2010 excavations another 9 and 7 marbles respectively emerged.

11. Excavation has shown that the areas that had been dug in the past were more extensive than it would appear from the excavation reports.

12. The removal of marble blocks from one whole course of a step from the only uncovered part of the foundations is a typical example. Massow also looked for these stones. See Buschor – von Massow 1927, 65.

13. E.g. an orthostat (inv. no. Fiechter 27), found broken into two fragments, which were subsequently put back together (no. in Research Programme 27+53).

14. Massow mentioned this phenomenon. A typical example is a capital with a relief scene. Of the 16 stones from steps that Fiechter identified only 5 have been found. The rest were broken up and used as building materials in the new church of St Kyriaki.

15. E.g. a stone outside St Nikon (inv. no. Fiechter 63).

16. To date work has been carried out to remove plaster from the church of St Nicholas in Amykles and St Kyriaki on the archaeological site.

17. This includes the proposed work to remove stones from the walls of churches in Sklavochori. See Bilis – Magnisali 2009.

18. E.g. taking up stones from the permanent exhibition of the Archaeological Museum of Sparta to examine and document hitherto hidden sides.

19. E.g. the use of stone gudgeons.

20. E.g. there is still no agreement as to the host of figures Pausanias enumerates.

21. E.g. “[...] at the upper limits of the Throne”, “[...] on the very top of Throne”, “[...] if one goes underneath the Throne”, “at the end there is [...]” “[...] Where the god would sit the Throne is not continuous but has a number of parts for seating and next to each there is some space while the middle part is the widest and that is where the statue stands upright [...]”, “[...] a statue of 30 cubits”, “[...] on one side”, “[...] and on the other”, “[...] under their horses”, “[...] on Castor’s side”.

22. “[...] Excluding the face, the hands and feet it is shaped like a bronze column [...]” “There is a helmet on the head and a lance and bow in the hands [...]”, etc.

23. There are even different interpretations on the mass of figures. Martin thinks that the decoration is part of a continuous frieze.

24. Massow made the same observation. See Buschor – von Massow 1927, 75.

25. According to Pausanias the statue had a height of 30 cubits. See Paus., 384, 387. On the basis of this information the height can be calculated as 13.30 m (30 x 44.355 cm [= a cubit]). For ways of measuring in Pausanias’s time, see Adam 1989, 43.

26. Without backs. So the cube would have 3.50 m sides.

27. A typical example is his aside on the width of the seat, which he is at pains to point out distinguishes the Throne he is looking at from a ‘normal’ throne.


29. Korres located the lions’ feet in the courtyard of the Museum of Sparta. The details of their construction and the type of marble link them with the stones from the Amyklaion.

30. Imitation of a pillow. The way these stones are arranged to fit the projections and corresponding recesses, paying special attention to sealing the joints, and the fact that their arrangement corresponds to the signs of thrust from vertical surfaces does not support the hypothesis that these stones were part of the crowning of the peribolos.


32. Only in stage scenery can the order of an upper storey consist of larger-scale elements than that of the ground floor.


34. Moreover we should not overlook the fact that Pausanias’s use of the word “uppermost” in connection with this structure points to vertical growth.

35. See M. Korres’s contribution to this volume.

36. Twenty-four of these figures would be on the outside and twelve on the inner shell, probably representing half the composition.

37. Which can be ascertained from a macroscopic inspection of the plaster used in the construction.

38. These particular stones were attributed to the peribolos in the past. The system of grooves seen on the stones from the foundations and on the marble slabs of the floor is also seen on the stones found built into the apse-shaped later addition to the south face of the crepidoma. We had already asserted that the conglomerate stones that made up the apse in the vicinity of the Throne did not belong to the peribolos, as earlier scholars had asserted. We had ascertained that these stones displayed certain Geometric characteristics, such as their height, which shows that they belonged to a construction that had been dismantled in order to build the apse. Moreover the grooves on these particular stones turned out to be additions and not the same sort of grooves as those found in the system employed in the southern part of the peribolos. In other words these stones, which all have the same height and the same construction details, are a distinct group.
39. It remains to be demonstrated whether the apse and this corner belong to the same historical phase, though we believe that to be the case.

40. Unsurprisingly when the ruins were uncovered after the church was demolished quite a lot of material was lost.

41. The same phenomenon, i.e. a building being adapted to a pre-existing system of alignment in a structure whose dismantling provided the material for a new arrangement, is seen in the church at Gyroulas on Naxos. In that case the basilica followed the outline of the original building. If for any reason only the ruins of the later development survived, that would establish the limits of the pre-existing structure or at least the framework within which it should be sought. At Amyklaion this was simply because the massive stones from the base were used in the later development.

39. Απαιτείται να δει εάν η κομητη παραμένει σε ευθεία με την θέση του αρχικού κτηρίου, όπως είναι συμβατική στην αρχιτεκτονική περίοδο.

40. Αντιστοίχως, όταν οι ερείπιες του ναού καταρρέθηκαν και η κατασκευή του ναού επέλεξε να επιλέξει την θέση του αρχικού κτηρίου, τότε το νεοσύστημα είχε νομικά και στρατηγικά έργα στην αίρεση της πρώτης περίοδος.

41. Στην ερείπια του ναού στο Γκούρους στη Νάξος, η ίδια είναι να επιλέξει την θέση του νεοσύστημα, που επέλεξε να επιλέξει την θέση του αρχικού κτηρίου. Αν και η κατασκευή του νεοσύστημα επέλεξε να επιλέξει την θέση του αρχικού κτηρίου, τότε το νεοσύστημα είχε νομικά και στρατηγικά έργα στην αίρεση της πρώτης περίοδος.