

THE ORIGIN AND DEVELOPMENT OF
HELLENISTIC MONUMENTAL TOMBS IN WESTERN
ASIA MINOR

By

©

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A thesis submitted in conformity with the requirements
for the Degree of Doctor of Philosophy in the
University of Toronto

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UNIVERSITY OF TORONTO
SCHOOL OF GRADUATE STUDIES

PROGRAM OF THE FINAL ORAL EXAMINATION
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

OF

JANOS FEDAK

10:00 a.m., Friday, April 6, 1979

Room 111, 63 St. George Street

THE ORIGIN AND DEVELOPMENT
OF HELLENISTIC MONUMENTAL TOMBS IN WESTERN ASIA MINOR

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Thesis Abstract:

The Origin and Development of Hellenistic Monumental
Tombs in Western Asia Minor.

Janos Fedak.

The thesis deals with grave monuments of various types that were conspicuous both for their size and for their magnificent decoration. These tombs were designed and built for the nobility and the well-to-do classes, who could afford such monumental undertakings. Large-scale tombs were generally built, or at least started, only in periods of peace and economic prosperity; even then, such tombs were often left unfinished after the death of the persons who commissioned them.

Although many of these tombs played an important part in the development of the Hellenistic architectural style, the nature and significance of their contribution, and their relationship to other types of structure, have not yet been analysed in detail. Moreover, neither the circumstances that prompted such undertakings nor the origins of their architectural features (both structural and decorative) have been fully explored.

For a long time the lack of systematic excavations, or even of adequate publication of remains accessible without excavation, has made a synthetic study of the tombs in question virtually impossible. Early studies of the problems involved (mostly dating from about the turn of the century) were too superficial in scope or too fanciful in concept to

permit a proper evaluation of the architectural importance of the monumental tombs. Fortunately, in recent decades more and more reliable evidence has accumulated, so that it is now possible to obtain a clearer picture of monumental tomb buildings in the Mediterranean area as a whole. A number of excavations are still in progress, and new information is constantly emerging; nevertheless, it is already quite evident that Western Asia Minor played the dominant role in the development of monumental tomb-designs, at least down to the later third century B.C.

No systematic examination either of the origins of the monumental tombs of Western Asia Minor, or of their further development both within and outside that region, can be attempted without first dealing with the problems of classification and terminology. The introductory chapters are therefore devoted to these aspects of the study. The evolution of monumental tomb structures prior to the fourth century B.C. is then examined; in this section, on the basis of the technical execution of the tombs, three main groups are distinguished: built tombs; rock-cut tombs; and tumuli and underground tombs.

The most popular, and thus the most successful, forms of funerary building were the "temple tombs" on podia, the so-called "mausoleum" type. The first "temple tombs" on podia were apparently erected in Lycia; after a generation or so of experiment, Persian, Greek and local traditions were

combined to produce a type of tomb that satisfied the needs of the local oligarchy.

Besides being burial places these large structures built above ground, served to glorify the achievements of the deceased and ensure his or her eternal "presence" within a given community. The earliest known structure of this nature was the Nereid Monument, built shortly after 400 B.C. at Xanthos in Lycia. Its predecessors were numerous and of various designs; but virtually none of them offered the same possibilities for future development as did the Nereid Monument.

In the course of the fourth and third centuries designers of monumental tombs were quick to adapt forms and ideas from many other types of Greek building (e.g. theatres, entrance gates etc.), thus producing a great variety of tomb forms.

The novelty of the large and richly decorated "temple tombs" of Western Asia Minor soon led to their appearance in other regions of the Mediterranean world. In each of these regions further developments often took place, as the borrowed forms were remodelled in terms of local materials and taste. From the large body of material outside Western Asia Minor only the best preserved and best documented examples have been examined, with a view to assessing their importance in the overall development of funerary architecture.

It also seemed necessary to examine, at least briefly, some of the technical innovations encountered in Hellenistic tomb designs, e.g. methods of roof construction, with special

reference to the use of the true vault in tomb architecture. Finally some of the problems of the relationship of monumental tombs to other types of building have been considered.

Most of the material included in the thesis date from the sixth to the first century B.C. No strict geographical limits have been observed, since monumental tombs of the type under discussion were likely to be built wherever Hellenistic ideas penetrated. For each region an attempt is made to assess the importance of individual structures, both in the local context and within the general framework of Hellenistic architectural developments. From the latter point of view monumental tombs have a special interest; since they were not utilitarian structures, they provided excellent opportunities for architects to experiment with new forms and new architectural principles.

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INTRODUCTION

Monumental tombs occupy a special place in the history of Hellenistic architecture, since they show more freedom of design, and greater variety of form, than other types of building; in fact there are no two large tombs that are exactly alike. This classification of the tombs, both individually and as groups showing typological affinities, poses a number of problems. Many of the monuments have been previously described and published, but often not accurately enough or not in detail. Others have been noted only briefly, or not at all, whether on account of their poor state of preservation, or for some other reason. The investigation of unpublished tombs and the re-examination of monuments only vaguely described before, is an enormous task, requiring large numbers of workmen and technical specialists. Such an enterprise would also require both sound financial backing and excavation-permits for the various sites. Thus a study undertaken by a single student has its limits, especially if such a project is further restricted by limited resources.

Many practical problems are encountered in studying large, elaborate tombs. Most of the monuments, whether built tombs, rock-cut tombs or tumuli, were outside the

city limits, many of them in isolated areas; thus access to them is physically rather difficult. For instance, many rock-cut façade-tombs can be reached only with the help of ropes and mountain-climbing equipment. In other cases the risk of falling material may prevent detailed investigation of the structures. Again, ancient sites may now be overgrown with thorny bushes, that make it impossible to study moulded blocks lying underneath the vegetation. In still other examples, though the blocks are free of any natural obstructions, they are too heavy for even two or three people to turn them over, let alone lift them. For these reasons the accurate measuring of many tombs is impossible.

As a result of the difficulties involved it seemed best to restrict the present study to those tombs that are either well documented in literary sources or have already been excavated and published in some detail. Even with this limitation there are still problems. It is becoming increasingly clear that early investigators, especially in the last century, often relied on their imagination rather than on observable facts; and when factual, their work may be superficial, or, simply incomplete, leaving many questions unanswered. Consequently at a number of major tomb sites new excavations have been undertaken; some of these are still in progress. These sites include such important structures as the Belevi mausoleum near Ephesos, the Limyra Heroon in Lycia, the Tomba Lattanzi at Norchia, a Doric tomb at

Vergina in Macedonia, the Araç il-Emir in Jordan, the Kallithea tomb between Athens and Piraeus, a peripteral "temple tomb" at Ai-Khanoum in Afghanistan, and the largest and most famous of them all, the Mausoleum at Halikarnassos.¹ In all the above mentioned cases, even where the investigations have been completed, no accounts have yet been published, apart from some preliminary reports. Thus in the present study discussion of these tombs and their relationship to other monuments is necessarily somewhat tentative.

Some other monumental tombs, about which available information is very sketchy, or still unpublished, have been left out of account almost entirely. Two examples may serve to illustrate the problem involved in dealing with such monuments. In both cases the remains suggest that the tomb resembled the "temple tomb" on a podium (i.e. the so-called mausoleum type), which will be the focal point of the present study. One of the tombs, discovered in 1919 at ancient Alyzia in Akarnania and dated to the second or first century B.C., recalls "...certains constructions orientales, le mausolée d'Halicarnasse, ou le monument des Néréides de Xanthos (Lycie)."² The other tomb, previously unmentioned by scholars in the field is located in the Elmali region on the eastern border of Lycia, near the village of Islamlar. The site is known to the locals as Eski Şehir. Judging from the architectural fragments lying around the tomb, the

structure must have resembled the Nereid Monument, and was probably built in the fourth century. However, in the absence of positive data further speculation about these and other little known monumental tombs would be rather futile.

The first serious investigations of tomb architecture per se date from the nineteenth century. One of the earliest general studies of the subject is Baron von Stackelberg's Die Gräber der Hellenen published in Berlin in 1837. Subsequent investigations added greatly to the number and variety of tombs available for study. Nevertheless no attempt has yet been made to synthesize the results of regional studies, identifying similarities and differences between one region and another. F. Matz's article, and the chapters in handbooks such as those of Fyfe, Lawrence and Kurtz and Boardman, are far from adequate. Furthermore, the particular circumstances that led to the great tomb-building activity of the fourth century have still to be examined in detail. Of course the collecting of all relevant information on the above topics is an enormous task, and one that could scarcely be expected in publications such as those mentioned above; even the present study can hardly claim to be more than a beginning. Our attempt to show the origins and development of the tombs of Western Asia Minor, both within and outside their local context, will in general be limited to a relatively small selection of the better known funerary monuments. Only when such a framework exists,

and more positive information becomes available about some of the key monuments, can a more comprehensive work be undertaken.

The tombs to be discussed below were not typical or everyday types of burial. Rather they were peculiar to royal or oligarchic societies, which alone had the concentration of resources needed to finance such undertakings. Even so, many of the tombs remained unfinished after the initiator's death. The purpose served by these tombs, other than as places of interment, will be noted from time to time; but at the outset we may note that the desire for "heroization," or self-glorification, was a major factor in the erection of overwhelmingly large funerary monuments. A good example is the story of a certain Artemidoros of Perge, a wealthy but half-educated veteran of the army of Ptolemy IV (late third century). Artemidoros spent a large sum of money to lay out a temenos that contained elaborate funerary arrangements; Rostovzeff aptly notes that "for his merits and piety Artemidoros was sure-- so he was told by Delphi-- of living as a theios heros even after his death."³ As a result of over-elaboration many of the monumental tombs acquired other than funerary connotations, and displayed a strongly stated symbolism, both in architectural design and in decorative details. In certain instances they may also have served a practical purpose, as landmarks for sailors and overland travellers.

The magnificent exteriors of many of these tombs might

lead us to expect a corresponding degree of adornment within, and such interior decoration was in fact provided, except for rock-cut, and especially façade tombs, where the interior chambers were small and roughly executed. Sometimes the tombs could be used to display implements, tools or military equipment descriptive of the career of the deceased person. Such a custom may have originated in the practice of dedicating the instruments of one's craft to the gods after retirement from active life; this practice is already known in the Odyssey (III.26). Armour (especially shields) and weapons may also have been thought to provide a symbolic protection for the deceased in his "last fight."

The factors governing the spread of certain types of tomb-design from one region to another can be identified only in part. Since architecture is firmly fixed in a particular location, and cannot be transported from one place to another, as can works of sculpture or the minor arts, any discernible cross-influences were doubtless due in large measure to people who travelled back and forth between different regions, and were impressed by the large and magnificently executed tombs that they encountered. However, ideas may sometimes have been transferred in the form of drawings of plans, elevations; there are no extant examples of such drawings of Hellenistic date, but it is clear that some Hellenistic technical manuals were in fact illustrated.

The "lifetime" of large grave monuments varied. Except for some tumuli, none of them has survived intact to

our own time. They were damaged or destroyed either by natural causes (earthquakes) or people. Usually after the interment tombs were protected against violation by fines, which were effective as long as some sort of orderly administration existed in a given community. One might think that the largest tombs would fare best; but such is not the case. Of the Mausoleum at Halikarnassos nothing remains in situ except some of the foundation courses; of the magnificent funerary complex of the Ptolemies, that included the final burial-place of Alexander the Great, not a single trace has been identified, and even its site cannot be determined with certainty from the descriptions of ancient authors. Only a few of the large tombs explored in modern times were found intact. In many cases stone-robbers subsequently demolished the empty tombs so completely that it is hard to determine their original appearance.

In the ancient Greek world there were no special areas consecrated as cemeteries, such as we have in Rome or today; tombs could be built almost anywhere outside of the inhabited areas. They were most often found along the roads leading out from major gateways, though the burial-places of important persons were carefully chosen, and were frequently within the city walls.

In selecting the monumental tombs to be discussed in the following pages certain chronological and geographic limits have been observed. The main emphasis will be on

Hellenistic developments, from the fourth down to the first century B.C.; and special attention will be given to the "temple tomb" on a podium. In examining the origins of the Hellenistic grave monuments we shall have to go back to the archaic age, or even earlier, and to consider structures other than tombs. Eventually Hellenistic monumental tomb-types spread throughout the Mediterranean world, and some of their descendants continued in use in Roman Imperial times. No detailed discussion of such projects, e.g. in Israel-Palestine, Egypt, Spain or Southern France, will be included in this study, since most of these tombs are later than the first century B.C., and thus lie beyond the limits indicated above. Etruscan and Roman Republican tomb-architecture is also excluded, except for a few large tombs near Sovana and Norchia, the designs of which suggest the possibility of Greek influence.

Geographically, Hellenistic monumental tomb architecture did not have any strictly defined limits. As a matter of fact, the influence of the tombs of Western Asia Minor was felt everywhere in the Mediterranean where Hellenistic ideas penetrated.

I

Notes

1 All these structures will be discussed in the following pages, with the exception of the Araq-il-Emir in Jordan. (For the Jordanian structure see the preliminary excavation report by E. Will, "L'édifice dit Qasr el Abd à Araq al Amir (Jordanie)," CRAI [Jan-March 1977] 69-85).

2 The site was investigated by M.K. Rhomaios. See "Chronique des fouilles et découvertes archéologiques," BCH 44 (1920) 393.

3 M.I. Rostovzeff, "The Mentality of the Hellenistic World and the Afterlife," Harvard Divinity School Bulletin 18 (1938-39) 14.

CHAPTER I
CLASSIFICATION

The number of recorded monumental tombs in the Mediterranean basin for any given period from the late archaic down to early Imperial times is substantial.

When political stability and economic prosperity coincided, building activity usually increased. Under such favorable circumstances, rulers and persons of authority were eager to erect permanent memorials to their own glory, in the form of large-scale tombs. The resulting variety of types is greater than in any other clearly defineable category or class of buildings. Other classes of buildings, such as fountain houses, theatres and bouleuteria, tend to follow the same general lines of construction within each group, simply because they were designed for utilitarian purposes. As is still the case today, after an early experimental period the most practical schemes are also the most widespread and popular (at least in a competitive world). For instance, ancient gateways, granaries and gymnasias above all had to be functional in order to serve their purpose best under the given circumstances. The same is not true of tomb constructions. Here, individuality and uniqueness were often the main considerations in planning an impressive burial building or complex.

Detailed classifications of these monumental tombs have been attempted ever since the nineteenth century, when larger groups and necropoleis were documented by scholars. However, existing classifications, which are generally the result of localized research in a particular region, have only a limited value. The most common method has been and still is, to set up systems of classification according to geographical regions, whether a large unit such as a province, or a small one, e.g. the necropolis of a single city. The scope and depth of the classification also varies a great deal. Often the distinction is made on the basis of construction as opposed to stylistic considerations. In other publications dealing with tombs no introductory classification is attempted at all; the classification, as it were, emerges from the discussion of the individual monuments. Detailed descriptions are naturally of great value, especially if they point out the peculiarities and common trends of the buildings under discussion. Such descriptions are certainly helpful in the preparation of a workable system. However, many classifications have been formulated for particular buildings or sites; as a result buildings at different sites, though structurally or typologically identical, or at least closely related, may be placed under different and frequently misleading headings.

No system of classification should be based on a mixture of structural, formal and stylistic considerations.

The separation of the main criteria for division is thus an important preliminary step, if we are to achieve a unified system, applicable, at least in its main outlines, to geographically distinct regions. If such a synoptic arrangement should prove possible, tombs that are structurally, formally and stylistically similar could all be placed under the heading appropriate to each group. Of course it is a question whether there is a large enough number of examples to permit the establishment of a new and more integrated system. From the constructional point of view an integrated system seems quite feasible; such a system, if based on considerations of form and style, becomes more difficult to apply consistently.

Before attempting to establish a broadly applicable classification system for the Mediterranean as a whole, we should first look at some of the earlier proposals, from the nineteenth century onward. In respect to the formation of the Greek types of monumental tomb (especially of the so-called mausoleum type), the research carried out in Lycia has been the most relevant. Of the first serious proposals, based on the constructional and formal unity of certain groups of Lycian tombs, comes from Ch. Fellows. In his account of discoveries in Lycia he notes: "The annexed sketch will show the varieties of rock-architecture, and the one following, those in the built tombs seen in Lycia."¹ In the accompanying drawings (his plate XI) there

are thirteen different types of Lycian rock-cut tombs and nine of built tombs. Further on, in discussing the possible origins of the different shapes, he uses terms such as "temple-like forms," "portico in antis," "various cottages" and "box-like barns"² as designations for the different types of structure. He is quite right in indicating that typologically similar buildings can still differ technically; some of them "were imitated in stone, and their forms ("i.e. of the built ones") cut in the rocks."³

Other travellers and scholars who discuss Lycian developments, e.g. Texier, Perrot and Chipiez, and Petersen and von Luschan,⁴ do not pay much attention to the creation of a classification system. The second and more serious attempt in this direction was made by Benndorf and Niemann in the late nineteenth century.⁵ They divided the Lycian tombs into four main groups: (1) Rock-tombs (2) Sarcophagi (3) Obelisks or pillar tombs and (4) "Hellenised" monuments. The primary principle followed in these four divisions is chronological. The oldest are the simple rock-cut tombs, which with the passage of time acquired architecturally recognizable forms. The sub-groups in the first main entry include (A) two-sided (B) three-sided and (C) four-sided house tombs, the last being completely freed from the surrounding rock formation, i.e. rock-cut but free-standing. At a later point in the architectural history of Lycia the sarcophagi appeared (Benndorf's and Niemann's

group No. 2); according to the authors, there are some two thousand examples in the region. No clearly distinguishable subgroups are indicated here; however, it is implied that the shape of the roofs could serve as a basis for further subdivision. The tombs of the third group, "Obeliskens óder Pfeilergräber," are a unique type of burial, probably of eastern origin. The fourth main class includes tombs of which the model is Greek, or which were influenced by Greek art. The subdivision of the group is based on a theory of development, in which the earliest examples have only some Greek-derived decoration, while at the other end of the line are the completely Greek types of monument, whether free-standing or façade tombs. For a possible fifth main class they propose the Roman tomb-monuments.⁶

Oelman in his paper "Über das Mausoleion von Halikarnass als Denkmaltypus"⁷ makes many valuable observations concerning Lycian monuments. However, his twofold division of the existing tombs is over-simplified: "Die zahllos erhaltenen Grabmäler dieses Landes lassen sich auf zwei Grundformen zurückführen: das ist einmal die Stele d.h. der steinerne Pfeiler, der auch (aber erst sekundär) zum oberen Ende eine Höhlung zur Aufnahme der Leichen erhalten kann, und dann vor allem der kasten-óder kammerförmige Leichenbehälter, der oberirdisch, meist auf mehr oder weniger hohem Unterbau aufgestellt ist."⁸ He seems to emphasize the native Lycian origin of many of these buildings.

However, he asserts that around the middle of the fifth century the imitation of timber designs became more and more Greek in form as opposed to local and other influences. His classification basically ends there.

Dinsmoor set up vaguely designed classes for Phrygia, Lydia and Lycia. About Lycia he says, "broadly speaking, there are three types."⁹ (1) The oldest are direct copies from Lycian timber houses. (2) later there are house tombs where squared logs occupy the position of the earlier round disks (representing the ends of roof poles) below the horizontal cornice. (3) The third type includes designs that were "largely influenced by the stone architecture of the neighbouring Greek cities,"¹⁰ namely the Lycian Ionic tombs. (4) An additional class includes the high Lycian sarcophagi. Obviously in this outline the main consideration is that of the form, the outward appearance of the monuments. Even from this point of view the first and second classes could be easily brought under a single heading.

Akurgal's proposal for Lycia follows similar lines.¹¹ His main interest seems to be rock-cut monuments. Here one can distinguish house tombs (1) with flat roof and (2) with saddle roof, the latter having two variants, (2a) with pointed roof, and (2b) with triangular gable roof. He concludes that "Der erste Grabtypus steht mit seiner flachen Decke in der einheimisch kleinastischen Tradition."¹² The second type is either a Lycian invention or reflects early

Greek house types. However, those tombs which closely imitate wooden prototypes are to be attributed to the native traditions. The third group (3) includes "lykische Felsgräber in griechischer Architekturordnung," of which the majority are Ionic façades of temple-like form.

Here as in Dinsmoor's scheme, stylistic and formal considerations appear under the same heading; thus both schemes suffer from a certain ambiguity. Moreover, neither author makes room for the pillar tombs or other elevated tomb types. As in all the above mentioned classifications, with the possible exception of Oelmann's, the developmental theory dominates, culminating in the Hellenized or Greek types of monuments.

More recently, since the nineteen-fifties, and especially in the last decade, Lycian research has once more accelerated. In addition to the previously known tomb types, stone tumuli have also been discovered.¹³ Thus the need for a more workable classification system became evident. The French excavators of Xanthos, in a series of five volumes,¹⁴ presented the results of their investigations of this important Lycian city. Like all other students of the region, they agree that most of the stone tombs, whether rock-cut or free-standing, reproduced the forms of wooden architecture. The most likely models for the non-Greek forms are thought to be Lycian dwelling houses and storage buildings. The French divisions are basically the following:

(1) house tombs, (2) rock-cut tombs, (3) sarcophagi, (4) pillar tombs. There is also a proposal by E. Laroche to establish a separate classification for tombs that carry epitaphs.¹⁵ He would divide these into a) tombs cut in the rock, b) built sarcophagi, c) monolith pillars. The fact that an independent scheme is set up by Laroche (within the same volume) shows the difficulties in establishing a unified system. J. Zahle, reviewing the fifth volume of the series, rightly points out that "the description of the tombs one by one reveals some ambiguity with regard to the question of whether they should be dealt with as constructions or works of art. The terminology is inconsistent in as much as the same parts may have more than one term and the same term may be used about various parts."¹⁶ Further on, referring to Demargne's efforts, he says, "He did not, however, take upon himself the task of devising a proper classification and he expressly confines himself to the evidence from Xanthos."¹⁷ Nevertheless, it should be noted that the author did emphasize the importance of a proper classification, even if he failed to achieve it: "Le classement attendu paraît une des premières besognes à accomplir si l'on veut faire progresser l'histoire de l'architecture Lycienne."¹⁸

Up to the present time the most comprehensive attempt to achieve a classification scheme was that of J. Borchhardt, as a result of five years of study. He stresses

that in order to establish a meaningful classification system for the tombs of Myra a study of Lycian necropoleis in general had to be undertaken.¹⁹ His own classification seems to be based on the Benndorf-Niemann proposal. Their Type I, the rock-cut tombs, now constitutes Borchhardt's second main division (B), to be distinguished from the first, the free-standing monuments (A). The sub-division within both of the main groups are the following: I. Pillar Tombs, II. House Tombs, III. Temple Tombs, IV. Sarcophagi and V. Double Tombs.)

In the next level of sub-headings are: Ia. decorated and Ib. undecorated pillar tombs, of which only free-standing versions exist. The burial chambers in pillar tombs are in the upper part of the structure, usually below the roof. Borchhardt suggests that the group might be further subdivided into pillars with Lycian and pillars with Greek inscriptions. Both A.II and B.II (house tombs) include IIa house tombs with round logs, IIb with dentils, IIc with saddle roof, and IId with pointed roof. This quadripartite division is a more elaborate version of the Benndorf-Niemann scheme mentioned earlier.

A.III and B.III are confined to the Greek type of "temple tombs" since we do not know the form of Lycian temple architecture; according to Borchhardt, IIIa (in antis) and IIIb (peripteral) appear in both free-standing and rock-cut variants, while IIIc (amphiprostyle) exists only in group A.

Group IV includes sarcophagus forms: IVa, "Riegelbau" with pointed roof; IVb, so-called "Thekaí," also with pointed roof; and IV, hyposoria. The main difference between a house tomb and a sarcophagus is in the matter of size. Borchhardt states that "Sarkophage sind kleine Grabhäuser. Alle Leichenbehälter aus Stein, die ca. 2-3m lang sind, werden daher also Sarkophage bezeichnet."^{19bis}

The hyposorion [sarcophagus], i.e. a sarcophagus supported by a podium which in turn contains a burial chamber, leads on to Borchhardt's last major group, the two-storied or double tombs, namely; Va, house tomb plus house tomb; Vb, house tomb plus sarcophagus; and Vc, pillar plus sarcophagus.

Borchhardt's scheme includes, in addition to features of the Benndorf-Niemann classification, elements from the systems of Dinsmoor and of Akurgal, especially insofar as the execution of the roofs is categorized according to the different shapes. Unfortunately, from the very outset Borchhardt's organization makes no clear distinction between his two main groups. The term "free-standing monuments" implies a distinction based on formal considerations, while "rock-cut tombs" refers to a constructional principle. It is true that most free-standing tombs are built, and rock-cut ones engaged; but this is not exclusively the case. Among other examples, there is a large free-standing rock-cut tomb at Phellos, called even by

Benndorf-Niemann "Freistehendes Felsgrab";²⁰ such a tomb could be entered under either of Borchhardt's two main classes.

Borchhardt also emphasizes that rock-cut tombs are far more common than others, because further additions to the interior chambers were more easily made than in the case of built tombs. Yet there are very few Lycian examples of subsequent additions to the original tomb chamber, or chambers, before the later Hellenistic period. It is much more likely that the tombs with the rock-cut façades were simply cheaper versions of the free-standing built tombs. Less wealthy individuals could more easily commission impressive tombs, if they had to pay only for the execution of the most important side, i.e. the façade of a free-standing tomb, rather than for the erection of a complete three-dimensional building. Besides, rock-cut tombs are more numerous, since they suffered less through the ages from stone robbers (by the virtue of not providing readily available construction material) than built tombs.

Again, in connection with sarcophagi, it may be noted that they can often be distinguished from house tombs, not only by size, but also by interior arrangements. Almost without exception sarcophagi lack shelves or benches for the reception of the remains, since the sarcophagus itself serves this purpose. On the other hand house tombs do have such provisions. Moreover, it is possible that sarcophagi

were originally derived from (storage) chests, while house tombs clearly go back to some sort of a large building.²¹

Borchhardt also has difficulties in finding appropriate examples for some of the subdivisions of his classes. Tomb No. 69 at Myra²² is assigned to BIIIb, the peripteral rock-cut temple. In this instance the classification seems to be based solely on the façade: the actual plan (his Abb. 30) does not fit into the group. Consequently, it is questionable whether this example from Myra should be called a peripteral temple tomb. Perhaps it is more closely related to the prostyle form. Problems can also arise in connection with his Group V (the double-tombs). In the first place many of these tombs combine a rock-cut lower with a built upper part. Again, AVa could easily be treated as a fifth sub-division in the house tomb group (AIIe): similarly, AVb and c might be regarded as elevated sarcophagi, with an extended lower section that served a function similar to that of the podium of a raised "temple tomb." The sarcophagus form is the dominant element, and the lower part is seemingly subordinated to the upper, or main, section. The only known sarcophagus supported by a pillar comes from Xanthos. In this instance the pillar is not a monolith, like those of the other pillar-tombs, but consists of tall orthostate blocks creating a hyposorion-like interior chamber for funerary offerings. Borchhardt uses this pillar sarcophagus as the only example under both

AIVa and AVc; moreover, in connection with the same monument he remarks: "Hier handelt es sich um eine massstabsgerechte Verkleinerung des Grabhauses Typus AIId."²³

As a further indication of the "interchangeable" character of his groups, AIVc, the hyposoria could easily be treated as a separate sub-group of AV (AVd).

The contributions of Danish scholars to the study of Lycian archaeology started in the nineteen-seventies. Their systematic grouping of Lycian monuments is not the result of a special attempt at categorisation, but has rather been derived from their general studies of the region, i.e. their approach has been similar to that of the French at Xanthos. According to Kjeldsen and Zahle, all the Lycian tombs go back to three basic forms of building: "sind die lykischen Gräber allem Anschein nach als Nachahmungen aus Stein von drei verschiedenen Bautypen zu betrachten: Dem Wohnhaus, dem Speicher und dem Pfeiler mit einer oberen Plattform."²⁴ It is now virtually certain that the pillar-tombs are the oldest form of monumental burial in Lycia, along with the recently discovered tumuli.²⁵ House tombs are next in line, appearing about a century later, around 460; the somewhat later rock-cut versions of these are called house tomb façades. Shortly after their introduction into Lycian tomb architecture c. 400, B.C., sarcophagi also began to be imitated in rock-cut form, as "sarcophagus-façades." All the rock-cut forms, as noted before, are to be interpreted

as cheaper versions of the free-standing built monuments. An additional form, of which there are only four known examples, can perhaps be added to the scheme; these are monumental tombs raised on a podium or massive terrace for extra elevation.²⁶ In all probability the later hellenized tombs, and Greek monuments of similar type, but with a colonnaded section above the podium in fact evolved from the Lycian podium tombs; in the later fifth century they completely replaced the Lycian type which gradually disappeared. The end result of this process was the creation of the "temple tomb" on a podium.

In the Danish scheme tombs are grouped according to the different forms, apparently leaving constructional principles aside. Nevertheless, house tomb façades and sarcophagus-façades (by being rock-cut) imply such a structural distinction. Since no further subdivisions are indicated, the system remains applicable only in very broad terms, with additional explanations for individual monuments.

In Asia Minor there are no other well preserved pre-Roman tomb groups or necropoleis that show such a heterogeneous character as those of Lycia. On the other hand most of the major types found in Lycia also appear with some local variations in other provinces.

To establish an even broader basis for a more extensive classification of monumental tombs we must look briefly at other regions of the Mediterranean, outside Asia Minor.

Published studies of the monuments of Cyrene are useful in this respect. This North African city possesses a well-preserved and extensive necropolis with a great variety of pre-Roman tomb structures. Here again, some of the studies go back to the nineteenth century; however, no detailed examination of the burial forms was undertaken until after the Second World War. In spite of later publications J. Cassel's survey "The Cemeteries of Cyrene"²⁷ remains the most useful work for purposes of classification. The essential feature of his approach is the division of the tombs into (C) circular, and (B) rectangular built tombs, and (R) rock-cut tombs. Unfortunately, his further division into sub-groups does not show any clear underlying principle. Class (C) has five, (B) and (R) each six subdivisions. The subdivisions of group (R) are further broken down into twenty-five smaller units. There are no definitions given for many of his terms, even where these would be useful. Without a firsthand knowledge of the site, a great deal of imagination is needed to interpret entries such as BVI ("Box with sarcophagi inside"), R6III ("Doorway: as inside of Strategeion"), or R6IV ("otherwise decorated"). It must be acknowledged that the Cyrene tombs are a difficult case, since there is a huge and well preserved necropolis containing a great variety of monuments. Nevertheless, a more careful selection of criteria would have been appreciated. Some of Cassel's entries ought to be combined, e.g. R2,

"number of doors," with R6, "Doorway" (the subdivisions do not in any event make much sense), and R3, "Façade with," with R4, "Façade,"-- indeed R4 could be eliminated completely. At the same time it should be noted that his R4 group, "Façade: (i) entirely rock-cut, (ii) partly built, partly rock-cut, and (iii) entirely built,"²⁸ indicates an approach based on constructional principles only. This approach deserves attention because of its applicability on a much wider basis.

Tomlinson²⁹ and Stucchi,³⁰ who have also recently dealt with Cyrenaican tombs, avoided the establishment of a unified system. Nevertheless, they both prefer a distinction between built and rock-cut tombs, thus stressing a primary division between the constructional methods. Their observations and suggestions have a supplementary value for specific cases. For example, Tomlinson's so-called false-façade tombs, of which the design has indirectly been derived from other contemporary dwellings, is called by Stucchi "scenae frons." He defines the type the following way: "...le tombe di questo tipo siano caratterizzate da una facciata, non appoggiata alla parete, sebbene completamente libera, costruita sopra un loculo funerario sottostante, aperto in una parete di roccia... la scene teatrale dell'età ellenistica imiti la casa contemporanea, in cui si immagina svolgersi l'azione scenica e quindi la scenae frons tombale imita in definitiva ach'essa l'interno di una casa...."³¹

Unfortunately neither Tomlinson's nor Stucchi's designation adequately covers the form, which consists of a portico of scaenae frons type (engaged or free-standing), but has only a single storey, with returning side walls and a rock-cut tomb chamber below it.

Another region where the existing tomb structures have been provisionally classified is the Syria-Israel-Palestine area. A number of the existing monuments date from the late Hellenistic period, i.e. from the first century B.C. onwards. In Nabatean territory the first intensive surveys of the huge necropolis at Petra were carried out by Bruennow and Domaszewski.³² A. Negev aptly summarizes their efforts: "Combining the results of their work with what was already known from the earlier surveys at Egra, the Germans compiled the first typological division of the Petraean monuments, basing their division on characteristic features of the decoration of the façades."³³ Their classes are the following: (I) Pylon tombs, subdivided into (a) free-standing monuments, (b) three-quarter free-standing, (c) decorated by one row of crenelation (d) with two rows of crenelations; (II) Stepped tombs; (III) Proto-Hegra tombs, (IV) Hegra-tombs, (V) Gable tombs, (VI) Roman temple-tombs, (VII) Arched tombs. The primary divisions are typological, with the possible exception of (VII), the Arched tombs ("Bogengräber"), where the technical aspect seems to have come into the foreground. The Proto-Hegra tombs of Group

III are in general like Group II, but have so-called Nabatean capitals, while the Hegra-tombs (IV) are a further development of the two previously mentioned groups. A couple of years later French archaeologists revised the system, or rather rearranged it.³⁴ Their observations were also based on stylistic criteria (the form of the upper part of the monuments), and aimed at achieving a chronological ordering of the monuments. Since we are dealing here with an almost exclusively rock-cut necropolis, such an approach is suitable and both schemes can be employed today.³⁵ For these Nabatean tombs the best course is perhaps to integrate them into a larger system of classification with little if any change in the current categories.

As far as Syria is concerned the majority of the monumental tombs are tower structures not unlike those in the Punic region of North Africa. Up to the present E. Will has attempted the most comprehensive typological division of the Syrian tombs.³⁶ According to him there are four types of towers: (a) with external loculus, (b) with internal loculus and staircase, (c) the so-called regular tower, and (d) the regular tower with architectural decoration. Here should also be mentioned his "Tour primitive"³⁷ which remains unclarified. The second part of his "Essai de classification"³⁸ includes: (1) Mausoleum-towers, (2) The mausoleum with baldacchinos of Commagene and north Syria, (3) The funerary naos with pyramid of west Syria, and (4) The

mausoleum stelai of Phoenicia and Palestine. In contrast to Will, Gawlikowski divides the Syrian tomb forms (with special emphasis on Palmyra) into three main classes: (I) tower, (II) hypogeum, and (III) funerary temple.³⁹ The variety of the primary constructional forms is not very great; thus the incorporation of the Syrian group into a more comprehensive system poses less difficult problems than do, for example, the Asia Minor tower structures.

The same may be said of the now largely lost Alexandrian tombs. In dealing with these tombs A. Adriani employs terms inherited from his predecessors in Alexandrian archaeology. The largest number of still existing Hellenistic tombs are cut into the soft local rock. They can be classed either as (A) oikos tombs or as (B) peristyle tombs.⁴⁰ Only later in the Hellenistic age do loculus tombs appear; these subsequently lead on to extensive rock-hewn catacomb complexes.

Pre-Imperial tombs in Italy constitute a class by themselves. The burials covered by mounds belong to the tumulus group, and I propose to separate them from the "exposed" tombs. The majority of these "exposed" sepulchres (i.e. not covered by mounds) are rock-cut tombs. Numerous authors have touched upon the problem of classification in the course of time, especially in the last fifty years; yet not a single comprehensive system has yet appeared. H. Koch, E. von Mercklin and C. Weickert in

their essay dealing with south Etruscan tombs⁴¹ distinguish the different forms, such as : (1) tumuli (a) with circular chamber (b) with rectangular chamber; (2) cube tombs (a) house tombs with gabled roofs (b) niche tombs; and so forth. Unfortunately such a vague organization is not very practical today.

Gino Rosi's "Sepulchral architecture as illustrated by the rock facades of central Etruria"⁴² is much more useful in this respect. Rosi tried to confine himself to tombs that had some architectural interest, i.e. to monumental constructions. He then states: "In reviewing the various forms of the different types, we shall follow the development from the simplest to the more elaborate form. This will not necessarily coincide with the chronological order, because ... of the lack of proper excavation... The three fundamental forms of rock-cut tombs are: (a) cube tombs (dadi)" (these are subdivided into (1) half-cubes [mezzodadi] and (2) false cubes [dadi apparenti] "(b) gabled tombs (dispioventi) and (c) tumuli (ruote). Of these the first and second reproduce the two types of the Etruscan house; the third, which is common to the cemeteries, not only of all the other regions of Etruria, but also of many other countries, assumes in the rock-cemeteries a special aspect, similar to that of the tombs of Caere,..."⁴³ What we have here is really a three-fold division, based on (1) constructional method (e.g. rock-cut), (2) tomb type (e.g.

house type), and finally (3) the various forms of each type (e.g. the cube and the gabled forms of the Etruscan house in the above quotation). It should be noted that the line between the types and forms is not, and cannot be, always clear.

Rosi also implies, even if he does not say so directly, that for detailed studies mouldings and architectural ornament could serve as distinguishing marks within his groupings (e.g. cube tombs with "lip" and "bell" mouldings). For some of the unique cases he makes no separate provision, preferring to include them in one of the main types; thus the monument at Grotta Porcina^{43bis} is included in the tumuli group in spite of the fact that he regards the type as intermediate between the cube-tombs and the tumuli. In connection with the pediment tombs Rosi remarks: "This class of sepulchre presupposes the use, or at least the knowledge, of another type frequently met with in the territory of Falerii towards the Tiber, . . . I allude to the portico tombs, not with a projecting portico, but wholly carved out on the line of the overhanging rock. In other words, such porticoes are formed by large, open rectangles cut back into the rock, with one or more columns or pilasters in front."⁴⁴ Besides the portico tombs there are references to "pediment tombs proper" (including the so-called Doric or pediment tombs at Norchia), "two-storeyed or double storey façade tombs" and "hut tombs," which are not

part of his original scheme of classification.

From Rosi's description of his first two classes, the cube tombs (a) and the gabled tombs (b), it becomes obvious, that both types were derived from a timber tradition of house-architecture. With regard to tumuli, his observation that they are common to many cemeteries of the Mediterranean would automatically makes them a major group by themselves.

Other scholars concerned with Etruscan tomb architecture, such as Bianchi-Bandinelli, Åkerström and Demus-Quatember⁴⁵ relied heavily on previous systems, especially that of Rosi, though with minor modifications. For example, Åkerström adds portico tombs, hypogaea and the so-called "tomba a sottofacciata" (really a two-storeyed tomb with the burial chamber at the lower level) which all appear in the S. Giuliano cemetery.⁴⁶ Unfortunately in discussing the different sites he is not always consistent in his terminology. His subdivision of the cube-tombs ("Würfelgräber") into (1) "eigentliche Würfelgräber" (all sides freed from the rock), (2) "Halbwürfel" (front and sides freed) and (3) "Scheinwürfel" (only the façade is worked) had been used by Rosi, but in a somewhat different context.

For Demus-Quatember "in der gebauten Grabarchitektur Etruriens dominiert der Tumulus."⁴⁸ Tumuli can be conceived as a constructional technique on their own; "das Tumulusgrab Etruriens is nicht ein primitiver Erdhügel sondern ein

Bauwerk mit wohldurchdacter Struktur."⁴⁹ All rock-cut sepulchres, even the more pretentious types, are grouped under the heading of Façade-Tombs. Otherwise the terminology is conventional. Nevertheless, for certain forms where there are problems with classification a new sub-group, called "Sondertypen" (special types) is introduced. Tomb buildings of exceptional form, apart from the method of their construction, can hardly be classified unless described individually. In Machatschek's organization of the mostly Roman tombs in the district of Elaiussa Sebaste and Korykos in Cilicia this view is clearly expressed: "abschliessend waren noch einige einzelne Denkmäler anzuführen, (namely the -Sonderformen-) die wegen ihrer grundsätzlichen Unterschiede zu den bisher beschriebenen grossen Gruppen eine gesonderte Besprechung erfordern."⁵⁰ Furthermore, Machatschek reintroduces the terms free-standing and engaged, but now as sub-headings for the sarcaophagus group.⁵¹

This brief survey of the regions that contain the most important tomb assemblies adequately covers the major problems of classification. Other monumental tombs, or groups of tombs, not cited here have been omitted simply because they present no additional difficulties from the organizational point of view or are poorly documented.

One of the shortcomings of regional studies is their limited scope; they rarely take into consideration related

schemes from other regions of the Mediterranean. Not infrequently certain basic types, such as tower tombs, are given two or more designations, each originating in a localized study of a particular region. Only from the actual descriptions does it become clear that we are dealing with one and the same type of monument. Of course this sort of confusion is to be expected; but the problems of classification would be simplified if local types could be fitted into a larger framework, making use as far as possible of a consistent terminology. Only in a few cases, where the general scheme became inadequate for dealing with certain special forms, would special terms and descriptions be needed. Such an approach at this stage must of necessity be gradual and experimental, since no comprehensive study of monumental tombs now exists. The chapters that the handbooks devote to such monuments are far from adequate with respect to classification. The collection and organization of the thousands of known large-scale burials, and their typological and formal arrangement, is beyond the scope of the present study. It would require years of field and library research, perhaps assisted by a computer, to process the data. The classification proposed here will therefore be selective, dealing with a limited number of examples, but choosing these from various geographical locations. An attempt will be made to establish groups representing the most common types, whether they are found in Asia Minor or in the western part

of the Mediterranean. The classification will cover monumental tombs from the sixth to the end of the first century B.C. (or using conventional terminology from the archaic period down to early Imperial times). Catacombs and larger sarcophagi will be included for the sake of convenience even if they are on the borderline of the topic to be discussed.

When dealing with a large and varied corpus of tombs the easiest and most obvious distinctions to be made are those based on the constructional methods and the materials used. Few tombs of monumental dimensions consisted exclusively of perishable materials such as timber;⁵² they were either built or rock-cut, or a combination of the two. Tumuli are a special group and will be classified accordingly (on the basis of exterior construction and the execution of the ceiling of the tomb chamber).

In the case of built tombs the first series of subdivisions is made, as far as possible, on the basis of the exterior form of the buildings. With rock-cut tombs the primary division has been made on the basis of the extent to which the tombs were freed from the surrounding rock, and thus imitated free-standing buildings. Each category is then subdivided on the basis of exterior form. While the built tombs are almost without exception free-standing, rock-cut tombs are rarely so. When there is a combination of built and rock-cut techniques, it is convenient to set them

apart as "mixed constructions" without changing the subdivisions. As far as the additional sub-classes are concerned, formal and stylistic considerations may change from group to group, depending on the usefulness of each criterion. Interior arrangements, except in the case of tumulus-tombs, will have no bearing on the classification. At this stage of research one cannot extend the sub-classes too far without losing sight of the main purpose of the study, namely, the development of a clear and easily intelligible system of classification. Only when the overwhelming majority of the data becomes available can we hope for a system that is universally applicable. For the moment all general classifications must remain subject to change on the trial-and-error principle.

The four main groups proposed are the following:

- I. BUILT TOMBS
- II. ROCK-CUT TOMBS
- III. MIXED CONSTRUCTIONS (indicating partly built and partly rock-cut combinations)
- IV. TUMULI

These are divided into the following groups and sub-groups.

I. BUILT TOMBS

- (A) Aedicula tombs
- (B) Altar tombs
 - (1) double "L" shaped
 - (2) others

- (C) Baldacchino tombs
 - (1) with podium
 - (2) without podium
- (D) Column tombs
- (E) House tombs
 - (1) long rectangular cella-like
 - (2) with flat roof
 - (a) with round logs
 - (b) with dentils
 - (3) with hipped or gabled roof
 - (4) double-storied
- (F) Mastaba tombs
- (G) Pillar and Stele tombs
 - (1) plain
 - (2) decorated
- (H) Portico tombs
 - (1) real
 - (2) false
- (I) Pyramidal tombs
 - (1) stepped sides
 - (2) smooth sides
- (J) Sarcophagi
 - (1) with architectural ornamentation
 - (a) columnar sarcophagi
 - (b) frieze sarcophagi
 - (2) giant sarcophagi

- (3) elevated sarcophagi
 - (a) on pillar support
 - (b) on podium with or without hyposorion
 - (c) on burial houses (of timber-like framework)
- (K) "Temple tombs" (on podia)
 - (1) in antis
 - (2) peripteral
 - (3) pseudoperipteral
 - (4) prostyle
 - (5) amphi-prostyle
- (L) Tholos and Cylindrical tombs
- (M) Tower tombs
 - (1) single elevation
 - (a) with interior tomb chamber
 - (b) with exterior loculus
 - (c) with interior loculus and staircase
 - (2) multi-storey
 - (3) "Pharos-tombs"
- (N) Tombs with two-tiered façade
 - (1) aedicula in upper storey
 - (2) superimposed row of columns
- (O) Others

II. ROCK-CUT TOMBS

- (A) Free-standing and (or)
- (B) Engaged (at least one side is engaged into the

rock surface)

Groups and sub-groups (A) and (B):

- (1) Aedicula tombs
- (2) Courtyard tombs
 - (a) no columns
 - (b) with columns
- (3) Cube tombs
 - (a) plain
 - (b) decorated
- (4) House tombs
 - (a) with ~~flat~~ roof
 - (a1) with round logs
 - (b1) with dentils
 - (b) with hipped or gable roof
- (5) Portico tombs
 - (a) real portico
 - (b) false or illusionistic portico
 - (c) scaenae frons
- (6) Pylon tombs
 - (a) with crenellated top
 - (b) with stepped top
 - (c) proto-Hegra tombs
 - (d) Hegra tombs
- (7) Sarcophagi
 - (a) with hyposorion
 - (b) without hyposorion

- (8) "Temple tombs" (with or without podia)
 - (a) in antis (a1) distyle in antis
 - (b) prostyle
 - (c) based on peripteral design
- (9) "Theatre" tombs
- (10) Two-tiered façades
 - (a) scaenae frons
 - (b) superimposed real colonnades
 - (c) superimposed false or illusionistic colonnades
- (11) Other
- (C) Tombs, partly or entirely cut below ground-level
 - (1) Catacombs
 - (a) single loculus type
 - (b) loculus corridor
 - (c) light well and loculus chamber
 - (d) loculus niche
 - (2) oikos type
 - (3) peristyle type
- (D) Chamber tombs without architectural façades

III. MIXED CONSTRUCTIONS

- (A) Free-standing and/or
- (B) Engaged

with any of the appropriate subentries from Built (I.) and Rock-cut (II.) groups.

IV. TUMULI

- (A) (layered) earth mounds
- (B) (layered) earth mounds with enclosing stone rings
- (C) built mounds of cut stone construction
- (D) rock-cut mounds
- (E) others (partly rock-cut, partly built)

Subdivisions for (IV) A,B,C,D and E:

- (1) built barrel-vaulted chambers
 - (a) with architectural façades (so-called Macedonian tombs)
- (2) built corbel-vaulted chambers
 - (a) over rectangular chambers with corner pendentives
 - (b) of circular plan
 - (c) with architectural façades (Mycenean)
- (3) built lantern or diagonal roofing
- (4) built hipped roofing
- (5) built flat roofing (slabs)
- (6) multi chamber arrangements of different roofings techniques ("apartment" type)
- (7) rock-cut chamber-- can be any of the above plus fan shaped
- (8) timber chambers
- (9) others
 - (a) with sarcophagi
 - (b) cist graves
 - (c) stele beneath

(d) cenotaph tumulus

Further explanation of some of the details of terminology will be provided in the following section.

II

NOTES

1 Fellows, Discov. 128.

2 Fellows, Discov. 130.

3 Fellows, Discov. 130.

4 Texier-Pullan; Petersen-von Luschan, Reisen 95;

Perrot-Chipiez, Hist. V.

5 Benndorf-Niemann, Reisen 95.

6 Benndorf-Niemann, Reisen 113.

7 H. Oelmann, AA 45 (1930) 240ff.

8 Oelmann (supra n. 7) 241.

9 Dinsmoor, 66.

10 Dinsmoor, 68.

11 Akurgal, Anatolien 122.

12 Akurgal, Anatolien 127.

13 J. Zahle, "Archaic tumulus tombs in central Lykia (Phellos)," Acta A 46 (1974) 77-94.

14 See FX I. P. Demargne, P. Coupel and P. Prunet: Les Piliers Funéraires (Paris 1958); FX II. H. Metzger and P. Coupel: L'Acropole Lycienne (Paris 1963); FX III. P. Coupel and P. Demargne: Le Monument des Nereides (Paris 1969); FX IV. H. Metzger, D. von Bothmer and J.N. Colstream: Les Céramiques Archaïques et Classiques de l'Acropole

- Lycienne (Paris 1972); FX V. P. Demargne, P. Prunet and P. Coupel: Tombes-Maisons, Tombes Rupestres et Sarcophages (Paris 1974) and E. Laroche, Les Epitaphes Lyciennes, 123-148.
- 15 Laroche, (supra n. 14) 123.
- 16 J. Zahle, Gnomon, 49 (1977) 405.
- 17 Zahle, (supra n. 16) 407.
18. Demargne-Prunet-Coupel FX I. 118 n. 6.
- 19 Borchhardt, Myra 97.
- 19 bis Borchhardt, Myra 102.
- 20 Benndorf-Niemann, Reisen 130 fig. 79 pl. XXXVII.
- 21 Following Borchhart's reasoning it could be asserted that sarcophagi are small scale urns and vice-versa, the only difference between them being in the size.
- 22 Borchhardt, Myra pl. 69A.
- 23 Borchhardt, Myra 102.
- 24 K. Kjeldsen and J. Zahle, "Lykische Gräber," AA 90 (1975) 349.
- 25 Zahle, (supra n. 13) 77-94.
- 26 Kjeldsen-Zahle, Centr Lycia 29.
- 27 Cassels, 1-44.
- 28 Cassels, 23.
- 29 R.A. Tomlinson, "False Façade Tombs at Cyrene," BSA 62.
- 30 Stucchi,
- 31 Stucchi, 162-163.
- 32 R.E. Bruennow and A. von Domaszewski, Die Provincia

Arabia I (Strassburg 1904).

33 A. Negev, "The Nabatean Necropolis at Egra," Revue Biblique (1976) 205.

34 A. Jaussen and R. Savignac, Mission Archéologique en Arabie (mars-mai 1907) de Jérusalem au Hedjaz, Medain, Saleh (Paris 1909).

35 Negev: "It should be said at the outset that I see no flaw in the typological division as made both by the French and the German scholars, and both will be employed..." (supra n. 33) 207.

36 E. Will, "La tour funéraire de Palmyre," and "La tour funéraire de la Syrie et les monuments apparentes," Syria 26 (1949) 87-116, 258-313.

37 Will (supra n. 36) 260.

38 Will (supra n. 36) 259.

39 M. Gawlikowski, Monuments funéraires de Palmyre (Warszawa 1970).

40 Adriani, Annuaire (1933-35).

41 H. Koch, E. von Mercklin and C. Weickert, "Bieda," Röm Mitt 30 (1915) 161-310.

42 Rosi, (1924-25) 1-59 and (1926-27) 59-96.

43 Rosi, (1924-25) 18-19.

43bis Rosi, (1924-25) 24.

44 Rosi, (1924-25) 36-37.

45 Bianchi-Bandinelli, Sovana; Åkerström; Demus-Quatember Et Grab.

46 Åkerström 85.

47 Rosi (1926-27) 69.

48 Demus-Quatember Et Grab 27.

49 Demus-Quatember Et Grab 57.

50 A. Machatschek, "Die Nekrópolen und Grabmäler im Gebiet von Elaiussa-Sebaste" in DenkschrWien 96 (Vienna. 1967) 111.

51 Machatschek (supra n. 50) 20.

52 Except for some of the Phrygian tomb chambers beneath tumuli. Use of timber was in general restricted to interior furniture or doors and framing.

CHAPTER TWO

TERMINOLOGY

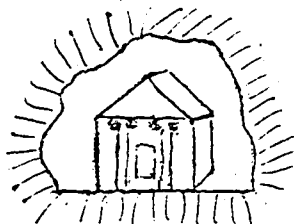
Some questions relating to the terminology of tomb structures have already been briefly discussed above; in the interest of clarity and consistency some additional terms pertaining to the different types and forms of tomb-buildings are given here. For technical and constructional details, such as door or window-frames, entablatures, and so forth standard Greek architectural terminology will be used whenever possible.

Built tombs include all masonry structures; they may be built of a single type of stone, or of a combination of different types, and may exhibit one or several styles of masonry. Their location in general is not predetermined by local geological conditions.¹ In this group can be included the later Roman tombs of poured concrete.

Rock-cut tombs developed only at places where workable rock formations existed. It may have been a single projecting cliff or a series of such formations. Because of the nature of the material and the manner of execution, rock-cut tombs were not bound by the conventional principles of thrust and support. Therefore modules, measurements and proportions show great flexibility, and an inconsistency not witnessed in built tombs, which otherwise they frequently imitate. Rock-

cut tombs could also be more easily expanded to receive additional burials than could their built counterparts. The most widespread form of rock-cut sepulchre is the façade tomb. This term will be used in general to refer to tombs where only the façade has been executed, regardless of its type. These façade tombs are two-dimensional units, and often appear in groups constituting independent necropoleis. They could be arranged in rows, or irregularly placed where the vertical rock-surfaces seemed to be the most suitable. On the basis of the cutting of the fronts (the three other "sides" were often part of the rock) three main forms can be distinguished, even though some examples may overlap from one group to another. In the first two groups there is as a rule an open portico, while the third is closed by panels except for a door opening.

- 1) Façade in niche: the façade is cut inside a niche-like opening (e.g. Tomb of Amyntas at Telmessos).²



Form 1

- 2) Flush façade: the façade is in the same plane as the surrounding rock (e.g. Cyrene Tombs N₂ to N₉ and most of the Paphlagonian tombs).³



Form 2

3) Projecting or relief façade: the architectural



Form 3

forms stand slightly free of the surrounding rock, or project from it in relief. The large majority of the Lycian tombs, that imitate timber construction, belong to this group (Myra);⁴ there are only a few examples in which the architectural decoration was derived from Greek sources (Limyra).⁵

These three basic types of façade-tomb can be used as a refinement to the classification when describing the monuments. For instance, the Tomb of Amyntas in Telmessos may be classified and described as II B8 a¹, façade in niche.

The so-called mixed construction group refers to tombs that are partly rock-cut and partly built. It is highly unlikely that for large built tombs, directly exposed to the effects of the weather, perishable materials could have been used. However, there are a few known rock-cut tombs in present-day Albania, in which the "pronaos" consisted of a wooden construction. In tumuli, especially in Phrygia, wooden beams appeared quite often as supporting members. Of course timber was extensively employed for monumental funeral carriages and boats, but these were of a temporary nature. The two most common combinations are those with a rock-cut

lower and a built upper part, and built façades in front of a rock-cut background.

Although tumuli may belong structurally to any of the above three main types, their peculiar form makes them a separate group. Often, but not exclusively, tumuli are circular in plan. They are in general low and wide mounds with a conical top; the width exceeds the height.⁶ On the exterior, usually at the summit, there may be grave markers, in the form of cippus, phallus, mushroom, stele and so forth; these markers emphasize the fact that tumuli were meant to be noticed. The exterior shows no visible signs of the interior construction. Many tumuli have a dromos, but it is not a necessity. The nucleus, the tomb chamber, is frequently off center. The plan of the interior chamber may be square, rectangular, circular, or (if multi-roomed) any or all of these. The technical execution of the visible exterior mound provides the basis for distinguishing the primary sub-classes. It should be added here, that classes IVA and B often consist, for stability and safety, of "earth" mounds of different layers of pebbles, clay and other broken filling materials, not simply of piled-up earth. The execution of the interior ceiling seems to be the best criterion for the secondary sub-divisions of tumulus tombs.

The sub-classes within the other three primary divisions (I, II and III) include tomb forms of which the origin, i.e. the derivation from other types of structure, can be

determined. Tombs of unconventional design, which are hard to classify, are entered under the heading "others." In such cases the modern names will be employed for reference, e.g. the so-called Taş Kule at Eski Foça (Turkey) or the "tomb of Persenna" at Clusium.⁷ Then follows a more detailed description of individual structures. Often large spectacular tombs are known by designations such as the Nereid Monument⁸ at Xanthos, the Archokrateion on the island of Rhodes (Lindos), or the Corinthian Tomb at Petra. Although these tombs can be classified under the appropriate headings, (e.g. Nereid M. IK2), the standard names found in literature will be employed for reference. The same applies for entire groups of monuments such as the Macedonian tombs, whose common characteristic features distinguish them from other types of funerary monuments. The typical barrows of the south Russian steppes, the so-called kourgans, should also be mentioned here. However, in this instance the name suggests a geographical region, rather than a common constructional technique.⁸ Similarly the term "Punic tombs" is occasionally employed of a number of different types of grave monuments built in Punic territory. The same holds true for the Alexandrian, Nabatean, Syrian and other tomb groups; these terms are often used in literature to indicate geographical rather than typological distinctions.

More difficult is the widespread use of the words "mausoleum" and "heroon." These are comprehensive terms, not

necessarily referring to a single type of edifice. "Mausoleum," of course, was originally the name of the monumental tomb of Mausolos, dynast of Karia from 377 to 353 B.C. Later, both in Roman and modern usage, the term has been widely applied to large-scale, but often typologically different, tombs. We find references to "small-scale," "tumulus-like," "commemorative," "tower," "rock-cut" and other mausolea. In other words the name is easily attached to tombs of varied origin and size. Their common characteristics, if the original fourth-century structure is used as a touchstone, ought to be extremely decorative appearance and large scale. On this basis the monuments belonging to our group Ik are closest to the ideal "mausoleum-type"; they consist essentially of a high and massive podium with a lighter superstructure above. Structures of this sort were especially popular in Asia Minor.

The term "heroon" ($\eta\rho\omega\nu\nu$) is even more widely applicable than mausoleum. It can designate a single edifice or a sumptuous funerary ensemble. In the Greek sphere the underlying idea goes back to Homer's heroes in the Iliad.⁹ Later on, with the spread of hero cults, shrines for worship became more numerous. Early triangular heroa were found, among other places, at Eretria and in the Athenian agora. It is also known from Pausanias that in the Athena Pronaia sanctuary at Delphi there was a large circular heroon

dedicated to a certain Phylakos, a local hero. It is datable to the sixth century.¹⁰ The cult places of the dead first assumed impressive architectural form in Asia Minor. By the fourth century and especially after Alexander, hero cults, housed in sizeable structures, sprang up in numerous localities.¹¹ Yet the earliest literary references all post-date the Diadochi. From the island of Thera comes one of the most important epigraphic testimonia relating to private hero cults. The author of this inscription from Thera is a certain Epicteta.¹² The document, of the late third or early second century, explicitly describes the dead as heroes and their resting places as *npwta*. A mouseion was to be set up containing the statues of Epicteta herself and the other deceased (the same idea is found in the 4th century Philippeion at Olympia); the mouseion in turn was an integral part of the temenos that housed the actual memorial edifices, the *npwta* of the persons buried there.

A good example of an earlier heroon-temenos complex still exists at Gölbaşı-Trysa in Lycia.¹³ Within the walls of the enclosure there were provisions for funerary banquets and for other cultic functions. A larger and truly impressive creation must have been the heroon-temenos of Antigonos Gonatas, containing, besides funerary buildings, a stadium, a round portico and baths.¹⁴ The heroon at Kalydon is a more compact late Hellenistic example (c. 100 B.C) of the type; the courtyard was once entirely surrounded by

roofed-over structures, the outer walls of which provided complete privacy.¹⁵ The plan finds its closest parallels in gymnasia and basilicas.

This seems the appropriate point to consider the classification of heroa put forward by Poulsen in the 1930's in connection with the Kalydon complex.¹⁶ His Type I is the Open Heroon or Temenos Type, e.g. the Gölbaşı-Trysa heroon,



Type I

the Pelopion at Olympia or the Neoptolemos precinct at Delphi. All examples of this type were open to the sky and surrounded by a peribolos; inside the enclosure "liegt das Grab ohne Überdachung."

Type II is the Hellenistic-Oriental "Normaltype," the



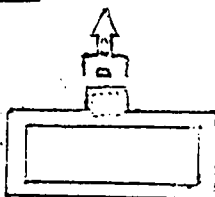
Type II

Mausoleum type. It consists of a substructure (the burial room or crypt) and a superstructure, frequently in the form of a temple in antis.

Among the examples listed there is a Roman heroon at Miletos and a

"Xanthosgrab," i.e. the Nereid Monument.

Type III is the Peristyle Type, represented by the Kalydonian



Type III

heroon. It unites the most important elements of the previous two types, namely the crypt with a superstructure and the enclosing peribolos wall.

Although Poulsen's classification has useful points, it is difficult to draw the lines between the classes. For example, there existed quite a few mausolea (Type II) with peribolos walls around them, the largest and best known example being the tomb of Mausolos himself at Halikarnassos. It is also difficult to see the Pelopion at Olympia and the Gölbaşı-Trysa heroon in the same group; and more information is needed to explain what is meant exactly by the tomb being "open to the sky." (The Gölbaşı-Trysa) heroon is a Lycian type of tomb building that certainly cannot be called a "tomb without a roof"). Problems can also arise in connection with complexes like that of Antigonus Gonatas which could not be included in any of the outlined groups.

Architecturally, the simple heroon buildings can perhaps be best described as a combination of a tomb and a modified temple structure. As can be sensed from Poulsen's type II, the most common form, especially in Asia Minor and the islands, is a burial chamber in a high basement with a "naos" section above it. Examples include the Limyra Heroon, the Chamyleon on Kos, and the Ta Marmara heroon near Didyma. In fact the tomb of Mausolos at Halikarnassos can also be noted here, as a monumental heroon-mausoleum. In general, the term heroon, from the architectural point of view, is not a useful criterion for classification, since it refers to the purpose or function of a building rather than describing its form. In those instances where the

heroon comprises several separate units, the individual buildings should be assigned to the appropriate headings.

Cenotaphs are sepulchral monuments erected in honour of a person whose body has been lost or buried elsewhere. Such "empty tombs" are known to have existed ever since the time of Homer.¹⁷ They were given the same honour and respect as real burials. Legendary heroes and military personnel are the people who were most frequently honoured by these monuments. In a number of instances the dedication is uncertain, as is the case with the late fourth century cenotaph-heroon within the city-walls at Paestum. Like mausolea, cenotaphs may take different forms. For example, the cenotaph of King Nikokreon at Salamis on Cyprus was in the form of a tumulus of burned material (from the funeral pyre?) raised over a mud-brick platform.¹⁸ Statues of the deceased (recalling once again the Philippeion and Epicteta's heroon on Thera) occupied the circumference of this mound. The monument, presumably a family cenotaph, is datable to the end of the fourth century. Much later is the large, relatively well preserved and adequately documented cenotaph of Gaius Caesar at Limyra in Lycia.¹⁹ He died A.D. 4 (Febr. 21) at Limyra, and his body was transported to Rome to be buried there in Augustus' own mausoleum. The commemorative cenotaph in Lycia must have been erected shortly afterward.

Unfortunately because of the present ruinous condition

of many of these edifices it is frequently hard to distinguish cenotaphs from real tombs. Such is the case with the Lion Tomb at Amphipolis,²⁰ which may be either a real burial or a cenotaph. Among large scale and unique buildings the so-called Throne at Amyklai near Sparta, the Karyatid Porch of the Erechtheion, and the Tholos at Epidauros can all be regarded as cenotaphs.²¹

"Communal tombs" are usually mass burials; even if they attain monumental dimensions, they do not adhere to any particular form or shape. Frequently they are simple constructions without much architectural elaboration, like the earth mound raised over the fallen Plataeans and slaves at Marathon, or the Lion Tomb at Chaeronea, erected after 338 B.C. On the other hand the communal Lion Tomb at Knidos is one of the more remarkable creations of Hellenistic architecture.

2 The nature of state tombs is indicated by their name; typologically they are akin to communal tombs. Even when these tombs were large in scale the architectural form and decorative details usually remained sober and restricted. With a few exceptions, the tombs were monuments commemorating individuals who became well known in their community.

The peribolos tomb, a common form in Athenian and other Attic cemeteries, is related to monumental tombs, but strictly speaking not part of the group. A peribolos tomb consists of a rectangular area enclosing a number of graves.

The best examples are found in the Kerameikos cemetery at Athens.

In addition to the above terms, brief mention should be made of a misnomer, the so-called "kline tombs." Heuzey and Daumet introduced the use of this term for burials where the body was laid out on a stone, wooden or metal "couch," the kline.²² K.G. Vollmeier surveyed various regions of the Mediterranean world where interments took place on klinai.²³ Unfortunately in both publications there appears the notion of the kline as a distinct tomb form.²⁴ It is true that there are certain tomb-groups and periods in which klinai dominated the interior furnishing. Nevertheless, from the architectural point of view the kline cannot be a valid criterion for purposes of classification, since burials on klinai took place in tombs of many different types.

Loculus burials differ to some extent from the klinai. Loculi are rectangular niches, either built or hewn out of the rock, for the interment of bodies. In tomb architecture their role was simply to facilitate multiple burials. From the early Hellenistic period, when loculi were first employed, until the appearance of catacomb complexes, one can speak only of burials with loculus arrangements. Naturally the process was gradual; the change from single kline burials to loculi is especially well documented in the Sidi Gaber cemetery at Alexandria.²⁵ The design of catacombs in time became entirely determined by the various

methods of cutting and arranging the loculi. Thus it is possible to distinguish within this group, IIC1, subclasses based on different loculus schemes and their relation to the surrounding space.

To avoid possible ambiguity, classes IB and IIC2 and 3 need to be briefly clarified. "Altar tombs" (IB) are simply grave monuments that imitate the form of altars. On the other hand when altars appear in the vicinity of tombs (e.g. in the Archokrateion at Lindos) they indicate the heroization of the deceased. Tombs in altar form are rare in the Hellenistic age but became somewhat more numerous in the Roman era.

Groups IIC2 and 3, rock-hewn complexes partly or entirely underground, are typical of Alexandria. The best preserved tombs of the 3rd and 2nd c. B.C. are of these types. Oikos, from Homer on, is used not only of a house but also of a single room or chamber in a private or sacred building. However, in our context the meaning is slightly expanded to suit the tomb type. The main court is there, but the rest of the units are differently disposed, or as A. Adriani puts it: "... sur le même axe de la cour s'alignent les chambres l'une après l'autre. Le point d'attraction de tout le tombeau est la dernière et la plus petite de toutes les pièces contenant généralement le lit funèbre ou, au moins, la sépulture principale."²⁶

IIC3, the peristylé type, can be similarly defined. In

Dinsmoor's terminology it is "a covered colonnade which surrounds a building" or "an inner court lined with a colonnade."²⁷ As can be seen in the well-known peristyle tombs in Alexandria (the most complete is Mustafa Pasha Tomb No. 1) and in Cyprus (the Palaeokastro tomb complex near Nea Paphos), these tombs are dominated by an inner court surrounded by covered colonnades. Pagenstecher, in discussing the type, adds a further point to the definition, "Der Grundriss... wird durch das Peristyl bestimmt; um dieses herum sind die untereinander im wesentlichen gleichartigen Räume gelagert."²⁸ If it were not so, then the Kalydon heroon, for example, with its separate elements on different levels, could be treated as one of the group.

Other terms and descriptive names, which occasionally arise in connection with monumental tombs, have only an auxiliary value; for the purpose of this study a short list of these will be sufficient. Some of them refer to sections of tomb buildings, while others have a more general meaning. Where several interpretations are possible only those relevant to funerary architecture will be mentioned.

bomos (βωμος) - a subbasement; a large raised platform, or an altar with its supporting base; especially common in Asia Minor.

ensorion (ενσοριον) - a place for a sarcophagus; also another name for loculus.

hyposorion (υποσοριον)/hypogeion (υπογειον) - underground

chamber, place for interment, usually in the podium section of monumental tombs, including (elevated) sarcophagi.

Hyposorion can also refer to a vault below the σορος. (soros - (σορος)- a vessel, urn or sarcophagus for holding human remains).

kamara (καμαρα)- According to G. Wissowa "...der Name bedeutet etwas gewölbtes, ist ein Lehnwort dunkler Herkunft";²⁹ in tomb architecture indicates a vault of a sepulchre.

koimeterion (κοιμητηριον)- a sleeping room, or sleep of death; in funerary context designates an area used for burials (a cemetery).

mnema (μνημα), mnemeion (μνημειον), mnemorion (μνημοριον)- all have a broad range of meaning referring to a memorial, monument, tomb-mound or building in honour of the dead.

orthostasis or orthostates (ορθοστατης)- a rarely used term, designating a "funeral monument with pillars."³⁰ However, Kubinska prefers to interpret it as "quelque sorte de soubassement."³¹

platas (πλατας)- a platform on which tombs were placed.

polyandrion (πολυανδρειον)-another name for a communal burial place; usually means a monument, e.g. Marathon Mound, in which "many men" were buried.

sekos (σηκος)- besides being a sacred enclosure, precinct, cella of a temple, can also signify a burial place, sepulchre.

sema (σημα)- in general, token, mark, but also a "sign" by which a grave is known, whether it is a mound, cairn, barrow or even a rock-cut tomb. A 6th c. B.C. inscription from the base of a kouros monument, clearly indicates what was meant by sema: "Stand and mourn at the sema of dead Kroisos,..."³²

In connection with Alexander's tomb in Alexandria Frazer points out that "considerable dispute exists as to whether the mausoleum of Alexander and the Ptolemies was called Σημα or the Σωμα."³³ Since soma (σωμα) means dead body, or corpse, the former is more likely. However it should be added that the uncertainty originates with ancient writers, who use both words for Alexander's tomb.³⁴

tafos (ταφος)- used of various forms of sepulchre.

theke (θηκη)- chest, coffin, burial vault, grave, tomb; in function similar to loculi.

thema (θημα)- can mean either a common burial place or a private grave yard.

thorakeion (θωρακειον)- used in connection with large supports, usually carrying sarcophagi. Kubinska remarks: "Il pouvait servir aussi comme un socle pour l'héroon. Le thorakeion n'est nulle part attesté comme un monument isolé, mais il fait toujours partie d'un ensemble funéraire."³⁵

In Liddell-Scott-Jones it is translated as a "breastwork parapet or dwarf-wall of an enclosure."³⁶

topos (τοπος)- place, region. A territory around the tomb where construction was not permitted.

trapeza (τραπεζα)- among other meanings, can refer to a platform-like block-monument (especially in Athens).

tymbos (τυμβος)- has a broad meaning, like taphos; frequently used of sepulchral mounds, barrows or tombs in general.

It is important to note that the meaning of the above words was sometimes changed or modified with the passing of time. Moreover, some terms were restricted to certain geographic regions of the Mediterranean (e.g. "thorakeion" occurs mostly in inscriptions found at Smyrna and Aphrodisias).

Finally, interchangeable terms referring to the same type of monument, or the same parts of a monument will be employed only if they do not hamper understanding.

II

NOTES

1 Thus damp, unstable sites were unfit for any kind of building, whether tombs or other edifices.

2 See below, 220

3 See below, 116.

4 Petersen-von Luschan, Reisen fig. 57.

5 Petersen-Luschan, Reisen pl. XII.

6 At least as we see the tumuli today; in antiquity the cone must often have been somewhat higher, though we have no way of estimating this original height.

7 For "Taş Kule" and for the Tomb of Porsenna, see below, 88 and 110.

8 Nevertheless, it should be noted that the tomb-chamber in many of these South Russian kougans had a corbel-vaulted ceiling.

9 Il. i.3; II.110, 256 etc.

10 J. Bousquet, "La Destination de la Tholos de Delphes," RHist (1960) 287-298.

11 See especially E. Kornemann, "Zur Geschichte der antiken Herrscherkulte," Klio 1 (1902) 51-146, and G. Wissowa, "Heros," RE 8 (1913) 1111-1145.

12 IG, 3.330, See also H. Dragendorff, "Theraeische

Graeber, " Thera 2 (Berlin 1903) 239.

13 Excavated and published by Benndorf-Niemann, Gjölbaschi. See also below, 204

14 H. Usener, "Ein Epigramm von Knidos," Rhm 29 (1874) 29.

15 See Dyggve, Poulsen, Rhomaios, .

16 Dyggve, Poulsen, Rhomaios, 119-120

17 Od. I.241; IV.584 etc.

18 V. Karageorghis, Salamis in Cyprus (London 1969) 151 figs. 85-100.

19 J. Borchhardt, "Ein Kenotaph für Gaius Caesar," Jdl 89 (1974) 217-241.

20 J. Roger, "Le Monument au Lion d'Amphipolis," BCH 63 (1939) 4-42 and O. Broneer, The Lion Monument at Amphipolis (Cambridge 1941) 84.

21 For the Throne at Amyklai see below, 84
For the others consult, M. Lauter, "Die Koren des Erechtheion," Antike Plastik 16 (1976); G. Roux, Architecture de l'Argolide (Paris 1961) 187.

22 Heuzey-Daumet 239.

23 K.G. Vollmoeller, Griechische Kammergräber mit Totenbetten (Bonn 1901).

24 Heuzey-Daumet, 259 and Vollmoeller (supra n. 23) 4.

25 H. Thiersch, Zwei antike Grabanlagen bei Alexandria (Berlin 1904).

26 O. Adriani Annuaire (1933-35) 72.

- 27 Dirsmoor, 394.
- 28 P. Pagenstecher, Nekropolis (Leipzig 1919) 98.
- 29 G. Wissowa, "kamara" RE 10² (1919) 1800.
- 30 H.G. Liddell, R. Scott, H.S. Jones, A Greek-English Lexicon 2 (Oxford 1948) 1249.
- 31 J. Kubinska, Les monuments funeraires dans les inscriptions grecques de l'Asie Mineure (Warszawa 1968) 90.
- 32 W. Peck, Griechische Versinschriften (Berlin 1955) 1224.
- 33 P.M. Fraser, Ptolemaic Alexandria 2 (Oxford 1972) 32 n. 79.
- 34 For further explanations of sema see, DarSag, Dictionnaire des Antiquities Grecques et Romaines (Paris 1904) 1213.
- 35 Kubinska (supra n. 31) 88.
- 36 Liddell-Scott-Jones (supra n. 30) 813.

CHAPTER III

MONUMENTAL TOMBS PRIOR TO THE FOURTH CENTURY

I. Built tombs

In the formation of Hellenistic monumental tombs Greece proper played little direct role. Even when the magnificent sepulchres of Asia Minor were ready for "export," that is to say, when the monumental tomb forms began to spread westwards in the fourth century, the Greek mainland remained by and large non-receptive and was therefore bypassed. For example, only echoes of the gigantic eastern productions (many of which were never finished) were to be found in Athens, at the time still the cultural centre of the Greek-speaking world. Perhaps the best example is the small but compact choragic monument of Lysikrates (335-34 B.C.), that probably imitated the form of an Asia Minor commemorative edifice. Besides laws,¹ the expense involved prevented the building of large funerary monuments. By comparison with Ionia, the financial situation of fourth-century Greece was rather deplorable. Thus we know from the building accounts of one of the most splendid of Peloponnesian creations, the tholos at Epidaurus, that construction dragged on for decades and was even halted several times for lack of funds.²

Prior to the fifth century the role of the Greek

mainland in the architectural developments of Asia Minor was rather passive. The activity of Attic artists in Asia Minor becomes more frequent only after the termination of the Periclean building program in Athens; for example, definite traces of mainland workmanship are detectable in Xanthian buildings, including the best known tomb there, the Nereid Monument. However, before discussing the Nereid Monument and its architectural impact on later large-scale tomb buildings, developments that preceded it should be examined.

During the sixth century the Ionian Greeks seem to have been the leading designers, artists and craftsmen of the Greek world. Even before the Persian conquest of Ionia they must have had a highly developed tradition in monumental architecture, that led to the creation of the huge Ionic temples at Ephesos, Didyma and on the island of Samos. East Greek influence was strongly felt not only in Greek-speaking regions, but also among their non-Greek neighbours. Migrating (or sometimes exiled) Ionian workmen often appeared selling their services at the courts of greater and lesser monarchs, in the territories controlled by Persians and Scythians. Among other places, they left the trademarks of their workmanship in Lycia, where to the best of our knowledge the prototype of the Hellenistic monumental tomb was created, as well as in other satrapies of the Persian kings.

Indeed the contribution of these Greek stonemasons to Achaemenid building programs at Pasargadai and later at

Persepolis was indispensable, even if they did not set the overall style. In his study of the origins of Achaemenid masonry Nylander concludes: "It was possible to demonstrate the probable Greek origin of a number of technical solutions to the problems of stone-working, not only in Achaemenid Persia but also in the ancient world as a whole. Apparently, some specialized stone-cutting tools, the anathyrosis principle, the elaborate setting procedures, the advanced bonding with a special type of reinforced iron clamp, and the ingenious lead sealing of dowels, some of which have remained in use for thousands of years, were either original Greek inventions or radical improvements of earlier, less practical solutions."³

Besides Greeks, other nationalities also helped to create a characteristically Persian style of architecture. In dealing with Achaemenid buildings one cannot speak of a single prototype, since several sources often contributed to a single work; and what made the work a stylistic whole was the underlying and pervading Persian spirit. An important inscription mentioning the international contributions to Darius' building program was found at Susa. This trilingual document (Persian, Babylonian, Elamite) leaves no doubt about the origin of the stonemasons: "The stone cutters who wrought the stone those were Ionians and Sardians."⁴ The inscription also suggests that the Persians chose to adopt the cultural heritage of the defeated people after their

continuing military successes.

On Persian art in general, H. Frankfort well expressed the essence of the dilemma of Persia: "It had no native antecedents and was created to meet the unprecedented situation in which the Persians found themselves after Cyrus' conquest of Babylon (539 B.C.)... it could either accept or destroy the cultural heritage."⁵ The Persians chose to blend the cultural traditions of the conquered lands of Media, Lydia, Babylonia and other regions. The contributions of these lands were just as important as those of the Greeks.

With the gradual expansion of the Persian empire, the absorption of new elements into Persian architecture took place with little hesitation. If nothing else, Persian architecture was flexible; and the rulers seem to have been always ready to improve or replace conventional methods and motifs with new ones. For example, the invasion of Egypt by Cambyses II took place in 525 B.C., shortly after the death of Cyrus II (559-530 B.C.), who commissioned the Pasargadai complex; thus it is significant that Egyptianized lintels, which are not found at Pasargadai, were employed in the structures of Darius I at Persepolis a couple of decades later.

It should be noted that alongside the formation of a Persian royal architecture, some regional styles also flourished. The relative calm and prosperity enjoyed under Achaemenid domination favoured more ambitious building

programs in certain regions. (The situation by and large is comparable to the later Pax Romana over most of the Mediterranean basin).

In the conquered territories where established architectural traditions already existed, a two-fold evolution can be observed. On the one hand, the old traditions continued, and occasionally even came into the foreground. For example, recent research indicates that in the Near East, with its long experience in building techniques, earlier methods of construction were revived. E. Stern, in discussing the results of the excavations at Tell Mevorach, states: "It became apparent that our finds at Mevorach were by no means unique, but agreed well with other discoveries, which, though few and sporadic, nevertheless show clearly that all of the well known "Phoenician" elements of the finest architecture of the tenth and ninth centuries reappeared in the region during the Persian and early Hellenistic periods (up to the third century)."⁶ On the other hand the erection of splendid new complexes in the Achaemenid centres of power inspired local rulers to borrow and imitate the architectural forms and schemes of edifices in these capital cities.

In Achaemenid tomb architecture the same eclectic tendencies are noticeable as in private and public buildings. A. Demandt distinguishes three tomb-types with a definite chronological development: "An den genannten Orten wäre

damit eine Entwicklung des Grabtypes in drei Stadien erfasst: zuerst der 'Haustypus,' Meshed in Pasargadai, dann der 'Turmtypus,' Zendan und Kaaba an beiden Orten, und schliesslich die Felsgräber in Naqsh-i Rستم." ⁷

There seem to be two serious discrepancies in Demandt's assumptions. First, there is no definite evidence for the "tower-type" of burial. Both the Zindan and the Ka'bah do have a sacred character, but even the recent excavations on the sites did not reveal their specific purpose. As a matter of fact the excavators observed that "the evidence pointing to the use of the tower as the dynastic fire sanctuary of Persis princes and Sassanian emperors induces us to conclude that this edifice and its counterpart at Pasargadai were erected to shelter the royal fire in the two homeland capitals of the Achaemenids. The Zindan at Pasargadai was undoubtedly built by Cyrus the Great... the tower at Naqsh-i Rستم was most probably built by Darius the Great,..." ⁸

Second, we do not know what the tombs of the early Persian kings were like. The existing rock-cut tombs of Median and Urartian origin may suggest, as one of the possibilities, that Persian nobles were buried in rock-tombs even before the Naqsh-i Rستم period. I shall return later to the typological distinction of A. Demandt, when I am dealing with Lycian tomb types as possible reflections of Achaemenid prototypes.

The overwhelming majority of the preserved Persian

funerary monuments are rock-cut burials, which offer greater resistance to the forces of destruction; but the earliest dated and securely identified monument is the built tomb of Cyrus the Great (fig. 1 a and b). As indicated above, the tombs of his predecessors are unknown or unidentified; thus it is difficult to trace the origins of the tomb of Cyrus. Ancient sources tend to concentrate on the description of the interior, with only a superficial description of the structure itself; and as might be expected, nothing was written about the origin of the tomb type. The most explicit ancient sources are Arrian and Strabo, who derived their information mainly from Aristobulus and Onesicritus.⁹

Mentioned in both texts is an important point that could hardly have been established from the remains now extant, even though in other respects the tomb is well preserved. Arrian states: "The tomb of this Cyrus was in the territory of Pasargadai in the royal park; around it had been planted a grove of all sorts of trees; the grove was irrigated, and deep grass had grown in the meadow..."¹⁰ The detailed description of the garden around the tomb is worth noting, suggesting as it does a "paradisiac" setting. A similar landscape architecture reappeared in connection with later Lycian, Hellenistic and Roman monumental tombs, probably more often than we are aware.

The actual tomb of Cyrus is a burial above ground, like all other Persian, and indeed most of the Lycian, tombs.¹¹

Above a rectangular "plinth" rises a stepped platform, which in turn supports a gable-roofed building. The overall height of this section is approximately 11m. The lowest part of the stepped pyramid starts out with an unfinished moulding; in earlier drawings this moulding is shown as kyma recta, but this cannot be more than a hypothesis. Above the moulding are followed three higher and three lower receding steps. Around the base of the actual burial building runs another decorative band, unfinished like the one below; this band is followed by a high orthostate section and three courses of ashlar. The transition to the cornice under the gabled stone roof consists of an unfinished dentil course and a cyma reversa moulding between two narrow flat bands. The gable roof, which has an angle of 36° , is made of large, precisely cut slabs. The small door of the burial chamber has a two-fascia frame with a (no longer recognizable) crowning moulding.¹² The edifice was surrounded by columns (eight on each side), that created a temenos-like enclosure.¹³

To sort out exactly the different artistic influences incorporated in this scheme would be a difficult, if not impossible, task. However, it is possible to distinguish the Greek elements from the others. The cyma-profiled mouldings, their use as a transition from vertical wall to horizontal geison, the unfinished dentils, and perhaps the pedimental shape of the cella roof, show Ionian Greek influence. Moreover, the stoneworking technique, the clamps

(swallow-tail), the fine joints and the use of anathyrosis may also be Ionian/Lylian. The division of the entire structure into tripartite units once more suggests western influence.

In spite of these western traits the appearance of the complex as a whole is non-Greek. Herodotos (I, 178ff.) reports Cyrus' attack on the Assyrian capital at Nineveh, and describes as follows the most impressive buildings within the walls: "In the centre of this enclosure a solid tower has been built, one of a furlong's length and breadth; a second tower rises from this, and from it yet another, till at last there are eight... In the last tower there is a great shrine,..."¹⁴ The inspiration for the tomb of Cyrus must have come from buildings such as this and other Mesopotamian ziggurats, seen by the Persian monarch during his campaigns.

Similar conclusions may be drawn from another, but less pretentious, tomb found at Buzpar (fig. 2). It is the only known direct descendant of the Cyrus tomb, and is perhaps datable to the late fifth or early fourth century.¹⁵ Here, rather as in many Lycian tombs and also in Greek temple designs, the base is reduced to three steps, thus losing the pyramidal effect of its royal predecessor. The fact that the overall elevation was diminished, may suggest that the builders in this instance were no longer familiar or were not concerned, with the symbolic significance of such a scheme.

The pyramidal platform of the Cyrus tomb remained a rare architectural concept;¹⁶ there are very few known funerary monuments that followed the ziggurat form. The so-called Pyramid Tomb at Sardis (fig. 3) is one of these.¹⁷ The tomb is located on a hillside near the river Pactolus among Lydian chamber tombs. In concept it is analogous to the Cyrus tomb; if Hanfmann is right in his assumption that this tomb "... may be the funeral monument for a Persian nobleman who fell in battle for Sardis (547 B.C.),"¹⁸ the structure actually predates the tomb of Cyrus.¹⁹

The tomb was reinvestigated in 1969 and reconstructed by S. Kasper as a twelve-stepped limestone structure, instead of the six or seven steps favoured by some earlier scholars.²⁰ It is approximately square on plan (c. 7.50m per side). The rectangular tomb chamber, facing north, was placed within the upper seven tiers of the receding steps, a unique arrangement in funerary architecture. The steps are 34-35cm. high, quite close to the length of the foot unit used in contemporary Ionia, for example at Didyma.²¹ In technical execution there are resemblances to the chambers of some of the Bin Tepe tumulus tombs. The stone blocks, with their differently tooled surfaces, but all with drafted edges, can also be related to the recently exposed section of the city wall at Sardis.²² In Persian royal architecture similar masonry techniques can be found as far away from Sardis as Daskylion and Pasargadai.²³

The existence of an unexplored monumental step-pyramid (fig. 4) at Is-Safiyeh in Syria is recorded by H.C. Butler. In the early twentieth century this tower-like structure still had two well-preserved stages forming a truncated pyramid. Inside the second storey there were two burial chambers reached by an exterior stair. Concerning the date of the tomb Butler states: "I do not hesitate, however, to assume that this stepped pyramid is to be reckoned among the most ancient monuments of Syria, antedating the Roman and Nabataean periods by many generations. This type of building was not a rarity in the region; for Butler adds: "A similar structure was found at Damit il-Alya in the Ledja, and other massive structures, presumably in the same form, existed in various quarters of the Hauran, but have long served as stone quarries, and are consequently in no condition to publish."²⁴

Some stepped burial structures are also to be found in Etruria. Here, however, the conical shape was preferred to the angular. As will be seen below, with one exception they stood on top of tumuli. The exception is a tomb that still existed in the early nineteenth century but has not been discussed since (fig. 5).²⁵ Eight circular receding rows of cut blocks faced a rock core, that contained a half-sunken, hewn funerary chamber. No date has been suggested for the structure, but the form seems to imitate the stepped-cone altars known from archaic Greece, while the shape of the

interior chamber is akin to other Etruscan examples of the early sixth century.

In connection with pyramidal monuments the so-called Tomb of Pythagoras in the Athenian Kerameikos cemetery deserves some attention. It is located at the foot of a small hill facing north and overlooking the Eridanos. Five receding limestone steps enclosed the burial chamber (corresponding to the second and third courses; above the chamber stood a high (c. 1.19 m) commemorative stele. Hoepfner reexamined the monument and pointed out the underlying mathematical principles of its construction.²⁶ He also drew attention to the foot-unit, which seems to be close to that employed in the archaic Artemision at Ephesos,²⁷ or to the Didyma foot-unit mentioned above. The inscription on the north side of the monument mentions that its commissioner, a certain Pythagoras, came from Selymbria.^{27bis} On the basis of his examination of the inscription Hoepfner shifted the date of the tomb from the early fourth century to "...nicht nach der Mitte des 5. Jh.." ²⁸ From the archaeological evidence we know that by the first half of the fourth century the base of the monument was already partly underground. Taking all these facts together, we may suggest that this monument was inspired by a stepped design like that of the Sardis tomb, in the period before the Persian invasion of Greece.

With the passing of time the function of stepped

pyramids gradually changed. The stepped pyramid of Djoser (fig. 6) was the resting place of the divine Pharaoh. The uppermost stages of the Babylonian ziggurats housed shrines for the worship of supernatural beings, or as Paganstrecher expresses the idea in connection with the Cyrus tomb: "Die Stufenpyramide, der Zikkurat, ist der Thron der Gottheit. Wenn Cyrus sein Grab auf hohem Stufenbau errichtete, glich er sich damit den Göttern an."²⁹ To understand why

Mausolos, in the fourth century chose the pyramid form for the top part of his tomb, it is worthwhile to dwell further on the symbolic significance of pyramids.³⁰ It is very

likely that stepped mastabas preceded pyramids as architectural forms; Reisner states: "It was the layer mastaba which developed into the layer or step pyramid of stone and finally into the true pyramid."³¹ The Pyramid Texts help to clarify further the use and meaning of these structures. Basically they were symbolic elevations enabling the ruler to ascend to the sky and mingle with the stars.

A. Badawy very aptly summarized the ideological essence of pyramids: "The ziggurat of Mesopotamia, resembling the stepped mastaba or pyramid even to its method of construction (accretion layers for enlargement at Uruk), was also a 'stairway to heaven' (name of the ziggurat at Sippar), and the term 'ziggurat' probably meant 'the pointed one' or 'the high one.' Further names of the ziggurat, 'house of the link between heaven and earth'

(Babylon), and the existence of one sanctuary on top and another at the bottom, have led scholars to consider this structure as an actual link; intended according to Mesopotamian mythology, to connect heaven and earth. In this respect the pyramid would have been for the pharaoh what the ziggurat was for the Mesopotamian gods."³² Furthermore, truncated pyramids surmounted by an obelisk or a chapel were build for solar cults' and obelisk-like victory (?) stelae with stepped pyramidal tops are known from the reign of Shalmaneser III (859-824 B.C.) of Assyria (fig. 7).⁷ The iconographic significance of such monuments coincides with the broader meaning of tombs surmounted by pyramids, both serving for memorial purposes.³³

This symbolic meaning of the pyramid remained alive and spread to other lands. However, in funerary contexts the pyramid was gradually transferred to the uppermost section of the tomb; instead of supporting the tomb-chamber or chapel, it became the crowning feature. In Egypt this change can actually be traced back to the New Kingdom, where pyramids surmounted many private tombs. For example representations of funerary naiskoi topped by smooth-sided pyramids are found at Deir el-Medineh near Thebes (fig. 8).³⁴

The same idea later reappeared outside of Egypt, e.g. in the so-called Tomb of the Pharaoh's Daughter (or "Monolith of Siloe") at Jerusalem (fig. 9).³⁵ The structure is entirely rock-cut including the pyramid on top. This

pyramid is of the Egyptian type, with smooth sides, suggesting the influence of the land of the Pharaohs rather than of Babylonia. Still farther afield at Amrith in Syria there are two curious monuments surmounted by pyramids of the smooth-sided type.³⁶ Concerning their date Gawlikowski (quoting earlier sources) says "...qu'une influence quelconque du monde hélienique est absente de leur décor, alors que les influences grecques sont pourtant très nettes en Phénicie au 4^e siècle. Tous les éléments du décor des monuments de Amrit sont en effet déjà connus dans l'architecture achéménide."³⁷ Whether the Egyptian or the Babylonian monuments suggested this form of building in Syria is hard to say; in either case the pyramid on top has the same symbolic significance.

For the sake of convenience another rock-cut monument will be included here, i.e. the so-called "Pyramid Tomb" at Midas City in Phrygia (fig. 10). Above the tomb chamber, now largely obliterated, the outlines of a steep, smooth-sided pyramid are still discernible. E. Haspels dates the original structure to the period of Lydian peace, that is, the time of the second flourishing of Midas City, during the second quarter of the sixth century.³⁸

As noted before, the existence of stepped funerary monuments is also attested in Etruria. However, there they occupied the upper part of circular tumulus tombs. Dennis noted the existence of such structures a century ago in his

comprehensive work on Etruscan cemeteries: "Among the sepulchral varieties of Bieda, two claim particular notice. One of these, which lies in the glen to the east of the town, is a cone of rock, hewn into steps, or a series of circular bases, tapering upwards. Of these, four only now remain, and the cone is truncated, but whether this were its original form, it is not easy to say. Like the conical tombs of Vulci and Tarquinii, it was probably surmounted by a sphinx, lion, pinecone, or some other funeral emblem, or by a cippus, or statue."³⁹ The date of these stepped monuments remains conjectural; however, both the external and the internal arrangements indicate an early period in Etruscan funerary architecture.

In the Greek world there is no evidence for the inclusion of stepped pyramids as the uppermost part of monumental tombs prior to the fourth century. From the architectural point of view their role from the fourth century onward was to serve as roof structures, and at the same time to support statues and other trophies. The change (i.e. from substructure to superstructure) is understandable in a predominantly Greek artistic atmosphere. From the architectural point of view it would hardly have been feasible to place a peripteral naos of Greek type on a gradually narrowing platform. Moreover, the pyramid would have lost its visual importance, and perhaps its symbolic meaning. Consequently, in tombs where the symbolic pyramid

form was retained, the pyramids were placed at the top of the structure.

The Mausoleum at Halikarnassos is presumably the first instance of the reintroduction of the symbolic pyramid into the monumental tomb architecture of western Asia Minor in the fourth century. It is not known exactly what prompted Mausolos (or his architect) to incorporate the pyramid form into the tomb building; but his oriental background and the symbolic impressiveness of such structures must have been factors. As indicated before, both stepped and smooth pyramids were known in Asia Minor, as well as in the Greek world proper. Herodotos states that when visiting Egypt he measured the Cephren pyramid himself.⁴⁰ However, before the time of Mausolos such forms were rarely employed in monumental architecture. Only some monumental altars, like that in the sanctuary of the chthonian gods at Akragas, utilized the stepped pyramidal scheme (fig. 11).⁴¹ The existence of such altars at Amyklai (the Apollo "Throne") and especially at Olympia (Zeus Altar) is questionable.⁴²

Alexander, during his campaign in the East, visited many different sites; like Cyrus before him, he derived ideas from these eastern creations for his own buildings. Diodorus Siculus tells us that among the written instructions left behind by Alexander there was one for a new burial-place for his father: "A tomb for his father Philip was to be constructed to match the greatest of the pyramids of

Egypt, buildings which some persons count among the seven greatest works of man."⁴³ From the same account we know that the project was never carried out.^{43bis} On the other hand he erected a magnificent pyre of six receding elevations in honour of his deceased general Hephaestion; the total height was "...more than one hundred and thirty cubits."⁴⁴

The impact of splendid and unique buildings on contemporary society was considerable, as is for example that of highrises in our own times. Kings and persons of authority were the first who tried to imitate and surpass the achievements of their predecessors. Augustus did the same with his great mausoleum, after having visited Alexandria in Egypt, as Mausolos had done at Halikarnassos after having seen Lycian prototypes for his own burial. These giant projects always contained new elements, often derived from non-funerary contexts; with the passing of time these elements frequently became standardized.

In later Hellenistic times pyramids (stepped or smooth-sided) appeared in several geographically distinct regions. After the fourth century, regardless of their scale, they were always the uppermost parts of built or rock-cut tombs. They can be called a sort of "baroque" version of the ziggurat. No true stepped pyramids are known to have been served as the lowest supporting section of any later monument. Three (very rarely four) stepped bases have little if anything to do with the original ziggurat form. They

simply served as elevated supports or base courses, without having any symbolic significance. The origin of these three-stepped-bases is obscure. Greeks, Lycians and others used them as a standard form for the kepidoma of many types of buildings.

About two centuries prior to the creation of the Halikarnassian Mausoleum the existence of a number of monumental built tombs is attested outside the eastern Mediterranean region. These are important for the record, as evidence of the search for monumental built tombs as counterparts of rock-cut tombs and tumuli. One famous example is the so-called Throne of Apollo at Amyklai near Sparta (fig. 12 a and b). This building, now completely destroyed except for some of the substructures, and fragments (in the Sparta Museum) of the superstructure, is generally dated to the second half of the sixth century. On the basis of Pausanias' description, scholars have attempted many reconstructions of the edifice; the latest is by R. Martin.⁴⁵

Pausanias was mainly concerned with the large number of sculptural reliefs; and he also speaks in more detail about the huge idol (c. 14-15m high) in the centre than about the architecture. His meagre evidence regarding the architecture is the following: "...Bathykles of Magnesia... made the throne of the Amyklaian (god)... I saw the throne and will describe its details. It is supported in front, and similarly behind, by two Graces and two Seasons. On the

left stand Echidna and Typhos, on the right Tritons."⁴⁶ Then comes the description of a number of reliefs, "At the upper edge of the throne are wrought, one on each side, the sons of Tyndareus on horses... On the very top of the throne has been wrought a band of dancers, the Magnesians who helped Bathykles to make the throne. Underneath the throne, the inner part away from the Tritons contains the hunting of the Kalydonian boar... 19. The part of the throne where the god would sit is not continuous; there are several seats, and by the side of each seat is left a wide empty space, the middle, whereon the image stands, being the widest of them all... The pedestal of the statue is fashioned into the shape of an altar, (βωυος) and they say Hyakinthos is buried in it, ... they devote offerings to Hyakinthos as to a hero into this altar through a bronze door, which is on the left of the altar."⁴⁷ This account is followed by a further description of sculptures. To this can be added a sentence from his description of the throne of the cult-statue of Zeus at Olympia: "It is impossible to go under the throne, in the way we enter the inner part of the throne at Amyklai."⁴⁸

Naturally the archaeological and comparative evidence has to be included in any proposed restoration. The former comprises the (not entirely clear) foundation courses, Doric column segments (free-standing, engaged and three-quarter columns) Doric capitals, console capitals and a few other architectural embellishments. The comparative material is

much too extensive to be dealt with here in detail. It involves commemorative and cult buildings in Asia Minor, especially altars and tomb monuments, and their predecessors in the east.

As Martin points out, although the *βωμος* (bomos) of Pausanias has been understood as an altar, the word actually has a much broader meaning, and can refer to a large socle or podium.⁴⁹ Some of the fourth century Ionian altars with steps in the middle, such as those at Cape Monodendri near Didyma (fig. 13) and in the sanctuary of Hera on Samos, do in fact have elevated platforms.⁵⁰ Many of the Lycian and the later fourth century monumental tombs in Asia Minor were also placed on elevated platforms. The large altars of ash also rose high above the ground, but because of their different function they had a different form.

Pausanias seems to mean by "throne" the entire monument and by bomos the central part of it, housing the tomb and supporting the statue. The free-standing column fragments could have belonged either to a temenos around the monument or to a propylon, as Martin has suggested, though the latter seems less likely. A third possibility is that the columns stood on top of the high bomos, as was the case in the fourth century altar of Artemis at Ephesos⁵¹ or in that at Magnesia,⁵² where statues were placed in the intercolumniations (fig. 14). The arrangement of the engaged columns remains just as uncertain as that of the freestanding members. In all the

proposed reconstructions they are shown as part of a screen-wall. However, they could have surrounded the massive podium section as attached columns-- an arrangement known from a small scale (0.62m high) marble model of a shrine found at Sardis (fig. 16).⁵³ Here there were painted reliefs in three zones between the columns. G. Hanfmann notes the importance of the find: "Unknown until now (i.e. 1963) in archaic Ionian architecture were the three-quarter Ionic columns on simple torus bases at the corners and engaged half-columns at the centres of the walls."⁵⁴

Another puzzle at Amyklai is the number and position of the Karyatid-like supports. Pausanias begins his description with the mention of these figures; they seemed to have been the first element to greet the approaching visitor. Thus they must have been clearly visible, as in all the other known examples of Karyatid arrangements. In this respect Fiechter's reconstruction perhaps comes closest to the truth (fig. 15).⁵⁵ From Pausanias' description we can also assume the existence of other freestanding statues.⁵⁶ However, we do not know whether they were placed on the throne or on the more secluded inner part of the bomos. They could also have stood between some of the columns, as in later tombs such as the Nereid Monument, or around the edge of the bomos (the burial place), as in the fifth century Heroon "G" at Xanthos.⁵⁷ The position of the "several seats" is also debatable. In any case they were near the pedestal, perhaps

flanking it.

The architectural composition as a whole must have had a pyramidal appearance, with its different elevations culminating in the idol in the centre. Contributing to such an effect was the prominent setting of the edifice on the summit of a hill (like a mountaintop sanctuary). Fiechter well summarizes the architectural importance of the building: "...der Bathyklesbau, wie wir darzutun versuchten, ein jonischer Bau, trotz seiner mannigfachen dorischen Einzelheiten - ja noch mehr, er ist ein asiatisches Gebilde und ein Nachkomme alter Thronvorstellungen aus der vorgriechischen asiatischen Kultur."⁵⁸ To this can be added that, "...Bathyklès joue un rôle très important dans la transmission des éléments ioniens du courant architectural qui va se développer à la fin du VI^e siècle dans le monde grec occidental."⁵⁹

Another type of monument built structure housing a tomb was the Tomb of Porsenna at Clusium in Etruria (fig. 17). Unfortunately we are on even more shaky ground with this structure than with the "throne" at Amyklai. The only ancient literary source is the Elder Pliny, who relies on Varro's account (late second century), indicating that in his own day no more remains existed.

The relevant passage in Pliny is as follows: "For it is appropriate to call "Italian", as well as "Etruscan", the labyrinth made by King Porsenna of Etruria to serve as his

tomb, with the result at the same time that even the vanity of foreign kings is surpassed by those of Italy. But since irresponsible story-telling here exceeds all bounds, I shall in describing the building make use of the very words of Marcus Varro himself: He is buried close to the city of Clusium, in a place where he has left a square monument built of squared blocks of stone, each side being 300 feet long and 50 feet high. Inside this square pedestal there is a tangled labyrinth, which no one must enter without a ball of thread if he is to find his way out. On this square pedestal stand five pyramids, four at the corners and one at the centre, each of them being 75 feet broad at the base and 150 feet high. They taper in such a manner that on top of the whole group there rests a single bronze disk together with a conical cupola, from which hang bells fastened with chains: when these are set in motion by the wind, their sound carries to a great distance, as was formerly the case at Dodona. On this disk stand four more pyramids, each 100 feet high, and above these on a single platform, five more. The height of these last pyramids was a detail that Varro was ashamed to add to his account: but the Etruscan stories relate that it was equal to that of the whole work up to their level, insane folly as it was to have courted fame by spending for the benefit of none and to have exhausted furthermore the resources of a kingdom; and the result, after all was more honour for the designer than for the sponsor."⁶⁰

Needless to say, this description has prompted many archaeologists to produce reconstructions, many of them quite fantastic. The last futile attempt was made by J.L. Myres.⁶¹ If one follows the narrative carefully it becomes evident that the building presented to the reader is architecturally impossible. Yet in spite of the exaggerated account of Varro one cannot doubt that a magnificent tomb was raised for Lars Porsenna, a powerful chieftain, who conquered Rome in the last decade of the sixth century.⁶² The site of his sepulchre would naturally be at Clusium, his capital. One can also assume that if it had not been of extraordinary dimensions and splendour historians would not have recorded its existence. It is also not improbable that it had a square basement of regular masonry, supporting five pyramids; a small example of such a tomb is still extant on the Via Appia at Albano Laziale (fig. 18). Although this tomb is of Republican date, the scheme, with a square basement and five conical pyramids on top, relies on a much earlier model: "It seems to show that this kind of tomb of the reges atavi of Etruria was among the antique tombs which the grandees of Republican and early Imperial Rome imitated, in addition to mounds-- as seen at the Via Appia-- and perhaps, tholoi."⁶³

The Cucumella at Vulci,⁶⁴ with its circular walled base and pair of towers,⁶⁵ square and conical, inside the mound, also shows affinities with Porsenna's tomb (fig. 19).

Further analogies can be found in Lydian mounds, especially the tomb of Alyattes near Sardis;⁶⁶ it is known from Herodotus (1. 93) that five oûpou marked the summit of this huge tumulus.

The labyrinth, another distinguishing feature of Porsenna's tomb, has also been the subject of controversy. It was in all probability underground, beneath the superstructure. No vestiges of it have been brought to light, though not far from Clusium (Chiusi), at Poggio Gajella, an underground maze of tombs was found in the late nineteenth century. It may or may not be connected with Porsenna's tomb.⁶⁷

To summarize, the origins of Porsenna's tomb are just as obscure as its subsequent fate. If one looks for contemporary or earlier analogous schemes, one should not forget that, in addition to the obvious eastern parallels, the Bronze Age nuraghi of Sardinia (fig. 20) also present similarities to the Porsenna complex, both in elevation and in the maze-like interior plan.⁶⁸ However, it can be asserted that the colossal Etruscan structure had little influence on subsequent developments in funerary architecture.

In looking for antecedents of Hellenistic monumental built tombs beyond the sixth century we come finally to Lycia. In this mountainous district of western Asia Minor there is more evidence for "proto-mausoleum" forms than anywhere else in the Mediterranean region. The early history of

Lycia is practically unknown. The region came under Persian domination after 545 B.C. The Persian general Harpagos managed to subdue the fiercely fighting Lycians, and at Xanthos killed all the inhabitants of that city "...saving eighty households... these eighty families as it chanced were at that time away from the city, and thus they survived."⁶⁹ Following the conquest Xanthos was largely repopulated by foreigners, a fact suggesting that with the newcomers there came also an influx of new ideas.

The currently available evidence suggests that in Lycian architecture stone construction started to play a more important role only from the middle of the sixth century onwards. This is the time when the first stone tumuli and pillar tombs appeared on the scene. Previously timber had been the dominant material; if the wooden hut engraved on the Phaistos disk⁷⁰ indicates a Lycian building type (fig. 21), the forms had remained essentially unchanged since the later Bronze Age. Obviously in the early stages of the development of cut-stone architecture, forms inherited from wooden construction played an important role. The most essential supporting members of stone buildings were cut so that they closely imitated their wooden prototypes. Thus in the early stages of the transition from timber to stone there remained a clear visual link with the past, though this link later gradually diminished.^{70bis}

As mentioned above, among the different varieties of

Lycian funerary monuments the earliest are the tumuli and pillar tombs. Built house-tombs appeared around the second quarter of the fifth century; shortly afterwards the schemes were reproduced in rock-cut architecture. The story is the same with built sarcophagi and their rock-cut versions, the former series starting around 400 B.C. It can safely be assumed that all the different types existed simultaneously till about 300 B.C. Thereafter Greek forms predominated in the architecture of the region.⁷¹

It should of course be remembered that certain Greek decorative and technical elements are found in remote areas of Asia Minor, and farther inland, even in the sixth century. Lycia was no exception in this respect; but the full impact of the western influence was not felt before the end of the fifth century. Judging from the available archaeological evidence, there took place about this time a rather successful combination of local forms and ideas with others imported from the east and the west. One outstanding result of this combination was the Nereid Monument, a "temple tomb" on a podium, the forerunner of the Mausoleum at Halikarnassos (or of the so-called mausoleum-form of tomb).

Both pillar-tombs and sarcophagi can be dismissed as typological predecessors of the Nereid Monument. The pillar-tomb, of which there are some thirty known examples, consisted (with a few exceptions) of a tall monolith with a burial chamber and crowning statue(s) on top (fig. 22). The origin

of this type is obscure; Mesopotamian stelai, Assyrian obelisks, Persian towers and high local beehives have all been suggested as prototypes. The existence of (elevated) sarcophagi (fig. 23) cannot be documented before the end of the fifth century; thus these tombs are more or less contemporary with the Nereid Monument and its successors. Besides, like the pillar tombs, they belong to a typologically different category.

Only the house tombs remain to be considered; and here indeed one finds a major component of the later elevated "temple tombs." "Temple tombs" are in fact house tombs raised on podia or platforms. In the case of the two earliest, Heroon "G" in Xanthos (fig. 24) and a dynastic tomb in Apollonia (fig. 25), it would perhaps be even better to speak of house tombs on terraces. Other house tombs of roughly contemporary date had only a stepped krepidoma for additional height. The superstructure, i.e. the actual house tomb or cella, is basically the same in all examples, and was derived from Lycian granaries or some other type of native wooden building. The style is easily recognizable by the projecting log ends and recessed panelling, usually confined to the narrower front and back ends. In all instances the roof consisted of cut stone slabs, whether gabled [Xanthos, "F" (fig. 26) and "H" (fig. 27)]⁷² or of the flat horizontal type, as in Heroon "G," (fig. 28) excavated and published by the French in the 1950's and

60's.⁷³

Heroon "G" occupied a prominent position partly inside the city walls, on a levelled rock surface in the SW part of the Lycian acropolis. The walls were of ashlar masonry, except the one on the south where the structure formed part of the fortification wall. This section was built of huge blocks, all straight sided, but some of them polygonal, others four-sided. The built terrace, about 3.00m high,⁷⁴ formed a platform that covered ca. 159m² (15.50 x 10.25m). The retaining wall of this terrace started out with an orthostate course. According to the excavators these blocks "...ne font point partie de l'édifice proprement dit et servent plutôt à délimiter un socle ou un terre-plein:"⁷⁵ The uppermost section of the wall terminates in an unmistakably Greek astragal crowned by two rows of egg-and-dart embellishments. As will be seen below, exactly the same decorative composition crowned the podium of the Nereid Monument, but there the style is more advanced, the eggs are more elongated and all the contours better defined.

In the central section of the north side a stair or ramp, parallel to the wall, gave access to the top of the terrace, the outer perimeter of which was presumably lined by statues: "On fera valoir aussi le luxe de décor dont s'entourait le bâtiment, décor possible de la terrasse, elle-même, fait de Corés d'un type purement grec, se dressant de place en place et montant une garde symbolique, décor du

socle où se pressaient satyres et fauves."⁷⁶ On the basis of comparative evidence from the Apollonia tomb, it has recently been suggested that there may have been a chamber within the high terrace of Heroon G.⁷⁷ The cella or cult building occupied a relatively small portion of the top of the terrace. It had a ground plan of 6.40 x 4.26m, above a one-step elevation. The height of the structure was almost 5.00 meters. The walls consisted of neatly fitted ashlar, "framed" with the typical Lycian imitation of wooden beams and recessed panels. In the interior six free-standing pillars supported the flat Lycian roof, the entablature of which consisted of a row of close-set round "logs" supporting two faciae and a taenia.

Opinions are divided about the disposition of the friezes found nearby. Coupel and Metzger have revised their earlier position, and now place the so-called "coqs et poules" frieze on the lowest section of the cella walls.⁷⁸ Some distance above this band they would place another, wider frieze, with a third frieze adorning the interior. In their restored drawing of the building⁷⁹ another frieze with a series of animals appears just below the egg-and-dart decoration on the principal east side of the terraced platform. They reject the more common combination of friezes, one immediately above the other, proposed by Bernard for the terrace wall (fig. 29).⁸⁰ According to Bernard's scheme the "coqs et poules" frieze would come between the

larger animal panels and the profiled cornice of the podium.

Two technical features deserve attention: the constant use of dovetail clamps, and the refined stone-working. The latter feature is also found in the dynastic tomb at Apollonia and in several other Lycian buildings. In Heroon F the lowest portions of the east sub-basement are still in situ; "the edges of these ashlar are carefully dressed, being bevelled with an oblique edge c. 1cm. wide and deep, so that the blocks are separated by a groove c. 2cm. wide, compared to the c. 5cm. on the Apollonia tomb. In addition, the faces of the blocks are lined by a smooth margin (drafted edge) c. 5cm. wide, inside which the surface is at a slightly higher level and seems worked only by a pointed chisel."⁸¹ As the Danish archaeologists have pointed out, on the basis of the Greek evidence these walls cannot be dated before the early fourth century. However, "the dated Xanthian walls... show the Greek evidence to be of doubtful value and use for the dating of the Lycian indigenous walls. We have seen that bevelling was well-known at least as early as c. 460B.C. and that the related oblique edge, which often was used to set a wall of a pillar-tomb off from a foundation or the bed-rock, already is seen c. 480/470 B.C. (the Harpy Tomb)."⁸² Both Heroon G and the Apollonia complex have been dated on archaeological and comparative evidence to the second quarter of the fifth century.

In Heroon G one can already sense the diverse influences

that also characterize many of the later, more complex and better unified designs for the monumental built tombs of the region. One of these influences is Greek, as shown in the decorative details and the technical execution of the complex. The cella building is definitely Lycian. The origin of the terraced podium as well as the subject matter of the friezes is debatable; they could be either oriental or local. Finally the overall disposition of the two main elements, consisting of a platform below and a cella above, distantly echoes the design of the Cyrus tomb.

Platforms or podia made of mud-brick or ashlar also occur in Attica as early as the archaic period. They imitated domestic architecture, but the burial-place lay beneath them, not inside. Built tombs of this type continued into the classical age. They were rarely free-standing and often give the impression of retaining walls built against a hill side. Moreover, these monuments (called mnema or sema) never had a cult building on top or a hyposorion inside. They simply supported grave markers, such as stelai, funerary naiskoi, vases etc. The development of the more grandiose peribolos tombs (enclosing a group of graves) does not predate the fourth century. Consequently it is hardly conceivable that any of these Attic tombs could have been a formative influence in the development of the elevated "temple tombs" of western Asia Minor.

Krischen's imaginative and intriguing idea,⁸³ that for

the Nereid Monument we should seek "...die unmittelbare Vorstufe im Niketempel auf der Burg von Athen" cannot be substantiated in the light of local Lycian evidence. The transporting of this idea to Lycia is highly unlikely, especially since the known Greek contribution to this part of Asia Minor in general and in particular to its architecture was restricted to decorative motifs and workmanship, and did not extend to overall composition. Only from the early fourth century onwards can we find a more significant transmission of building-forms or frieze-subjects to Lycia. Even then, the underlying ideological principles of the new creations, the organization and the combination of units, and their display in Lycian funerary architecture remains in essence non-Greek. The Lycians either misunderstood or did not care to follow the architectural guidelines and principles employed in fourth century Greece.

A recent find (1969) from Sardis known as the "Pactolus pediment" (fig. 30) has introduced a new and puzzling problem into the search for the origin of the broadly defined "mausoleum" type of burial, and more particularly of the "temple tombs."⁸⁴ Somewhat less than half of the white marble pediment, originally 4.60m long, is preserved; it represents a funeral banquet. The sloping sides of the pediment were decorated with a bead-and-reel below, now badly damaged, and a Lesbian cyma moulding above. The cuttings on top of this cornice were probably for the attachment of a

of a sima. On the basis of its high reliefs, which show a general affinity to the Satrap Sarcophagus from Sidon,⁸⁵ the pediment has been dated to the third quarter of the fifth century. The form and appearance of the rest of the building remain largely unknown "...it may have been a building in antis,... what little architectural decoration is left argues for the Ionic order..."⁸⁶ The importance of the find is that "the new pediment indicates that among the Lydian funerary monuments there was represented a type hitherto unknown in the Sardis area,— the mausoleum in the form of a temple-like shrine."⁸⁷ The location of the building is also conjectural, though it was presumably in the same general area where the Pyramid Tomb was found. The find unquestionably adds a new dimension to Lydian funerary architecture (i.e. the temple-like heroon), but until more is known about the overall architectural development no conclusions can be drawn.

Here may be mentioned Butler's proposed restoration of a tent-like or triangular built façade above a Lydian chamber tomb (fig. 31).⁸⁸ Butler's description of this curious mixed construction is as follows: "The entrance was approached by a broad flight of four steps composed of well wrought blocks of white limestone. At either end of the steps stood a tall stele, one of which, though perfectly plain in other respects, preserved a part of its ornamental akroterion... the opening into the tomb chamber is now simply the end of a wide passage with double pitched ceiling; it probably was originally

closed with a wall and doorway, since destroyed."⁸⁹ The height of the façade, including the steps, was approximately 4m, the width without the stelai c. 2m. The tomb can be dated ca. 500-480 B.C.⁹⁰ The discovery of the "Pactolus pediment" certainly seems to support Butler's proposed restoration of a "pedimental" crown for the façade of this tomb. Presumably the other chamber tombs overlooking the Pactolus valley had similar or perhaps even more elaborate façades; in the light of the advanced stoneworking techniques of Lydia this situation would not be surprising.

II. Rock-cut tombs

The use of monumental rock-cut tombs was restricted to regions with appropriate geological formations. For smaller rough chambers, rock-cut sarcophagi, or for other architecturally insignificant tombs, irregular rock-surfaces were sufficient. The overwhelming majority of rock-cut tombs to be discussed below are two-dimensional tomb façades of some architectural pretentiousness. There are only a few examples where the units are completely free-standing, not attached to the surrounding rock.

While in the construction of built tombs the same methods were applied as in any other built structure, in rock-cut tombs different techniques were required. Even if the thrust and support principle existed visually it was not needed technically. First the sites had to be chosen. For groups of tombs, where only the façades were to be cut out,

extensive vertical rock formations served best. In most instances they provided a picturesque setting, a "frame" for the funerary monuments. If there were no visible fissures in the rocks then work could be started. After having outlined the design and roughly dressed the rock-face, the cutting could proceed from top to bottom. The workmen were lowered from above on ropes. At the appropriate level they erected temporary scaffolding from which to work. Around a number of tombs the square holes that once supported the scaffolding are still visible today.⁹¹ As the unfinished façade of tomb B2 at Kaunos indicates,⁹² the work at each level was largely completed before the masons moved to the next lower section. The carving of finer details was probably left to another group of workmen. When the intercolumnations had been completely freed from the back, the hewing out of the pronaos and the chamber behind could have begun. P. Roos in his study of the Kaunos tombs has pointed out that, "Stucco has been used in several tombs and for different purposes, coating, moulding and fastening."⁹³ Furthermore as in built architecture, painting played an important role: "on the whole I think that the painting of the façades was of the same extent as, for example, that of the tomb at Leufkadhi in Macedonia with the exception of the painted frieze. This means that the shafts and the bases of the columns as well as the fronts and the bases of the antae, and the architrave, were unpainted."⁹⁴ Occasionally, too,

painted ornament replaced carving (again as in Macedonian buildings), like in the Amyntas tomb at Telmessos.⁹⁵

For the treatment of the rock-surfaces various tools were used at the different stages of work. According to N. Ceka, "pour la préparation de la tombe on a fait usage de la pioche pour donner la première main."⁹⁶ This pick axe was either pointed at both ends or had a flat butt at one end. It was employed to remove large quantities of stone. After this initial stage points were employed. These long and narrow iron tools of various sizes could be used for both the coarser and the finer treatment of the rock surfaces. The edged hammers with their pointed but horizontal blades (some with teeth) played an important role in making the desired planes, curved or flat. Chisels usually came in at the last stage of the work, often being used to cut out reliefs or other architectural ornaments. Since in rock-cut tombs the finishing polish did not exist, paint was applied to these semi-smooth surfaces. Sometimes the above mentioned stone cutting stages were not fully carried out. Interment often took place even before the chiselling stage had been reached; in such cases, with a few exceptions, the façade was never completed.

Historically, the tradition of monumental rock-cut tombs and cult monuments goes back to the Bronze Age. They occur in Egypt as well as in the Near East. Some of the Hittite rock-cut sanctuaries, such as Yazilikaya, executed

in the reign of Hattusili III (1275-1250 B.C.),⁹⁷ are still well preserved today. During the earlier half of the first millenium B.C. rock-cut tombs continued in use in Anatolia and the Near East. However, they were never so popular or as elaborate as they became after the custom had been revived by Darius I (521-486 B.C.). One isolated example has already been mentioned, i.e. "Tomb of Pharaoh's Daughter" of the first temple period in Jerusalem; in addition, Urartian rock-cut monuments also deserve attention.

The destination of the Urartian chambers hewn out of the rock has only recently been recognized; "...the rock-cut chambers in the precipitous south side of Van citadel, ... must be described not as shrines but as tombs."⁹⁸ The three largest belonged to the royal house of Urartu. For the tomb of Angishti I (786-764 B.C.-- the only identifiable one of the three) the entire upper section of a projecting cliff was reshaped. The exterior, with whatever applied architectural embellishments it carried, has completely disappeared. The tomb was approached by steps placed parallel to the cliff face. The interior "...was decorated with bronze stars of Assyrian pattern"⁹⁹ similar to those found in some of the Mycenaean bee-hive tombs.

The monumental Phrygian rock façades are another link, even if indirect, leading to the creation of monumental rock-cut tombs of western Asia Minor. Their exact destination was in question for a long time, though it is now believed

that most of them were cult monuments.¹⁰⁰

The so-called Midas Monument, near Eskişehir (fig. 32), is one of the largest and a typical example.¹⁰¹ An architectural composition enclosed a relatively small recessed niche, intended for the display of a cult statue (of Kubila or Kybele). A succession of shallow frames enclosed the niche and helped to focus attention on this idol. Carved geometric patterns (mainly variations of the meander motif) cover the entire surface of the façade, which otherwise reproduces the front of a contemporary gabled building. Eighth-century line drawings on wall blocks found at Gordion support this view: "There is evidence at Gordion that these megarons were covered by gable roofs: an acroterion; pictures of houses scratched on wall blocks; a gable-roofed wooden tomb under a tumulus."¹⁰² It is generally believed that the above mentioned rectilinear patterns, as ornamental motifs, originated in the minor arts, such as terracotta tiles, textiles and inlaid woodwork.¹⁰³ Here, they are reproduced rather skillfully and on a gigantic scale.

Among the Phrygian rock-cut monuments near Ayazin at Köhnüş the best preserved is the so-called Lion Tomb (fig. 33) (locally known as Arslan Taş).¹⁰⁴ That it was definitely a burial place is shown by the arrangement of the interior chamber. The monument was cut out of a cube of rock, 11m high. The disposition of the two huge lionesses, flanking and symbolically protecting the chamber high above

the ground level, recalls the Hittite tradition; but these lionesses are "...more vigorous, more alive, less conventional than the Hittite."¹⁰⁵ The scheme is also reminiscent of the famous Lion Gate at Mycenae.

In connection with these rock-cut monuments a number of observations can be made. The tombs of the group to which the Midas Monument belongs, with their low pitched roofs and the double frames of the door openings showing the ends of cross-beams, all imitate wooden construction. Stone versions of timber buildings are also known from Lycia, but their existence cannot be documented before the end of the sixth century. The idea of possible cross-influences from Lycia to Phrygia, put forward by Akurgal, cannot be maintained from the chronological point of view.¹⁰⁶ E. Haspels also raised this possibility, but dismissed the idea, since "it seems out of the question that there was a connection or the possibility of a mutual influence between the two."¹⁰⁷

She rejects Akurgal's proposal both on the ground that "the styles differ greatly, each being individual and regional,"¹⁰⁸ and on account of the geographical separation of the regions.¹⁰⁹

Another important aspect of these Phrygian façades is their sheer existence. They simply demonstrated for the first time that free-standing monuments, regardless of their size, could be abstracted from their settings, and recreated in their essentials as two-dimensional designs on a vertical

rock-surface. The Persians seem to have made exclusive use of the idea. From the time of Darius I to the fall of the Achaemenid dynasty all their royal tombs were rock-cut. It is not known exactly what led Darius I to change the form of the royal burial just introduced by Cyrus. However, the move has to be seen in the context of the new overall approach adopted by Darius. He reestablished the capital at Persepolis, and also revived old religious and political ideas and applied them with some modifications in his own administration. In monumental architecture Darius, like Cyrus before him, showed the Achaemenid ability to borrow and adapt features, rather than to rely on original inventions. In the introduction of the new type of funerary architecture it is conceivable that the decorative effect of the large "spread out" rock-cut monuments (as in the Phrygian façades) was closer to native thinking than the more sophisticated built burials of developed civilizations. Picturesque façades effectively conveyed the idea of the superhuman nature of the king to the majority of the population whose background was rooted in the nomadic tradition. Textiles, metal works etc. were highly developed in Persia, a heritage shared with the Phrygians, whose territory came under the control of the Achaemenids after the mid sixth century.

No securely dated rock-cut tombs with architectural façades are known before the time of Darius I. E. Herzfeld's supposition that the rock-cut tombs in the mountains of

Kurdistan belonged to Median or early Achaemenid rulers cannot be substantiated.¹¹⁰ H. von Gall and D. Stronach have rightly pointed out that these tombs with their carved architectural members were made in the wake of the royal creations rather than before them.¹¹¹

Of the seven mostly cruciform (fig. 34) Achaemenid royal tombs, the earliest, that of Darius I, is securely dated by the inscription.¹¹² The sacred site of Naqsh-e Rostam was chosen for the tomb. The cutting of the central portion of the 64m high cliff started soon after 520 B.C.¹¹³ The height of the rock-cut façade is 23m. The illusionistic composition has three registers. The bottom part (6.80m high) is left blank. Above that the scheme expands horizontally. Four attached ("Persian") columns with double bull protomes as capitals support visually an Ionic architrave and a dentil course. In the central intercolumniation a doorway with an Egyptian lintel above leads to the hewn interior. The arrangement of this central section probably reflects in a simplified form the front of the Persepolis palace: "It is to be assumed that the order of the portico columns of Darius' palace was the same as that depicted on the tomb façade."¹¹⁴ The top register is equal in width to the section at the bottom and accurately aligned with it but somewhat higher (8.50m). Here, the king can be seen worshipping before the symbol of his god on a three-stepped pedestal. Opposite him, balancing the design, is a

fire altar. The entire composition is raised on a monumental "throne" supported by thirty figures in two tiers, each figure representing a separate nation.¹¹⁵ Each tier is topped by a single row of archaic Ionic kyma decoration. The excavators have shown that at least some sections of the façade were painted.¹¹⁶

It is easy to realize that the scheme is the translation of a three dimensional building on to a two-dimensional surface, resulting in a strangely tower-like appearance. For the plain bottom register no acceptable explanation has yet been found. E.F. Schmidt's assumption that it "...was presumably cut to prevent easy access to the funerary compartments,"¹¹⁷ is hardly convincing. Perhaps the blank zone represents a "paved approach" to the complex, but now on a vertical surface. The arrangement of the interior of the tomb lies outside the scope of this study; however, it is important to note that new studies suggest Urartian origins for the scheme.¹¹⁸

Returning to architectural façades imitating wooden construction we should note one more series of funerary structures that needs to be discussed in this context, namely, the Phoenicio-Cypriot Royal Tombs at Tamassos on Cyprus. These underground burials are "...die wichtigsten archaischen Zeugnisse der Insel für die monumentalisierende Nachbildung einer gemischten Stein-Holz-Architektur!"¹¹⁹

Both the execution of the façades and the interiors show that

the reproduction of timber forms in stone architecture was well advanced before the Lycian "mass"-production of such tombs started. Since all of the Cypriote monuments are underground tombs, more detailed discussion will be reserved for the next section.

A unique group of three little known tombs near ancient Phokaia on the coast of western Asia Minor may be discussed here. These tombs were probably executed under Phrygian influence. All of them are dated in recent literature to the fourth century though on the basis of architectural style they ought to be much earlier.

One of the tombs in question, referred to in the literature as Taş Kule (fig. 35 a and b and c) is a curiously cut structure, of unique design and not readily classified. The date of the tomb, as well as the provenance of the stonemasons and that of the owner, remains a subject of dispute. For example, G. Bean has assigned it to the eighth century, while Akurgal advocates a date in the fourth century.¹²⁰ The monument is located in an open, slightly undulating landscape, about 7km from modern Foça on the way to Izmir. A large outcrop of rock was shaped into the desired form, a rectangle measuring 8.80 x 6.25m, and rising to a height of 2.50m on all sides. Around the base of the otherwise vertical faces there are step-like cuttings arranged in an irregular fashion. Three sides were left plain; only the eastern, or principal, façade carried some

ornamentation, in the form of a slightly recessed false window surrounded by a double frame, the outer of which projects slightly. The top band is crowned by two more horizontal fascia-like bands. The ends of the lower fascia are shaped in a double curve, recalling a flattened kyma-reversa moulding; the upper fascia had Δ -shaped corners in very low relief, that were still visible in the last century.¹²¹

Corresponding to this "cornice" section, the other sides, above the level of the main rectangular platform, have a three-stepped base measuring ca. 3.10x3.40 m on the top step. A fourth step, on top of these, is continuous on all four sides, including the east. This stepped base, approximately 1.30m high, is surmounted by a solid cube reaching ca. 1.90m in height. Here again steps start of which only two are still in situ with a broken surface above them. The reconstruction of this uppermost section remains conjectural. It may have ended simply in a pyramid, or a stepped base surmounted by a phallus stone as suggested by Bean and others.¹²²

The interior of the tomb is reached by a small doorway in the eastern part of the north façade. An elongated forechamber (1.60 x 2.65m) is followed by the roughly square burial-room, opening off the west side of the antechamber and set at a slightly lower level. In this inner room is a sunken rectangular pit, 1.25 x 2.35m and 1.30m deep, for the actual burial. Both chambers have flat horizontal ceilings.

Around the exterior of the monument there are rather irregular but straight channels, that may have served to drain the rain-water. The tomb has been compared to a small village church with its projecting tower: "A première vue, il fait l'impression d'une petite église de village avec sa tour carrée."¹²³ Certainly the play of elements is on the eastern side. It is a "disturbingly" one-sided, asymmetrical design, both in its details and as a whole.

The other tomb, closer to Eski Foça, is known as Şeytan Hamami (Devil's Bath).¹²⁴ It was completely hewn out of the rock. Architecturally, the façade is not imposing. An arched rock-cut doorway, with sides and top stepped inward, gave access to two chambers, slightly off axis, one behind the other (3.00 x 4.12m and 3.10 x 3.42). The inner chamber is entered by another arched doorway; as in the Taş Kule, there is a sunken pit for the burial.¹²⁵ In contrast to Taş Kule, the ceiling of this tomb was carved to represent a very low pitched roof.

The controversy surrounding the date of these tombs has lately been "resolved" by Akurgal, and both have been assigned to the fourth century, though on dubious evidence. Akurgal sees Lycian, Lydian, Phrygian and Persian influence in the monolith of Taş Kule. The pattern on the front entrance (?)-- which was actually left plain-- suggests to him Lydian inspiration; the two-storied arrangement and form is Lycian, while "the presence of a stepped section between

the "floors" is indicative of Achaemenid influence."¹²⁶ He is probably right in saying that the concept of design is native Anatolian, and that it was a princely tomb. However, whether it can be attributed to one of the tyrants who lived at nearby Larisa^{126bis} during the fifth and fourth centuries remains questionable. In the Şeytan Hamami tomb Akurgal found some Greek sherds that, "may be dated to the end of the 4th. century, and confirm the date suggested for the tomb lying near Foca."¹²⁷ At this point it is worth recalling his earlier observation concerning the find: "In der Grabstelle haben wir einen ganzen aber zerbrochenen Lekythos hellenistische Zeit gefunden. Der Lekythos mag dennoch aus einer späteren Verwendungszeit des Grabes herrühren."¹²⁸

Architecturally, the complete absence of Greek decoration in fourth century Ionia is hardly conceivable. Moreover, there are no comparable monuments in the neighbourhood that date from this period; neither are there any traits in these tombs that can be compared with buildings at Larisa, supposedly the origin of the commissioners. Consequently the source of inspiration must be sought elsewhere. After Harpagos' devastating campaign in the mid-sixth century and the ill-fated Ionian revolt of 499-494, Phokaia became impoverished, and never regained its former importance. On the other hand, in the decades just before the Persian invasion Phokaians were famous navigators; and they also founded several colonies in the western Mediterranean, including Massalia,

the present day Marseille. Phokaia was a prosperous city, with contacts all over the Mediterranean world. What its people lacked in their native tradition could be imported from other places; this borrowing could well have included architectural forms and ideas.

In nearby Phrygian territory we find numerous rock-cut monuments ranging in date from the late eight to the mid-sixth century. Large natural rock formations were frequently utilized for the cutting of these Phrygian monuments. For instance, Midas City itself is nothing but a huge rock-cut establishment.¹²⁹ The still existing individual structures within the city testify to the great variety of rock-cut forms. Among others, stepped platforms and asymmetrical designs characterize the so-called Altar¹³⁰ and Step-Monument H.¹³¹ Window-like niches framed by recessed panels also appear frequently.¹³² Phrygian interiors include some with flat ceilings, others with sloping sides. Moreover, among the two-roomed schemes we find examples both of axially aligned rooms and of inner rooms at right angles to the outer chambers.¹³³ These Phrygian parallels certainly suggest that the Ionian tombs under discussion may also have been executed under Phrygian inspiration at some date before the destruction of Phokaia by the Persians in the third quarter of the sixth century. A third Ionian rock-cut tomb of peculiar design, known as the tomb of St. Charalambos, deserves mention here (fig. 36 a and b). It is located near

Manisa at the north-east foot of Mt. Sipylus.¹³⁴ The imposing structure was created by a simple but clever method. The scheme is adjusted to the natural contours of the sloping hillside, instead of the other way around. First, a ca. 5.70m wide dromos was hewn out of the rock all the way from the horizontal platform to the vertical, undecorated façade. The full width of this dromos is occupied by steps leading up to a landing 2.20m deep, which in turn supports a smaller two-stepped "krepis" right in front of the doorway of the tomb. The vertical façade rises 3.00m above the threshold of this doorway. For the top, or "roof," section of the design (if one can speak of such a feature at all in this case) the approximately 45° slope of the hillside was smoothed out. The sloping surface of this "lean-to roof" measures 9.50 x 6.24m; it is set off from the surrounding hillside by a trench, that both marked the extent of the project and at the same time provided drainage.

The two-roomed interior resembles the axial arrangement of the Şeytan Hamami tomb, but the second room has a slightly lower floor level as in the Taş Kule tomb. Also, the opening between the two chambers is not aligned with the outer doorway. Both rooms have curved ceilings.

There is little evidence for the period of construction. Bean simply concludes: "It is undoubtedly very ancient and may well be Pausanias' tomb of Tantalus."¹³⁵ As with the other two tombs near Foça, and especially because of the

lack of Greek architectural mouldings, it seems safe to assume that the "St. Charalambos" tomb was cut under Phrygian influence before the Achaemenid invasion of the region.

All the rock-cut tombs discussed above belong to a period of negligible Greek architectural influence. It is appropriate to include here two groups of rock-cut façade tombs in Paphlagonia (Asia Minor) and in Cyrene (North Africa), in the latter of which at least entire schemes were derived from Greek sources. The Paphlagonian and Cyrenaican tombs can be treated as groups because individual examples show few variations in design; most of them follow a stereotyped pattern.

The earliest façade tombs of Paphlagonia can be dated to the early fifth century. They continued to be cut down to Imperial times, though with the progress of time they became less and less pretentious architecturally. The façades are flush with the rock-surface.¹³⁶ They all have a columnar treatment with a porch and burial chamber(s) behind the columns. The façades were often, if not always, crowned by an incised gable and embellished by symbolic carvings in low relief (fig. 37). The number of columns can vary from one, as in the "Direkli-kaya" tomb at Alasökü, to a maximum of five, in the "Kaya-dibi" tomb at Asar;¹³⁷ the columns are generally short and heavy in proportion. A few of the columns lack bases; where there is a base, it generally consists of a high torus (or half torus), sometimes

with a narrow plinth below. There is little carved detail; one can only agree with von Gall that, "die paphlagonischen Basen auf Formen der späthethitischen Architektur zurückgehen."¹³⁸ Interestingly enough, the type of base remained essentially unchanged, even in tombs which were cut in the late fourth century (i.e. "Direktykaya" at Salarköy),¹³⁹ when Greek influence had become quite widespread in the Mediterranean. Perhaps the only exception is the Gerdek Bogazi tomb at Karakoyunlu,¹⁴⁰ of the late fourth century, where the anta-bases are reminiscent of the Asiatic-Ionic type (fig. 38).

The capitals too rarely have even a suggestion of Greek influence; their prototypes are generally to be sought in wooden architecture imitating simple plinth forms. However, once again the capitals of the Gerdek Bogazi tomb at Karakoyunlu (both those of the free-standing columns and those of the two antae) show some Greek influence on the native Anatolian style.¹⁴¹ In the design (palmette forms ending in volutes) there seems to be some reliance on Greek sources, as seen for example in an anta capital from the Hekatomnid Andron at Labraynda.¹⁴² Otherwise, the form finds its closest parallel in the "Tomba dei Capitelli" at Caere in Etruria.¹⁴³ The monotony of plinth-like capitals in a few other instances was replaced by crouching bull figures; this idea was certainly borrowed from Achaemenid architecture.

In most tombs access to the burial chamber(s) was through window-like openings, framed by an embrasure with triple stepbacks. Even the outer borders of the façade often show the same treatment.¹⁴⁴ Similar framing has been noted in some of the Phrygian rock-cut monuments mentioned above. This device has a long history prior to its occurrence in the Phrygian and Paphlagonian examples;¹⁴⁵ and the motif was also taken over by Ionic architecture, where we see it in the three-fascia architrave and the triple recessed bands of doorways (e.g. Erechtheion in Athens). As so often, all these schemes seem to have originated in wooden architecture.

The inspiration for these open "colonnaded" porches remains debatable; however, it seems unlikely that they would have appeared without some knowledge of Greek peripteral or prostyle temple forms:

Much easier to recognize is the source of inspiration for the earliest rock-cut façade tombs in Cyrene.¹⁴⁶ They all show principles that are in general derived from Greek architecture. All the early, and rather roughly executed, façade-tombs occur in the northern necropolis, along the road to ancient Apollonia. Of these eight tombs standing side by side and numbered N₂-N₉ from east to west, the three easterly ones have pillars across the front of the porch, while the others have columns. They are similar in size, their width varies between 3.00m and 5.50m, and their height from 2.80m to 3.30m. Seven of the tombs have three supports

between the side walls; there is only one example with a distyle in antis disposition. It is notable that in the original form of the local temple of Zeus (variously dated from 540 to 450 B.C.)¹⁴⁷ we find a tristyle in antis arrangement in the opisthodomus, and the possibility cannot be excluded that the tomb designers derived the idea from the plan of the temple-- if in fact the latter belongs to the second half of the sixth century. The capitals of N_2 - N_4 are Aeolic, N_8 is Ionic, and the rest (N_5 - N_7 and N_9) are of the Doric order. All the column shafts are fluted, though the flutes are not regular in number.¹⁴⁸

The rectangular burial chambers were entered by a single door, more or less in the centre of the back wall. The interiors have been recut over the centuries; thus the original plans can hardly be determined.

In all but one of the tombs the section above the columns consists of nothing but a flat architrave; only N_8 has its carved pediment preserved. Presumably in all the other tombs the pediments were separately cut and attached to the entablature, and could thus be easily carried off and reused.

The front of Tomb N_5 is raised on a two-stepped base, while Tombs N_6 and N_7 have a low narrow platform in front of the columns. In N_2 - N_4 and N_9 the walls of the porches are lined with rock-cut benches, providing seating for visitors.¹⁴⁹

For the date of the tombs the best clues are offered by the decoration. The most ornate, and probably the latest, of the group is Tomb N₈. Cassels sees in the mouldings of its pediment "affinities with the sixth-century treasuries at Delphi, although being rock-cut they are much cruder." Furthermore, "the door, too, is perhaps a simplified version of the type represented by that of the Siphnian Treasury."¹⁵⁰ The Ionic capitals have large archaic volutes, placed quite far apart. The slightly concave spirals of the volutes are connected by a canal of archaic style, convex in profile with a sagging lower edge. A Lesbian kyma ornament embellishes the abacus of the capitals. In their main characteristics the capitals are certainly comparable to the capital of the so-called Column of the Sphinx in Cyrene, or with that of the Column of the Naxians in Delphi.¹⁵¹ Yet the closest parallel to the Cyrene design seems to be an early fifth-century capital found at Halikarnassos;¹⁵² a similar date is possible for Tomb N₈. Noteworthy are the Aeolic capitals of the pillars in Tombs N₂-N₄. They consist of two close-set volutes with concave channels, with a plant motif springing up in the centre of the capitals, from the point where the spirals meet. These capitals are a rare type; perhaps the closest parallel to them is a capital from Eressos on the island of Lesbos. According to P. Betancourt the date of the Eressos capital is problematical; it has been assigned to "the sixth century B.C. (presumably in the second

half)... but an even later time is possible."¹⁵³ The same type of Aeolic capital was found not far from Cyrene in a rock-cut sanctuary at Ain Hofra.¹⁵⁴ This capital, along with those of Tombs N₂-N₄, can also be dated to the second half of the sixth century, making them the earliest of the group. The Doric tombs should probably be dated somewhere between N₂-N₄ and N₈ (the Ionic tomb).

These eight façade tombs, with a columnar treatment in front of the porch and with other Greek features, are the earliest known examples of their kind of the Mediterranean. Cyrene was founded in 631 B.C.^{154bis} by Doric colonists from the island of Thera, who brought with them no established architectural tradition. It is likely that many of the earliest buildings of the new colony were at least partly built of wood. Cyrene was renowned for its hard and weather-resistant thyrine wood; according to Theophrastos, "Thyon, which some call thya, grows near the temple of Zeus Ammon and in the district of Cyrene... there is abundance of it where now the city stands, and men can still recall that some of the roofs in ancient times were made of it."¹⁵⁵ However, within a few decades cut stone seems to have become the preferred building material in the city. One would expect that the strongest architectural influence would come from Thera, the other Aegean islands and Asia Minor. The Aeolic capitals of Tombs N₂-N₄ and the Ionic capital of N₈ support this view, though there are in the islands of Asia

Minor no known rock-cut façade tombs of the sixth century that are analogous to those at Cyrene. The Persian royal tombs could have been known to Cyrenaican architects, especially since the district, along with Egypt and Libya, became the sixth satrapy of Persia during the reign of Arkesilaos III, ca. 530-510 B.C.; however, these Persian tombs, as we have seen, are different in concept. In Greek architecture the building types closest to the Cyrene tombs are treasuries (e.g. the Massalian Treasury at Delphi) and shrines.¹⁵⁶ Among other possible models outside the Greek sphere, the rock-cut tomb façades at Beni Hassan in Egypt (fig. 40), executed during the Twelfth Dynasty, 2000-1785 B.C., seem to be closest to the Cyrenaican rock-cut façades.¹⁵⁷ Cyrene had connections with Egypt all through its history; thus these early façade-tombs could be Greek versions of much earlier Egyptian models.

III. Tumuli and Underground Tombs

In describing the territory of Pheneos in Arkadia Pausanias remarks: "The grave of Aepytus I was especially anxious to see, because Homer in his verses about the Arkadians makes mention of the tomb of Aepytus. It is a mound of earth of no great size, surrounded by a circular base of stone."¹⁵⁹ Obviously he is describing a simple type of tumulus; nevertheless the form of all these circular earth mounds was basically the same, regardless of their

size. Pausanias, who was probably a native of Magnesia-ad-Sipylum, must have seen in his native Lydia much more imposing tumuli, erected many centuries before his time. However, in Imperial Rome grandiose earth tumuli were no longer a novelty; with the gradual expansion of Christianity burials of this kind disappeared for ever. Yet, like the other major tomb types, tumulus burials also had their periods of popularity, depending on the region and the times. In the Aegean, the most notable pre-Iron Age tumuli were the Mycenaean bee-hive, or tholos, tombs and Trojan tumuli. In the eighth and seventh centuries a new upsurge of tumulus construction started in regions such as south Russia, central and western Anatolia, Etruria and the lands north of the Aegean.

In Phrygia the most significant concentration of tumuli (over eighty) is to be found around Gordion, but the existence of the same type is also noted elsewhere in Anatolia, for instance at Ankara.¹⁶⁰ The Phrygian tumuli are in open terrain, not on hillocks or mountainsides. Only about half of the known mounds at Gordion have been explored. Certain features are common to them all, thus distinguishing the group from others. The so-called "Great Tumulus" incorporates all the characteristics of the smaller mounds, but naturally on a more imposing scale (fig. 41). Due to erosion, the tumulus is presently only 53m in height but close to 300m in diameter; "the original diameter of the mound must have

been about 250m, and its height 70 to 80 meters."¹⁶¹ The excavation of the mound started in the 1950's, after overcoming the initial technical difficulties.¹⁶² A tunnel was dug into the mound from ground level, creating a modern "dromos," that was no part of this or any other Phrygian tumulus. In the case of the "Great Tumulus" the tomb is built above ground-level, rather than in a sunken shaft as in other known examples; it occupies roughly the centre of the artificial hill. Inside, a concentric ring of different materials ensured the safety of the tomb chamber up to our times (fig. 42). The first protective inner "belt" consists of a built wall, approximately 3.00m high and 0.80m thick, of limestone blocks. About 2.50m further in towards the tomb chamber another wall of eight wooden logs-- in alternating courses of two smaller and two larger logs of juniper (or cedar)-- rose to a height of about 2.50m. The space between the logs and the outer limestone construction was filled by rubble that was removed during the excavations. 0.30m inside the log-wall, another wall of precisely squared and fitted beams of pine forms the enclosure of the actual tomb.¹⁶³ Except for the outer rubble filling, no clamps or any other artificial bonding was used to hold the whole structure together. The logs are carefully finished inside, with imperfections removed and the holes filled with stones. The tomb-chamber measures 6.20 x 5.15m, and 3.25m in height up to the beginning of the double-sloped roof. The ends,

connected by cross-beams, form triangular gables. According to the excavators "the roof is double, with an outer layer of round logs overlying the inner layer of squared timbers."¹⁶⁴ Above that, "an attempt was made to relieve, or rather to spread, the downward pressure of the stone mass by laying a series of long parallel logs in the rubble immediately above the ridge of the tomb-roof, at right angles to it and to its entire length. Above these stones were piled to a depth of almost three meters, assuming the shallow dome-shaped mass natural to such a pile of loose stone. Over this again the clay of the tumulus was piled to a height of nearly forty meters."¹⁶⁵ There was no door leading to the burial place; thus it is assumed, no doubt correctly, that the walls enclosing the chamber had already reached the level of the roof before the interment took place. The rest of the mound was then build by piling materials toward the centre. The construction shows experience in building the wooden chamber and the tumulus above it. However, the tradition could not have been a long one, at least not on a large scale, since the cross-beam supporting the roof was found cracked in this mound, and in the second largest tumulus of the region had collapsed completely.¹⁶⁶

In spite of the intact state of the burial chamber in the Great Tumulus, the comissioner and the date of the construction remains controversial. Obviously this tomb, and all others of similar nature, were intended to be used

only once. The size of the Great Tumulus indicates that it was built by a king in a time of prosperity, in all likelihood before the Kimmerian assault on the Phrygian capital in the early years of the seventh century (696-695 B.C.). R.S. Young assumed that the tomb was that of king Gordios and not of Midas. The latter was killed during the Kimmerian raids on Phrygia; "since Midas was already on the throne in 717 his predecessor must have been dead and buried; our tomb then, must be dated before 717 at the earliest, and probably in the years between 725 and 720 B.C."¹⁶⁷ Akurgal takes note of Young's suggestion, but says, "this date hardly agrees with the age of the Assyrian and Urartian objects found among the grave offerings."¹⁶⁸ He concludes therefore, "that the great tumulus must be that of king Midas, who probably died in 696 B.C."¹⁶⁹ Yet, he assigns the Urartian cauldrons and the bronze situla found in the tomb to the Sargonid period (721-705 B.C.) a date which does not exclude the possibility that such objects were already used during the last years of Gordios' rule. The difficulty in connecting the tomb with Midas of course arises from the extent of the Kimmerian destructuion. Rarely, if ever, were any monumental building projects undertaken during periods of warfare or their immediate aftermath. However, the question must remain unsolved till more is known about the chronology of the early Phrygian kingdom.¹⁷⁰

The Lydian necropolis at Bin Tepe near Sardis makes an

impression similar to that of the Gordion countryside. The landscape is dominated by artificial mounds (over a hundred in number) of various sizes. However, in contrast to their Phrygian counterparts these tumuli, or at least the larger ones, have a stone krepidoma, a built dromos, tomb chamber(s) of neatly fitted ashlar, and a mound interspersed with chips of limestone. Moreover, there is evidence that many of them had grave markers on the summit.

Some of the most imposing of these mounds were noted by ancient authors. For the Ephesian Hipponax, (second half of the sixth century) they seem to have been landmarks.¹⁷¹ On his way to the west coast of Asia Minor, he takes note of them briefly, "by the road to Smyrna; go through Lydia past the mound of Attales, the tomb of Gyges... and the marker and memorial of Tos... turning your belly to the setting sun."¹⁷²

Herodotos was just as impressed by the largest of the mounds, the tumulus of Alyattes (610-560 B.C.), as he was by the Egyptian pyramids. He gives a fairly detailed account of the tomb: "Lydia does not have many marvels worth mentioning like any other country, except the gold dust brought down from Tmolus. But there is one piece of work which is more enormous than any excepting those of Egypt and Babylon. There is the tomb of Alyattes, father of Croesus; its retaining wall is built of large stones, and the rest of the tomb is a mound of earth. The merchants, the craftsmen, and the prostitutes built it, and five markers, on which

written characters recorded the work contributed by each, survived till my day atop the tomb... The circumference of the tomb is six stades and two plethra, and its breadth is thirteen plethra. A great lake is nearby the tomb which the Lydians say is ever full, and it is called Gygaean."¹⁷³

It is difficult to translate the ancient measurements into meters, since the values of plethron and stadion are not known exactly.¹⁷⁴ However, a general correspondence can be deduced from the figures given by Herodotos and those of H. Spiegelthal who excavated the site in 1853.¹⁷⁵ According to Spiegelthal, the diameter at the base of the retaining wall (which has since been removed by stone robbers was 355.20m, the calculated circumference 1,115.32m and the height 61.46m.

Strabo, relying on Herodotos, also draws attention to the tomb, but seemingly stresses its socio-economic background: "The tombs of the kings are located close by Lake Coloe. Directly opposite Sardis itself is the great mound of Alyattes built within a high retaining wall by the city's populace, as Herodotos says. Prostitutes contributed most of the work, and Herodotos says that all Lydian women prostituted themselves; some call the tomb itself a monument of prostitution."¹⁷⁶ Obviously the lake in Strabo is that known today as Marmara Gölü.

The reexamination of the Alyattes mound conducted by Hanfmann in the early 1960's could do no more than reconfirm

the results of Spiegelthal's work, and make a few additional observations.¹⁷⁷ The complex, as was customary for royal tombs, must have started soon after Alyattes came to power in 610 B.C. The known nucleus, about 30m off center, consists of a marble ante-chamber and the chamber behind it. The former measures 2 x 2.24m and 2.50m in height, while the latter is 3.34 x 2.37m and 2.08m high. The masonry shows a very high quality of proficiency for 7th. c. B.C. Lydia. "The astonishing feature of the monument is the complete mastery of huge marble masonry fitted with hairbreadth precision... the joints are razor sharp."¹⁷⁸ The north or rear end of the main chamber has a double wall. Here, according to Hanfmann, a large iron clamp is still visible in the wall.¹⁷⁹ Another interesting observation of the reinvestigation of the mound is a sort of corbelled vault northwest of the chamber,¹⁸⁰ perhaps a relieving triangle over another room. There are other features inside the mound that suggest the existence of more structures within, but this possibility can only be confirmed by future investigations.

Above the ceiling of the main burial chamber a thick layer of oak ashes was found, suggesting cremation rites. If such rites took place, the generally accepted assumption that the tomb was finished by 600 B.C. cannot stand; the mound could have been completed only after the death of its commissioner. This would explain the extensive "V" shaped

built section and platform on the summit of the tomb.¹⁸¹
Perrot-Chipiez describe it as follows: "A 26 mètres au-dessus du niveau de la plaine, commençait le tertre proprement dit; celui-ci était revêtu de briques, au moins dans le voisinage du sommet, et se terminait par un aire sur laquelle gisait encore, au moment des fouilles, renversée, mais en place, une des bornes dont parle Hérodote; elle mesure à sa base 2m85 de diamètre..."¹⁸²

The excavation of the other mounds, including the second largest, that of Gyges (680-645 B.C.), mentioned by Hipponax and Nicander,¹⁸³ has confirmed the advanced architectural techniques employed elsewhere in Lydian constructions. The mound was excavated by an American team in the nineteen-sixties.¹⁸⁴ Neither the burial chamber or its dromos was ever found; however, the identity of the commissioner has been ascertained. A dozen graffiti have been found carved into the wall of the crepidoma, all referring to a certain GUGU, i.e. Gyges.

The artificial hill, apart from the already mentioned chunks of limestone, consists of a combination of hard red and softer greenish clay. Rather remarkable is the krepis wall, forming a circle of about 210m.¹⁸⁵ The original girdle is well preserved (fig. 43 a and b), thanks to the fact that it was covered over later in the seventh century, when the mound was enlarged. It comprises two courses of rectangular ashlar masonry (almost 2.00m high) and a huge

round "bolster" course on top. The arrangement is reminiscent of the retaining walls of tumuli built in Etruria. The masonry is advanced, not the work of "first generation" masons. Its subtleties can be especially well observed where the round "bolsters" meet. The central portion of each block is rusticated, with a drafted margin all around, while the joints have bevelled edges. As noted above, this technique reappeared (probably under Lydian influence) in the fifth century in Lycia.

Many of the other tumulus tombs show additional technical virtuosity. A smaller-scale tomb, possibly that of a nobleman, has a room in which the faces of the side walls incline slightly from floor to ceiling, especially in the uppermost of their height.¹⁸⁶ In another sixth-century tomb Π -shaped iron clamps were leaded into cuttings with triangular or circular heads.¹⁸⁷ In this tomb vertical anathyrosis is also found. In two other tombs one finds features that recur in the Belevi tumulus.¹⁸⁸ One of these is a chamber-tomb of the sixth or fifth century with a ceiling block that has a semicircular hole in the centre, just as in one of the chambers in the Belevi mound. Presumably libations were poured into the interior through this opening. In the other sixth-century tomb triangular slabs were found, indicating a roofing system similar to that employed in the forechamber of the Belevi tumulus. If these observations are correct, a sixth-century date for the

initial construction period of the Belevi mound cannot be excluded.¹⁸⁹

Near Old Smyrna (modern Bayrakli) are the ruins of the so-called Tantalos tomb (fig. 44 a and b).¹⁹⁰ The tumulus survived through the ages in a good state of preservation until the nineteenth century, when Texier, in order to examine the interior, destroyed it; in his own words, "j'ai été obligé de le démolir, ainsi que la majeure partie du soubassement, pour bien saisir ce système ingénieux de construction."¹⁹¹ This monumental tomb, in spite of its smaller scale, ranks with the above mentioned Great Tumulus at Gordion and the Alyattes tomb at Bin Tepe.

In this instance we are dealing with a mound entirely of stone, built on the summit of a rocky hill. Pausanias, in his frequent references to the west coast of Asia Minor twice makes brief mention of the tomb of Tantalos: "the grave of him who legend says was son of Zeus and Pluto-- it is worth seeing-- is on Mount Sipylos. I know because I saw it."¹⁹² Later he returns to the region; "there is a lake called after Tantalos and a famous grave, and on a peak of Mount Sipylos there is a throne of Pelops."¹⁹³

The form of the edifice, as known from Texier's drawings, is strictly speaking not that of a tumulus. It is almost as high (27.60m) as wide (29.60m in diameter). One can conceive the construction as an enormous Mycenaean tholos or bee-hive tomb stripped of its exterior filling. In

Texier's drawings the tumulus appears as a perfect circle of 33.60m in diameter (or 105.53m in circumference) with the tomb chamber in the centre. Miltner re-examined the ruins and gives 14.80m for the radius (i.e. 29.60m across).¹⁹⁴ Moreover, the plan is oval rather than circular and the tomb chamber is somewhat off centre, to the south-east.

The rectangular built chamber (3.55 x 2.17m and 2.85m high) has no dromos. It is corbel-vaulted, recalling Bronze Age designs of similar nature, as has been recognized by Akurgal, "Das Tantalos-Grab weist eine Grab-kammer vom Typus Isopata auf, wie er auch in der Grabern von Ras Samra und in Mittelanatolien bei Gâvurkale in einem Grabmonument der hethitischen Zeit vorkommt."¹⁹⁵ To this could be added the Mycenaean vaulted passages at Tiryns and Mycenae and the more contemporary tomb interiors in Etruria, such as the Cucumella at Gajolo in St. Giuliano and the late seventh century Cucumella at Vulci.¹⁹⁶ The system also resembles the chamber of an unpublished tumulus tomb near Ephesos.¹⁹⁷ The course above the apex of the vault (and only this part) is fastened with dovetail clamps, the type noted in the Alyattes mound.

A series of protective radiating rings of different sized stones enclosed the nucleus, ensuring the solidity of the structure.¹⁹⁸ The system of cross-walls meeting the radial sections extends all the way to the outer perimeter. Smaller stones were packed between these ribs to create a

closely fitting "web." The idea of protective layers around the tomb-chamber is found, as we have seen, in Phrygian tumuli; but there the concept was less sophisticated. In the tomb of Tantalos the exterior of the entire mound was faced with closely jointed polygonal stones. The cylindrical section at its base and top carried a profile moulding, while the summit was crowned by a phallus-stone.

Legend, supported by the passage of Pausanias quoted above, connects the tomb with the name of Tantalos, "Tantalos is vaguely linked with the Hittite stage of culture, not only by his supposed approximate date (1300 B.C.) but by three traditions connecting him with Mt. Sipylus," states Cadoux.¹⁹⁹ Certainly the tomb is much later, but probably still the first and largest in a series of some forty tumuli on the south-east slopes of the same mountain. The proposed dates, in lack of small finds, range from the seventh to the fourth century.²⁰⁰ The masonry is certainly in the tradition that can be seen in some of the fortification walls erected before the Lydian destruction of the city in 600 B.C.²⁰¹ In addition, the seventh century corbel-vaulted fountain house of Old Smyrna provides another obvious comparison, this time with the tomb chamber.²⁰² The presence of dovetail clamps makes the problem more difficult, since they "...appear to have been unknown in the Smyrna temple buildings of the end of the seventh century B.C."²⁰³ Nicholls also says that there is "...no certain evidence for the practice of tumulus-

burial at Smyrna before the Lydian period."²⁰⁴ On the other hand there is no certain evidence to support either of his objections, both of which are tied to the presence in Smyrna of Lydian conquerers. The mouldings of the cylindrical part do not provide a useful criterion for dating; nevertheless their presence is remarkable just by their existence. Akurgal leaves the question of date open (either the end of the seventh or the second quarter of the sixth). From the historical point of view the later seventh century date would appear more likely, for it was in this period that the city of Old Smyrna experienced its greatest prosperity.

As the sixth century advanced, tumulus burials seemingly became the most popular form of monumental funerary architecture around the Mediterranean. Their existence is documented in regions as far apart geographically as Illyria in the north, Olbia in the northeast, Etruria in the west, and Cyrene on the north coast of Africa.²⁰⁵

Tumuli built entirely of ashlar were rather rare. A well-preserved example of the type is to be found on the island of Korfu.²⁰⁶ From the inscription carved on the monument we know that it is the cenotaph of Menekrates (fig. 45) son of Tlasias, a citizen of Oianthia, a locality on the north coast of the Corinthian Gulf. The epitaph also tells us that Menekrates died in a shipwreck, and that the monument was erected by his brother Praximenes and the people of Korfu to honour his service to the islanders. The letter-

forms of the Corinthian alphabet date the cenotaph with reasonable certainty to around 600 B.C. The structure built of hard limestone, stands on a one-stepped socle. Five courses of equal height constitute the drum section (4.69m in diameter). The fifth course, with the inscription, contains the longest blocks. The slabs of the "cornice," approximately 1.40m above ground-level, project slightly. The present flattened dome is modern, but the original was probably similar to it, at least as far as one can tell from drawings of 1843, when the cenotaph was excavated.²⁰⁷ The archaic crouching lion statue, found 7.00m from the edifice, was in all likelihood the crowning feature of another funerary monument.

Among the structures that resemble this archaic cenotaph the closest well preserved parallels, in size, form and construction, are the early fourth-century stone tumuli at Cyrene (fig. 46)²⁰⁸ and the still later Kleobulos tomb at Lindos (fig. 47).²⁰⁹ On the other hand there are a number of other related fourth-century buildings that show affinities with both the Menekrates monument and the Tantalos tomb.

A so-called "Rundbau," recently reconstructed from spolia found in the Dipylon area of the Athenian Kerameikos and elsewhere, is a further development of the above type.²¹⁰ According to Koenigs the round building had a stepped platform, a slightly tapering drum (8.40m at its base) of six or seven

courses, a Doric triglyph frieze and an Ionicising geison (fig. 48). The roof was probably a very low conical dome. In its architectural composition and decoration Gruben sees "...a Beimischung ionischer und äolischer Bauformen einzig da, die sich wohl aus der Zuwanderung von ionischen Handwerkern in früh-peisisthrotidischer Zeit erklärt."²¹¹ The function of the building was similar to that of the Korfu tumulus, i.e. it was probably a cenotaph-heroon.

Koenigs, in dealing with this "Rundbau," echoes earlier views, according to which the "Kuppelgräber" disappeared at the end of the Mycenaean period in Greece, while the tumulus form survived.²¹² In the archaic period circular buildings, even if not exclusively so used, became more and more frequently and closely associated with hero-cults; "die älteste aus dem Steinkreis um den Tumulus entwickelte monumentale Einfassungsmauer umzieht den Hügel über einem Kuppelgrab, dem sog. Grab der Klytemnästra in Mykene. Von den mykenischen Tumuli und Kuppelgräbern zum griechischen Heroenkult bestand eine literarische und kultische Verbindung die auf der Vorstellung des Grabhügels als Heroengrab beruhte."²³¹ As a matter of fact in the Menekrates monument we may have a transitional step towards the creation of later tholoi.

A further stage in this development is now documentable in the "Rundbau" described above. As Koenigs observes, "damit ist der Rundbau ein eigener aus dem abgestützen

Tumulus, der sein Grundkonzept ausmacht, entwickelter Bautypus - das theoretische Bindeglied zwischen Tumulus und Tholos."²¹⁴ As far as the essential underlying concept of the type is concerned, "vielleicht spiegelt sich in dieser Herkunft der Tholosform von Tempel und von Grab die Eigenart der Heroen als vergötterte Sterbliche."²¹⁵ With the increase of hero-cults the circular buildings became more and more sophisticated structures. Their interiors could serve for different purposes, such as the display of statues, places for holding rituals and so on. The rather austere exteriors of the sixth century changed in a generation or two into fields for architectural decorations, often with columns around their outer walls. The original appearance of the tumulus, as an impressive structure mainly because of its huge mass, was lost in the built tholoi.²¹⁶ Earth tumuli in the sense of Phrygian or Lydian mounds continued to be erected all through the Hellenistic period along with built tholoi, but on a smaller scale. The subsequent stories of the tumulus and the tholos, from the time when they became separated in the archaic age, cannot be traced here, simply because of the sheer quantity of the material.²¹⁷ It is sufficient to mention that the two concepts were once more revitalized and united in Imperial Rome; "in fact the mausoleum of Hellenic and Roman times is nothing but the ancient tumulus constructed as a conical top on a cylindrical base over the tomb of the apotheosed ruler."²¹⁸

Lastly, a unique group of archaic tombs, noted before, is included here. At Tamassos in central Cyprus a number of built (sandstone) "Royal Tombs" have been excavated, some in the late nineteenth, others in the twentieth century. All of them are underground burials, with no traces of a tumulus above them.²¹⁹ The most elaborate example of the group is known as "Royal Tomb V" (fig. 49). The entrance to this complex is reached by a stepped dromos, approximately 6.00m long, and widening toward the bottom. The walls flanking the dromos show fine workmanship, with carefully jointed ashlar blocks; the technique was to "frame" large slabs, set upright as stretchers, by others laid either flat or upright as headers.

The façade, by its mere existence, is a rare feature in underground tombs and tumuli; the most notable buried tomb façades in the Aegean before this Cyprus group were the so-called Treasury of Atreus (fig. 20) and the Tomb of Clytemnestra at Mycenaea. In later times the series of Macedonian tombs, starting in the later fourth century, employed a similar concept of burial.

The origins of the well preserved Tamassian "Royal Tombs" has long been recognized; the group shows "forms which recall the workmanship of a carpenter."²²⁰ In Tomb V a three-fascia stepped back frame encloses the door opening. Above that appears a plain lintel topped by a heavy dentil course. The gabled ceiling of the interior did not extend

all the way to the entrance (unless it was indicated in paint?), as it does in Royal Tomb XI.²²¹ A singular treatment characterizes the sides of the entrance porch. Here heavy pilasters, one on each side, are crowned by Phoenicio-Cypriot capitals with a single "Aeolic" volute. As P. Betancourt observes "Phoenician influence in the style seems certain... It seems quite likely that the Phoenicians often used wooden Aeolic pilasters at the entrances of important buildings. Whether they are to be taken as decorations on the inner facings of antae or a simple door-jamb is not clear from the nature of the evidence. Either use is possible, since the structural origins would be the same-- a wooden facing to strengthen and protect the ends of mud-brick walls and give needed support for a heavy wooden beam. The ceiling beams, visible... "as dentils, would then be laid across this horizontal member. Most of the surviving examples of the system used gable roofs,..."²²²

In the ante-chamber there were two false doors opening in the side walls; it is interesting to note that even the locking system of contemporary doors has been precisely carved in the stone. There is a small sunken panel, serving as a false window, over the door leading to the actual funeral chamber; "the sills of the windows are carved with elaborate sacred trees, a motif familiar from both Phoenician and Cypriote art."²²³ The second interior chamber had plain walls without any carved or illusionistic devices. (Whether

it was painted or not is not known). The saddle roof of both chambers is constructed of huge slabs resting on the side walls and leaning against each other. Certainly the pressure of the earth above was needed to keep the roof in place.²²⁴ The inner faces of the slabs were carved to represent round logs, with a moulded beam running along the ridge-line of the roof. Members imitating timber work are often found in the tomb interiors of Etruria; and the same system can now be documented in archaic Asia Minor, in a recently found tomb at Soma.²²⁵

Royal Tomb V and most of the others of the same series can be dated to the first half of the sixth century.

NOTES

III.

1 See Cicero, De legibus 2, 26, 64-- anti-luxury law of the early fifth century by Keisthenes. Then a new anti-luxury law was put in effect by Demetrius of Phaleron in 316 B.C.

2 A. Burford, The Greek Temple Builders at Epidauros, (Liverpool 1969) 220.

3 Nylander, Ionians 70.

4 G.M.A. Richter, "Greeks in Persia," AJA 50 (1946) 25.

5 H. Frankfort, "Achaemenian sculpture," AJA 50 (1946) 6.

6 E. Stern, "The excavation at Tell Mevorach," BASOR 221 (1977) 18.

7 A. Demandt, "Studien zur Kaaba-i-Zerdoscht," AA 83 (1968) 539.

8 Schmidt, Persepolis III 49.

9 Arrian, Anabasis 6.29.4; Strabo 15.3.7.

10 Anabasis 6.29.4.

11 In Lycia an exception is provided by the stone tumuli which, however, may date from a period before the Persian influence became felt there.

12 For a more detailed description of the section see D. Stronach, "Excavations at Pasargadae: Second preliminary

report," Iran 2 (1964) 23.

13 The colonnade itself as it is known today was built in the 12th. c. A.D. The date of the column bases is questionable. According to J. Boardman they "...need not be contemporary, but must be quite early (by Ionic standards), for their plumpness and their shallow flutes with sharp arrises." J. Boardman, "Chian and early Ionic architecture," The Antiquaries Journal 39 (1959) 217.

14 Herodotos, 1.181.

15 Stronach (supra n. 12), 28; he dates it to about 575 B.C. However, Nylander's date is more likely (Ionians 93).

16 Nevertheless the use of the pyramidal form must have been much more widespread than we realize today; among other examples it was used for pyramidal seals. See Iran 8 (1970) 19.

17 Nylander, Ionians 91.

18 G.M.A. Hanfmann, Letters from Sardis (Cambridge, Mass. 1972) 261 fig. 192.

19 This possibility would not change the origin of the overall form of the building, which was dictated by the Persian royal house.

20 Butler, Sardis I 169. Butler proposed two reconstructions for the tomb, one having a twelve stepped pyramid, the other resembling the Cyrus tomb at Pasargadai. Recent excavations on the site have confirmed the accuracy

of the first of these two proposals.

21 See G. Gruben, "Das archaische Didymaion," Jdl 78 (1963) 84 n. 12.

22 See R. Gusmani, Neue epichorische Schriftzeugnisse aus Sardis (1958-1971) (Cambridge, Mass. 1975) fig. 44.

23 Daskylion: G.M.A. Hanfmann, "The fourth campaign at Sardis (1961)," BASOR 166 (Apr. 1962) 28 n. 49;

Pasargadai: G.M.A. Hanfmann, From Croesus to Constantine (Ann Arbor 1975) fig. 38.

24 Butler, Syria IIA 125.

25 Monumenti Inediti I (Rome and Paris 1829-1832) pl. XLI, 13c.

26 Hoepfner, 145-163.

27 Hoepfner, 161.

27bis Although Hoepfner says that Selymbria is in the Pontus region (145), there is only one Selymbria (Silivri) on the Propontis on the Sea of Marmara.

28 Hoepfner, 145.

29 R. Pagenstecher, Nekropolis (Leiden 1919) 11.

30 It is worth nothing at this point that Mausolos also adopted eastern and Egyptian customs in his court, as well as borrowing architectural forms from these regions.

31 S.A. Reisner, "The history of the Egyptian mastaba," Mélanges Maspéro I (Cairo 1935-38) 580.

32 A. Badawy, "The ideology of the superstructure of the mastaba-tomb in Egypt," JNES 15 (1956) 183.

- 33 See H. Schaefer and W. Andrae, Die Kunst des alten Orients (Berlin 1925) 163.
- 34 J.P. Lauer, Le Mystère des Pyramides (Paris 1974) 149.
- 35 C. Dalman, Petra und seine Felsheiligtümer (Leipzig 1908) 77.
- 36 Perrot-Chipiez, Hist. III 154.
- 37 M. Gawlikowski, Monuments Funeraires de Palmyra (Warszawa 1970) 16-17.
- 38 Haspels, 127, 136.
- 39 G. Dennis, Cities and Cemeteries of Etruria I (London 1883) 217.
- 40 Herodotos, 2.126.
- 41 G. Gruben, Die Tempel der Griechen (Munich 1976) 300.
- 42 See Şahin, 28-35.
- 43 Diod. Sic., 18.4.5.
- 43bis Unless the newly discovered Doric tomb at Vergina was constructed for Philip II as the excavator of the tumulus, Andronicos believes it. See Andronicos, Maced. Tomb 76.
- 44 Diod. Sic., 17.115.1-4.
- 45 R. Martin, "Bathyclès de Magnésie et le "trône" d'Apollon à Amyklæ," RA (1976 1) 205.
- 46 Pausanias 3.18.9.
- 47 Pausanias 3.19.1-5.
- 48 Pausanias 5.11.4.
- 49 See above, , 59.

50 A. Bammer, "Der Altar des jüngeren Artemisions von Ephesos," AA 83 (1968) 400

51 Şahin, 91 fig. 20

52 Şahin, 97

53 Hanfmann (supra n. 23/1975) figs. 23-26

54 Hanfmann (supra n. 23/1975) 12

55 E. Fiechter, "Der Thron des Apollon," Jdl 33 (1918) 107-245

56 Pausanias, 3.19.4, where Pausanias states "now this statue of Hyakinthos ..."

57 H. Metzger, FX II (1963) 51

58 Fiechter, (supra n. 55) 242

59 Martin (supra n. 45) 218

60 Pliny, NH 36.19.91-93

61 J.L. Myres, "The tomb of Porsenna at Clusium," BSA 46 (1951) 117; see also E. Alföldi-Rosenbaum, Anamur nekropolü. The necropolis of Anemurium (Ankara 1971) 95 n. 31

62 For the history of the period see A. Alföldi, Early Rome and the Latins (Ann Arbor 1965)

63 Boethius-Ward-Perkins 70

64 J. Martha, L'art Étrusque (Paris 1889) fig. 159

65 See Myres (supra n. 61) 118

66 See below, 127.

67 The suggestion cannot be entirely dismissed, as has been done as recently as 1975, by F. Boitani, M. Cataldi and

M. Pasquinucci, Etruscan Cities (London 1975) 59.

68 Boethius-Ward-Perkins, 12.

69 Herodotos, 1.176.

70 See Y. Duhoux, Le Disque de Phaestos (Louvain 1977)
59 n. 24 "edifice".

70bis In Greek columnar orders we also have echoes of earlier wooden prototypes, e.g. in the members of the entablature; but in the overall design they are less conspicuous than in Lycian buildings.

71 However, there can be no definite conclusions about Lycian architecture until more research is carried out in the region. Perhaps we shall then have a clearer picture of the chronological developments as well.

72 FX.II (1963). For "F" see, 74 and for "H" 63.

73 FX.II (1963) 49.

74 Zahle-Kjeldsen, Centr Lycia 40.

75 FX.II (1963) 87.

76 FX.II (1963) 60.

77 Zahle-Kjeldsen, Centr Lycia 41.

78 See P. Coupel and H. Metzger, "La frise des "coqs et poules" de l'Acropole de Xanthos," RA (1976 2) 247.

79 FX.II (1963) fig. 28.

80 See P. Bernard, "Remarques sur le décor sculpté d'un édifice de Xanthos," Syria 42 (1965) 261-288 fig. 2.

81 Zahle-Kjeldsen, Centr Lycia 40.

82 Zahle-Kjeldsen, Centr Lycia 44.

83 Quoted by H. Oelmann, "Über das Mausoleion von Halikarnass als Denkmaltypus," AA 45 (1930) 240.

84 S.M.A. Hanfmann, "A pediment of the Persian era from Sardis," Mélanges Mansel (Ankara 1974) 289-302.

85 Kleemann, Satrapensark,

86 Hanfmann, (supra n. 84) 295.

87 Hanfmann, (supra n. 84) 290.

88 Butler, (supra n. 20) 116.

89 Butler (supra n. 20) 116.

90 For the date of this "mixed construction" tomb see, G.M.A. Hanfmann, "On Lydian and eastern Greek anthemion stelai," RA (1976 1) 36.

91 Roos, Caunus pl. 19, n.3.

92 Roos, Caunus pl. 5, n. 1.

93 Roos, Caunus 63.

94 Roos, Caunus 65.

95 See below, 220.

96 Ceka, 178.

97 Akurgal, Ruins 306.

98 Ch. Burney, From Village to Empire (Oxford 1977) 164 plts. 27, 28.

99 Burney (supra p. 98) 164.

100 E. Akurgal, Anatolien 70 and Haspels, 73.

101 Haspels, 73.

102 R. Young, "Gordion: Problems of Western Phrygia," Huitième Congrès International d'Archéologie Classique (Paris

1963) 482 fig. 3.

103 See R.M. Boehmer, "Phrygische Prunkgewänder des 8. Jahrhunderts v. Chr.," AA 88 (1973) 149 and especially figs. 7-9.

104 Haspels, 118-119.

105 Haspels, 135.

106 E. Akurgal, Phryg. Kunst 88. The same idea is repeated in Anatolien 108-109.

107 Haspels, 101.

108 Haspels, 101.

109 But why should one expect the Lycians to rely on foreign type of construction when they had their own timber buildings? - The transmission of the idea could have been enough to start their own series.

110 E. Herzfeld, Archaeological History of Iran (London 1935) 204 also in Iran in the Ancient East (London and New York 1941) 205 by the same author.

111 H. von Gall, "Zu den "Medischen" Felsgräbern in Nordwestiran und iraqi Kurdistan," AA 81 (1966) 19 and D. Stronach, "The Kuh-i-Shahrah Fire Altar," JNES 25-26 (1966-1967) 221.

112 Schmidt, Persepolis III 80.

113 The date of 520 B.C. is a seemingly safe assumption, also supported by Ktesias' writings. (Persica, 38-39).

114 Schmidt, Persepolis III, 83.

115 A remarkable resemblance to the theme is to be found

in a Neo-Assyrian rock-relief; see R.M. Boehmer, "Die neuassyrischen Felsreliefs von Maltai (Nord-Irak)," Jdl 90 (1975) 49 fig. 10.

116 Schmidt, Persepolis III 84.

117 Schmidt, Persepolis III 81.

118 F.W. König, Die Persika des Ktesias von Knidos (Graz 1972) 67 and P. Calmeyer, "Zur Genese altiranischer Motive," Arch. Mitt. aus Iran 8 (1975) 99.

119 H.G. Buchholz, "Tamassos, Zypern, 1970-1972," AA 88 (1973) 322.

120 Bean, Aegean 125; Akurgal, Ruins 118; See also G. Weber, "Trois tombeaux archaïques de Phocée," RA ser. 3, 5 (1885) 129-138; Perrot-Chipiez, Hist. V, 68; F. Sartiaux, De la Nouvelle a l'Ancienne Phocée (Paris 1914) 29.

121 No writers mention such features, and in the reproductions the mouldings are not visible except for Weber's fig. 10.

122 Bean, Aegean 124.

123 Weber, (supra n. 120) 132.

124 Bean, Aegean 124; Akurgal, Ruins 118; Perrot-Chipiez, Hist. V 64; Weber (supra n. 120) 129.

125 Bean, Aegean 124 notes two rectangular graves let into the floor in both of these chambers. In Weber (supra n. 120) fig. 2 there is no indication of such an arrangement.

126 Akurgal, Ruins 118.

126bis Granting that the site at Burunçuk is actually

that of ancient Larisa.

127 Akurgal, Ruins 118.

128 Akurgal, Anatolien 329 n. 41.

129 Haspels, 139.

130 Haspels, pl. 528.

131 Haspels, pl. 529.

132 Haspels, see plts. 118, 185, 209, 245.

133 Haspels, see plts. 541 n. 8, 542 n. 3, 543 n. 3

and 4.

134 Weber (supra n. 120) 136; Perrot-Chipiez, Hist. V
64; Bean, Aegean 61.

135 Bean, Aegean 62.

136. See A. Gökoğlu, Paphlagonia (Kastamonu 1952); von
Gall, Felsgräber with earlier bibliography.

137 von Gall, Felsgräber 108 and 98 respectively.

138 von Gall, Felsgräber 114.

139 von Gall, Felsgräber 57.

140 von Gall, Felsgräber 73.

141 For the Anatolien influence see R. Naumann,
Architektur Kleinasiens (Tübingen 1971) 139.

142 K. Jeppesen, "The Propylaea," Labraunda I¹ (Lund
1955) 42 fig. 27.

143 Demus-Quatember, Et. Grab 49 pl. 30.

144 von Gall, Felsgräber pl. 2 n. 3.

145 See R.D. Barnett, The Nimrud Ivories (London 1975)

146 For further bibliography see Cassels, 17 and Stucchi, 38.

147 Stucchi, 24.

148 In the unfinished Tomb N₉, the maximum is sixteen; however, J. Cassels says "eighteen seems to be the number aimed at" (Cassels, 18).

149 The benches in Tomb N₃, for example, might be later additions. The pillars have "bases" as the result of recutting. (See A. Rowe, Cyrenaean Expedition [Manchester 1959] pl. 16a).

150 Cassels, 18.

151 For both see Stucchi, 30.

152 R. Martin, "Chapiteau Ionique d'Halicarnasse," Revue Études Anciennes 61 (1959) 65 pl. 1.

153 P.P. Betancourt, The Aeolic Style in Architecture (Princeton 1977) 88. Unfortunately Betancourt did not include the Cyrene tomb capitals in his publication.

154 Stucchi, 43 fig. 32 b.

154bis Stucchi, 3-4, with further bibliography on the early history of Cyrene.

155 Theophrastos, Hist. Plant. 5.3.7.

156 Architectural sarcophagi could also be mentioned. See below, pp. 338-352, though their design is also derivative from some type of large free-standing building.

157 A. Badawy, A History of Egyptian Architecture (Los

Angeles 1966) 128 pl. 14.

158 Stucchi (supra n. 146) 174 fig. 164.

159 Pausanias, 8.16.3; see also Iliad II.592.

160 Akurgal, Ruins 283.

161 See R.S. Young, Gordion, A Guide to the Excavations and Museum (Ankara 1968) 39.

162 R.S. Young, "The Campaign of 1955 at Gordion: Preliminary Report," AJA 60 (1956) 264.

163 At this point it should be mentioned that the data given by Akurgal (Ruins 282) do not always correspond with those of the excavators.

164 R.S. Young, "The Gordion Campaign of 1957: Preliminary Report," AJA 62 (1958) 148.

165 Young (supra n. 164) 149.

166 R.S. Young, "The Gordion Campaign of 1959: Preliminary Report," AJA 64 (1960) 228 n. 6.

167 Young (supra n. 161) 42.

168 Akurgal, Ruins 283.

169 Akurgal, Ruins 283.

170 Haspels, 142 seems to prefer Midas for the king who commissioned the tomb, but leaves the question open.

171 O. Masson, Les Fragments du Poète Hipponax (Paris 1962) 11.

172 Hipponax, F 42.

173 Herodotos, 1.93.

174 W. Zschietzschmann, Wettkampf-und Übungstätten in

in Griechenland, Stuttgart (1960) 7 gives for the 191.39m stade at Priene 192.27m at Miletos. The Asiatic stade seems to have varied between 185 and 195 meters.

175 H. Spiegelthal in J.F.M. von Olfers, "Über die lydischen Königsgräber bei Sardes und den Grabhügel des Alyattes," Abh. Berl. Akad. 16 (1858) 545.

176 Strabo 12.4.7.

177 See especially G.M.A. Hanfmann, "The fifth campaign at Sardis (1962)," BASOR 170 (Apr. 1963) 52.

178 Hanfmann (supra n. 177) 55.

179 Hanfmann (supra n. 177) 55; see also Spiegelthal (supra n. 176) pl. III.

180 Hanfmann (supra n. 177) fig. 40, section A-A.

181 Spiegelthal (supra n. 175) pl. IV. It could have served as a lid after the burial.

182 Perrot-Chipiez Hist. V 272.

183 Hipponax, F 42; Nicander, Theriaca 630-635.

(Nicander lived in the second century).

184 G.M.A. Hanfmann reports on the Sardis campaigns in BASOR: 174 (1964) 52; 177 (1965) 27; 182 (1966) 27; 186 (1967) 43.

185 Hanfmann (supra n. 18) 147.

186 A. Ramage, "The fourteenth campaign at Sardis 1971," BASOR 206 (Apr. 1972) 11.

187 Hanfmann (supra n. 177) figs. 42-43.

188 Hanfmann (supra n. 184/1967) 48.

189 The excellent masonry of its retaining wall would not necessarily indicate a Hellenistic date. On the other hand it is possible that the tumulus was repaired and reused at a later time. See H. Vettiers, "Ephesos," Österreichisches Archäologisches Institut, Grabungen 1971/72 (Wien 1974) 42.

190 See Ch. Texier, Asie Mineure (Paris 1862) 229; Perrot-Chipiez, Hist. V 48; F. and H. Miltner, "Bericht über eine Voruntersuchung in Alt-Smyrna," OJh. Beibl. 27 (1932) 149; E. Akurgal, "Smyrne à l'époque archaïque et classique," Belleten 10 (1946) 72; E. Akurgal, Bayrakli, die Ausgrabungen in Alt-Smyrna (Ankara 1950) 81; R.V. Nicholls, "Old Smyrna: the Iron Age fortifications and associated remains on the city perimeter," BSA 53-54 (1958-1959) 64.

191 Texier (supra n. 190) 231.

192 Pausanias, 2.22.3. It is rather difficult to reconcile Pausanias' location with that of the structure near Bayrakli.

193 Pausanias, 5.13.7.

194 Miltner (supra n. 190) 150.

195 Akurgal (supra n. 190/1950).

196 Demus-Quatember, Et Grab. 68.

197 For a short description and pictures see Demus-Quatember, Et Grab 71 and figs. 42-43.

198 Perhaps such a construction made the tomb also shock-resistant, and thus capable of surviving the numerous earthquakes in the region.

- 199 C.J. Cadoux, Ancient Smyrna (Oxford 1938) 35
- 200 For the various dates see Akurgal (supra n. 190/1950) 81.
- 201 Compare Akurgal (supra n. 190/1950) fig. 18 n. 2 with Nicholls pl. 18b.
- 202 See Nicholls, fig. 15.
- 203 Nicholls, 64 n. 125.
- 204 Nicholls, 64.
- 205 M. Djunić and B. Jovanović, "Illyrian Princely Tombs in W. Serbia," Archaeology 19 (Jan. 1966) 43; E.B. de Ballu, Olbia (Leiden 1972) 29; Demus-Quatember, Et Grab 15; Stucchi, 12.
- 206 See J. Dörig, "Frühe Löwen," Ath Mitt 76 (1961) 70 and J.F. Crome, "Löwenbilder des siebenten Jahrhunderts," Mnemosynon Th. Wiegand (Munich 1938) 47.
- 207 Crome (supra n. 206) pls. 17 and 18.
- 208 Stucchi, Tomb N₁, fig. 73-74.
- 209 E. Dyggve, Lindos, III-2 (Berlin-Copenhagen 1960) 487-489.
- 210 The building has been reconstructed by W. Koenigs from fragments, some of which have been known for decades. See W. Koenigs, Ein archaischer Rundbau in Kerameikos zu Athen (Diss. Munich 1974).
- 211 G. Gruben, "Untersuchungen am Dipylon, 1964-1966," AA 84 (1969) 32.
- 212 For examples of surviving Mycenaean forms see

Koenigs (supra n. 210) 7 and H. Dragendorff, Theraeische Graeber (Berlin 1903) 98, where Dragendorff indicates that Mycenaean techniques have survived down to the sixth century.

213 Koenigs (supra n. 210) 7.

214 Koenigs (supra n. 210) 6.

215 Koenigs (supra n. 210) 11.

216 One of the few exceptions is the Arsinoeion on Samothrace, of the second decade of the third century.

217 The subject would easily fill a volume by itself. Therefore reference will be made only to built tholoi that have funerary connotations.

218 N. Valmin, "Tholos tomb and tumuli," Skrifter Utgivna av Svenska Institutet (Rome II 1932) 227 n. 2.

219 See H.G. Buchholz, "Tamassos, Zypern 1970-72," AA 88 (1973) 322 and his report on the following season of excavation, "Tamassos, Zypern, 1973." AA 89 (1974) 578. Both of these reports give an extended bibliography of previous publications on the subject.

220 G. Jeffrey, "Rock-cutting and Tomb Architecture in Cyprus," Archaeologia 66 (1914-15) 166.

221 Buchholz (supra n. 219/1973) pl. 25.

222 Betancourt (supra n. 153) 48.

223 Betancourt (supra n. 153) 48.

224 The same approach was used, maybe for the same reason in the Hellenistic period where barrel vaulted chambers appeared, especially in Macedonian tombs. As will

be seen later, such a "safety device" suggests the inexperienced handling of true vaulting in its beginning stage.

225 S. Kasper, "Eine Nekropole nordwestlich von Soma,"
AA 85 (1970) 71

CHAPTER FOUR

THE DEVELOPMENT OF TOMB STRUCTURES IN ASIA MINOR FROM THE NEREID MONUMENT ONWARDS

As can be seen from the previous chapter, there were many divergent tendencies in large-scale funerary architecture prior to the fourth century. Initially, the dominant type seems to have been the huge tumulus-tomb. Then with Darius I there developed a new interest in rock-cut tomb architecture. Attempts were also made to erect monumental built tombs of cut stone; however, these projects had no real successors, and were thus cul-de-sacs. In fact no really successful type of built funerary monument appeared before the end of the fifth century. At this time a special combination of circumstances helped to produce in western Asia Minor a type of built tomb that soon became very popular both there and elsewhere. As indicated above, the development of this new type of structure was evolutionary rather than revolutionary. It took centuries of experimentation, with different types of grave monuments, before a new form was created that was both grandiose and expressive, in terms of architectural structure and sculptural decoration.

Naturally the achievement of such a satisfactory

solution required a favourable political atmosphere. From the point of view of our study, the most important political development in the Mediterranean world was the Greek success in checking the westward advance of Persia. This hard-won victory must have greatly enhanced the reputation of the mainland Greeks in the eyes of the peoples of Asia Minor who remained under Persian domination. In Attica it also led to the spectacular building program on the Athenian acropolis.

Nevertheless funerary architecture for the time being remained bound to earlier traditions; for funerary customs do not change overnight. This adherence to inherited forms is found in all regions. In Lycia, for particular religious reasons, interment above ground was the dominant custom; and the same was true in Persia. The function of the tomb building, however, was not so much to elevate the body (which in fact was often placed in a hyposorion, barely if at all above ground level), but rather to surround it with a glorified setting, that could be expressed in clear visual forms. The Lycian pillar tombs are a good example of such an approach. The eastern idea of heroization after death, known to the Lycian nobles through Persian influence, seems to have appealed to Lycian rulers. They too wished to be venerated after their earthly existence as semi-divine heroes.

Thanks to their geographical location the Lycians also had connections with the Greek world. They must have had some knowledge of Greek temple architecture and the reasons

for its existence, even if the true nature of Greek sacred buildings was not quite clear to them. In any case they welcomed Greek ideas, which were to their liking. Thus as the Peloponnesian War dragged on in Greece, they readily opened their territories to refugees from the west. A number of the people who found shelter and employment in Lycia were craftsmen and artisans-- the more so since the activity of such persons was most restricted by the hostilities. Thus the general situation was favourable for modifications and new developments in various fields, including that of funerary architecture.

Tumuli, regardless of their size, could not adequately express the visual message that local rulers wanted to convey; they remained essentially "silent" monuments. Rock-cut tombs were too restrictive in the choice of location. Only built structures could have all the qualities needed to fulfil the overall aims of the Lycian nobles. The majestic Greek temple form, especially if elevated well above ground and sumptuously decorated, was undoubtedly one that attracted attention; thus it was precisely what these well-to-do nobles wanted. They wished to remain part of the community after their death, in the same "dominant" position that they had enjoyed during their lifetimes. We now turn to the first known structure that fully expressed these ideas.

I. The Nereid Monument at Xanthos

This Xanthian structure was designed in accordance with Lycio-Persian customs, but clearly under Greek influence. It stands on a rocky hillside about 200m west of the acropolis of Xanthos (fig. 51 a and b). It was set in a (walled) enclosure, and rose to a height of about 13.50m.¹ The lower part of the rectangular podium, 6.80 x 10.17m, consisted of limestone blocks, above which were three courses of marble; the two upper courses were carved with sculptural friezes. On the larger lower frieze were generalized combat scenes, reminiscent of Greek Amazonomachies. The smaller upper band depicted the siege and surrender of a city. A meticulously executed astragal, a double row of egg-and-dart, and a plain narrow band, formed the crown of the high podium (fig. 52). In the interior of the podium, almost 3.00m above ground level, was a rectangular chamber (fig. 53), accessible by way of a ramp leading from the paved platform of the northern side of the tomb.²

Above the podium stood a small peripteral Ionic temple, which, in contrast to the high tower-like lower part, is purely Greek in concept (fig. 54). There were four columns on the shorter east and west façades, six along the north and south sides (fig. 55). The columns were 3.04m tall, with monolithic shafts; the height was eight times the lower diameter. The capitals imitated, though in a simplified form, those of the Athenian Erechtheion, while the bases were of the Asiatic-Ionic type, i.e. a double scotia topped

by a torus, but without the normal plinth. It should be noted that the four-cornered, or diagonal, capitals at the corners are among the earliest known examples of the type. Nereids, or Aurae (Sea Breezes), stood in the wide intercolumniar spaces, giving a certain flamboyance to the otherwise conventional Ionic framework.³ Statues here appear for the first known time in the intercolumniar spaces of a building of Greek form.

The "cella" within the peristyle of this upper structure contained four kline beds, placed in pairs along the longer walls. There were doors giving access to the cella from the porches (the "pronaos" and "opisthodomos") at each end. The elaborately carved lintels, framed by consoles, again betray the influence of the Erechtheion. The necks of the anta capitals had rosettes in relief, a widely used motif on the later rock-cut tombs of Asia Minor.

The outer faces of the cella walls were crowned with a decorative frieze, that dealt with such funerary themes as banquets and sacrifices. The ceiling of the pteron and the naos consisted of three different sizes of marble coffers, decorated with floral and figure designs. The architrave was carved with a fourth frieze depicting hunting scenes; above this frieze was a row of large dentils, surmounted by a cornice and a lion-head sima. The gabled roof had an unusually heavy covering of stone tiles (fig. 56). The west pediment contained a schématisized combat scene between

horsemen and footsoldiers; in the east pediment the dynastic couple were shown seated among their attendants (fig. 57). This latter theme recalls the east frieze of the Parthenon, or even the east frieze of the Athena Nike temple in Athens. Large figured acroteria crowned the gables. As symbolic guardians of the tomb, lions and sphinxes were also included in the ornamental scheme, but their place in the overall design is not certain.

The appearance of the monument, as reassembled in the British Museum (fig. 58) is stylistically quite heterogeneous. The artists who worked on this tomb were obviously familiar with the architecture both of the Ionian coast and of the Greek Mainland; in particular, they had a firsthand acquaintance with Athenian buildings, such as the Nike and Ilissos temples and the Erechtheion. Nevertheless, here on Lycian soil the rigid Greek temple form underwent a considerable change. The adaptation of the temple to serve as a tomb involved a great deal of modification, as a result of which only the "distorted" outlines of an Ionic temple remain. The notion of constructing a tower-like grave monument, which at the same time served as a commemorative trophy, was Perso-Lycian.

The technical details of the building also display a mixture of indigenous Lycian and imported Greek traditions. In the limestone foundation the Lycian system of jointing was employed, except for the two top courses, where double-T

clamps of Greek type were used. The door structures of the cella were Lycian, but the decoration was Greek. Furthermore, the sima on the north flank was Lycian in shape, that on the south Greek.^{3bis} In the stoneworking technique one can see either Ionian or Lydian influences. In course "B,"⁴ still in situ, the vertical edges of the ashlar blocks are slightly bevelled; and the perimeter of each block has a smooth margin enclosing the rusticated central part.⁵ Such combinations indicate the mixed background of the artists who worked on the monument; yet its commissioner in all likelihood belonged to the local aristocracy.⁶ The monument can be dated to the early years of the fourth century, notwithstanding the style of its sculptural decoration.⁷

II. The Heroon at Limyra

The new form of tomb represented by the Nereid Monument became very popular in Asia Minor and elsewhere. One of the first of the series of later large-scale tombs was the Heroon at Limyra, also in Lycian territory.⁸ This building was discovered in 1966 on a rocky terraced promontory, 218m above sea level, on the lower level of the acropolis of Limyra (fig. 59). The excavation of the complex was undertaken between 1969-1971. The site commands a spectacular view of the surrounding region. The actual tomb building, 6.80 x 10.40m, was situated within an ample rock-cut temenos, 19m wide and 18m deep, intended for cultic purposes. Thanks

to the difficult terrain, even after the structure had been destroyed by earthquake many of the sculptural and architectural fragments remained on the site, making an accurate reconstruction possible (fig. 60).

The podium, 3.80m high and built of large neatly fitted ashlar blocks, was placed on a slightly projecting base course, 0.50m high, laid immediately above the rock surface. Within this podium there was a hyposorion that could be approached through an opening from the south or main façade. According to the excavators there was (in contrast to the Nereid Monument) no relief decoration on the podium, which was crowned by a simple kyma reversa moulding.

For the superstructure the designer chose the amphiprotstyle plan used in the late fifth-century Ilissos and Nike temples at Athens.⁹ Instead of columns, four Karyatids, 2.80m tall, set on circular bases 0.90m high, supported an Ionic entablature at the narrow south and north ends of the building (fig. 61). The composition is strongly reminiscent of the Karyatid porch of the Athenian Erechtheion (fig. 62). However, in Limyra the female figures are not graceful, but heavy pillar-like supports (fig. 63). Each of them wears a peplos over a chiton, and carries cult objects in her hands (e.g. libation bowls and rhytons), thus clearly indicating an association with funerary rituals. On their heads the figures (Charites or Horae) wear a high headgear; their hairstyle is oriental. Besides reminding the visitor to

observe the cult of the dead, they may also have symbolised a promise of life after death.

At any rate their symbolic function is unquestionable, even if we can no longer determine their precise role in an ancient funerary context. Borchhardt identifies them as Horae or Charites, and an analogous role might be suggested for related korai: the Erechtheion maidens,¹⁰ those of Heron "G," the female statues supporting the upper structure of the Tomb of Hyakinthos at Amyklai. Among these examples, the only extant representatives, in the Karyatið Porch of the Erechtheion, deserve special attention. In the light of the Limyra discovery the notion that the Athenian temple was erected over the legendary tomb of Kekrops, with the six maidens supporting a baldacchino over the grave, becomes once more the most plausible theory concerning the function of the building.¹¹

In this connection questions also arise regarding the role of the female figures of the Knidian and Siphnian (fig. 65) treasuries at Delphi. However, no definite answers can be given without further research. The motif seems to have been derived from the Near East.¹² Closest in date among the Near Eastern examples are the monumental anthropomorphic figures from Tell Halaf (fig. 65), dating from the eighth century.¹³ These three large standing figures of basalt, mounted on animals, supported the lintel of a doorway, 9.50m wide, in the temple-palace. From here, perhaps through

some Persian intermediary, the motif may have reached Greece, where, with the passing of time, a more and more functional role was attributed to the Karyatids, so much so, that by the time of Vitruvius their original symbolic role was not clearly understood.¹⁴

An architrave of two fasciae constitutes the lowest section of the Ionic entablature. Again recalling the Karyatid Porch in Athens, the upper fascia was adorned with a row of carved rosettes, an appropriate decoration for funerary and commemorative buildings.¹⁵ The next element was a row of large dentils, followed by the geison and a lion head sima on the long sides of the edifice. The south and north façades carried a pediment.

After some initial difficulty the central and corner acroteria of the north pediment have been convincingly reconstructed.¹⁶ The central acroterion represents Perseus with the beheaded Medusa at his feet, while the corners show the sisters of Medusa, Stheno and Euryale, in flight (fig. 66). The theme was well known in Greek art, though Herodotos mentions its possible Assyrian origin.¹⁷ The southern acroteria, facing the sea, have disappeared, but according to the excavators the subject was Bellerophon's fight against the Amazons. The height of the still existing central acroterion on the north came to 1.60m, while the superstructure, from the capitals of the karyatid figures to the apex of the pediment, measured 2.00m.

The cella (6.00m long) behind the karyatid supports housed a second burial chamber above the hypostyle of the podium. The outer face of the third course of the chamber, 0.90m high, was decorated on the east and west with sculptured reliefs. The west frieze is quite well preserved; it shows a scene reminiscent of a military parade. At the head of the procession is a quadriga, followed by attendants, mounted horsemen and foot soldiers in full armour. Although most of the east frieze is missing, it can be established from the remaining fragments that it was a mirror image of the processional scene on the west side. In both friezes the participants move from north to south.

The corners of the cella walls were adorned with pilasters. Below the capitals were carved rosettes in pairs.

The main approach to the temenos of the heroon was from the east. The wide flight of steps in front of the south façade had no functional purpose, but rather contributed to the monumental effect by increasing the apparent height of the structure as seen from below. The painted surfaces, standing out from the monotonous background of rock, further increased the brilliant and striking effect of the tomb, which perhaps served as a landmark for sailors approaching Limyra.

As a measure of economy, both the architectural and sculptural members were executed in local stone, quarried in the course of preparing the ground for the heroon. The

complex may have been the trophy-tomb of the Lycian dynast Perikles, who became ruler of the region during the decade 380-370 B.C., and perished during the satraps' revolt of 362-360 B.C.

The building, although it reflects Attic influence in plan and Xanthian in the arrangement of the main units, is an independent creation showing a different form of the theme of the Nereid Monument, i.e. the "temple-tomb" on a podium. The architect must have been a Lycian who was also quite familiar with the strict symmetry of Persian architectural designs; for example the mirror-image effect of the friezes is also found in the entrance ways of Achaemenid buildings.¹⁸ The dramatic setting of the complex is its most remarkable feature. It is in the focal point of the projecting lower level of the acropolis of Limyra, which in an abstract way resembles the ornamental prow of a large ship. By combining palace and tomb, the residences of the living and of the dead, the person who commissioned the heroon made his presence in the community eternal.

III. The Mausoleum at Halikarnassos

The largest and most magnificent tomb of the fourth century was undoubtedly the Mausoleum at Halikarnassos;¹⁹ none of its Greek successors surpassed it either in scale or in fame. The city of Halikarnassos, Herodotos' birthplace, rose to importance under the Karian dynast Mausolos (377-

353 B.C.). He spared no expense in refounding this coastal town as his capital.²⁰ Unfortunately very little has survived either of his tomb or of his palace, which were probably the two most splendid buildings of the entire city. During the 16th century of our era, the Castle of St. Peter was erected on the site of the palace, reusing materials from the Mausoleum. The site of the tomb was rediscovered in 1856, and then excavated by C.T. Newton. Since that time numerous restorations of the Mausoleum have been proposed, relying partly on the results of Newton's excavation, and partly on the descriptions of ancient writers. A fresh campaign of study and excavation was started by Danish archaeologists in the sixties of this century.

Vitruvius (2.8.11) aptly described the location of the Mausoleum as being in the middle of a natural amphitheatre, i.e. the curved and gradually rising ground level enclosing the bay of Halikarnassos. A section of an earlier necropolis was utilized for the new tomb; the soft rock was recut for the base (fig. 67) of the edifice (32.94 x 38.73m). The area was paved with large blocks of green volcanic stone, except for the white marble floor of the burial, placed in the N-W section of the enclosure. The tomb chamber was directly connected with the wide western staircase through a vestibule and a short dromos. A huge portcullis blocked the entrance to the complex. All the architectural ornaments have disappeared, but a 16th. century description suggests

that the interior was lavishly decorated.²¹

To relieve the weight over the tomb chamber the architect probably relied on the well-tested system of corbelled vaulting, that had been widely employed in funerary architecture since Mycenaean times.²² Another rock-cut, but smaller, staircase was set obliquely to the S-E part of the complex. It faced the south side of the tomb chamber and carried cuttings for offering-vases. A unique and extensive system of drainage channels and regularly placed pillars surrounded the entire foundation cutting. The latter perhaps served to support the lifting machines employed during the construction of the edifice.

There is little or no direct information concerning the podium of the Mausoleum. However, the vague reference in Vitruvius may relate to the podium: "For on the several elevations (i.e. perhaps indicating a stepped podium?) different rival craftsmen took their share in decorations wherein they competed."²³ Martial describes the Mausoleum as "hanging in vacant air."²⁴ In speaking of the dismantling of the remains Guichard says that, "the deeper they went the more the structure was enlarged at its base";²⁵ these words may indicate some peculiarities of the high socle, perhaps suggesting again a stepped podium-like appearance for it.

Other literary sources emphasize that the Mausoleum was regarded as one of the seven wonders of the ancient world

mainly because of its sculpture.²⁶ The large number of sculptural fragments found on the site seems to support this point; a certain number of these figures must have belonged to the high podium. According to the Danish archaeologists, this section was built of blue limestone, and had two socles or parapets for free-standing sculptures, stepped back one above and behind the other (fig. 68). The sculptures included both groups and single figures. The figures on the upper pedestal were of colossal size, like the so-called figures of Mausolos and Artemisia, c. 3.00m tall, now in the British Museum (fig. 69); those in the lower range were "heroic," or slightly over life-size.²⁷ Next followed a marble-faced wall, crowned on all four sides by a relief frieze, representing the traditional theme of an Amazonomachy on top, and perhaps a Centauromachy below.²⁸

Above a crowning moulding and a one-stepped stylobate an Ionic peristyle enclosed the "cella." The thirty-six columns were set out in a 9 x 11 arrangement. Blue plinths supported white marble bases of Asiatic-Ionic profile. The column shafts measured 1.10m, at the base and had twenty-four flutes.²⁹ The capitals conformed to the type current in the mid-fourth century. There is no evidence for a frieze-course between the architrave and the dentils; the crowning moulding of the former, an astragal under an egg-and-dart, provided the transition. Sculptures probably stood in the ca. 3.00m wide intercolunar spaces, doubtless

following such models as the Nereid Monument, the Limyra Heroon and the sarcophagus of the Mourning Women. Above the sima, and slightly set back from the edge, stood groups of heraldic lions. If the arrangement of the later Belevi Mausoleum is any indication, these lions faced ornamental motifs, while the four corners carried group compositions.

The description of the uppermost portion of the tomb in Pliny is fairly explicit, though not precise: "...above the pteron there was a pyramid, equal in height to the lower part (i.e. the colonnade), contracting by twenty-four steps to a summit like that of the meta. At the top of all was a chariot with four horses..."³⁰ It can be assumed that the chariot had at least one figure, that of Mausolos, in it.

Regarding the cella of the peripteral stage information is scarce. This section too may have had a corbel-vaulted interior to provide support for the pyramidal roof (fig. 70). Because of its good state of preservation the chariot frieze, made of fine grained white marble, must have been in a part of the building that was protected from the weather. It may have been placed at the top of the outer face of the cella walls. The coffers of the pteron were sculptured-- an early example of this kind of ornament.

The artists employed to execute all these sculptures were among the most famous of this time. Scopas worked on the east, Bryaxis on the north, Timotheos on the south, and Leochares on the west side. In addition, a certain Pytheos

made the marble quadriga, and in cooperation with Satyros of Paros published a study on the Mausoleum; he is usually assumed to have been the architect of the whole building.³¹

In connection with the measurements and the numerical relationship of the component parts of the tomb, there arises the question of the module employed. According to the Danish excavators a foot-unit of c. 32cm comes closest to Pliny's dimensions; however, the foot of c. 30cm also played an important part in the design.³² Jeppesen, though not convincingly, resotes the total height of the tomb as 57.60m (180 feet), the circumference as 128m (400 feet) and the height of the colonnaded part as 12.00m (25 ells) (fig. 71).³³

An extensive peribolos wall surrounded the terrace of the Mausoleum (105 x 242.50m). The enclosure was entered by a propylon in the east wall. This entrance way was left unfinished ca. 340 B.C. when work on the tomb itself stopped.

By this time both political and economic conditions had become unfavorable for the completion of the project. Mausolos, who must have conceived the grandiose design well before the end of his reign, died when building activity was at its height. However, his wife Artemisia carried on the task till her own death in 351 B.C. Thereafter the construction continued with interruptions till it came to a standstill about a decade later.

Because of its size and prominent position the Mausoleum

not only dominated the city but also served as a familiar landmark for sailors. It was a monumental undertaking on the part of a local ruler designed to win him immortality. Here the earlier Asia Minor tradition of commemorative buildings and grave monuments was developed into an impressive, even awe-inspiring, "heroon-tomb."³⁴ In place of a conventional roof like those of the Nereid Monument and the Limyra Heroon, the design terminated in a stepped pyramid. As indicated in the previous chapter this idea was probably derived from oriental sources. The unusual height of the tomb itself, the excellence and variety of the sculptures (an almost "Gothic" combination), and the well planned landscape design made the Mausoleum complex a source of inspiration for many later monuments; these included not only tombs and memorial buildings, but also lighthouses and altars.

IV. The Large Tomb at Labraynda

The original capital of the Hekatomnid dynasts of Karia had been at Mylasa (modern Milas), some 14km southwest of the Karian national sanctuary at Labraynda. The impressive ruins of Labraynda are located in mountainous terrain, about 700m above sea-level. The necropolis around the sanctuary contain both rock-cut and built tombs of the fourth century. Most of these tombs are still unexplored or unpublished, including the largest example, which is relatively well preserved. The best (though not completely accurate) drawings

of this heroon-tomb are those of Le Bas (fig. 72), who visited the site in 1844.³⁵ The structure was restudied and redrawn by a Swedish team in 1960,³⁶ but so far only a preliminary report of their work is available.³⁷

The lower sections of the multi-storied building are still in situ, about 30m higher up the slope above the temple area (fig. 73). A small terrace was cut in the mountainside to provide a prominent site for the heroon. Fifty metres higher again is the former acropolis, known today as Hisar (fortress). A passage, partly stepped, connected the heroon with the lowerlying sanctuary area. Thus the siting of the tomb is roughly comparable to that of the Limyra Heroon. Nearby are many traces of the quarries that provided building material for the tomb as well as for the other structures on the terraced areas below.

The complex, 15m long consists of three units. On the east is a dromos (or court-yard), more than 6m long, followed by two chambers axially aligned with the dromos. The whole north wall, approximately up to the apex of the roof of the chambers, was built against the scraped rock-surface on the uphill side of the terrace; the north wall of the dromos consisted of at least six courses of ashlar, laid as alternating headers and stretchers. On the east side the roughly cut rock surface was left unfaced. The south side, facing the sanctuary below, is still preserved to a height of 5.20m. Here two slightly projecting foundation

courses support a base moulding; this is followed by a higher, then a lower, course of blocks, which might perhaps be regarded as "orthostates" crowned by a "string-course." The next three courses, except for the long corner blocks, consists of headers. The fourth course consists of stretchers; above this level the still existing courses are stepped back in a scheme corresponding to that of the north side, where the Swedish excavations... "revealed three steps running along the whole of the north long side of the structure like a kind of stylobate, on which the tomb wall rises to a height of three courses of 1.30m."³⁸

The dromos was entered by a low door with tapering sides, set in the middle of the south side; the two large threshold blocks were fixed in place by a leaded-in iron clamp. According to the excavators, after the funeral the door was sealed and the open courtyard, or dromos, filled with sand and earth. A doorway similar to that of the dromos leads into the interior. A six-ton slab of gneiss, similar to that used in the tomb chamber of the Halikarnassian Mausoleum, blocked the entrance to the burial rooms. The lintel over this doorway measures 0.65 x 0.90 x 2.40m; the block above it, is 5.30m long, thus transferring the weight of all higher courses to the solid wall on either side of the door. Two sarcophagi were placed in the forechamber, to the left and right of the doorway. The larger main room originally contained one sarcophagus, but

at a later period was rearranged to accommodate three. The ceilings are corbel vaulted, but the soffit of the vault is shaped to give the impression of semicircular barrel-vaulting (fig. 74). Both rear corners of the inner chamber were built of large L-shaped blocks, that formed part of the side wall as well as of the rear wall.

Above the two chambers the design of the tomb is unusual, consisting of a single rectangular "chamber" measuring 6.00 x 3.20m, and ca. 0.70m in height; access to this space was through a trapezoidal opening in the east wall, i.e. the west wall of the dromos (fig. 75 a and b). Its purpose is not known; presumably it was needed to relieve the pressure of the superstructure above. The roof of this "clerestorey" consists of a series of ten huge slabs of gneiss, each ca. 4.50m long (fig. 76); these also provided a base for the lost upper structure. No reconstruction of this superstructure has been proposed. One of the finds illustrated by Le Bas, a section of a marble Doric frieze with a metope between two triglyphs,³⁹ has since disappeared. The combined height of the architrave and frieze was approximately 1.05m. The cornice block, also drawn in Le Bas (pl. II-9 n. VIII), was 0.29m high. The triglyphs are classical looking, with their grooves showing elliptical profiles, and the outer edges of the glyphs have curved tops. The mouldings of the cornice, taken as a unit, have no really close comparable parallel. Separately, however, the kyma

reversa geison bed-mould may be roughly compared with mid-fourth century designs, e.g. in the third Temple of Athena Pronaia and the new Temple of Apollo at Delphi. The geison mouldings of the Temple of Alea Athena at Tegea and of the Thersilion at Megalopolis, both of the mid-fourth century, also recall the Labraynda moulding. The hawsbeak of the Doric geison crown is once more classical in appearance, distantly echoing the form of the same moulding in the interior order of the Bassae temple.

On the east part of the temple terrace fragments of a small Doric column and that of a capital were found. Their size would be appropriate for a colonnaded superstructure rising above the chambers of the tomb. In the absence of any additional information, it can be tentatively suggested that the building was an elevated "temple tomb" like the Nereid Monument or the Limyra Heroon.^{39bis}

The existing masonry is of the same nature as those of other buildings in the sanctuary executed during the reigns of Mausolos, Idrieus (351-344 B.C.), and Ada (344-341 B.C.). It is known that Idrieus dedicated a large number of buildings on the site, including the Andron, the temple, the Oikoi, a gateway etc.⁴⁰ The closeness of the heroon-tomb to the main sanctuary would indicate that it belonged to an important person of the region; this person may have been Idrieus, the brother of Mausolos.

V. Knidos, Alinda and Antiphellos

A number of commemorative tomb structures used a large-scale lion as their epithema, or crowning element. Even if lions were rarely seen by the Greeks, the symbolic value of the king of beasts must have been well known to them, thus accounting for the standardized types. Some of these monuments, e.g. those at Thespiiai, Chaironeia and Amphipolis, employed the seated type, while the Knidian Lion Tomb (fig. 77) had a reclining lion on top. The nature of these designs, and the evidence of the Chaironeia and Knidos examples, indicate that they were erected to honour a number of heroes rather than a single individual.

The limestone core of the Lion Tomb at Knidos is still standing (fig. 78) to about 6m, or approximately a third of its original height.⁴¹ The rocky ground was carefully levelled to receive the foundation layers. The square lower part of the tomb, measuring over 12m per side, consisted of a three-stepped krepis and a high socle finished in fine "bossiert" style. Four engaged Doric columns, c. 5.50 lower diameters in height, adorned each side of the massive middle section of the building. According to the excavators, there were three triglyphs above the central intercolumniation, two above the lateral spans, with a complete triglyph at the corners. The arrangement of three triglyphs in the central interval is analogous to the recently excavated Doric Portico of Knidos, datable perhaps to the late fourth or early third

century.⁴² The width of the metopes varied. The entablature terminated in a plain lionhead sima, only roughly blocked out.

To support the crowning lion figure and its hollow rectangular pedestal an oblong stepped pyramid ~~was~~ erected above the lower storey; the sides and bottom of each block of the risers were decorated with a band of drafting. Inside the podium and pyramid was a circular beehive-shaped chamber (fig. 79 a and b), built of "...concentric horizontal courses, overhanging each other so as gradually to converge to an apex."⁴³ A huge circular slab, trapezoidal in section, closed the top of the beehive. The walls immediately above the paved floor were pierced by eleven radiating loculi plus a larger opening on the north side for the doorway.⁴⁴ These rectangular burial niches extended right to the external marble facing of the podium.

No architectural decorations were found, except for a broken relief shield which in all probability was placed above the doorway of the central intercolumniation.⁴⁵ In addition to the above-mentioned limestone, grayish marble with purple and yellowish patches was employed for the external walls. The lion was of Pentelic marble (fig. 80), possibly indicating some sort of Attic connections for the monument.

The entire complex was located on the projecting tip of a small peninsula, about 4 km east of Knidos. An extensive walled temenos, a common feature of heroon-tombs, surrounded

the central structure. Traces of this enclosure are still visible on the north and west sides (fig. 81). Because of its prominent site overlooking the sea, it must have been a familiar landmark to mariners.

Remains of other elevated tombs, similar in nature to the Lion Tomb, are to be found along the ancient road to Knidos.⁴⁶ Their period of construction must fall within the years of the Lion Tomb, when such pyramidal structures were fashionable.

In the absence of inscriptions and small finds (except for a small vase of the shape known as a lagynos found outside of the doorway),¹⁴⁷ there is no firm basis for dating the Lion Tomb. Many of its architectural details were left uncarved. However, its overall design connects it with the Halikarnassian Mausoleum and its successors in the same region. The solution to the problem of roofing the interior chamber seems rather old-fashioned, recalling Mycenaean beehive tombs; but it is also comparable with roughly contemporary corbelled constructions on the Lelegian peninsula, at Gebe Kilisse (fig. 82) and Asarlik, and perhaps even with the burial chamber of Mausolos' tomb.⁴⁸ Loculi are found in the late fourth century in the Charmyleion on Kos, as well as later, in the Hellenistic heroon at Miletos.

Representations of lions are often seen on Knidian coinage from the archaic period onward,¹⁴⁹ but they are of

little help in dating the Lion Tomb. Knidos apparently enjoyed an upsurge of artistic activity in the second half of the fourth century, after the refounding, or at least enlarging, of the city at the end of the peninsula.⁵⁰ During this period the Knidians acquired a number of works of art created by famous Attic artists.⁵¹ Thus it would not be surprising if this Dorian city employed an architect who had acquired practical experience from various parts of the Mediterranean. Besides being familiar with developments in Attica and Asia Minor, the architect many also have had a firsthand knowledge of Macedonian architecture. Macedonian Doric architecture is of excellent quality, and engaged columns resting on a socle often appear in Macedonian designs.⁵²

The Lion Tomb used to be associated with Konon's naval victory over the Spartans off the Knidian coast in 394 B.C. However, a date in the late fourth or early third century now seems far more plausible. A similar design was employed in the less well preserved Lion Tomb at Amphipolis (fig. 83), which must belong to the same time.⁵³ Among their successors in Asia Minor are the early Doric constructions of Pergamon, the even more advanced buildings of the second century at Miletos (e.g. the Bouleuterion), and the still later Heroon at Ta Marmara near Didyma.

Also related to the Lion Tomb at Knidos is a much smaller built tomb at Alinda (fig. 84).⁵⁴ The main or middle,

section of the tomb was raised on a four stepped krepidoma, approximately 1.20m high. Each side of the square stylobate measured ca. 3.90m. All four faces carried an identical design of two Doric half-columns enclosed by boldly projecting corner pilasters. The lower diameter of the columns, 0.38m, was equal to the width of the pilasters; the column height measured 6.5 lower diameter, or 2.46m exactly. Architrave and frieze were Doric; there were two triglyphs above each intercolumniar space, i.e. ten triglyphs and nine metopes on each side. The architrave and frieze were equal in height, (0.30m each). No restoration has been proposed for the sections, if any, above the frieze; the Knidos and Amphipolis examples suggest that there may have been a pyramidal top, with some sort of crowning finial. The date of the structure is probably within the fourth century, perhaps even before that of the Knidian Lion Tomb.

Somewhat different in design but still of the same genre is an entirely rock-cut but free-standing tomb outside Kaş (ancient Antiphellos) in Lycia (fig. 85 a and b). The monument has been noted briefly by a few authors but otherwise remains largely unpublished.⁵⁵ It is almost square on plan, the front measuring 4.70m in width; the sides 4.00m; the preserved height is about 4.50m. The sides are plain; at the corners are pilasters. A Doric entablature crowns the cubical lower part of the monument. The rest of the superstructure has almost completely disappeared, so that its

original form cannot be determined with certainty; however, a stepped pyramid again seems to be the most appropriate form for the crowning element, i.e. the Kaş monument would have resembled a small-scale Hellenistic model found at Syracuse (fig. 86),⁵⁶ or another tomb at Turgut in Asia Minor (fig. 87).⁵⁷

The burial chamber was reached through a narrow doorway, with a "Vitruvian Doric" frame, the outer edges of which are decorated all around by an astragal moulding. Inside the chamber three klinai served for the interment of bodies. Their ornamentation included a frieze (0.20m wide) of rosettes alternating with stylized palmettes. Other decorative motifs found in the tomb are a small pilaster capital (0.18m high), with floral ornament springing from volutes (the top of a kline leg?), and another small frieze (0.20m high) of twenty-four "dancing girls."⁵⁸

On the basis of the decorative details the tomb can be dated to the first half of the third century.

VI. The Belevi Mausoleum

This monument is located about 14km inland from Ephesos.¹⁵⁹ The tomb stands at the foot of a sloping hillside overlooking a fertile plain. In contrast to the Halikarnassian Mausoleum, where the rock surface was hollowed out to receive the foundation layers, at Belevi the living rock was artificially shaped to provide a core for the high

basement (fig. 86).⁶⁰ In other respects, however, the main outlines of the design clearly followed that of Mausolos' tomb. The ground plan was square, each side measuring 29.65m; this figure probably represents 100 feet of 29.65m. Above the euthyteria a three-stepped krepidoma supported the base mouldings, consisting of a plain band, torus, scotia and Lesbian kyma. Above this base the podium was faced with ten courses of large neatly cut ashlar, 0.69 to 0.88m high; the total height of base elements and wall was 11.37m. A low architrave (0.45m) and somewhat higher Doric frieze (0.67m) ran around the top of the podium. Along the south side a deep recess was cut into the rock core for the burial chamber (fig. 89 a and b), which was placed off centre and sealed from the outside so as to conceal its existence. The actual chamber within the recess was barrel vaulted, and consisted of a small vestibule and a larger rectangular back-room for the kline sarcophagus. The north side of the edifice had an unfinished false door.

The second floor again started out with a three-stepped krepis, 1.12 m high, the top step serving as the stylobate for a Corinthian peristasis (fig. 90) with eighth columns per side.⁶¹ The Attic-Ionic column-bases rested on plinths, as at Langaza in Macedonia and in the largest rock-cut tomb at Telmessos.⁶² In the entablature (fig. 91) the three-fascia architrave was crowned by an astragal, egg-and-dart and plain fillet. Above the architrave were both a kyma-

profiled palmette-and-lotus frieze and a dentil course. The Ionic cornice supported a plain sima with lion head water spouts.⁶³ The total height of the entablature was 1.70m.

The ceiling of the pteron was embellished in a "baroque" manner with large coffers. The panels of the principal north side represented funerary games, while the reliefs of the other sides dealt with a centaumomachy.⁶⁴ The Austrian excavators restored on each side, above the sima, groups of antithetic lion-griffin figures facing large stone vases; pairs of horses were placed at the corners. Little or no archaeological evidence is left for the reconstruction of the cella and the roof structure. The latter in all probability resembled Halikarnassos in having a stepped pyramid with a crowning element on top.⁶⁵

From the surviving traces of the ground plan of the cella it may be conjectured that the inner face of the walls was adorned with pilasters (fig. 92), not unlike those of the adyton walls of the Hellenistic Didymaion.⁶⁶ A block belonging to the architrave of this inner order was found; it bears the inscription: "HAIAAEEΣ." Some fragments of a small palmleaf capital and fluted Ionic drums may belong to the same section of the building. Perhaps they formed part of a two-tiered interior decorative scheme.

The sculptural finds inside the burial chamber included a large sarcophagus with a reclining figure on top unfinished, and a standing statue of a servant. The existence of over-

lifesize figures is indicated by fragments found around the site. The sculptures as well as the architectural members still bear extensive remains of their painted finish; frequently painting replaced carving on the architectural mouldings, a practice reminiscent of Macedonian architecture.

An estimated $2,500\text{m}^2$ of marble was extracted from the quarries of the neighbourhood for building the tomb. If the monument was ever completed to its summit it must have reached a height of about 35m (fig. 93). The unfinished architectural members indicate that work stopped rather suddenly; we are thus able to see the different stages in the progress of the work (fig. 94).

The problem of the identity of the commissioner and the date of construction remain unsolved. The high square podium and the pyramid(?) on top are un-Greek. Oriental influence is even stronger in some of the sculptural decoration, such as the statue of the servant and the heraldic lion-griffin figures and vases. The execution of the tomb chamber is Macedonian in every respect. The combination of different orders on the exterior of buildings appeared elsewhere in early Hellenistic work, e.g. in the Great Tomb at Lefkadia and the Propylon of Ptolemy on Samothrace.

From the time of the Nereid Monument onward important tombs had often been richly decorated. The form of the capitals and the profiles of the mouldings find their closest parallels in buildings belonging to the first half of the


third century, such as the Lysimachean projects on Samothrace and at Miletos, the Athena temple at Ilion, and above all the new naiskos at Didyma, which was completed by ca. 270 B.C.⁶⁷

Ultimately the decorative forms of the period go back to the fourth century temple of Athena at Priene; but the particular shapes became harder and less lively, e.g. as in the third-century Zeus temple in the same city. On the other hand some of the strictly technical details, such as the clamps and dowel holes, continue unchanged from the Athena temple.⁶⁸

To make matters even more difficult, there is no uniformity in the corresponding details at Belevi. For example, the row of frieze blocks of the Corinthian order and the Lesbian kyma decoration show variations in the carving. Some sections are still executed in the late fourth-century manner, while others are more stiff and shallow.

Perhaps there were two or more periods of construction at Belevi; the strongest indication of this possibility is given by a number of coffer plaques that resemble reliefs from the early second-century Herkateaion at Lagina.⁶⁹

Otherwise the mausoleum seems to belong to the first half of the third century. Its commissioner was presumably a king. In choosing the site, the existence of the nearby tumulus-tomb, perhaps also of royal origin but of an earlier period,⁷⁰ must have been a decisive factor. The design, the preparation of the ground and the building itself required years, of work that could not have been done in an emergency.



or on the spur of the moment. The order to erect this huge hero-tomb perhaps came from the reorganizer of the nearby city of Ephesos, Lysimachos himself.

The influence of the Belevi mausoleum elsewhere in the Hellenistic world seems to have been widespread. Such monuments as the "Tomba Ildebranda" in Etruria, the so-called Tomb of the Ptolemies on Rhodes, and the tower tomb at Ptolemais in North Africa are all directly or indirectly related to the Belevi building.⁷¹

In western Asia Minor proper this mausoleum is one of the last known examples of a built tomb⁷² of monumental scale that also included new features in its design. Not until the building of the so-called Ta Marmara heroon near Didyma, in the mid-second century, do we again find a built tomb noteworthy for its size and architectural execution. This "gap" in monumental tomb buildings may be attributed largely to the uncertainty of the times and the generally poor economic climate. In order to find a continuation of the trend established by the Nereid Monument one has to turn to the islands off the coast of Asia Minor. These islands were always receptive to the ideas popular in Asia Minor, and often transmitted them to the western regions of the Mediterranean world.

VII. The Charmyleion, Kos

One of the earliest edifices to show the influence of

the monumental tombs of Asia Minor was the Charmyleion on the island of Kos (fig. 95).⁷³ The building was the product of Ionian provincial architecture, with some Doric elements in its design. An inscription found nearby, originally from some part of the edifice, identifies its owner as Charmylos and his family, who lived around 300 B.C.⁷⁴

The design is unusual, since only the façade of the building is emphasized. The sides and back are devoid of architectural decoration. The heroon consisted of three levels, of which the lowest was underground. This crypt was approached from above by steps forming a short dromos (fig. 95). A wide shallow antechamber gave access to the vaulted burial chamber, 5.58m long. Along the west and east walls of this vaulted space were six loculi, each 2.45m deep. This arrangement for burial in the basement is comparable in a general way with that of the Lion Tomb at Knidos, and especially with the heroon on the Theatre Hill at Miletos.⁷⁵ These loculi were closed by large slabs depicting in relief the short end of a funeral kline with a tympanon above.

Above the basement the narrow podium running along the north, or main, façade of the building was broken by two symmetrically placed staircases leading up to the doorways (fig. 97). The lintel of each door was topped by slightly projecting band of Ionic decorations, consisting of egg-and-dart above a hanging palmette, kyma reversa and astragal, with consoles closing the ends. The horizontal relief of

each door-leaf were carved with rosettes, such as are found in Macedonian and Asia Minor examples. Behind this façade, which measured 9.50m in width, there were two identical rooms, their floors supported on six parallel rows of poros blocks running N-S above the vaulted basement, not unlike the joists below a stagefloor; this arrangement seems to have been designed simply to bring the floor-level to the desired height. The rather plain first storey terminated in an Ionic cyma profile.

The second storey was visually lighter and more open. Corner pilasters flanked the two Ionic columns in antis that formed the façade of a rectangular aedicula. The entablature had a row of dentils, but no frieze-band. The crowning course of the wall of the central aedicula, or cult room,⁷⁶ and the necks of the pilasters and antae, were carved with a row of rosettes. The acanthus foliage of the pilaster capitals and the Lesbian kyma of their bases both indicate a close stylistic relationship with Priene, Didyma and Belevi. The façade of the central aedicula was crowned by a "relief" pediment, behind which a lean-to roof sloped down to the rear.

The masonry of the building was pseudo-isodomic. From the inscription it is known that the design included a temenos containing other buildings and gardens belonging to the Twelve Gods and the hero.

VIII. Lindos and Rhodini

With the exception of the rock-cut core of the Belevi mausoleum, all the tombs discussed so far were built structures. As we have seen in the previous chapter, rock-cut monuments generally imitated free-standing built edifices, though with some modifications as a result of the different method of execution. We now turn to two monumental rock-cut tombs on the island of Rhodes, the prototypes of which were clearly built structures. The first tomb is only a rock-cut façade, though the largest of its kind and of unusual design; it is located at Lindos, some distance south of the city of Rhodes (fig. 98). Like many other funerary structures, the monument occupies a conspicuous site just above the western section of the city, in the region called "Kampana."⁷⁷ From inscriptions found on the site we know that it was commissioned by one Archokrates as a burial place for himself and his immediate family, thus assuring their continued "presence" in the community even after their physical death.

The façade of the tomb, 22.50m long and approximately 9.50m high, was cut from the living rock; it faced eastward, and was two storeys high (fig. 99). The lower storey consisted of an engaged order of twelve Doric half-columns. The fluted Doric shafts rested on a platform of three steps. The necking of these half-columns consisted of three annulets below a slightly curving echinus. The ratio of column height

to lower diameter, is 5.8:1; the axial span was 2.00m. The frieze had two triglyphs, with flat topped grooves, above each intercolumnar space. The lower order terminated in a projecting sima with antefixes. Above the sima was a wide decorative band on which elliptical medallions alternated with female figures emerging from acanthus foliage. The simplified second storey stood at the back of a narrow platform (maximum width 1.64m), that could be reached from the sides by symmetrically placed staircases recalling the approaches to the proskenion of a Hellenistic theatre. In the centre of this "stage" were placed four cylindrical marble altars with inscribed bases. Here the vertical lines of the ground floor were continued by flat pilasters, 2.20m high, placed on a high socle. The crowning elements are missing, but in all probability a carved horizontal cornice and sima topped the monument.

To enhance the sceneographic impression of the composition decorative elements (painted, or sculptured, or both) probably played a considerable role. Only a few traces of these decorations have been found; but their positions, between the Doric columns of the lower and in the pinax-like panels of the upper storey, can be restored by analogy with the Lefkadia tomb.

From the east one could enter the interior through three centrally placed openings between the Doric columns. An approximately square chamber, preceded by a much wider but

shallower vestibule, recalls the ground plan of Macedonian subterranean tombs. A remarkable feature of this rock-cut cult tomb is its western podium, approached by steps along the sides, with a T-shaped burial place beneath. A centrally placed staircase led to this chamber. On the other sides of the cult room rock-cut benches lined the walls. Since the interior is badly damaged and somewhat altered by the addition of later loculi, its exact shape and decoration can only be conjectured. Originally the ceiling may have had a tent form, while the walls had polychrome painted revetments, composed of panels alternating with pilasters, similar to those on the upper part of the façade.

Architecturally, the overall scheme of the Archokrateion can be compared with other local buildings, e.g. the lower stoa and the propylaia of the Athena precinct, both with imposing columnar façades, and the large rock-cut tomb at Rhodini.⁷⁸ Moreover, the monument is related to other two-storeyed structures, especially theatre and tomb façades, in which scenic effects were stressed at the expense of a more conventional design.

We know from the Lindian Chronicle that Archokrates became a priest of Athena in 225 B.C. It can therefore be assumed that the tomb was executed during the last quarter of the third century; and this date is supported by both epigraphic and stylistic evidence.

In addition to the better known Archokrateion at Lindos,

there is another monumental Hellenistic tomb on the island of Rhodes, i.e. the rock-cut mausoleum at Rhodini mentioned above.⁷⁹ This tomb is situated in a large park a couple of kilometers south-west of the city of Rhodes. In contrast to the Archokrateion, the Rhodini tomb is not merely a façade, but a completely free-standing structure (fig. 100). A small natural hill of sandstone, located between two ravines, was chosen for the mausoleum. The rock was cut to form a cube, approximately 4.50m high, each side being roughly 27.80m long.⁸⁰ Of the four sides only the north is relatively well preserved. Here, and presumably along the other sides too, the main body of the mausoleum was decorated with a row of 21 engaged half-columns, standing on a 3-stepped krepidoma raised on a high base. Each of the 3 steps is ca. 0.35m high and 0.30m deep. The columns lack bases and have very slender proportions. They project 0.30m from the wall; the lower diameter averages 0.48m. The interaxial span is 1.30m. All the shafts are unfluted. Although not a single capital is preserved, the order was undoubtedly Doric, the most widely used of the orders on Rhodes during the Hellenistic age. No fragments of the entablature have been found. For the upper part of the tomb Ross suggested a pyramid, or simply a tumulus planted with trees like that of the Mausoleum of Augustus in Rome; Newton correctly, as I believe, prefers the first possibility. In fact, among the numerous large masses of carved sandstone on the site is one that

seems to have come from the upper part of the pyramid; it now lies close to the N-E angle of the ruined structure.

On the north side, between the fifth and sixth columns from the N-W corner, a doorway, 2.70m high and 1.10m wide, gave access to the hewn-out interior. As in the Archokrateion, a vestibule (here wide and shallow, 9.20 x 3.00m) precedes the main cult room. This room is on axis with the exterior doorway; it is 6.75m long and 4.40m wide.⁸¹ The forechamber has two loculi of unequal depth cut into the long ends of the wall. The second room has three on the west side, two in the back, or south, wall; no two of these being of the same size; in the east wall were five loculi, each 1.20m deep and 0.65m wide.

Both rooms show traces of a coat of whitewash; originally both were painted, but no traces of their decorative schemes have remained. Ross and Newton suggested that there might be additional burial-rooms inside the rock-core since the excavated room occupies only one fourth of the complex.⁸²

The closest parallel to the Rhodini design is the Belevi mausoleum near Ephesos, which can be considered as a kind of prototype of the Rhodini tomb. The rock-cut core faced with columns, the pyramidal top, and the burial chamber opening off centre from one of the sides indicate that the architect of the Rhodini project was familiar with the layout of some monument such as the Belevi tomb. However, at Rhodini, to judge from the still extant remains, everything

is simple in design and less meticulously executed than at Belevi. The two-storey arrangement of Belevi has been in effect reduced to a single storey; the supporting base (in place of a real podium) was included at Rhodini only because of the unevenness of the groundline. Moreover, instead of a free-standing Corinthian order, Doric half-columns, like those of the Knidian Lion Tomb, were carved from the core of living rock. The Rhodini mausoleum was a huge monolith that impressed by its overall mass rather than by its details, the execution of which is rather mechanical. In this respect it resembles other third- and second-century Rhodian projects, such as the large lower stoa at Lindos and the Colossus of Rhodes, overthrown by the earthquake of 227-26 B.C.

The date and the owner of the Rhodini mausoleum are both unknown. Dates from the third to the first century B.C. have been suggested; but no theories have been put forward regarding the identity of the owner of the tomb. In literature it is known as the "Tomb of the Ptolemies," probably a misnomer that goes back to mediaeval Frankish writers working on the island.⁸³

Within the Hellenistic period the most flourishing years in the history of Rhodes began about 220 B.C.,⁸⁴ and lasted for about half a century. During these years the Rhodians sided with the Romans and won a number of decisive sea-battles against their enemies. Most remarkable was the sea-battle off the coast of Chios, won by the combined

Rhodian-Pergamene navy in 201 B.C. The victory was mainly due to an energetic Rhodian politician and skilful admiral named Theophiliskos, who died as a result of this engagement. It would not be surprising if the Rhodini mausoleum was made for this outstanding, and presumably wealthy, person. Whether the interior rooms were originally designed as a family burial place with loculi, or whether the loculi were a later addition, can no longer be determined.

There are very few projects closely comparable with the Rhodini tomb, other than the largely rock-cut mausoleum at Belevi and the built Lion Tomb at Knidos. However, some resemblance can be detected between the monumental Rhodian mausoleum, and the Algerian Medracen tomb and Tomb W80 in Cyrne; the latter is dated by Stuchhi to the first century B.C.⁸⁵ The "Absalom" and "Zacharias" tombs in Jerusalem, and the Tomb of Hamrath at Suweida, also reveal similarities in concept.⁸⁶

The Rhodini mausoleum is the largest of the extant tombs in the vicinity, and dominates the entire necropolis.⁸⁷ Only one other tomb deserves to be mentioned here. Located west of the great mausoleum, it is a rock-cut "façade-tomb" with three false doors between four fluted columns (fig. 101). The capitals are missing; according to Ross they were of the Corinthian order, though the Ionic order would be more appropriate for the tomb.⁸⁸ Below the façade, some three metres high and five wide, were three openings for the

actual burial; and arrangement of this sort was common in Etruria, and to a lesser extent at Cyrene in North Africa. The other tombs in the neighbourhood were mostly simple chamber tombs; the few that had architectural decoration have been destroyed beyond recognition.

IX. "Ta Marmara" near Didyma


About 11.5km northeast and inland from the village of Didyma stand the ruins of the Hellenistic heroon known in modern literature as "Ta Marmara."⁸⁹ This structure, 12m square on plan (fig. 102), was built on a hill some 40m high, overlooking Akbuk bay to the south. The building material was the local limestone, stuccoed and painted. A stepped socle, more than 1.50m high, supported three courses of isodomic masonry, the total height of which was about the same as that of the socle. On this high platform stood a walled cella enclosed by Doric columns. The sides and back had a 6 x 6 arrangement of freestanding columns set close to the cella walls.⁹⁰ The front was tetrastyle, with two half-columns between the corner supports; in the wide central span was a large doorway. The only relief decoration of the heroon consisted of carved and painted shields in the upper part of the intercolumniations. A Doric architrave and frieze,⁹¹ and a low pitched roof with pedimental ends, completed the temple-like form of the monument. A small doorway in the lower storey gave access to a chamber divided

into two sections, one behind the other. The interior of the upper floor repeated this plan, but here the ceiling was adorned with diamond-shaped coffers.

The "Ta Marmara" heroon provides another example of temple forms modified to serve as a tomb; but it also has close affinities with the second-century Bouleuterion at nearby Miletos, which was probably built a few years before the tomb. "Ta Marmara" in turn may have had a formative influence on similar schemes of the Roman era.

X. Diocaesarea, Tower-Tomb

The "Ta Marmara" heroon represents the end of the line, not only of Hellenistic "temple tombs" on podia in western Asia Minor, but also of monumental tomb building in general, until the idea was revived in the later first century B.C. There is only one large built tomb of the early first century B.C. that deserves attention, and this not so much for its peculiarities as for its good state of preservation. It is located in the mountains of Cilicia near ancient Diocaesarea (modern Uzuncaburç).⁹² It is a high tower tomb (fig. 103), square on plan (ca. 5.40 x 5.40m), set on a three-stepped platform. Above a high orthostate course the upward tapering tower is built of pseudo-isodomic masonry. The four angles are articulated by Doric pilasters; above these is a Doric entablature consisting of a plain architrave and a frieze course, with five triglyphs and four undecorated metopes on-



each side. A pointed stepped pyramid surmounts the scheme. Access to the interior is from the south, through a small opening less than one meter high, which could be closed by a sliding slab. Inside there are arrangements for three kline-burials within a low vaulted chamber.

The tomb has been dated to the first quarter of the first century B.C. According to Keil and Wilhelm it was the burial-place of a priestly ruler of Olba or perhaps even the Seleucid king Philip I (c. 93-84 B.C.).⁹³ The tower structure betrays Syrian influence, while the interior almost certainly copies some Macedonian prototype. If in fact the grave monument was built for a Seleucid king, the Macedonian character of the interior is understandable; on the other hand Cilicia's geographical closeness to Syria would explain the tower form of the exterior. The type, with some changes, was later imitated in Roman Cilicia.⁹⁴ Outside Asia Minor its closest parallels in form (and time) are to be found in north Africa; these tombs will be discussed in some detail in a later chapter.⁹⁵

XI. Heroa at Gölbaşı-Trysa, Miletos and Termessos

These three monumental complexes, although related in size and pretentiousness to the tombs described earlier, show a somewhat different concept. In each of them the actual tomb-building or burial-place was just one element of the overall design, and not necessarily the dominant one; the rest of the complex was given over to cultic purposes.

Furthermore, only a few details of the designs were derived from the Nereid Monument and related edifices. At Gölbaşı-Trysa the Lycian type of tomb-house, imitating timber construction, was retained for the actual burial building; at Miletos a tumulus was raised above the central core containing the burial; and at Termessos the picturesque qualities in sixth-century monumental rock-carvings reappear in the carvings around the kline-bed.

The earliest of the three complexes is the heroon at Gölbaşı-Trysa (fig. 104).⁹⁶ The site is located in a wooded region 866m above sea level; the setting is spectacular. Falkner describes it as follows: "The view that presents itself from the peribolos, I consider as the most beautiful that I have ever beheld. To the east one looks towards a distant promontory; below you is the sea, with a row of rocky islands; on the north and west rise mountains above mountains while the immediate foreground is grand and striking."⁹⁷

The higher (by some three metres) of two natural plateaus on the east side of the acropolis hill was chosen for the sacred enclosure, which was scraped back into the rising slope on the west and built up on the east, to form a more or less horizontal surface. The limestone walls enclose a trapezoidal peribolos. The south, or principal, side is 19.66m long, the west 24.54m, the north 20.70m, the east 23.50m. The walls are on the average one meter thick;

the original height of the inner face was about three meters. The three free-standing walls on the north, east and south were constructed of two parallel rows of stretchers, the space between them filled with rubble. The fourth, or eastern side, abutting against the scarp of the hill, had polygonal blocks behind a single row of stretchers. Coping-stones ca. 0.34m thick covered the tops of all the walls. The doorway on the south side was 1.23 x 2.15m, slightly off centre.

The masonry of the south wall is more sophisticated than that of the other sides. The exterior, up to the level of the door-threshold, consists mostly of rusticated blocks with smooth drafted margins. Above that level there are two massive courses of plain trapezoidal blocks followed by two superimposed friezes. The decorative band beneath the coping is found only on the exterior face of this south wall; it consists of an astragal, an egg-and-dart and the cornice proper. The height (0.32m) and disposition of this decorative band is almost the same as in the Nereid Monument (0.325m in height), with its double row of egg-and-dart. However, at Gölbaşı-Trysa the cornice projects more and the eggs are less rounded.

The heroon is justly famous for its low-relief friezes, of which ca. 210m is preserved (now in Vienna). They were displayed in a double row on the inner faces of all the walls, in addition to the exterior face of the south wall (fig. 105).

The subjects represented are almost exclusively derived from Greek mythology;⁹⁸ but the disposition of the friezes, and the lack of mouldings above and below them, are very un-Greek.

The themes are the following ("A" indicates upper frieze, "B" lower frieze):

1. South wall, exterior frieze east of the doorway:
 - (A) Seven against Thebes (9.40m long)
 - (B) Battle at landing (9.70m)
2. South wall, exterior frieze west of the doorway:
 - (A) Amazonomachy (7.25m)
 - (B) Centauromachy (7.50m)
3. South wall, interior, west of the doorway:
 - (A) Slaying of the suitors (7.61m)
 - (B) Meleager hunt (7.61m)
4. West wall, south section:
 - (A and B) Battle scenes, mostly hand to hand combat (11.26m)
5. West wall, centre section:
 - (A and B) Siege of Troy (6.18m)
6. West wall, north section:
 - (A and B) Amazonomachy (7.10m)
7. North wall, west section:
 - (A and B) Abduction of the daughters of Leucippus (8.74m)
8. North wall, eastern section:
 - (A) Hunting scenes (11.96m)

(B) Centauromachy (11.96m)

9. East wall, north section:

(A) Deeds of Theseus and Perseus (11.75m)

(B) Centauromachy (11.75m), a continuation of the scene from the north wall (8:B).

The southern half of the eastern peribolos wall, and a stretch (6.92m long) at the eastern end of the southern wall, were taken up by scenes from a funeral-banquet. In this south-eastern corner of the temenos there was a two roomed wooden cult building open along the sides (fig. 106); thus the friezes occupied the second and third courses from the top, instead of the two top courses. The remaining stretch on the interior of the south wall, 2.30m long, was taken up by a representation of a quadriga (A) above a scene with Bellerophon (B).

The doorway in the south wall of the precinct could be reached by a path; but there must have been steps or a ladder in front of the entrance, to overcome the difference in level of some two metres between the ground and the threshold. The exterior face of the lintel was carved with projecting bull protomes (and three rosettes) above four seated figures. These two couples were in all likelihood the commissioners of the monument. On each side the reveal of the doorway had a large-scale dancing figure; above these, on the soffit of the lintel, was carved a group of masked musicians and dancers. The symbolism of the door frames seems

obvious. The bull protomes protect the people below them, the rosettes indicate the commemorative nature of the heroon, and the dance inside the entrance is of a religious nature, connected with the funeral or commemorative rites.

In the north-west sector of the complex stood a large stone tomb-house, of typical Lycian design (i.e. imitating timber construction), oriented toward the cult-building in the opposite corner. Fragments of a number of other sarcophagi were found inside the peribolos wall, but their number and position is uncertain. The rest of the enclosure probably contained plants and trees.

The Gölbaşı-Trysa heroon is not a building in the conventional sense; the architectural components do not create their own three-dimensional space defined by walls and a roof. Here the circuit-wall alone marks the limits of the sacred area. Within this enclosure existing natural features were not completely destroyed, but rather adjusted to suit the new function of the site. In modern terminology the design could be described as a kind of landscape architecture. The hanging gardens of Babylon, the setting of the Cyrus Tomb (described in the previous chapter), the adypton of the Didyma temple, Mustafa Pasha Tomb III at Alexandria, and the later Augustan mausoleum of Augustus at Rome are all in a sense related to the Lycian heroon, in that they all depended for their decorative effects on landscape gardening as well as architectural ornament.

The Austrian excavators emphasize the relationship between the heroon and the temenos of a god with its sacred grove: "Die Abgrenzung des geweihten Platzes, das Temenos, hat das griechische Heroon mit dem Gottesheiligtum als ein der Idee nach Unerlässliches, den Hain oder die Baumpflanzung als einen bedeutungsvollen Schmuck gemein."⁹⁹ At the same time Benndorf points out the functional differences between funeral enclosures and those of other sacred places: "Vom Gottesheiligtum unterschieden war das Heroon durch das factische oder symbolische Grab, das den Kern der Anlage bildete, und durch die abweichende Art der Opfer und Culthandlungen, welche dem Dienste der Unterweltsgötter glichen."¹⁰⁰

The Gölbaşı-Trysa heroon, which can be dated to about 360 B.C. on the basis of the relief decoration, invites comparison with other well-known heroa with courtyards, for instance the Epicteta heroon on Thera mentioned earlier, and that of Antigonos Gonatas near Knidos. An inscription found at Myra¹⁰¹ tells us that caretakers were to live at the heroon there, to serve as guards and keep the place tidy. Similar arrangements were to be found in other places in the Greek world, and even as far away as Ai-Khanoum in present day Afghanistan.¹⁰² Cyrene also has a number of large heroa;¹⁰³ and the so-called el-Maabed complex near Amrit in Syria (fig. 107) was in all probability yet another heroon.¹⁰⁴ The latter consists of a large (48 x 55m) rock-cut rectangular

courtyard, with a monumental shrine in the centre. The podium of this shrine alone, measured 5.50m per side and was more than 3m high. It was crowned by the built tabernacle; and a large cavity, rather like a sarcophagus, occupied the centre of the podium.

By the late Hellenistic period heroa with courtyards are found over a wide area, often, as we might expect, with features peculiar to particular localities. The overall form also changed with the passing of time, as may be seen in the heroon at Kalydon, dating from the early first century B.C. (fig. 108).¹⁰⁵ While the general concept is the same as at Gölbaşı-Trysa, the courtyard is completely surrounded by rooms of varying sizes, and there was an underground chamber below the principal room.

The Gölbaşı-Trysa heroon remains unique in Lycia; and its origins are disputed. However, the strong mainland Greek influence is beyond question: "ohne Einwirkung mütterländischer, insbesondere attischer Kunst freilich ist kein ostgriechisches Denkmal dieser Zeit zu denken. Das Heroon erinnert an den Peribolos mit dem Freiermord in Korinth, an das von Kimon gestiftete Theseusheiligthum in Athen, dessen berühmte Gemälde die Umfassungsmauern des Heroengrabes in umlaufenden Hallen verziert haben mögen wie die Friesreliefs in Trysa."¹⁰⁶ More recently M. Robertson agrees with Benndorf's view: "we know that some Greek hero-shrines, especially those of Theseus and the Dioscuri at

Athens, were adorned with wall-paintings... the disposition of the pictorial reliefs at Gjölbashi-Trysa echoes this practice." He notes further: "we have seen that there is evidence for such an arrangement in a building possibly identifiable as the Theseion at Athens, where the cornice had the same deep projection as here."¹⁰⁷ Yet we should not forget that already in the late sixth century long friezes were a standard feature on both the exterior and interior of Achaemenid buildings; moreover the custom of "decorat(ing) and protect(ing) gates and entrances... is Mesopotomian."¹⁰⁸

The necropoléis of Miletos have not as yet been studied in detail, and many tombs (including some large ones) remain unexplored. The tombs discovered to date range from Mycenaean times to the Roman era. The largest concentration is in the region called Kazar Tepe. Among the Hellenistic structures a barrel vaulted underground tomb approached by a short dromos is especially important from the architectural viewpoint.¹⁰⁹ The technique and execution are akin to those of Macedonian tombs; but the Milesian example has no antechamber or decorated façade preceding the actual burial-chamber.

At Miletos, as elsewhere, the only burials allowed inside the city-walls were those of persons of outstanding importance. One such intramural Hellenistic complex, the largest of its kind in the region, is located on the

northeastern slopes of the theatre hill (fig. 109). The site was briefly explored in the early twentieth century,¹¹⁰ and a few years later the central core of the heroon was restored under the direction of A. von Gerkan.

The complex originally measured 43.50 x 39.96m. The entrance to the heroon was from the centre of the east side, through a vaulted dromos that opened into the burial chamber. This chamber also has a vaulted ceiling spanning the width (4.17m) of the room; its depth is 3.57m. Five loculi, each 1.95m deep, were placed in the lower part of the west or back wall of the chamber. In the middle of the room is a sunken area (1.10 x 1.10m) faced with marble slabs; originally this "basin" was covered by a slab of which a section still remains in situ. The top surface of the slab is picked smooth, in a fashion indicating that something else was placed on top of it, perhaps an altar or a kline. From the sunken area came the only small finds of the complex, including a silver ring, a small gold plate, glass fragments, bones and a relatively well preserved skull.

According to the excavators the entire central core was "in einem kreisförmigen Poroskern wie in einem Tumulus eingebaut."¹¹¹ The original form of this artificial tumulus (14.50m in diameter) cannot readily be determined today. Th. Wiegand's suggestion, that it perhaps resembled the conical superstructure of the tomb at Albano Laziale,¹¹² is intriguing, but lacks supporting evidence. Along the shorter

east and west sides of the courtyard were found remains of rooms, some of which, to judge from the preserved portions, were two storeys high. As one would expect, these rooms served for cultic purposes.

None of the architectural ornament has remained in situ; but fragments of Ionic columns, dentils, entablature and pieces of sima, all of Hellenistic date, have been found. According to the excavators, all these elements belong stylistically to the late fourth century; a date in the last decades of the century is also indicated by the pebble mosaics found in two of the rooms.

So far no inscriptions have come to light; a small marble naiskos (0.90m high and 0.54 wide) is the only indication of a hero-cult within the establishment. Though the identity of the person who commissioned it is not known, he must have been an important person in the history of the city. The size of the heroon, and its location half-way up the theatre hill, made it visible from almost all points of the city; as we have seen, such a conspicuous location is typical of structures of this type. We know from Pausanias that the founder of Miletos, Neleus, was buried outside the city walls;¹¹³ consequently he could not have been honoured by this large heroon. The architecture of the vaulted burial chamber, as well as the artificial mound above it, suggest Macedonian connections.¹¹⁴ The existence of loculi inside, as in the Knidian Lion Tomb, the Charmyleion on Kos

and the Sidi Gaber tomb at Alexandria, indicate that the tomb served an entire family. Diodorus Siculus in his account of Milesian affairs after the death of Alexander, mentions that in 314-313 B.C. the city was in the hands of a certain Macedonian named Asandros.¹¹⁵ Since Asandros was a tyrant, he might have had enough money and manpower to build this monumental heroon for himself during his short period of reign; however, no definite conclusions can be drawn until the site is completely investigated.

The influence of the complex can be detected in later Milesian funerary architecture; for example, the plan of the largest Roman heroon (46 x 28m), near the Faustina Baths, recalls that of its Hellenistic forerunner.¹¹⁶

At this point we may mention the small monument within the courtyard of the Hellenistic bouleuterion, formerly labelled "Ehrengrab." Tuchelt has now shown conclusively that this structure was a monumental altar of the Augustan period, as had been originally believed.¹¹⁷

The largely unexplored site of Termessos in Pisidia, is located about 30km north-west of modern Antalya, on a small natural shelf, or plateau, enclosed by mountains. Its elevation, averaging 1000-1100m above sea level, and the natural defences provided by the local rock formations, made the city isolated and difficult to reach.¹¹⁸ The earliest rock-cut tombs, probably dating from the fourth century, are cut into the vertical cliffs along the western side of the

plateau. Many of these tombs recall Lycian or Karian rock-cut examples that imitated timber construction;¹¹⁹ however, the largest and most interesting tomb in this western necropolis is of a rather different character (fig. 110). The monument in question is not a façade tomb; rather, a natural hollow which seems to have been enlarged and cut back so as to provide an enclosure for the tomb. The two extant rock-cut walls form an angle of approximately 90°. The east and south sides are now open, but presumably were closed by some sort of a built wall. Perhaps future excavations will reveal more about the nature of these destroyed sections.

The north, or principal, wall contains the sarcophagus partly broken, the front of which is carved to represent a kline. This projecting sarcophagus-kline is 1.80m long, 0.60m wide and 0.40m deep. In front of its bench 0.38m deep, recalling arrangements elsewhere with funerary tables in front of kline burials, e.g. on the sarcophagus of Athienau from Cyprus,¹²⁰ or the Satrap sarcophagus from Sidon.¹²¹ Palmettes rising between volutes decorate the legs of the kline-sarcophagus; Kleiner notes their resemblance to "late classical palmettes."¹²²

Above the actual burial arrangement appears a relief screenwall, 1.64m long, enclosed by pilasters. The bases have a torus-scotia-torus profile above a plinth; the neck of each of the capitals was originally ornamented either by a rosette or a disk. The pilasters support a friezeless

Ionic entablature, consisting of an architrave of three fasciae (the width of the bands increasing from bottom up) and a dentil course. The composition is crowned by a low pediment.

Obviously this section, ca. 2.40m high is a representation of a three-dimensional structure on a two-dimensional surface, such as occurs earlier in Persian or Phrygian rock-cut monuments; the entire scheme above the kline-sarcophagus seems to be derived from a baldacchino supported by four pillars, with a trellis work between them. The basic idea is similar to that of the funeral carriage of Alexander the Great described by Diodorus Siculus: "The colonnade that supported the vault was a golden net, made of cords the thickness of a finger, which carried four long painted tablets, their ends adjoining, each equal in length to a side of the colonnade." On top of this, "on each corner of the vault on each side was a golden figure of Victory holding a trophy."¹²³ Above the summit of the gabled roof in the Termessos relief, ie. corresponding to the victory figures on Alexander's carriage, there is an eagle with spread wings holding a snake in its talons. The eagle indicates the royal rank of the person buried there, rather than an apotheosis scene.

To the right of the kline-sarcophagus there are a number of broken rock-cut containers, which were used for offerings. Further to the right is a large vessel in which

water was collected from a lionhead waterspout above. Not far from this lionhead there are two small relief figures, perhaps representing Hermes (or Dionysos) and Aphrodite (or a Nymph). Next to this large container appears a segment of a circular relief, the edge of which is decorated by a wide plain band followed by a row of egg-and-dart and an astragal moulding. To the left of the kline-sarcophagus is a broken ostotheke with a false door on its front.¹²⁵

Roughly in the centre of the west wall is a carving of a mounted warrior approximately 2m high. His head was deliberately smashed in antiquity. In the north-west corner of the same wall are weapons and pieces of armour in relief: a round shield with a short sword behind it, a pair of greaves below, and a helmet above the shield.

The reliefs and the arrangement of the interior (fig. 111 a and b) of the tomb, are unmistakably Macedonian. Burial on a kline is also a standard feature of Macedonian tombs. The armour of the horseman closely resembles that worn by Alexander in the scene from the battle of Issus (333 B.C.) represented in the Naples mosaic.¹²⁶ The short sword and the helmet-type¹²⁷ are Illyrian in origin; a similar shield and helmet appear on an Illyrian rock-cut tomb near Pogredace in Albania.¹²⁸ The depiction of mounted warriors was a popular theme with the Macedonian nobility. Outside of Macedonia the Alexander Sarcophagus from Sidon,¹²⁹ the tomb-relief at

Kadyanda in Lycia,¹³⁰ and a painted stele from Shatby in Alexandria,¹³¹ all show analogous representations of horsemen. Finally, in the territories adjoining Macedonia there are a number of other horseman reliefs, long overlooked, in Epirus,¹³² in Thessaly,¹³³ and (perhaps the closest in style) a Thracian rock-relief.¹³⁴ These too are comparable with the relief at Termessos.

The date and identity of the person buried in this tomb is less of a problem than in other instances. Diodorus Siculus gives a detailed account of Termessian affairs after the death of Perdiccas in 319 B.C.¹³⁵ Antigonos, in his bid to gain power in Asia Minor, had to defeat other Macedonians who were aiming at the same goal. One of them was a certain Alkestas, a former general of Alexander. After losing his army in a series of minor engagements with Antigonos, Alkestas retreated to the mountain stronghold of Termessos. The older Termessians, wishing to save the city from a siege, plotted to capture Alkestas and deliver him to Antigonos. They acted while the younger men, who were ardent supporters of Alkestas, were outside the city; however, Alkestas committed suicide before they could capture him alive. His body was mutilated, and left unburied by Antigonos when he departed from the region; "but the young men of Termessos, still preserving their goodwill for the victim, recovered the body and honoured it with splendid obsequies."¹³⁶ The imposing tomb under discussion can be plausibly associated with the

burial of Alkestas; for there is nothing in the still preserved portions that conflicts with the date of 319 B.C. implied by such an association.

XII. Simple Façade Tombs

Among the façade tombs that are less elaborate than the Archokrateion at Lindos, there are a large number of examples in Lycia. Individually these tombs show little variety in design. Like the sixth and fifth century tombs of Cyrene and the somewhat later Paphlagonian rock-cut façades most of them follow a stereotyped scheme.

In western Asia Minor the fourth century witnessed the development of entire necropoleis of rock-cut tombs, all reflecting Greek architectural influence. As already mentioned, while the existence of such burials depended in part on local geological conditions, economic considerations also played an important role. It was cheaper to cut a façade out of the face of the cliff than to build a free-standing structure of equal dimensions.

The most common arrangement was that of an imposing façade masking a small (and often summarily executed) burial-chamber, with rock-cut klinai (imitating wooden prototypes) along the walls. The number of columns on the façade varied from one to four, though the most common arrangement was distyle in antis. In contrast to fourth-century temples, tomb-façades with uneven number of columns were not uncommon,

since in tomb architecture the obstruction of the entrance was not considered a serious matter.

The best site for rock-cut façade tombs, which were meant to attract attention, were vertical cliffs visible from a number of different directions; from a distance the tombs are the most numerous. The Doric order was less commonly employed, except at Cyrene; and there is only one known example of a Corinthian tomb, at Sovana in Etruria.¹³⁷ In proportions and details no strict rules were applied by the designers; the result was a non-canonical, "free-style" imitation of established Greek principles.

Of the numerous façade tombs two large examples, both Ionic, will be chosen for discussion from the Lycian series. Following that, for the sake of convenience we shall turn to the few extant monumental rock-cut tombs from Phrygia and Kappadocia. Of the very few Doric façades in western Asia Minor the best preserved are at Kaunos in Karia (fig. 112); these tombs, including the Ionic designs (fig. 113) have been studied and published in great detail by P. Roos,¹³⁸ and will therefore not be dealt with here.

The façade of the so-called Tomb of Amyntas at Telmessos^{138bis} (modern Fethiyeh) stands in a large niche, approximately 11 x 13 m, hewn out of the limestone rock (fig. 114). As in numerous other tombs of similar nature, the sides of the façade are flanked by shallow recesses. Four high steps, perhaps taking the place of a podium, lead up

to a rather deep (ca. 2.60m) porch, ca. 6m in width.¹³⁹ The front is distyle in antae; the unfluted columns are ca. 6.15m high, with a lower diameter of 0.73m. The Ionic capitals have heavy prominent volutes, in some respects recalling those of the temple at Bassae.¹⁴⁰ The bases are also unusual in possessing a plinth; the scotia between the upper and lower torus is extremely elongated. Each of the antae has three carved rosettes beneath the capital. The left-hand anta also has an inscription, AMTNTOT TOT EPMAIOT (of Amyntas son of Hermagios), that probably identifies the owner of the tomb. The simplified entablature, a common feature of rock-cut tombs that is very evident here, consists of a rather bulky dentil course supported by a two-fascia architrave. The pediment is quite low; it carries no sculpture, but was probably painted. The apex and corners are ornamented with acroteria.

A high stone door with four panels masked the burial chamber. In design it faithfully copied Greek wooden prototypes, even including their bronze ornaments. Here, however, only the lower right hand panel could be opened to allow access to the interior. The door lintel has a series of carved bands, painted with decorative motifs and enclosed by unfinished consoles. In the interior three rock-cut benches projected from the walls of the small (ca. 2.50 x 2.70m) burial chamber.

The date of the Amyntas Tomb, like that most of the

rock-cut tombs, remains an enigma. All these burials have been robbed of their contents, and what remains in the way of supplementary evidence is meagre. The unorthodox execution of the architectural forms makes them difficult to date on stylistic grounds, the more so since many of the tombs were never completed. In the rock-cut tradition of Asia Minor, and especially Lycia, the introduction of Greek architectural elements was a gradual process. Following a period in which Lycian rock-cut tombs imitated wooden construction, mixed designs with some Greek mouldings began to appear. Completely Greek façades must then have been created under the influence of such monumental free-standing tombs as the Nereid Monument.

The Tomb of Amyntas can probably be assigned to the later fourth century, a period which saw an upsurge of monumental building activity.¹⁴¹ By the time of the Macedonian conquest of Asia Minor many of these tombs were already standing, and the new rulers continued to erect them.¹⁴² Since Amyntas is a Macedonian name it is conceivable that the Amyntas Tomb belonged to a prominent Macedonian who died at Telmessos.¹⁴³

In the necropolis at Myra two large concentrations of rock-cut tombs occupy the almost vertical slopes of the local acropolis.¹⁴⁴ The south-west group, facing the sea, is also known as the seaward necropolis while other cluster of tombs is referred to as the river-necropolis, since it faces the Demre-Çay. The large majority of these very picturesque

burials are of the familiar Lycian type (fig. 115), imitating local wooden construction. Among the few of Greek type, tomb No. 69 of the river necropolis, about 50m up the cliff-face is perhaps the most remarkable (fig. 116).¹⁴⁵ The façade, raised on a low socle, was carved completely free of the surrounding rock to a depth of about 2.50m; it measures roughly 6m across and 4m in height. The porch, with three unfluted Ionic columns (no longer extant), was rather unconventional. There is a friezeless entablature, with an architrave of three fasciae surmounted by a heavy dentil course. The tympanon is occupied by low relief, a rather rare feature of Lycian tombs. It shows a lion attacking a bull. Borchhardt calls the plan peripteral; however, as noted in the chapter on classification, the arrangement is rather that of a prostyle temple.

In the centre of the back wall is a doorway framed all around by three fascia-like bands; above the lintel there is a relief-band representing a funeral-banquet. (The painted blue background of the frieze was still visible a few years ago). Flanking the doorway are two pilasters and two engaged Ionic columns; each pilaster supports a large lionhead, placed at the level of the capitals over the exterior columns. Next to the lionhead of the righthand anta are two identical "plant-goddesses" carved in low relief (fig. 117 a and b). On the left side of the doorway there is only one goddess between the lionhead and the engaged

Ionic capital, so that the design of the doorwall is unsymmetrical. On the upper part of each anta are three large rosettes placed one above the other. The engaged Ionic columns stand free of the wall for three-quarters of their diameter; the bases have a torus-scotia-torus profile, with no plinth.

In the mid-nineteenth century publication of the tomb by Texier, the funeral chamber appears to be perpendicular to the façade, with three klinai along the walls.¹⁴⁶ However, Borchhardt correctly notes that the tomb has only one klinē, in the east wall, and the axis of the chamber is at an oblique angle to the façade.

In the absence of inscriptions and small finds it is hard to assign a date to the tomb. The large volutes of the Ionic capitals are set fairly close together, with a high canalis between them. Designs of this type seem to occur most frequently in late archaic and early classical times (i.e. first half of the fifth century); the volutes of later capitals are often large in proportion to the eye-to-eye width, but the canalis is very low. The occurrence of large volutes with high canalis in Lycian territory may have been due in part to the influence of wooden prototypes. In the present case the line of the column's outer circumference, if extended, would cut through the eyes of the volutes, as is the case in capitals of the Hellenistic age. In built architecture there are no readily available parallels for

the capitals under discussion; but the tradition seems to be that of Bassae, and its influence is noticeable in other rock-cut Ionic tombs in Lycia (e.g. Telmessos) and Karia (e.g. Kaunos).¹⁴⁷ If Roux is correct in identifying the Ionic forms at Bassae as the work of a Peloponnesian, and specifically Argive school, we must then assume some degree of Peloponnesian, as well as Attic influence in Lycia.

According to Borchhardt many of the decorative details are stylistically akin to other examples from the fourth century, to which tomb No. 69 may also belong. Although there is no room here to discuss the origin of the decorative motifs or to analyze their style, their strongly symbolic nature should be noted, since most of the tomb-ornaments of the fourth century are analogous in this respect. The meaning of the funeral-banquet scene is obvious. The animal fight is symbolic of an old oriental notion, the "cycle" of life and death. Lions are often represented as protectors and guardians of tombs; here the two large lionheads seem to fulfil the same function. The goddesses emerging from plants are probably representations of Artemis; besides being protectors of vegetation and animals, they are also rulers over the realm of the dead.

In the fourth century rosettes frequently occur on tomb monuments. However their symbolic significance, along with that of meanders, has long been ignored;¹⁴⁸ even Borchhardt has only a brief note of them. "Auch den drei

Rosetten, die die Löwen tragenden Pilaster zieren, kommt sepulkrale Bedeutung zu. Diese Ornamente, die wir seit dem Beginn des Jahrhunderts an attischen Grabstelen und an Anten und Pilastern bei den vornehmlich griechisch beeinflussten Grabdenkmälern Lykiens beobachten können, sind Ausdruck einer freudigen Jenseitserwartung."¹⁴⁹

In Phrygia, where there was a long and well-established tradition of rock-cut monuments, one might expect to find an abundance of large Hellenistic rock-tombs. Yet there are only three known examples which are clearly derived from Hellenistic Greek architecture.¹⁵⁰ The best preserved and the most interesting of these is the so-called Gerdek Kaya tomb near Çukura (fig. 118).

The façade of this tomb, approximately 8m wide and 6m high, stands about 4m above ground-level; it is flush with the surrounding vertical rock surface, except on the top and the right side, where the rock forms a slightly projecting "frame." Two slender, unfluted Doric columns (now mostly destroyed) were set far apart between the corner antae. The entablature too is Doric, with a narrow architrave and a somewhat wider triglyph-and-metope frieze. There are four triglyphs and five metopes over the central intercolumniar space, with two triglyphs and three metopes over each of the corner intervals. The façade is crowned by a low pediment with central and corner acroteria. The porch behind the columns is 3.60m deep, and widens inwards to a maximum

breadth of 8.50m. The flat ceiling clearly imitates a wooden construction of rafters laid over lengthwise beams that are parallel to the ridge-beam. The interior of the tomb was altered during the Roman period; originally it had two burial rooms, arranged as triclinia with three benches in each room.

The façade, unusually for a two-dimensional rock-cut tomb, was surmounted by a colossal lion figure (one foot measures 1.10m across). According to Haspels the lion was shown in the same position, with legs stretched forward, as the Hamadan lion in ancient Ekbatana.¹⁵¹ To judge from Haspel's photo^{151bis} of the surviving "flank" of the lion (still in situ a couple years ago), the closest parallel for the Gerdek Kaya beast is the lion that surmounted the communal Lion Tomb at Knidos. The Knidian lion is analogous to the Phrygian, not only in pose, but also in position and symbolic function.

The low, wide façade, and the increased number of triglyphs over the central intercolumniation, can also be compared to the Knidian monument; however, at Gerdek Kaya the widening of the central span is much more pronounced.

The date of the Phrygian tomb must surely be later than that of its Knidian counterpart; to judge from the architectural details it can hardly be earlier than the second century.¹⁵²

Although Cappadocia is best known for its numerous

rock-cut churches of the Byzantine era, among the earlier architectural remains there are a number of little known Hellenistic rock-cut tombs.¹⁵³ Near the modern village of Maziköy there are four Doric tombs with columns in antis, cut into the vertical north (three tombs) and south (one tomb) sides of a rocky plateau. The façades are all either flush with the irregular rock-surface or project slightly from it (fig. 119). All the northern tombs are crowned by a low pediment. The superstructure of the southern tomb (fig. 120), above the columns, resembles the frieze-like band in the recently discovered (1977) Doric tomb at Vergina in Macedonia. In the centre of this wide "frieze" stands a human figure with outstretched arms.¹⁵⁴

The three tomb façades (also Doric) at the nearby village of Maçan are closely related to the preceding monuments. The largest, now destroyed, even attracted the attention of Texier.¹⁵⁵ The site is known as Dikili Taş. The façade measured 14.36m in width, but only about three meters in height (fig. 121). In the middle of this façade were two heavy-set columns flanked on each side by a free-standing square pier and a corner anta. The capitals of columns and piers are derived from the Doric order; none of the supporting members has a base. Above the façade was a low pediment. The ceiling of the interior room, off which opened three spacious loculi, imitated barrel vaulting. Presumably in Roman times, when the tomb was reused, a

funerary column (as seen for example next to the Kara Kuş tumulus in Kommagene)¹⁵⁶ was added to the grave monument. H. von Gall has compared the scheme to that of the small Asagi Güney tomb in Paphlagonia.¹⁵⁷ As a matter of fact these seven Cappadocian tombs are all closer in concept to those of Paphlagonia than to any other group. However, the Greek influence seems to be somewhat stronger in Cappadocia than in Paphlagonia. The date of the tombs must fall within the period of the Cappadocian kingdom, which lasted from the third to the first century B.C.

Mithradates I. Ktistes was the first king of Pontus to achieve substantial military successes. Even before 281 B.C. he managed to conquer most of Paphlagonia and a large portion of Cappadocia. In his capital, at ancient Amaseia, there are a number of niche-like rock-cut façade tombs that must date from the period before the king's residence was moved to Sinope, in the middle of the second century.¹⁵⁸ These tombs are interesting, inasmuch as none of them has a columnar treatment; the scheme is that of an aedicula or perhaps the vaulted interior room of a tumulus, represented in rock-cut form (fig. 122).

IV

NOTES

1 A comprehensive publication of the monument appeared in FX III; see also W.A.P. Childs, "Prolegomena to a Lycian Chronology: the Nereid Monument from Xanthos," OpusRom.

9 (1973) 105-116; A.S. Shahbazi, The Irano-Lycian Monuments (Teheran 1975) 75; and P. Demargne, "L'iconographie dynastique au monument des Nereidis de Xanthos," Recueil Plassart (Paris 1976) 81-95.

2 As a result of the slope of the hillside the northern elevation was lower by about 2m.

3 The mid fourth century sarcophagus of the Mourning Women in Istanbul comes closest to imitating such an arrangement. See fig. 195.

3bis See FX III¹ pl. 86.

4 In the stone working technique one can see either Ionian or Lydian influences. In course "B" (FX III plts. 14-16), still in situ, where the ashlar meet the edges are slightly bevelled. The perimeter of each block has a smooth margin enclosing the rusticated centre part.

5 Kjeldsen-Zahle, Centr Lycia 42, where Lycian masonry is discussed in more detail.

6 Shahbazi (supra n. 1) 72, 108 considers the Nereid

Monument as the heroon of Keriga, who was active in the last quarter of the fifth century.

7 The French excavators dated the monument around 400-390 B.C. on the basis of its architecture; however, the style of the sculptural decoration suggests a somewhat different date. See Childs (supra n. 1) 105-116; and J. Borchhardt, Bauskulptur 137.

8 Borchhardt Bauskulptur, and consult also the review of the publication by W.A.P. Childs, AJA 81 (1977) 399.

9 Concerning the date of the Ilissos temple see, C.A. Picón, "The Ilissos Temple Reconsidered," AJA 82 (1978) 47-81.

10 For a comprehensive study of the Karyatid Porch see, H. Lauter, "Die Koren des Erechtheion," AntP 16 (1976).

11 Other identifications are summarized by Borchhardt Bauskulptur 119.

12 The provenance of the Karyatid figures is discussed at some length by Borchhardt Bauskulptur 42 and 118.

13 See A. Parrot, The Arts of Assyria (New York 1961) 83.

14 Vitruv., 1.1.5.

15 For the possible symbolism of rosette decorations see below, 225.

16 Now on display in the Antalya Museum (Turkey).

17 Herodotos, 6.54.

18 See Parrot (supra n. 13) fig. 243.

19 For further literature see K. Jeppesen, "Neue Ergebnisse zur Wiederherstellung des Maussolleions von Halikarnassos," Ist Mitt 26 (1976) 47-49.

20 Vitruv., 2.8.10.

21 Guichard's 16th century account is as follows: "... they saw an opening as into a cellar... found that it led into a fine large square hall, ornamented all around with columns of marble, with their bases, capitals, friezes, and cornices engraved and sculptured in halfrelief. The space between the columns was lined with slabs and bands of marble of different colours, ornamented with mouldings and sculptures, in harmony with the rest of the work, and inserted in the white ground of the wall, which was all covered with histories and battle-scenes sculptured in relief." This account appeared in, Funerailles des Romains, Grecs (Lyon 1851) 52.

22 For a true or radiating vaulting there is no evidence in Asia Minor before the Macedonian period. The corbel principle for example is still used in the somewhat later Lion Tomb of Knidos, but there over a circular chamber. On arches and vaults see Boyd, "The Arch and Vault in Greek Architecture," AJA 82 (1978) 83-100.

23 Vitruv, 2.7.13.

24 Martial, 1.1.

25 Guichard (supra n. 21) 52.

26 Pliny, NH 36.4.30.

27 Jeppesen (supra n. 19) 95 suggests that the lower statue base around the podium walls had groups of fighting warriors both on horseback and on foot, while the upper portrayed hunting scenes on the west side, like those of the "Alexander" sarcophagus, and a sacrificial procession on the north side.

28 Both friezes are made of the same material with similar tooling on the back of the blocks. However, in contrast to the Amazon frieze few fragments of the Centauromachy have been discovered. The small number of fragments and the slightly projecting concave foot profile lead Jeppesen to suggest that this frieze ornamented the pedestal of the quadriga base.

29 The exact height of the columns is not known, but they measured more than nine times their lower diameter.

30 Pliny, NH 36.4.31.

31 Pliny's Pythis is probably the same person as Vitruvius' Pytheos, who also worked on the Temple of Athena at Priene. See H. Riemann, "Pytheos," RE 24 (1963) 371. W. Voigtlander has suggested that this same Pytheos also worked in Egypt, (W. Voigtländer, "Der jüngste Apollontempel von Didyma," IstMitt-BH 14 (Tübingen 1975) 46).

32 Jeppesen (supra n. 19) 91,-- the architectural remains would indicate 30cm as the most likely module.

33 The reason for altering the dimensions given by Pliny has to do with the inconsistencies of his text. See

Jeppesen (supra n. 19) 63.

34 F. Krischen, Weltwunder der Baukunst in Babylonien und Jonien (Tübingen 1956). Krischen proposes the tower of Babel and the Tomb of Cyrus among the forerunners of the Mausoleum. The pyramid as a crowning element definitely points to Babylon and (or) to Egypt, as noted before, as does the brother-sister marriage between Mausolos and Artemisia. The pyramids suggest eternity as tumuli do. Tumuli often crown hilltops as at Belevi or Nemrut Dağ. The tumulus of Antiochos I of Kommagene on Nemrut Dağ, over 2000m above sea level, is an extreme example of a ruler being elevated above earthly existence.

35 Le Bas, published by S. Reinach, Voyage Archéologique (Paris 1888) 47, pl. II-9.

36 A. Westholm, "The Architecture of the Hieron," Labraunda I² (Lund 1963) 12, 101-105, figs. 56-58.

37 The promised publication and reconstruction of the tomb (Labraunda I³) has not appeared yet.

38 Westholm (supra n. 36) 103.

39 Les Bas (supra n. 35) pl. II-9 n. VIII.

39bis The possibility also exists that there was only a Doric parapet on the roof of the tomb.

40 J. Crampa, "The Greek Inscriptions," Labraunda III² (Stockholm 1972) 101.

41 Newton, Discoveries 480; C.T. Newton, Travels and discoveries in the Levant vol. 2 (London 1865) 214;

C.T. Newton, Essays on Art and Archaeology (London 1880) 82; F. Krischen, "Löwenmonument und Maussolleion," Röm Mitt 59 (1944) 173; H.H. Büsing, Die griechische Halbsäule (Wiesbaden 1970) 21, 77, 83 fig. 29; A.W. Lawrence, 196, 197, 310 n. 10 fig. 108.

42 I.C. Love, "A Preliminary Report of the Excavations at Knidos," AJA 76 (1972) 63-64. It has also been suggested that the Portico was designed by Sostratos of Knidos. Pliny (NH 36.18.83) actually states in connection with the work of Sostratos: "The same architect is said to have been the very first to build a promenade supported on piers: this he did at Knidos." Probably all later examples of widened central spans in Doric derive to some extent from fifth century Athenian monuments such as the Mnesiklean Propylaia and the Stoa of Zeus in the Agora. However, it should be borne in mind that widening of the central span had been commonplace in Ionic temple-façades from Archaic times onward; the appearance of this feature in the Doric designs of classical Athens, and subsequently in other regions as well, is simply another example of the influence of Ionic on classical and later Doric.

43 Newton Discoveries 487.

44 In the reconstruction proposed by the excavators the door on the north side is not indicated.

45 Decorative shields besides being military emblems, also can be interpreted as symbols of protection from evil

spirits. They often appeared on Macedonian inspired monuments from the later fourth century onward, e.g. Tomb of Alkestas at Termessos.

46 Newton Discoveries 502.

47 G.E. Bean and J.H. Cook (BSA 47[1952] 181 n. 44) date the lagnynos after the mid-fourth century, but the small container is called a lekythos as in Newton's publication.

48 Gebe Kilisse: W. Radt, "Siedlungen und Bauten auf der Halbinsel von Halikarnassos," IstMitt-BH 3 (1970) 219; Asarlik: Newton Discoveries 586; Halikarnassos: Jeppesen (supra n. 19) 50-51.

49 See P.R. Franke and M. Hirmer, Die griechische Münze (Munich 1964) pl. 186.

50 For the possible relocation of the city at the end of the peninsula, see Bean and Cook (supra n. 47), 202; Love questions the theory, AJA 77 (1973) 421.

51 Pliny 36.4.20.

52 See S.G. Miller, "The Philippeion and Macedonian Hellenistic Architecture," Ath Mitt 88 (1973) 189. Of course this architectural feature did not originate in Macedonia.

53 O.J. Roger ("Le Monument au Lion d'Amphipolis," BCH 1963 [1939] 35) comparing the Lion Tomb at Amphipolis with that of Knidos says: "Les differences ne sont que dans les details d'organisation et de proportions; le schéma général

est identique!"

54 See Le bas (supra n. 35) 149. The reconstructed drawing of the monument by E. Landron (pl. II-7, III and IV) shows no doorway, though its existence, if the structure is a tomb, seems essential. It may be noted that in early drawings of the Knidian Lion Tomb the doorway is again missing, though it still exists today.

55 Texier-Pullan 146; E. Akurgal, Ruins 262.

56 See G.V. Gentili, "Resti di un grande mausoleo ellenistico a Siracusa," Archivio Storico Siracusano 13-14 (Siracusa 1967-68) 25.

57 P.M. Fraser and G.E. Bean, The Rhodian Peraea and Islands (London 1954) 41.

58 Akurgal, Ruins 262. Other comparable ideas appeared for example on Samothrace (K. Lehmann, Samothrace, A Guide to the Excavations and the Museum (New York 1966) fig. 30.

59 J. Keil, "Vorläufiger Bericht über die Ausgrabungen in Ephesos," ÖJh 28 (1933) Beibl. 28-44; Keil, ÖJh (1935) Beibl. 116-145; Keil, ÖJh 30 (1936-37) Beibl. 175-193; C. Praschniker, "Die Datierung des Mausoleums von Belevi," AnzWien n. 20 (Vienna 1948); Keil, "Der Gräber des Mausoleums von Belevi," AnzWien n. 4 (Vienna 1949); G. Kleiner, Diadochen; B. Schmaltz, "Zum Sarkophag des Mausoleums bei Belevi," ÖJh 49 (1968-71) 63-67; H. Bauer, "Korinthische

Kapitelle des 4. und 3. Jahrhunderts v. Chr.," AthMitt-BH 3
(Berlin, 1973):

60 As will be seen below, the so-called Tomb of the Ptolemies on Rhodes has a similar concept as far as the core of the monument is concerned.

61 The column shafts had twentyfour flutes. According to Keil (supra n. 59/1935) 122 their lower diameter measured 0.92m and the calculated total height was 8.50m. A. von Gerkan, (Von Antiker Architektur und Topography, - Gesammelte Aufsätze [Stuttgart 1959] 223) states that if the column diameter was ca. 1m the height should be ca. 10m.

62 For Langaza, see Th. Macridy, "Un Tumulus Macédonien à Langaza," Jdl 26 (1911) 193. For Telmessos see below, 220

63 In this arrangement the remarkable feature was the insertion of the kyma reversa anthemion frieze between the epistyle and the dentils. Only a few examples of such a design are known from the later fourth and early third centuries; the Tholos at Epidauros, the Monument of Aristaineta at Delphi, the Naos ad Didyma and the Kastabos temple. As far as the lion heads are concerned F. Willemsen discussing the lion heads from the Naos at Didyma says: "mit den Löwen vom Belevi gehen sie fraglos eng zusammen" (OlForsch 4[1959] 67).

64 Of the located coffer reliefs seven belonged to the north side and seventeen to the rest of the pteron.

65 No blocks that could have come from the stepped

pyramid were found; however, the nature of the building, if it ever had been completed, presupposes its existence.

Praschniker (supra n. 59) 272-273 suggested an angle of 45° rather than 30° for the pyramidal roof.

66 It would indicate that the designer of the Belevi mausoleum was familiar with the plan of the Didyma adyton. See Voigtländer, (supra n. 31).

67 For the date of the Naos building at Didyma, see Voigtländer (supra n. 31) 67.

68 It should be noted that the ceiling slabs of the peristyle of the Epidauros Tholos show circular holes in addition to the impressions of clamps. (G. Roux, L'Architecture de l'Argolide aux IV^e et III^e siècles avant J.C. [Paris 1948] 15 fig. 34). A similar technical detail is found at Kastabos where blocks No. 19 and 36 "recall the round dowel-holes-- or peg-holes-- on column drums from the Mausoleum of Belevi." (J.M. Cook and W.H. Plommer, The Sanctuary of Hemithea at Kastabos [Cambridge 1966] 141); and column drums from the Temple of Apollo at Klaros, ca. 300 B.C. (S. Dimitriou and G. Klammet, Die türkische Westküste (Munich 1975) 69; A. Schöber, Der Fries des Hekateions von Lagina (Baden bei Wien 1933). P.W. Lehmann, Samothrace 3, The Hieron (Princeton 1969) 346 says of the Belevi sculptures: "Some of Keil's associates favored the second century date... In the meantime, the relative merits of a late fourth or a late second century date for its sculptures, the evaluation

of their style as late classical or classicistic, must remain a difficult and disputed question."

70 S. Kasper, "Der Tumulus von Belevi," AA (1975) 223.

71 For all these monuments see below p. 24; "Tomba Ildebranda," 269; Tomb of the Ptolemies, 197; Ptolemais tower tomb, 279.

72 Actually the Belevi mausoleum could be considered as a "mixed construction," since its core is rock-cut.

73 The most comprehensive study of the monument is by P. Schatzmann, "Das Charmyleion," JdI 49 (1934) 110-127, with earlier bibliography.

74 R.H. Simpson and J.F. Lazenby in "Notes for the Dodecanese II," BSA 65 (1970) 61 remarks without any further elaboration: "The elements of the façade appear to be late Hellenistic." The date of the inscription is uncertain, but it probably belongs to the third century.

75 For the heroon on the Theatre Hill at Miletos see above, 211.

76 It is possible that the interior staircase led up to this open aedicula or cult room.

77 E. Dyggve, Lindos: Fouilles et Recherches II (1952) Kähler, Lindos (Zürich 1971) 23-24.

78 For the Rhodini tomb see above, 197.

79 L. Ross, "Griechische Baudenkmäler," AZ 19 (1850) 210-214; Newton (supra n. 41/1865 vol. 1) 179; Clara Rhodos I (1928-29) 55 fig. 38.

80 The measurements, as in most of the other rock-cut

tombs, differ somewhat from column to column, from step to step etc. For example, the column diameters may vary as much as 7-8cm, as may also the height of the steps.

81 The interior description is according to Ross, since I was not able to enter the chambers while on the site.

82 The work carried out on the site by Italian archaeologists did not reveal any additional rooms. Their restoration of the columns to the left of the doorway is misleading, since the shafts did not reach down to the level of the threshold block of the door, but ended above it, as can still be seen on the right side of this entrance.

83 Newton (supra n. 41/1865, vol. 1) 180.

84 For the history of the period see H.H. Schmitt, Rom und Rhodos (Munich 1957).

85 Stucchi 153. The author also suggests a 1st c. B.C. date for this so-called Tomba dei Tolomei.

86 Jerusalem Revealed, Archaeology in the Holy City 1968-1974 (Jerusalem 1975) 17-18. For the Tomb of Hamrath see Lawrence 210.

87 From the top of the structure some of the other tombs in the vicinity can be seen; moreover, there is a beautiful view over the sea towards the coast of Asia Minor.

88 Unfortunately today it is hard to make out the badly eroded outlines of the capitals.

89 T. Wiegand, "Zweiter vorläufiger Bericht über die Ausgrabungen der königlichen Museen zu Milet," AA 17 (1902)

149-150.

90 The columns were all fluted except for the sides facing the cella walls. Below the echinus four annulets decorated the neck of the capitals.

91 There was one triglyph for each intercolumniation, except for the façade where there were three above the doorway, and two between the side bays.

92 J. Keil and A. Wilhelm, "Denkmäler aus dem rauhen Kilikien," MAMA III (Manchester 1931) 59 fig. 89, pl. 31 n. 90; E. Will, "La tour funéraire de la Syrie," Syria 26-27 (1949-1950) 270 fig. 7.

93 Keil-Wilhelm (*supra* n. 92) 60.

94 Will (*supra* n. 92) 271.

95 See below, Ch. V. 294.

96 Benndorf-Niemann, Gjölbaschi; F. Eichler, Die Reliefs des Heroon von Gjölbaschi-Trysa (Wien 1950); for additional bibliography also consult, Enciclopedia dell'Arte Antica (Rome 1966) 1028; and Borchhardt, Bauskulptur 141-143.

97 E. Falkener, The Museum of Classical Antiquities I (London 1851) 41. It should not be surprising that an impressive setting was chosen for the heroon; as indicated before, it was a common practice in antiquity to select mountains and hillsides, especially for tombs and temple sanctuaries. The natural contours of the Mediterranean region provided countless opportunities for such locations.

98 Interestingly enough the often depicted Persio-

Lycian theme, the power of the hero-ruler does not appear here.

- 99 Benndorf-Niemann Gjölbaschi 42.
- 100 Benndorf-Niemann Gjölbaschi 42.
- 101 Benndorf-Niemann Gjölbaschi 43.
- 102 P. Bernard, "Fouilles d'Al Khanoum. Etude d'archéologie et d'histoire sur l'hellénisme en Asie centrale," vol. I (Text et figures) Mémoires de la D.A.F.A., 21 (Paris 1973).
- 103 See for example Stucchi, fig. 175, Tomb S 185.
- 104 Perrot-Chipiez, Hist. III. 103.
- 105 Dyggve-Poulsen-Rhomaïos, where the structure is discussed in detail.
- 106 Benndorf-Niemann Gjölbaschi 250.
- 107 M. Robertson, History of Greek Art (Cambridge 1975) 405.
- 108 C. Nylander, Ionians 124.
- 109 G. Kleiner, Die Ruinen von Milet (Berlin 1968) 12.
- 110 Th. Wiegand, "Vierter vorläufiger Bericht über die Ausgrabungen der königlichen Museen zu Milet," AA 21 (1906) 36-38.
- 111 Wiegand (supra n. 110) 36.
- 112 See fig. 18.
- 113 Pausanias, 7.26.
- 114 For early vaulting systems in the Greek world see Boyd, 83.

- 115 Diod. Sic., 19.75.1-5.
- 116 Kleiner (supra n. 109) 132.
- 117 K. Tuchelt, "Bouleuterion und Ara Augusti," Ist Mitt 25 (1975) 91-140.
- 118 For the description of the terrain see also Arrian (1.27.6).
- 119 The two best preserved ones are published by C. Lanckoronski, Städte Pamphyliens und Pisidiens II (Wien 1892) 70.
- 120 Perrot-Chipiez, Hist. III, 615.
- 121 Kleemann, Satrapen Sark pl. 14.
- 122 Kleiner (supra n. 59) 78.
- 123 Diod. Sic., 18.26.6.
- 124 Kleiner (supra n. 59) 78 n. 34.
- 125 For another similar arrangement at Termessos see, Lanckoronski (supra n. 118) fig. 21.
- 126 C.M. Havelock, Hellenistic Art (London 1971) 252 pl. XI.
- 127 See also Kleiner (supra n. 59) 76.
- 128 Ceka, 210-211.
- 129 Kleiner (supra n. 59) 79.
- 130 J. Borchhardt and J. Neumann, "Dynastische Grabanlagen von Kadyanda," AA 83 (1968) 226 fig. 39.
- 131 E. Breccia, La Necropoli di Sciatbi (Cairo 1912) pl. XXIII.
- 132 Heuzey-Daumet, pl. 33 n. 2.

133 Heuzey-Daumet, pl. 26 n. 1.

134 Heuzey-Daumet, pl. 3 n. 3.

135 Diod. Sic., 18.46-47.

136 Diod. Sic., 18.47.3:

137 However, it is of a more complex type imitating free-standing tombs such as the Belevi mausoleum. For the discussion of the tomb see below, 269. The existence of Corinthian capitals at the above-mentioned rock-cut façade tomb at Rhodini is questionable.

138 Roos, Caunus.

138bis H. van Gall, "Zu den 'medischen' Felsgräbern in Nordwestiran und Iraqi Kurdistan," AA 81 (1966) 37, with further bibliography.

139 Steps were not a common feature in these tombs; the usual access to them in antiquity as today, was doubtless by ropes lowered from above.

140 In this connection note also a capital from Kavalla, Heuzey-Daumet, pl. 1 fig. 7.

141 Akurgal, Ruins 256, dates the tomb to the fourth century because of the Ionic ovolo of the door lintel.

Benndorf-Niemann, Reisen 41 prefers a date in the later fourth century. See also Roos Caunus 94.

142 At Telmessos there are two locations with rock-cut burials. The older types of tombs, those of exclusively Lycian design and some of the elevated sarcophagi, are grouped around the old acropolis hill. At some time during

the fourth century it seems that a new cliff-site was selected for the Ionic tombs, among them the Tomb of Amyntas. The native Lycian types of rock-cut tombs are much less conspicuous in this new cliff-cemetery.

143 The name often appears in association with Macedonian military men; see G. Wissowa RE 1 (1894) 2005

144 Borchhardt, Myra. Actually the S-W. group is in two sections about 200m apart, "between" them is the ancient theatre of Myra. Farther N-W. of the second group (river necropolis) there are also some rock-cut tombs, but they are too far to be called part of the same assembly.

145 Borchhardt, Myra 129.

146 Texier-Pullan pl. 226.

147 For Kaunos see Roos, Caunus.

148 I intend to deal with this problem elsewhere at more length. Basically, in most fourth-century contexts meanders seem to indicate the never-ending continuity of life; they are like a continuous chain with no beginning and no end. They appear most often in funerary contexts and in connection with mystery cults, again suggesting the mystery of the continuity of life and death. The pattern is also closely connected with labyrinth representations.

149 Borchhardt, Myra 135.

150 Haspels, 155.

151 Haspels, 160; see also W.R. Lethaby, "Greek Lion Monuments," JHS 38 (1918) 43 fig. 4.

151bis Haspels, 70.

152 Haspels compares the tomb with the temple of Hera Basilea in Pergamon, dedicated by Attalos II (see P. Schazmann, "Das Gymnasion," in Altertümer von Pergamon VI [Berlin 1923] 110 pl. 33). The tomb is also comparable with the distyle-in-antis arrangement of the Doric temple of Isis on Delos. (P. Roussel, Les cultes égyptiens à Délos [Paris 1916] 59 fig. 10).

153 See N. Thierry, "La Cappadoce entre Rome, Byzance et les Arabes," CRAI (Jan-Mars 1977) 106-112. For other Cappadocian tombs not discussed here consult von Gall, Felsgräber 109-112.

154 It is not known whether this upper section was part of the original composition or a later addition.

155 Texier-Pullan, 84.

156 D. Schlumberger, "Bornes frontières de la Palmyrene," Syria 20 (1939) 43-47.

157 von Gall, Felsgräber 104.

158 von Gall, "Felsgräber der Perserzeit im pontischen Kleinasien," AA (1967) 585-595.

CHAPTER FIVE

THE DEVELOPMENT OF HELLENISTIC MONUMENTAL TOMBS OUTSIDE OF ASIA MINOR

It is well known that as a result of Alexander the Great's campaigns Greek language and culture spread over a very large area. The use of a single language greatly encouraged the exchange of ideas between the different regions of the Mediterranean. Before the rise of the Macedonians contacts and trade connections between the Greek and non-Greek populations of the Mediterranean had generally been on a more restricted scale. The Macedonian dynasties acted as a sort of unifying influence by establishing many new colonies in non-Greek regions, e.g. at Alexandria in Egypt. The Graeco-Macedonian settlers brought with them fresh ideas, that certainly influenced the local cultural outlook and provided the basis for new developments in architecture as well as in other fields.

In Western Asia Minor and the offshore islands very few new monumental tombs were built after the third century; however, the earlier grandiose examples remained, to impress all who saw them. Thus the architectural novelties of each region could be studied (especially by military engineers), and later reproduced or imitated elsewhere, whenever the

political and economic situations were favourable. Imitation did not necessarily mean the mechanical copying of an entire building; as a matter of fact in really monumental structures direct copying never occurred. Instead, parts or sections of earlier buildings, that appealed to those who designed or commissioned later tombs, were borrowed and incorporated into the new monuments; sometimes ideas derived from several different places were united in a single building. At sites where there was an existing tradition of rock-cut or built architecture, established local customs and forms often played a dominant role, even in the execution of new types of funerary monuments that had been previously unknown in the region.

The tombs discussed in the following pages can be regarded as a continuation, or rather a further development, of the monumental tombs erected in Western Asia Minor. As the construction of monumental tomb-buildings spread to other regions the variety of forms increased. In a few projects the direct influence of Anatolian models can be detected; more often, however, Anatolian influence was indirect, and was transmitted through intermediaries. In still other cases the inspiration for the building (or cutting) of monumental tombs may have come from other forms of architecture, as indicated in the chapter on classification of grave monuments.

The large Anatolian "temple tombs" on podia were

familiar to the fourth century designers of mainland Greece, including the Peloponnesos; indeed mainland artists actually worked on several of the East Greek monuments. Yet neither at Athens nor elsewhere on the mainland do we find tombs closely related in scale and decoration to the monumental funerary buildings of Asia Minor. The tombs of the early fourth century along the West Road of the Athenian Kerameikos, or the larger monuments on the Academy Road between horoi 2 and 3, are of little interest from the architectural point of view.¹ Somewhat more sumptuous tombs seem to have appeared in Attica and elsewhere in mainland Greece only after the mid-fourth century.²

I. The Kallithea Tomb

The largest of the later examples, betraying at least some influence of prototypes from Asia Minor was found at Kallithea in 1968.³ The ruins of this tomb came to light next to a gateway in the Long Walls that once connected Piraeus with Athens.⁴ Except for preliminary reports the tomb has not yet been published; its fragments (both architectural and sculptural) are deposited in the Piraeus Museum. The following reconstruction is based on the scanty published information supplemented by an extended visit to the store rooms of the Piraeus Museum.

A three-stepped platform supported a high limestone podium, which presumably carried two superimposed friezes

separated by an inscribed course. The lower frieze (fragmentary) represents an Amazonomachy, the upper (almost 4.50m long) an animal fight. Above the geison course that crowned the podium, the superstructure was raised on a two-stepped base. It was probably in the form of a large naos (ca. 3m high) with a façade of two Ionic columns (with Attic-Ionic bases) in front of the antae. The antae were richly painted in brilliant shades of red, blue and yellow. Inside the naos were statues of a young, a middle-aged and an old man. E. Tsirivakos, the excavator of the site, suggests that they were perhaps father and son with a servant. The overall height of the monument was about 8.30m. The tomb can be dated on the basis of its relief sculpture to the third quarter of the fourth century, just before the enactment of the suptuary laws of Demetrios of Phaleron in 316 B.C.

By the second half of the fourth century there were other structures in Athens that echoed the tripartite division of the monumental tombs of Western Asia Minor (e.g. the Lysikrates Monument). Yet the Kallithea tomb in general still adheres to the tradition of the Kerameikos grave plots of the earlier fourth century, e.g. the Dexileos tomb of 394 B.C. Only the presence of a decorated podium (if the proposed reconstruction is correct) indicates direct influence from Asia Minor.

II. The Tombs in Arkadia

During the third and second centuries few large new tombs seem to have been built either in Attica or in most other regions of mainland Greece. - The obvious exceptions are the Macedonian, or Macedonian-inspired, grave monuments; there were also a few tombs with architectural façades at Alipheria in Arkadia.⁵

The Alipheria tombs had large forecourts in front of the actual tomb façades, of which one of the largest one was approximately five meters wide (fig. 123). A number of openings separated by piers faced the lower parts of the façades, behind which were installed long, narrow compartments. The façades supported pediments crowned by acroteria. The Arkadian tomb fronts vaguely resemble the simpler Macedonian tombs with pedimental façades. However, the Arkadian structures were exposed to view, and the interior arrangements followed a concept quite different from that seen in Macedonian examples.

III. The Great Tomb at Lefkadia

During the fourth century a special tomb-type evolved in Macedonia. The vaulted burial chambers, often masked by imposing façades,⁶ were covered by earth tumuli or mounds. The design of the façades show great variety, both in the use of the columnar orders and in the subsidiary decoration. The most pretentious tombs resembled the façades of temples, with Ionic or Doric members engaged in the outer face of the

entrance wall, which was crowned by a pediment. Among the finest Ionic examples are those at Vergina (fig. 124), Langaza and Lefkadia-Naoussa,⁷ each with a tetrastyle front of engaged columns.⁸ The large akroteria-anthemias surmounting the pediment of the Lefkadia-Naoussa tomb are unusual (fig. 125).

Among the Doric tombs is one, at Laina, in which two free-standing columns stood between the antae.⁹ Otherwise the columns were generally engaged, e.g. as in the Monastir road tomb in Salonika and the recently (1977) discovered large tomb at Vergina (fig. 126).¹⁰ Moreover, some façades had no columns at all, e.g. the so-called Soteriades tomb at Dion¹¹ (fig. 127), where, however, engaged Ionic columns are in the interior (fig. 128). No tomb of the Corinthian order has yet come to light; presumably Corinthian was never really accepted in the eclectic architectural style of Macedonia.

Most of the Macedonian tombs were constructed of local poros stone; marble was rarely used.¹² The decoration, whether plain panels, relief figures, or applied architectural elements with hardly any structural function, was executed in painted stucco. Klinai are found in virtually all the burial chambers, which were approached by a short dromos leading to the entrance.

All the Macedonian tombs with decorated façades were constructed during the 150-200 years immediately preceding

the Roman conquest of the region.

The most splendid example is the so-called Lefkadia Great Tomb (fig. 129), discovered and excavated during the nineteen-fifties.¹³ Local limestone was employed for the entire structure, including the platform, half-a-meter thick, that served as the only foundation for the tomb building. Unlike the other known Macedonian tombs, the façade of the Lefkadia building had two tiers of columns, although the interior was one-storeyed. The height of the façade (8.55m) is almost the same as its width (8.68m). Four fluted Doric half columns, 3.35m high, stood between the corner pilasters; there was a large doorway in the central span of this lower order. The height of the Doric columns was six times the lower diameter. The stuccoed intervals were divided into two sections. The lower part imitated coursed masonry; the panels above (1.29m high and 1.55m wide) carried paintings of the deceased person and Hermes on the left of the entrance, and of Aiakos and Rhadamanthys on the right. All the figures turn towards the doorway, indicating behind it lay the focal point of the whole building, i.e. the burial. The figures were placed on a ground-line consisting of a painted egg-and-tongue.

Above the central intercolumniation there were two triglyphs.¹⁴ The eleven metopes represent fights between Lapiths and Centaurs; they were covered with a light wash, but had no colour except for the strongly emphasized dark

brown shadow lines.¹⁵ A Doric cornice crowned the lower storey; its topmost section had a lively leaf-scroll decoration, painted in black, yellow, green, red and white, on a blue background.

A particularly striking element in the decoration of the façade is the insertion of a continuous frieze, 0.70m high, between the Doric lower and the Ionic upper storey.¹⁶ This stuccoed and painted relief-band depicted a battle between Greeks (Macedonians) and Persians, a subject that must have enjoyed a considerable popularity after the conquests of Alexander the Great in the east. The frieze was surmounted by an Ionic cornice, above which a stylobate course supported the upper order, consisting of six engaged Ionic columns, 1.46m high, between corner antae. The intercolumniar spaces were filled by seven false doors. The idea of a row of columns set on a high socle seems to have come from the podium tombs of Asia Minor. Here, however, the compression of the façade into one plane does not have the same "stage" effect found for example in the Archokrateion at Lindos. Yet there is a certain theatrical quality to the design; the scenographic impression is emphasized by setting the Ionic half columns of the upper storey against a brightly painted back-ground, thus creating the illusion of a real portico. The entablature of the upper order consisted of a two-fascia architrave with a narrow band on top, followed by a Lesbian-leaf course, dentils and a painted pediment.

Behind this extremely decorative front wall, the more modest vestibule and funerary chamber were laid out in a T-shaped plan (fig. 130), the former wide and shallow (6.50m x 2.12m), the latter square (4.80m per side). Both were barrel-vaulted; the vaults reached a height of 7.70m and 5.40m respectively. The anteroom had little ornament apart from the two relief shields flanking the doorway of the partition wall. The walls of the burial chamber, however, were richly decorated in stucco-relief. The lowest element consisted of three horizontal fields of varying widths, forming a "podium" a meter and a half high. Above this "podium" were fourteen engaged pilasters supporting a continuous Ionic entablature.¹⁷ The scheme as a whole seems to echo the second storey of the façade.¹⁸

In the design of the façade the upper portion (including the Ionic frieze) may be compared with monumental altars as well as podium-tombs. High decorated podia surmounted by columns, such as are found in the Hellenistic altars at Priene, Magnesia on-the-Maeander and Pergamon, are certainly related in concept to the upper level of the Lefkadia façade. On the other hand no known Hellenistic building is close enough to the overall design of the Lefkadia tomb to have served as a prototype. Temples do not have multi-storeyed fronts. Such combinations were rather reserved for certain types of public and private secular buildings. Stoas, the scene-buildings of theatres, and some parts of palaces and

larger private houses all show a predilection for two-storeyed designs. Some large-scale tombs, e.g. those at Cyrene (fig. 131), Canosa (fig. 132) and Kandyba in Lycia,¹⁹ and gateways, such as the Gate of Zeus and Hera on Thasos (fig. 133), also had two-storeyed façades.²⁰ However, none of these structures were as elaborate as Lefkadia, and all lacked the intermediate frieze.

We must therefore conclude that in this Macedonian tomb elements derived from various contexts were blended into a unified and original composition. Combinations of different orders, or of their component parts, are by no means unknown in Macedonian monuments, as attested by the Vergina palace and the Philippeion at Olympia.²¹ Clearly Macedonian expansion in the eastern Mediterranean during the latter part of the fourth century resulted, among other things, in the modification of the traditional Macedonian tomb. Some of the new influences can already be discerned in the description of Alexander's funeral carriage transmitted by ancient authors.²²

The reasons for building the Macedonian tombs underground are obscure; probably religious beliefs and customs were the major factors. By raising a tumulus over the tomb, the builders ensured that the burial-chamber could not be seen by mortals, but only by gods and supernatural beings.

The Great Tomb, along with the three other known burials of Macedonian type in the Lefkadia region,²³ are not

far from modern Edessa, where some scholars place the old national capital of Aigai;²⁴ and Aigai also served as the burial place of the native kings from Perdikkas onward. Consequently, the owner of our tomb may have been a prominent member of the Macedonian aristocracy, who died around 300 B.C. or a little later, to judge from the stylistic details of the façade of his tomb.

IV. Illyrian Tombs.

Among the monumental rock-cut tombs of the Hellenistic age special interest attaches to the series of Illyrian monuments located in the mountainous eastern region (called Basse-Selce) of present-day Albania. In Illyria, unlike other regions of the Mediterranean where Hellenistic rock-cut tombs are found, there was no earlier native tradition of such structures. The tombs in question are cut along a ridge of a precipitous limestone cliff, approximately 1000m above sea level. Only three of them were finished; the others were never completed and are thus less interesting architecturally. The three finished tombs are the earliest in the entire group. The investigation of the site as a whole was carried out by Albanian archaeologists in 1970-71.²⁵

Tomb 1²⁶ occupies the central position among the three finished tombs (fig. 134). It consists of a straight façade 2.40m high and 4.00m long, raised on a ledge, 0.25m high.

The door, tapering slightly towards the top, is located in the centre of the façade; it is 1.02m wide and 1.98m high, and is framed by a flat relief band. The lintel is crowned by two narrow fillets under a moulding that vaguely resembles the profile of a Greek egg-and-dart. The overall design recalls the exteriors of the Langaza and Palatitsa tombs. Two slender unfluted Ionic columns, without bases, flank the central opening; their height is slightly more than ten times the lower diameter. According to the excavators the capitals were decorated with rosettes, in the middle of the canalis.²⁷ The ends of the façade are closed by pilasters with simple rectangular capitals. The surfaces between the pilasters and the columns once carried frescoes. The actual funerary chamber behind the façade measures 3.00 x 2.80m. Along the left side and across the back of the room are two rock-cut benches (appr. 0.50m high) on which the corpses were laid. The ceiling of the chamber is cut in the shape of a barrel vault. An interesting feature of the tomb is the level rock-cut area, with benches along the sides (3.80 x 3.50m), in front of the façade; there are some indications of supports for a timber roof over this area.

Tomb 2 stands a few meters north of Tomb 1, but 1.50m higher; it is the only known specimen of its kind in Hellenistic funerary architecture (fig. 135). It is laid out on two different levels; the lower contains the actual burial-place, while the upper part was intended for

commemorative ceremonies. This upper section, horseshoe-shaped and 1.32m high, consists of three steps forming seats like those of in the cavea of a theatre. Around the outer circumference of the uppermost step there is a channel to collect rainwater, thus preventing it from getting into the interior of this "theatre" tomb. Beneath the "orchestra" were sunk two rectangular shafts, the upper 1.78 x 1.68m and 0.77m deep, the lower somewhat smaller, 1.00 x 1.22m and 0.87m in depth. These shafts served to hold the funerary urns of the deceased; they were covered by a flat slab that formed the floor of the "orchestra." The "skene" is formed by a wall (0.45m thick), pierced by a small central door which was originally blocked and sealed by lead. Around the "cavea," which undoubtedly served for commemorative ceremonies, there are cuttings indicating the existence of some sort of a wooden roof for protection against sun and rain.

Tomb 3, the largest of the group (fig. 136) occupies a ridge above and to the south of Tomb 1. The façade, three meters high, has the form of a portico with a semicircular recess in the middle, containing the doorway. A continuous two-stepped base, 0.40m high, supports eight engaged Ionic columns with a door in the centre. Six of these eight members are half-columns; the central recess is framed by three-quarter columns. In contrast to Tomb 1, all the columns have bases and fluted shafts. The capitals were

separately carved, and inserted in spaces left between the tops of the shafts and the architrave. These capitals (fig. 137^c) have much the same form as those of Tomb 1, with a rosette in the centre of the unusually wide canalis; but here the workmanship is more careful and refined. The bases (fig. 137^c) are rather unorthodox. The apophyge is hardly noticeable, but the bases are strongly splayed; the profile consists of a concave bottom member above a narrow fillet, and two superimposed kyma bands crowned by a second narrow fillet. Both the capitals and the bases recall those of the temple of Apollo at Bassae. The architrave has two fasciae of equal width, crowned by a third, and much narrower, band (hardly to be called a fascia). The profile of the cornice forms an elongated "S" curve. In the centre of the façade above the cornice there are the remains of a rectangular built niche (0.98 x 0.43m). Probably the niche contained a statue, or an inscription, or both. The panels (2.20m high and 0.70m wide) flanking the doorway in the central semi-circular section of the façade were evidently painted; unfortunately no traces of the paintings have survived. The scenographic effect of the whole design was further enhanced by reliefs carved in the intercolumniations of the straight wing sections. On the spectator's left side, is a shallow rectangular niche (fig. 137^b) containing the head of a bull in high relief; a Hellenistic helmet, displaying some Thracian features, is carved above this recess.²⁸ On the

right side (fig. 137^a) a round shield (0.70m in diam.), also in relief, is placed in the intercolumnar space; half of its design has been broken away, including the central portion. The still existing upper part of the shield has a relatively wide rim and a swastika decoration enclosed by three ellipses -- the type of shield that is used in Illyria, but also occurs in Macedonian contexts.²⁹

The central door (2.00 x 1.10m) is similar to that of Tomb 1, with a relief frame around it. The lower part of the door leaves were found in situ; they closely resemble Macedonian examples. The interior of the room was never finished, due to technical difficulties resulting from the faults in the rock. Instead a second funerary chamber was hewn below the open courtyard in front of the façade of the tomb; this chamber is almost square (2.77 x 2.72m and maximum height 1.85m), with a ceiling imitating a barrel vault. Two klinai were placed inside the chamber; the one along the back wall (fig. 137^d) has decorative carvings. The motives and especially the form of the legs of this kline, are once more closely related to Macedonian examples such as found in the Pydna tomb.³⁰

The courtyard in front of the façade deserves special attention, not only on account of its size (appr. 6.50 x 4.00m) but also because of its decoration. The floor was completely covered by mosaics, further enhancing the picturesqueness of the entire complex.

Tomb 4, to the south of the above-mentioned monuments (fig. 138), was never completed. As far as can be determined from its incomplete state, it was meant to have a pediment supported by either columns or pilasters, with a doorway in the centre of the façade. Somewhat to the north of this façade six lines of an inscription were found. Each line mentions a certain Μηκος, who doubtless commissioned the tomb. The name and the way it is spelled are local Illyrian; the letter forms suggest a date in the second half of the third century for both inscription and tomb.

Because of their unfinished state the other tombs of this rock-cut cemetery are devoid of architectural interest. However, only about 40m from Tomb 4 is a well-preserved built tomb with a barrel vaulted interior (fig. 139). The rectangular tomb measures 4.25 x 2.50m overall; the vault reaches a height of 2.40m. Local stone was used for the construction, and clamps were employed to ensure the stability of the vaulted interior. As in the typical Macedonian tomb, this interior is divided into two compartments, a vestibule (1.80 x 1.20m) and a burial chamber (1.85 x 1.85m). In the burial chamber a kline was found; there were also benches along the side walls. The Albanian archaeologists make no mention of evidence for a tumulus above the built chambers.

Vaulted construction seems to be almost as widespread in certain parts of Illyria as it was in Macedonia, as shown

for instance by several examples in the valley of Vjose.³¹

The ceilings of Illyrian rock-cut tombs also imitated barrel vaulting; the source of inspiration was undoubtedly Macedonia. Thus the Illyrian examples must be later in date than the Macedonian models. Illyria was always receptive to outside influences, especially from the Greek peninsula and Asia Minor. A good example is a little known relief of warriors from Apollonia (fig. 140), 0.60m high and executed in archaic style.³² The relief, recalling a similar scene from the Siphnian treasury, shows strong Ionic influence, and can be dated to the early fifth century. The type of building to which it belonged is hard to determine. L. Rey poses the question: "Faut-il y voir le soubassement de quelque monument analogue à ceux de Lycie?"³³ Since there is no evidence in Illyria for buildings like the Nereid Monument at Xanthos, the question must remain unanswered. On the other hand the source of inspiration for the Hellenistic tomb discussed above is much easier to detect. The interiors are clearly based on the vaulted tombs of Macedonia, though in the case of rock-cut tombs the outer chamber, or *prodomos*, of the Macedonian prototype is transformed into an open-air courtyard, or covered only with a light timber construction. The façades of Tombs 1 and 4 rely directly on Macedonian models, such as the Ionic tomb at Vergina;³⁴ but they are now exposed to view, after the fashion of the rock-cut tombs of Asia Minor, which probably also provided part of the

inspiration for the Macedonian buried façades. The design of Tombs 2 and 3 is based on secular buildings (e.g. theatre and portico), as was often the case with grave monuments. The character of the design was determined to a certain extent by the rock formation, or at least by the fact that the tombs were carved from the living rock, not built; thus the forms were simplified and reduced in scale. The courtyards, with closed sides, of Tombs 1, 3 and 4 are a feature rarely, if ever, encountered in the rock-cut tombs of Asia Minor; but such a scheme was quite widespread, for example, in the necropoleis of Cyrene.

The period of construction of the rock-cut tombs of Hellenistic Illyria must lie between the late fourth and the last quarter of the third century. During this period the region enjoyed political stability and was relatively prosperous. In Tomb 3 the majority of the small finds date from the second half of the third century; however, they might belong to a secondary burial, rather than to the period of the original cutting of the tomb. From the point of view of architectural style a date in the first half of the third century cannot be excluded, and the same is true for Tombs 1 and 2, the former being perhaps the earliest in the entire necropolis. The unfinished tombs constitute a second chronological group; they must have been started only in the later third century. They were commissioned by military personnel, as shown for example by the relief

decoration of Tomb 3, and by wealthy citizens who owed their prosperity to Macedonian influence in their territory.

V. Tombs at Canosa

In the discussion of Macedonian tombs, and especially of the Great Tomb at Lefkadia, mention should be made of a closely related design at Canosa in southern Italy. Of the three tombs placed side by side and known as the "Ipogei Lagrasta," one (No. 3) had a two-storeyed façade (figs. 132 and 141).³⁵ Unfortunately the tomb, though still relatively well preserved up to the 1850's, has almost completely disappeared during the past century. As early as 1914 H. Nachod described the site as follows: "Die Stelle dieser Grabanlage ist jetzt nur noch als eine Mulde im Boden zu erkennen,...."³⁶

Drawings from the middle of the last century show a lower storey with plain corner pilasters and two fluted Doric half-columns flanking a central doorway.³⁷ The upper half of the intervals between the half-columns and the pilasters was decorated with false windows. A regular Doric entablature followed, with a low architrave and a much higher frieze course; the metopes carried figured scenes. In contrast to the Lefkadia Great Tomb, there was no Ionic frieze-band separating the upper storey from the lower. Instead, a series of mouldings (their total height less than that of the Doric frieze) provided a narrow base for the

upper storey. The drawings of Bonucci and Gerhard in general agree in their representation of the lower storey. Both drawings show engaged Ionic columns, but Gerhard has six, Bonucci only five, with pilasters at the corners.³⁸ Both scholars assumed, probably, correctly, that the upper storey was surmounted by a pediment. The column bases shown in the drawings were of regular Attic-Ionic type.

A long dromos preceded the elaborate façade. In addition to the central door of the façade there were two entrances in the side walls of the dromos leading to separate burial chambers. Each of these side entrances was framed by two engaged Doric columns supporting an entablature crowned by a pediment.³⁹ In plan, the complex closely resembles the cruciform arrangement of Etruscan tombs rather than that of Macedonian and other Eastern Hellenistic examples.

The same may be said of the plan of the neighbouring tomb, No. 2, located north-west of No. 3. An interesting feature of this tomb is the back wall of the antechamber, behind which was one additional room. This wall, still well preserved and 3.85m wide, has four Ionic half columns (each with eight flutes) with a doorway in the middle (fig. 142). The capitals have a sagging lower section to the canalis; the spirals of the volutes are incomplete.¹⁴⁰ The upper half of the wall between the columns was painted with false windows, as on the façade of tomb No. 3. In the top portion of these panels traces of wings can be made out; these may

have belonged to Harpies or Sirens. Above the columns there is an architrave and a dentil course. The flat ceiling was carved in imitation of wooden construction in the manner familiar from Etruscan tombs at Caere and elsewhere.⁴¹

Along the base of the walls there is a high painted socle. The decorative scheme, as will be seen below, is surprisingly similar to that of some Alexandrian rock-cut tombs, e.g. the hypogeum at Shatbi. However, as Bertocchi points out, by the third century tombs such as those of the Canosa group are found over a wide area, with similarities in plan as well as decoration.⁴²

The five exterior doorways, one in the centre of the façade and two in each of the side walls of the dromos, have no special interest; each of the lateral entrances has a columnar frame similar to those of the lateral entrances of tomb No. 3.

The date of the Lagrasta tombs can be fairly definitely fixed in the first half of the third century. We know from Diodoros and Livy,⁴³ that Canosa enjoyed a period of relative prosperity during the later decades of the fourth and the first half of the third century. The pottery found in the tombs also supports a date in the early part of the third century.

VI. The Tombs at Sovana and Norchia

During the Hellenistic period Etrusco-Italic tomb designs generally continued to follow local patterns that

had been developed during earlier centuries. Tumuli and rock-cut cubic tombs (the so-called *dadi*) seem to have been the most popular forms; in these special attention was given to interior design. Nevertheless, there are a number of monumental tombs, with elaborately decorated exteriors, that at least suggest the possibility of direct influence from Eastern Mediterranean prototypes. The fame of the fourth century "temple tombs" of Asia Minor gradually spread to many other regions of the Mediterranean world. Travellers, military men, and merchants, must have seen at first hand tombs such as the Mausoleum at Halikarnassos and related structures in the Hellenistic East. Imitations, or adaptations, of these monuments may then occasionally have replaced more traditional forms of burial. For example, the overall design of the so-called Tomba Ildebranda⁴⁴ at Sovanna (fig. 143), north-west of Rome, was perhaps derived from one or the other of the tomb-types of Asia Minor. The tomb-site, on a cliff-face overlooking a vast valley below, is visible from a considerable distance. Three sides of the tomb were carved entirely free of the rock, thus creating the illusion of a free-standing monument. The front is over 12m wide, while the depth and height of the hewn-out section each measure approximately 10m. The podium, 3.50m high, consists of two sections, of which the lower projects slightly. The upper section is crowned by a large torus moulding, not a leaf- or egg-moulding in the Greek fashion.

The front originally had six fluted columns, more than 4m high, with three more on each return. The intercolumnar spaces varied from 1.52m to 1.73m; such variations are common in rock-cut tombs, where technical requirements played a secondary role.

Today, only one column remains in situ (lower diam. 0.83m); most of the others have completely disappeared, except for some of the bases. The bases are relatively high (0.47m), with a central drum-like section (fig. 144) (which can hardly be called a scotia) enclosed by two narrow tori. The design is similar to that of some rock-cut tombs in Asia Minor, for example the Amyntas tomb at Telmessos. The capitals (fig. 1440, 0.77m in height, have a band of acanthus foliage around the bottom; the corner leaves spring boldly up to form volutes, while in the middle of each face there is carved a human head.⁴⁵ The flanking colonnades are continued backward by walls faced with pilasters. The ceiling of the pteron was carved to imitate a complex scheme of coffering. The section corresponding to the pronaos and cella of a Greek temple is a solid rectangular block, the front of which had a false door apparently decorated with lozenges in low relief, in imitation of a metal grille.

Above the columns there were two friezes (fig. 144); the lower band (0.47m high) has juxtaposed griffins between plant motives, while the upper (0.80m high) consisted of foliage patterns. The crowning element was a series of

dentils, with large rosettes at regular intervals replacing the conventional antefixes.⁴⁶ There was no pediment, only a stone cippus, 0.77m high, placed in the centre of the façade above the horizontal roof line. The impressiveness of the façade must have been enhanced by its polychrome effect; stucco fragments with traces of red, green, blue, yellow and white paint were found in the tomb.

Two stairways flanking the podium led up to the colonnade. In front of the podium is a rock-cut platform, in the middle of which a deep dromos (5m long and 1.90m wide) leads to the burial chamber, a large room of cruciform shape (maximum depth more than 7.50m), with the ceiling sloping down from the "ridge-beam" on either side. Along the back wall is a bench with two rosettes.

Bianchi-Bandinelli, who excavated the site and studied the architectural elements in detail, came to the conclusion that the Tomba Ildebranda reproduces in rock-cut form the design of an Etruscan temple. His theory has generally been accepted without reservations; and indeed the plan does resemble those of Etruscan and Italic temples dating from the end of the fourth down to the first century B.C. Examples include the Temple of Diana at Ariccia, Temple "C" in the Largo Argentina at Rome, the Corinthian-Doric temple in the Forum at Paestum, the temple at Gabii and others.⁴⁷ He notes that "il tempio ad alae retratte, pseudoperiptero e inaccessibile dalla parte posteriore, rappresentato dalla

pianta dell'Ildebranda. è proprio uno dei due tipi di tempio caratteristicamente etruschi descritti da Vitruvio..."⁴⁸

The podium is of course another characteristic element of Etruscan temple design. As M. Bizzarri and C. Curri observe, "a differenza del tempio greco, nel quale il naos, cioè la cella, è la reale abitazione del dio, nel tempio etrusco-italico il carattere sacrale dell'edificio è connesso all'alto basamento o podio, concepito come sede dei rapporti fra l'uomo e le divinità celesti o ctonie. In esso forse sopravvive la parte scoperta, al centro di un'area sacra, simile a quelli dell'oriente caldeo, oppure da una terrazza naturale."⁴⁹

On the other hand, the prominent gabled roof of the Etruscan temple, with all its component parts, is missing in the design of the tomb. The omission of this distinctive feature of Etruscan temples cannot have been due to lack of space, nor as far as we can tell, to any other practical reason; it was simply not part of the design. As will be seen below, whenever the Etruscans wanted to imitate temple façades in rock-cut architecture, they included a conspicuous pediment above the columns.

If one looks elsewhere in the tomb architecture of the Hellenistic period for possible prototypes for the Tomba Ildebranda, the Belevi Mausoleum seems to provide an obvious parallel. There is a striking correspondance between the main components of the two monuments; for both have a high

podium supporting a colonnaded middle section with a flat roof line. It is true that at Belevi the original plan probably included a crowning section in the form of a stepped pyramid, like that of the Mausoleum at Halikarnassos; however, this part of the tomb seems never to have been built.

A double frieze, with one band above the other as in the Nereid Monument also occurs on the podium in a number of tomb-designs in Asia Minor. At Sovana the double frieze appears above the columns; but this arrangement may be compared on the one hand with the sculptured architrave of the Nereid Monument, on the other with the sculptured architrave surmounted by a triglyph-and-metope frieze of the early Doric temple at Assos. Of course all exposed wooden parts of Etruscan temples were normally faced with terracotta slabs, bearing either figured or floral and geometric ornament; and these terracotta revetments doubtlessly provided part of the inspiration for the rock-cut design at Sovanna. However, Etruscan terracotta revetments are themselves derived from archaic Greek models; and it was apparently only in Hellenistic times, long after the step had been taken in Asia Minor, that Etruscan architects thought of transferring the architectural and structural forms of temples to the design of tombs. Thus it is hard to believe that the new development was not inspired by Aegean prototypes,-- the more so since the development of later

Etruscan sculpture and painting remains closely tied to that of the Eastern Mediterranean. The Etruscans were almost always imitators rather than originators in the fields of art and architecture; and the unique character of the Tomba Ildebranda, among known examples of Hellenistic Etruscan tombs must surely suggest a foreign rather than a native source of inspiration.

The lower and narrower of the two friezes at Sovanna represents juxtaposed griffins, as mentioned above; at Belevi there is a free-standing version of the same theme, placed along the roof-line of the monument. The block-like entablature, filled with reliefs, with columns below but without a pediment or pyramid above, was rare in funerary architecture. However, such a feature is readily explained if it was in fact copied from the unfinished monument at Belevi.⁵⁰

Bianchi-Bandinelli, in discussing the individual architectural elements of the decoration of the Tomba Ildebranda, mentions possible outside influences from the eastern Mediterranean in matters of detail, but never raises the possibility of foreign influence for the design as a whole. He regards the design as a local development, based on Etruscan temple projects of the earlier second century, a few decades before strong influences from Asia Minor reached central Italy: "La Tomba Ildebranda ci mostra uno stadio dell'architettura nell'Italia Centrale immediatamente anteriore

al periodo Sillano, col quale Roma entrerà nel gran movimento edilizio, adottando, oltre che una nuova tecnica costruttiva, anche le forme nuove dell'architettura ellenistica microasiatica: il che avviene fra la metà del secondo e l'inizio del primo secolo a. Cr."⁵¹

Bianchi-Bandinelli praises Delbrück's work on Hellenistic influence in Latium, but at the same time criticizes him for restricting the eastern influences in Italy to the period from the mid-second century onward and to Rome.⁵² However, in his analysis of the Tomba Ildebranda Bianchi-Bandinelli himself seems to have stumbled into a similar pitfall, in refusing to recognize in later Etruscan architecture the possibility of direct Anatolian influence, strong enough to have affected entire building projects (as seen in the Sovana tomb) as early as the beginning of the second century. Although the Tomba Ildebranda embodies many local Etruscan architectural elements, the end result is not really comparable with any other known Etruscan building. We may therefore suggest that the tomb is actually an Etruscan version of the Belevi Mausoleum, remodelled and executed in a manner that shows little regard for accepted Greek rules.

If this view is correct, the buildings at Belevi and Sovana add one more proof of the existence of active connections between Central Italy and Asia Minor.⁵³ Nevertheless, the dating of the Tomba Ildebranda remains

problematic. If we could demonstrate the existence of strong and direct connections between the architecture of Etruria and that of Asia Minor as early as the second half of the third century, it would be reasonable to assign the tomb to this period. Yet such connections do not really seem to begin before the early second century, when Rome, and with her all of Central and South Italy, was increasingly involved in affairs east of the Adriatic. The initial trickle of Anatolian influences became a flood only after 133 B.C., when the "Provincia Asia" was formed out of the Pergamene kingdom; but Italic familiarity with, and imitation of, the monuments of Western Asia Minor is possible at any time following the campaign that culminated in the victory of Rome and Pergamon at Magnesia in 190 B.C. Thus Bianchi-Bandinelli's dating of the Tomba Ildebranda to the earlier second century can be retained without dismissing the possibility of a direct connection with Belevi; but a date in the last third of the century, after the establishment of the province of Asia, is also possible.⁵⁴

The Grotta Pola, also at Sovana,⁵⁵ is a "temple tomb" design with a pediment over the colonnaded façade (fig. 145). In contrast to the Tomba Ildebranda, no attempt was made to produce the appearance of a three-dimensional building. There are no returning sides; and the podium does not stand out clearly, but rather forms part of the surrounding vertical cliff. Only one of the row of eight columns, set

in front of a continuous wall, is now standing. The height of this column is just under 4m, its lower diameter 0.80m; the thirteen flutes are separated by wide fillets. The bases consist of two large tori enclosing a narrow scotia. The capitals resemble those of the Tomba Ildebranda, with human heads in the centre of each face. Behind the corner columns fluted pilasters were carved on the wall; the pilaster capitals were also adorned with human heads. The façade measures 12.50m in width, and was approached by a flight of steps on the right side. More than two-thirds of the pediment has been broken away; no traces of decoration have been detected on the remaining section. As in the Tomba Ildebranda, there is a hypogeum, preceded by a dromos, about 6m below the middle of the façade. The hypogeum is extremely long (18.50m) and of cruciform plan. The bodies were laid out on benches along the walls. The date of the complex must be close to that of the Tomba Ildebranda; in neither case do we know who commissioned the tomb.

It is much easier to recognize the prototypes of two entirely rock-cut tombs at Norchia south of Sovana than those mentioned previously. Dennis noted that their "peculiarity consists in this,-- that while all the sepulchres around are of the severly simple style of Castel d'Asso, approximating to the Egyptian, these two are highly ornate, and of Greek character."⁵⁶ They are generally referred to as Doric, or as Temple, tombs. The façades, carved very closely side by

side at the end of a series of cube tombs (fig. 146), overlook the valley of the Aqualta stream. Due to the softness of the local tufa neither tomb is well preserved.

Tomb A, the more westernly of the two, is slightly larger (9 m wide) and more elaborate than Tomb B (7m wide). Curiously enough, in both tombs the characteristic podium of Etruscan temple architecture is missing. All the supports of the pediments have disappeared. However, it can be established with certainty that Tomb B had an arrangement of two columns standing on a low parapet that rose above the floor of the portico; Tomb A, to judge from the remains, had pillars instead of columns.

The superstructure is more or less the same in both monuments. Above a plain architrave there is a Doric frieze slightly set back, then a projecting dentil course in two bands (the upper of these could be called a "dentillated cornice"), and a pediment (of which the sloping sides are framed by large kyma leaves, recalling archaic Etruscan examples).⁵⁷ The decoration of the friezes is quite unusual. Each metope had a single carved human head;⁵⁸ each triglyph had only three guttae which were of a peculiar downward-tapering shape. Also noteworthy are the volutes at the junction of the raking and horizontal geisa. In Tomb A these volutes are adorned with Gorgon heads; those of Tomb B probably had lion heads. Traces of acroteria were also found. The corner acroteria had seated animal figures cut in

the living rock, while the central figures (now completely lost) were carved separately and then attached. Although the figures in both pediments are partly preserved,⁵⁹ the subject matter cannot be clearly determined. The scene in tympanon A remains disputed;⁶⁰ tympanon B seems to represent the story of the Niobids.

The pronaos wall of Tomb A is decorated with remarkable reliefs representing a processional scene of warriors and the soul of the deceased. In addition to the figures there are also ornamental motifs: a convex round shield, greaves, two helmets, two daggers and a lance. As Demus-Quatember has pointed out, the topics are related to tomb paintings in Tarquinia, especially the Tomba del Tifone.⁶¹

In front of the façades there was a platform for the funeral rites; the remains of an altar have been found.

The hypogaea of these tombs are approximately eight meters below the level of the pronaos. The western tomb has the larger chamber, with only three loculi; the smaller burial chamber beneath Tomb B has eleven loculi and two sarcophagi. Both tombs show signs of burials from different periods.

The style and execution of the sculptural decoration of Tomb A indicate that it slightly predates Tomb B; however, the reliefs of the pronaos wall (which somewhat overlap into Tomb B) were evidently executed sometime after the completion of the eastern tomb. The architectural ornament as well as

the sculptural reliefs were stuccoed and painted over in a polychrome scheme. A cippus with a few roughly carved letters was found in Tomb A. The inscription mentions a family name, Vel, that was very common in the region; but there are no other clues to the identity of the persons buried in either tomb. To judge from the style, these two tombs at Norchia were probably executed about the same time as the Tomba Ildebranda at Sovana. They have no real predecessors or successors in Etruscan Italy. Consequently prototypes for the façades must be sought outside Etruria, and perhaps outside Italy altogether. The borrowed elements, however, were combined with native forms; and even without these it must be admitted that no façades of exactly this type are known in the Eastern Mediterranean. The most that can be said is that some of the inspiration may have been provided by classical or Hellenistic "temple tombs" in Lycia or Karia. The theory of Anatolian influence is of course all the more plausible if our suggested association of the Tomba Ildebranda with the Belevi Mausoleum is accepted.

The other large rock-cut tomb of unusual design at Norchia is the so-called Tomba Lattanzi.⁶² The façade of this monument must have had a really splendid appearance when approached from the plain below (fig. 147). It reached a height of some 16m, while its width increased from 13m at the bottom to 15m at the summit. Rosi restores this huge tomb

with two superimposed colonnades above a high podium.⁶³ On the (spectator's) left of the façade is a flight of eleven steps, each 0.42m high.

Two large Tuscan-Doric columns supported the floor of the upper storey. A column fragment found on the site, probably from one of these two columns, measures 1.55m in diameter and has 28 flutes; its estimated height was ca. 5.50 meters. The base consists of a large bell-profiled section topped by a narrow torus moulding. Behind these two columns there was a false door carved in the middle of the back wall. On the left side of the portico was a fluted pilaster set on the back of a standing monster figure. This feature is strikingly similar to an earlier rock-cut tomb, presumably of the fifth century at Terelik Kayasi in Paphlagonia, where again only the left anta is placed on a summarily executed lion figure.⁶⁴ About one metre behind the pilaster of the Etruscan tomb is a circular hollow that once held a cippus. To the left of the pilaster the lower stairway continues upward, but reduced to a width of only about one metre. A frieze, 0.90m high, with griffins alternating with rosettes and four-petalled flowers, separated the lower floor from the upper.

In the second storey an open platform, more than 4m deep, preceded a colonnaded porch (fig. 148). This consisted of three compartments divided by walls which terminated on their fronts in four fluted columns, 2.70m high.

The remains of the capitals suggest a variant of Corinthian. There is a second stairway on this level, continuing all the way up to the summit of the tomb; but it is placed on the right of the façade, instead of on the left, as in the lower storey. The burial chamber, as in the other Etruscan tombs described above, is placed well below the floor of the pronaos (7m down).

Unfortunately many of the ornamental features of the tomb are unknown, being either destroyed or not yet recovered; but according to Rosi, "the architecture of the tomb is ostentatious in its decoration, and shows an uncouth jumble of monstrosities."⁶⁵ The coloured stucco fragments, some of them still in situ in the last century, indicate that much of the tomb was painted. The monument has been variously dated to the third or second centuries.

Bianchi-Bandinelli concluded that: "abbiamo piuttosto l'imitazione del doppio porticato di un mercato, come non ne mancavano nelle città ellenistiche dell'Oriente e come non ne mancavano assai più tardi a Roma..."⁶⁶ Rosi saw in the superimposed orders of the Tomba Lattanzi a Hellenistic, if not a Roman, architectural innovation; but he does not suggest a source for the design. There is some truth in both these views. Seen from in front and from a distance, the tomb did indeed resemble a two-storeyed portico; however, the painted recesses of the second floor are also reminiscent of the pinakes of the proskenia of Hellenistic theatres.

During the third century two-storeyed façades certainly became fairly common in stoas; but they were also used in theatres, at least in the west.⁶⁷ Gateways and private houses, too, employed such features, though rarely with colonnades on both levels. Even in altars there is evidence for the existence of similar designs, and on Italian soil. An altar-model from Capua, 1.14m high, and probably of third-century date, has a podium-like base, on which stand two engaged Tuscan-Doric columns supporting a Doric frieze; above this in turn is a much smaller second "storey" with engaged columns.⁶⁸

Some tombs with two-storeyed columnar façades are perhaps as early as the fifth century. We have already noted, at Barka in Cyrenaica, a rock-cut tomb façade with two tiers of vertical supports (fig. 131). At Barka on the façade of the porch of the lower floor there are two short thick Doric columns, while the upper storey has three piers, each with a bowl-shaped capital, described to be Aeolic by Stucchi.⁶⁹ Behind these supports there is another true porch. The façade measures over 5m in both width and height. Another example of the two-storeyed arrangement, but later in date, is the well known Great Tomb at Lefkadia.⁷⁰

With the exception of the theatre proskenia, the above noted two-tiered façades, including the non-funerary ones, are almost all in a single plane. A striking exception among the tombs is the upper storey of the Lattanzi tomb, which is

set back from the line of the lower storey, rather in the manner of a Hellenistic skene in relation to the proskenion; thus an open space for the performance of funerary rites was left in front of the columns of the upper storey. In funerary architecture there is only one other rock-cut tomb of monumental scale with an analogous treatment of the façade, namely, the Archokrateion at Lindos. A comparison of these two tombs shows that they were conceived along similar lines, in spite of the differences in details and the unsymmetrical execution of the front of the Lattanzi tomb. It is therefore possible that the designer of the Tomba Lattanzi drew his inspiration from the Archokrateion; if such was indeed the case, the Etruscan tomb is another example of direct influence in Italy of the eastern type of monumental tomb. The suggested relationship between the two monuments would also provide a firm terminus post in the early second century for the Lattanzi tomb.

VII. Cyrene, Tomb N180

The extensive and well preserved necropoleis of Cyrene offer examples of most of the tomb-types described under built and rock-cut tombs in the chapter on classification. However, among the known varieties of Cyrenaican tombs there seem to be none that directly imitated, either in design or scale, the grandiose "temple tombs" on podia of Asia Minor.

The design that most closely resembles the Asia Minor

type is perhaps that of Tomb N₁₈₀ in the northern cemetery of the city (fig. 149).⁷¹ It can be classified as a mixed construction, since the extant lower part of the tomb is rock-cut, while the superstructure, now missing, was built of ashlar blocks. The façade rises from a socle slightly over 1m high and 4m wide, containing three rock-cut compartments for the interment, which were closed by doors. Above them there is a narrow platform, at the back of which four steps lead up to the square middle section of the monument, measuring 3.70m, or twelve Attic feet, per side. In the typologically related Lion Tomb at Knidos the sharp corners of the cube are softened by engaged columns; at Cyrene the corners are emphasized by flat pilasters enclosing plain panels. The outer edges of these panels, framed by the corner pilasters and the architrave, were enlivened by a decorative kyma-leaf pattern. The architrave supported a Doric frieze and a cornice with ovolo and Lesbian kyma ornament. Above the cornice there was probably a twelve-stepped pyramid, crowned by a statue or a stele.⁷²

Stucchi assigns the monument to the second half of the fourth century. He compares it with the "less ornate" rock-cut monument at Eski Foça in Ionia (i.e. the Taş Kule tomb), though there is little if any resemblance between the two. His other comparison, with a small-scale monument (perhaps the crowning element of a pilaster) now in the Syracuse

museum (fig. 86), is more appropriate; however, this piece has been dated to middle or late Hellenistic times.⁷³

The composition of Tomb N₁₈₀ clearly presupposes some acquaintance with the mausolea of Asia Minor, with its tripartite division of the main elements. In the local Cyrenaic context, the articulation of the middle section shows similarities with the late fourth-century (308-305 B.C.) Strategeion.⁷⁴ The marked "frontal" aspect of the tomb, which stands free on all sides only above the four-stepped base, and the multiple compartments (resembling loculi-like arrangements) suggest a date no earlier than the third century.

Tombs N₅₇, N₅₈ and S₁₈₅ show a vague resemblance⁷⁵ to Tomb N₁₈₀. However, from the third century onwards, these as the other Cyrenaican tombs, generally show the influence of Alexandrian rather than Anatolian designs.

VIII. Alexandrian Tombs

The history of the Greek city of Alexandria that supplanted the Egyptian fishing village of Rhakotis, begins only with Alexander the Great. Thus the Greek tombs in its various necropoleis are all of Hellenistic date. The more elaborate of the preserved Hellenistic examples are in most cases cut into the soft bedrock of the region.

As the town expanded, especially eastwards, the cemeteries also moved outward, since they were normally

situated outside the inhabited areas. In the eastern part of the city, where most Greeks and foreigners lived, are the cemeteries of Shatbi, Hadra, Ibrahimiya, Sidi Gaber and Mustafa Pasha; the last named constitutes the largest and richest Hellenistic burial complex so far discovered in Alexandria. The western necropoleis of Gabbari, Wardian-Mafrusa,⁷⁶ and Mex came more and more into use from the later second century onward. The Anfushi and Ras et-Tin cemeteries are located on the Pharos island. Southwest of the city centre, near the Sarapeion, lie the later catacombs of Kom es-Shogafa. The "Alabaster Tomb," southwest of the Shatbi cemetery, is a unique fragment of a sumptuous built funerary monument of the Ptolemaic age. A rock-cut bed was prepared for a series of meticulously constructed rooms (one still exists [fig. 150 a and b]), which were probably surmounted by a tumulus in the Macedonian manner.⁷⁷ In the vicinity of the Alexandrian Eleusis, southeast of the Hadra area, lay the so-called Antoniades Tomb. In ground plan it was comparable to Greek dwelling houses of the second and first centuries B.C., with a series of rooms arranged around a central nucleus.⁷⁸

Unfortunately the Sema of Alexander, mentioned by ancient authors along with the royal burials of the Ptolemies, has not yet come to light; in all probability it occupied a focal point in the layout of the city.⁷⁹

It is reasonable to assume that the Macedonians who

settled in the Nile delta after 332 B.C. initially buried their dead according to their own customs. However, local geological and climatic conditions, the Pharaonic heritage, and the earlier traditions of rock-cut tomb-architecture in Asia Minor and the Cyrene region soon led to modifications in the funerary practices and architecture of Alexandria.

The Shatbi tombs seem to be among the earliest of known Hellenistic funerary complexes, datable to the first generations of the history of Alexandria.⁸⁰ They were discovered during the last century, near the coast and east of the ancient Nile canal that opened into the royal harbour. The original plan was altered over the years by the addition of new sections, until the ever-expanding city absorbed the site. However, the original form of the main tomb can still be traced. An open courtyard, 6.75 x 8.20m with a pseudo-peristyle of half columns (fig. 151), was preceded on the north by a wide, shallow vestibule and an adjoining corridor. To the east opened an antechamber leading to the burial-room proper (fig. 152).

Architecturally the most intriguing parts of this rock-cut sunken tomb are the walls with engaged orders. Against the northern wall of the large court stood six partly fluted Doric half columns, with a central doorway.⁸¹ In the upper sections of the intercolumniations were false windows above a string course; the right-hand panels, painted sky blue, were slightly set back. Obviously the intention was to

create the effect of vistas through the wall, such as later appeared in wall-paintings of the Second Pompeian Style. The entrance to the kline chamber reflects the same concept. In this case the wall is decorated with a small tetrastyle Ionic temple-façade supporting a low pediment; this scheme recalls the façades of Macedonian tombs. Presumably the same kind of illusionistic treatment was accorded to the now destroyed wall surfaces of the central court. In addition to the loculi of the antechamber, a number of later burial niches were added to the east and west of the main complex, at the time when the original family burial-place became a public cemetery.

Tombs I and IV in the well preserved necropolis of Mustafa Pasha, as well as the Antoniades hypogeum, all belong to the same class of burials as Shatbi; a central open space formed the nucleus of the design. In other respects each of these monuments has its own special features.

Mustafa Pasha Tomb I (fig. 153) is approached by a staircase set along the western side of a pseudo-peristyle courtyard.⁸² The openings on each of the four sides of the court are framed by pairs of Doric half-columns; in each corner two quarter columns form a relief version of the cordiform pier (fig. 154). The frieze had three triglyphs over each intercolumnar space; the corner triglyphs were bent around the internal angle. Above the lintel of the middle doorway on the south side of the court a remarkable painting,

imitating Macedonian models,⁸³ depicted three horsemen and two standing female figures (fig. 155). Only a few traces remain of the rest of the painted decoration; one panel represents the upper part of a tholos building.⁸⁴ Behind the somewhat Egyptianized doorways an extensive vestibule with loculi opening off the sides gives access to the kline chamber. Corinthian pilasters and a plain pediment framed the entrance, providing one of the earliest examples of such an arrangement. The remaining two rooms on the south, along with those of the north and east sides, served for loculus burials.

The complex has generally been assigned to the second half of the third century, mainly on the basis of the style of the paintings.⁸⁵ However, the architectural members do not exclude an earlier period within the same century.⁸⁶ Closely related, but later in time, are some rock-cut tombs at Paleokastro on Cyprus and others at Cyrene.⁸⁷

Much more original is the somewhat later Mustafa Pasha Tomb III (fig. 156). Little effort is needed to detect the architect's source of inspiration. The semicircular exedra for funerary rites on the south side of the central court was probably suggested by the cavea of the theatre. At the opposite end of the court, the kline chamber is preceded by a square room with an altar in the middle. Taking up the full width of the courtyard is a simple raised "stage" with a decorative back wall; this "skene-building" constituted

the principal element of the design. The scaenae frons is adorned with four Doric half-columns, plus two quarter columns in the corners; the scheme is reminiscent of Shatbi. In the three middle intervals there were real openings; in the corner bays of the returning wings were false doors (fig. 157 a, b, c). Unlike Tomb I, the corners of the courtyard of Tomb III were filled by pilasters; the corner spans have only one triglyph, while the other intercolumniations have two. Most of the painted surfaces, along with other decorative details, have long since disappeared.

This tomb complex was partly built above ground; with its different levels and variety of shapes and forms, including the central court, it is a unique product of the funerary architecture of the Hellenistic era.⁸⁸ The imaginative organization of space and the frequent use of purely decorative non-structural architectural members, particularly half-columns, give a clearer notion of the character of the residential architecture at Alexandria than any other monuments discovered in the Ptolemaic capital.

Tomb IV, datable to the second century, lies north of Tomb III. It is remarkable in having a true peristyle, with two free-standing Doric columns between antae on each side of a square courtyard (fig. 158).

Among the excavated tombs of the Mustafa Pasha cemetery Tomb II (fig. 159) clearly reproduces the so-called oikos-type of house-plan, with various compartments disposed

along a central axis. A staircase along the east side, parallel to that of Tomb I, gives access to a hypaethral court decorated on all sides with a triglyph-and-metope frieze 3.85m above ground level. Two smaller compartments, one for a painted kline, the other for a well, were cut in the western wall of the court. At the northern end an annex used for funerary banquets faces the main compartments. On the south a tripartite entrance with two Doric columns in antis leads to a vestibule. At the back of this vestibule another distyle-in-antis colonnade forms the approach to the cult room, which was provided along the longer sides with benches in front of loculi. At the far end of the complex is an offering table with a small chamber behind it. The tomb has been dated by coin finds to the first half of the second century; but the architectural and decorative details suggest that it may actually have been cut in the late third century.⁸⁹

The hypogeum at Sidi Gaber, of which virtually nothing now remains, lay a short distance west of the Mustafa Pasha cemetery. The plan shows a strict axial arrangement of the various components (fig. 160) of an open court, vestibule and kline chamber with a loculus at the back.⁹⁰ The ceiling of the antechamber in the form of a segmental vault, is an interesting feature of this tomb. The wall surfaces of this room were divided into a tripartite system of painted horizontal zones. A wide passageway, flanked by inward-facing

Doric half-columns attached to the antae, preceded the oikos. At the back there was a large kline painted with an Amazonomachy. The walls were decorated with garlands hung between pilasters, such as are found in some Macedonian tombs, e.g. the Great Tomb at Lefkadia. The relative scarcity of Egyptianizing features and the combination of a single loculus with a real kline, as opposed to "false" couches in relief or painting, suggest a date in the third century, possibly earlier than Mustafa Pasha Tomb II.

Of the six large tombs in the Anfushi district, the two most important were discovered in the early twentieth century.⁹¹ Both have a plan similar to that of Sidi Gaber. They exhibit numerous Egyptianizing features, including two segmental pediments; these may be either originals or additions of a later period.⁹² Some of the stuccoed and painted walls imitated marble incrustation; the ceilings have geometric patterns. The date of these tombs is conjectural, but the small finds and the absence of kline burials seem to indicate the later Ptolemaic era.

Brief mention may be made of two more large Hellenistic hypogea of oikos type found in Alexandria. The Mafrusa tomb is interesting for its wall-paintings recalling the First Pompeian Style.⁹³ The Wardian tomb (No. 1) of the mid-second century was discovered in the nineteen-sixties;⁹⁴ it has a painted false kline, with a niche placed behind it for the actual burial.

IX. Taposiris Magna, Lighthouse-tomb.

In connection with Alexandrian developments some mention must be made of the "lighthouse," or Pharos, type of funerary monument. The biggest and most famous of all ancient lighthouses was undoubtedly the Alexandrian Pharos, built in the early third century at the north-east entrance of the Great Harbour.⁹⁵ It was near to, and may even have occupied the site of, an earlier building, perhaps a tomb connected with the worship of the local sea-god Proteus.⁹⁶ The influence of the Pharos was substantial in both the Graeco-Roman and the Arabic world. It inspired the designs of many smaller lighthouses, watch-towers, tombs, "trophies" and minarets. One such building is the tower-like structure, of Ptolemaic date, only about 50km west of Alexandria at Taposiris Magna (modern Abusir).⁹⁷ Above a low base, 10.75m square, stands a high octagonal middle section and a cylindrical top (fig. 161). The entire edifice is constructed of neatly cut and well fitted ashlar blocks, without architectural decoration. An interior staircase led to the summit. The existence of a hypogeum below the tower seems to indicate that the latter served as a funerary monument in the form of a lighthouse.⁹⁸

X. North African Tombs

^aIn the western Mediterranean many of the larger tombs were clearly influenced by prototypes in one region or

another of the eastern Hellenistic world. The known examples are all later than the most imposing types in Asia Minor. The "obelisk" or "pinnacle" tombs of the Punic regions of North Africa form a special category. In their slender appearance they distantly echo the design both of Semitic "nefesh" monuments and of Lycian elevated sarcophagi and pillar tombs. Furthermore, the superimposing of different stages, perhaps suggests a connection with the Halikarnassos Mausoleum and its immediate descendants. At the same time there are also elements derived from local traditions and borrowings from the architecture of the urban centres along the southern shore of the Mediterranean, especially Alexandria and Cyrene.

The most remarkable of the Graeco-Punic funerary monuments is the sandstone Mausoleum B at Sabratha (fig. 162), also referred to as the mausoleum of Beş or Bisu.⁹⁹ This building, almost 24m high, rose above a triangular base, resembling a monumental "tripod" structure. A high stepped platform with concave sides supports a lower storey framed by squat engaged Ionic columns. The necking-ornament of the diagonal capitals is reminiscent of the Erechtheion. On the eastern, or principal side, instead of attached columns there was a false door of wholly Egyptian design; such doors are a common feature of Punic architecture. Above the large cavetto cornice the second storey was lavishly adorned with freestanding sculpture. Three seated lions

supported projecting consoles on which stood colossal (ca. 3m high) kouroi. The concave fields of the three sides were enclosed by tall slender pilasters ending in Phoenicio-Cypriote capitals.¹⁰⁰ ~~Between these pilasters~~ the lower section of each face was decorated with reliefs;¹⁰¹ between the capitals was a band of stylized palmettes. A steep pyramid crowned the monument. The entire structure was covered with painted stucco. According to di Vita the mausoleum probably dates from the late third or second century.

Another early second century mausoleum, of Graeco-Punic type but more conventional in design, is found at Dugga.¹⁰² It has been regarded, on the basis of its bilingual inscription, as the funerary monument of Ateban (fig. 163), a Numidian chief of the time of king Massinissa.¹⁰³ Each of the three square storeys is smaller than the one below it, since each stands on a stepped base.¹⁰⁴ The lowest storey, 5.74m high, has the largest number of steps (five); it is decorated with corner pilasters topped by "bent" Phoenicio-Cypriot capitals. The intervals have false windows, except for the north and east sides leading to the funeral chamber. These openings were provided with moveable slabs. The second storey, 5.21m high and resting on three steps, has four engaged Ionic columns per side; on the north and east sides there is an opening in the central interval. The third stage, 6.21m in height, is more elongated than the others.

At the corners are pilasters with bent Phoenicio-Cypriot capitals, surmounted by an architrave and cavetto cornice similar to those of the second storey. The three-stepped base was interrupted by pedestals at the corners; these once carried statues of horsemen. The crowning element, as in Mausoleum B at Sabratha, was again pyramidal (height 3.73m); at the corners of the base of the pyramid were winged female statues, at the apex a seated lion. In all three square storeys the masonry is pseudo-isodomic.

A massive tower tomb (fig. 164) at Ptolemais¹⁰⁵ evidently followed closely the design of prototypes in Asia Minor, e.g. the Belevi Mausoleum. The tomb still stands on its solid rock foundation to a height of 14m; the original height was ca. 27m, while the base is 12m square. The lower storey was decorated with a Doric frieze above plain corner pilasters; there were three false doors on the north, or main façade. On the same side the second storey has a complete Ionic order, with four engaged columns supporting the entablature and the pediment. In the intercolumniations were three false windows corresponding to the false doors below. The necking ornament of acanthus foliage on the Ionic capitals is noteworthy, as a motif borrowed from the Corinthian repertoire.¹⁰⁶ Provision was made for multiple burials in the interior, which was reached through an opening on the south side. The two storeys were connected by an interior staircase. The combination of architectural elements

and the beautiful ashlar construction serve to date the tomb to the Hellenistic period, perhaps to the first half of the second century.

The so-called Tomb of Theron at Agrigento (ancient Akragas) in Sicily (fig. 165) was constructed about a century later.¹⁰⁷ Its form has affinities with Punic structures in North Africa.¹⁰⁸ As we see it today, the tomb consists of a high podium resting on a socle, and supporting an upper storey with engaged Ionic columns. Above the socle is a toichobate crowned by a kyma recta moulding. The main portion of the lower storey, or podium, is of plain isodomic construction. Above this is a complex cornice terminating in a pronounced cavetto profile. The total height, including base and crown is 3.91m; each side measures 4.81m. The upper storey, 3.73m high, has a large false door placed in the middle of each side; at the corners were three-quarter Attic-Ionic columns. A Doric architrave and frieze are the highest elements still preserved today; the strongly tapering podium and columnar stages suggest that the crowning element was probably a pyramid, such as we find in most of the related Punic monuments. The now undivided interior must originally have had a lower and an upper chamber, corresponding to the two levels of the exterior.

Large-scale tumuli entirely in stone were rare in the Hellenistic world. The Medracen tomb in eastern Algeria (fig. 166 a and b) must have been the largest ever built,

measuring some 59m in diameter at the base; the height is close to 20m. It must have been commissioned by a Numidian king, perhaps as early as the third century.¹⁰⁹ The cylindrical socle is lined with sixty engaged and fluted columns, and has three equidistantly placed false doors. Above the prominent cavetto cornice is a circular stepped tumulus with twenty-three rings of stone. An interior gallery led to the burial chamber, which was placed slightly off center.

The builder of the so-called Tombeau de la Chrétienne (fig. 167), which probably dates from the later first century B.C., used the Medracen as his immediate model.¹¹⁰ Both tumuli owe their existence to local geological conditions; material for earth mounds was not readily available, and sand would have blown away without a retaining facing of stone.

Of all the north African tombs described above, the design that comes closest to the Anatolian "temple tomb" on a podium is that of the tower burial at Ptolemais, with its "false," or engaged, Ionic colonnade and pediment above the Doric podium. However, here as elsewhere the columnar orders never regained their long-lost classical function, and served merely for decorative purposes. In the absence of evidence to the contrary it can be assumed that the Punic mausolea exerted some influence on later Roman tombs in southern France and elsewhere in the northern and western

provinces of Europe. In the end it was the Punic type of mausoleum that eventually reached Italy by way of Sicily (e.g. the Tomb of Theron), and later influenced the design of Roman tombs in Southern France and elsewhere in the northern and western provinces of the Roman Empire.¹¹¹

XI. The "Temple Tomb" at Ai-Khanoum

Lastly a unique example of a built monumental tomb should be mentioned which is located far beyond the "boundaries" of the Greek-speaking world, in present-day Afghanistan. The site of Ai-Khanoum, discovered in the 1960's, is a settlement built under strong Hellenistic influence in the wake of Alexander's expansion into the east. Apart from the heroon of Kineas, recently the remains of a large peripteral "temple tomb," came to light within the city limits.¹¹²

The structure consists of a combination of cut stone and baked brick. Only the foundation courses (fig. 168) and the elaborate underground burial arrangements survive. The krepis of three "steps" measured 1.50m in height, while the stylobate was 29.75m long and 20.00 wide. No traces of the peristyle columns (10 x 6) have been found, but they were presumably of baked clay, or perhaps even of wood, like the rest of the superstructure; their estimated height was 6m. Exceptional features are the remarkable stone Ionic capitals, which are modelled on Aegean prototypes. Although no exact

parallel for these capitals can be found, they show close stylistic affinities with capitals from the Seleucid Kingdom.¹¹³

The actual cella measured 21.50 x 11.75m in plan (fig. 169) consisting of a distyle-in-antis pronaos, a naos and a back room. From the eastern part of the naos a twelve-stepped, 4.46m long stairway ("dromos") led down to the actual main burial chamber (4.54 x 2.32m) placed under the back room. This dromos-like stairway was covered and sealed after each interment in order to "conceal" its existence. The chamber itself was constructed of well cut ashlar, fitted without the use of clamps or dowels, and roofed by a barrel vault in the Macedonian manner. Inside two sarcophagi were found (one well preserved), and bones belonging to five skeletons.

The "temple tomb" must have been used for the burial of a number of generations as suggested by the addition of a later secondary chamber north of the stairway.

The naos was obviously used for funerary cults, while sacrifices must have been made outside the building. An altar was discovered in front of the east façade next to a central stairway giving access to the naos.

According to the French excavators at least two major stages of construction can be distinguished, the first one of which can be dated to the early third century, a date that is supported by pottery evidence.¹¹⁴

The design of the structure is based on Greek Hellenistic models as is the case with most of the other buildings at Ai-Khanoum. Using the plan of the temple for a funerary purpose was nothing new but followed a tradition established in Western Asia Minor. The novelty in the present case seems to be that a Greek temple plan was little, if at all modified, and the high prominent podium, known for instance from the Nereid Monument, was reduced to three high steps. The actual burial arrangements were completely allocated to the basement (as in the Charmyleion on Kos), and unless the now lost decoration had funerary character, the appearance of the building was more like that of a temple than a tomb or even a "temple tomb" on a podium.

V

NOTES

1 For these tombs see, Kurtz-Boardman, 108.

2 The number of monumental tombs in mainland Greece is not known exactly and some of them are poorly documented as indicated in the introduction. In the following pages only some of the better documented tombs will be mentioned.

3 E. Tsirivakos, "Kallithea: Ergebnisse der Ausgrabung," AAA 4 (1971) 108; and B. Häuptli, "Bedeutendes Grabmonument in Attika entdeckt," Antike Welt 3 (1972) 54.

4 Today the site is a built-in area located at the crossing of Cyprus and Archimedés streets.

5 A.K. Orlandos, H Arkadike Alipheira (Athens 1967-68) 203-243.

6 For bibliography see Kurtz-Boardman, 376-377, and S.G. Miller, Hellenistic Macedonian Architecture: Its style and painted ornamentation (Diss. Bryn Mawr College 1972).

7 Vergina: K.A. Rhomaios, Makedonikos Taphos tes Verginas (Athens 1951); Langaza: Th. Macridy, "Un Tumulus Macedonien à Langaza," Jdl 26 (1911) 193; M. Paraskevaidis, "Archaeological Research in Greek Macedonia and Thrace, 1912-1962," Balkan Studies 3 (1962) 449; Lefkadia-Naoussa:

K. Rhomiopoulou, "A New Monumental Chamber Tomb with Paintings of the Hellenistic Period near Lefkadia," "AAA" (1973) 87-92.

8 There are variations in the employment of the orders from tomb to tomb. The half-columns at Vergina were attached to projecting pilasters. At Lefkadia four engaged columns stand free for three-quarters of their circumference; at Langaza quarter-columns are combined with pilasters at the corners.

9 E.A. Gardner and S. Casson, "Antiquities found in the British Zone, 1915-1919," BSA 23 (1918-19) 15 fig. 1

10 See Andronicos, 55-77.

11 G.A. Soteriades, "Anaskafai Diou Makedonis," Praktika (1930) 36; J. Boardman, "Travelling Rugs," Antiquity 44 (1970) 143-144, where the author draws attention to a narrow painted frieze in the funeral chamber, that has strong affinities with woven textiles preserved by the "permafrost" tombs at Pazirik in Siberia.

12 However, one tomb near Stavroupolis was built entirely of local marble; the tomb is published in Praktika (1953) 133-140.

13 P. Petsas, O Taphos ton Lefkadion (Athens 1966).

14 R. Martin, ("Sculpture et peinture dans les façades monumentales au IV^e siècle av. J.-C.," RA [1968-69] 183) says that the nose profile of the triglyphs cannot be earlier than the beginning of the third century. Miller (supra n. 6) 102

prefers a late fourth century date for the "ears" of the triglyphs, since they are of the Attic type.

15 The third-century Tomb I at Mustafa Pasha. (see below, 289) shows a similar treatment of the painted frieze above the central doorway of the south side, but the execution of the shadow lines is much more sketchy.

16 The new Doric tomb at Vergina has a similar frieze, but no upper storey.

17 There are four pilasters (without bases) on all sides except the west, which has the doorway. The necks of the pilasters are painted with disks and surmounted by a band of leaf-and-dart. Presumably garlands were hung on all the walls between the pilasters, as shown in the painted examples in the later tomb of Lyson and Kallikles at Lefkadia.

18 P. Petsas calls the arrangement "a peristyle with stoas around it" ("Macedonian tombs," Atti del settimo Congresso Internazionale di Archeologia Classica I [Rome 1961] 404).

19 Cyrene: M.G. Pierini, "La tomba di Menecrate a Barce in Cirenaica," in Quaderni di Archeologia della Libia 6 (Rome 1971) 23-24; Canosa: "La Magna Grecia nel quadro dell'arte ellenistica," Atti del nono convegno di studi sulla Magna Grecia, Taranto, 5-10 Ottobre, 1969 [Naples 1970] pl. II, Tomb No. 3; Kandyba: W.W. Wurster, "Antike Siedlungen in Lykien," AA 91 (1976) 48. Wurster gives no description of the two-storeyed tomb, but simply mentions its existence

("insbesondere zwei Gräber mit lykischer Inschrift, ein zweigeschossiges Fassadengrab...").

20 Martin (supra, n. 14) 171. For other examples of two-storeyed structures see J.J. Coulton, The Architectural Development of the Greek Stoa (Oxford 1976) especially, 124.

21 If the Philippeion was indeed designed by a Macedonian architect, as S.G. Miller believes. See S.G. Miller, "The Philippeion and Macedonian Hellenistic architecture," Ath Mitt. 88 (1973) 189-218.

22 According to Diodorus Siculus (8.26.8) the Satrap Arrhidaios spent two years constructing the funeral carriage of Alexander. For a detailed study see K.F. Müller, Der Leichenwagen Alexanders des Grossen (Leipzig 1905).

23 The other three are the following: the so-called Kinch Tomb (Kgl. Danske Vidensk. Selsk. Skrifter, 7. Raekke. Hist. og. Fil. Afd. IV. 3. /1920 483); the Lyson and Kallikles Tomb, (Archaeology 37 [1974] 248) and an Ionic tomb discovered in 1971 and reported by Rhomiopoulou (supra n. 6).

24 It should be noted that the site of Aigai has not been located with certainty. See M.G. Daux, "Aigeai site des tombes royales de la Macédoine antique," CRAI (Nov.-Dec. 1977) 620-630.

25 Ceka, 167-217.

26 The numbering follows the order of discovery of these tombs given by Ceka.

27 Ceka, 176-- Although rosettes do not appear in the published drawings of this tomb; compare text, 176 with pl. IX (p. 208).

28 For Thracian helmet types see B. Schröder, "Thrakische Helme," Jdl 27 (1912) 317-344.

29 Ceka, 181, n. 13.

30 Heuzey-Daumet, 261.

31 For further bibliography see Ceka, 190.

32 L. Rey "Fouilles de la Mission Francaise à Apollonie d'Illyrie (1931-32)." Albania (1935 No. 5) 47-48.

33 Rey (supra n. 32) 48.

34 See Rhomaios (supra n. 7).

35 For fuller bibliography see, F.T. Bertocchi, La pittura funeraria Apula (Naples 1964) 30 n. 1 and 16.

36 H. Nachod, "Gräber in Canosa," RömMitt 29 (1914) 279.

37 See B. Bonucci, "Viaggi nella terra di Bari," Poliorama Pittorico 15 (1854) 186 and E. Gerhard, "Gräber zu Canosa," AZ 15 (1857) 57-58.

38 It would seem that Bonucci in his detailed drawing of the façade represented its actual state of preservation, while Gerhard shows a graphic reconstruction of the tomb.

39 Recent excavations in south Italy have revealed more and more chamber tombs with columns flanking the entrance, but not necessarily with a pedimental top. In Taranto on the Via Polibio a row of chamber tombs came to light, in which the front has columns, (see JHS [1970] 42 fig. 19).

Particularly interesting is the façade of a chamber tomb found in Salapia (fig. A); the two Ionic half-columns flanking the entrance are fluted; in the centre of the sagging cushion of the capitals there are rosettes recalling Hellenistic rock-cut examples in Illyria (Albania). See E.M. De Iuliis, "Ricerche ad Arpi e Salapia," Economia e Società nella Magna Grecia [Taranto 1972] 333.

40 For the capitals see Nachod (supra n. 36) fig. 16-17.

41 See for instance, Demus-Quatember, EtGrab pls. 13, 30.

42 Bertocchi (supra n. 35) 22.

43 Diod. Sic. 29.10.1; Livy 9.10.1.

44 Rosi (1924-25) 49; Bianchi-Bandinelli, Sovana 76-86; Boethius-Ward-Perkins, 36, 45. The name of the tomb is due to Rosi, "It is my desire that this nameless ruin should perpetuate the memory of the dead city's most illustrious son - the monk Hildebrand who became Pope Gregory VII," Rosi, (1924-25) 49 n. 1.

45 For other examples of carved heads in capitals see Bianchi-Bandinelli, Sovana 89-92.

46 The entire superstructure above the column tops came to a height of 2.15m, while the colonnaded section measured 4.30m.

47 For bibliography and further information on these temples consult F. Castagnoli, "Peripteros sine portico," Röm Mitt 62 (1955) 139-143.

48 Bianchi-Bandinelli, Sovana 80; see also Vit. 4.7.

49 M. Bizzarri-C. Curri, Magica Etruria (Florence 1968)

161.

50 Andronicos, 26.

51 Bianchi-Bandinelli, Sovana 84.

52 Bianchi-Bandinelli, Sovana 84.

53 See J.P. Oleson's article, "The source and mechanics of non-Italian influence on later Etruscan tomb design," Archaeological News 5 (1976) 115-123, who through funerary architecture and literary evidence tries to show direct connections between cities of Asia Minor and Etruria.

54 Although the problem of the "Altar of Domitius Ahenobarbus" falls beyond the scope of this study, it should be noted that the interpretation of this monument proposed by G. Hafner, "Zwei frühe römische Opferbilder," Aachener Kunstblätter 45 (1974) 17-48, again implies the existence in Rome of some architectural influence of commemorative monuments in the Eastern Mediterranean; and Asia Minor is an obvious source for the sort of prototype Hafner has in mind.

55 Bianchi-Bandinelli, Sovana 74-76.

56 G. Dennis, The Cities and Cemeteries of Etruria v. 1 (London 1907) 289; see also Rosi (1924-25) 42; and M. Demus-Quatember, "Die Tomben mit Tempelfassade in der Nekropole von Norchia," Ojh 40-42 (1953-55) 108.

57 The same design of kyma leaves appears for instance on a sarcophagus from Clusium; see H.H. Scullard, The

Etruscan Cities and Rome (London 1967) fig. 74.

58 There were 17 heads in the west frieze, while the east had only 11.

59 The western half of the pediment is in the Museo Archeologico in Florence.

60 See Rosi (1924-25), 46 and Demus-Quatember (supra n. 56) 111.

61 Demus-Quatember (supra n. 56) 114.

62 Rosi (1924-25), 38-42.

63 Rosi's reconstruction (1924-25) fig. 34 seems to be correct in its main outlines. The results of the new excavations carried out on the site in the mid-seventies are not available yet. (See Oleson [supra n. 53] 123 n. 10).

64 See von Gall, Felsgräber 82. It may be a mere coincidence, however, that there are other very similar solutions shared by the Paphlagonian and Etruscan tombs, see von Gall's pl. 8.

65 Rosi (1924-25), 41.

66 Bianchi-Bandinelli, Sovana 74.

67 See for example a late fourth century terracotta model of a two-storeyed staged building; J. Bethe, "Die hellenistischen Bühnen und ihre Decorationen," Jdl 15 (1900) 61, fig. 2.

68 See H. Koch, "Hellenistische Architekturstücke in Capua," RömMitt 22 (1907) 407.

69 Stucchi, 40.

70 Other examples of two-storeyed columnar treatment are discussed in connection with the Lefkadia Great Tomb; see above, 256-257.

71 J.R. Pacho, Relation d'un Voyage dans la Marmarique, la Cyrénaïque 2 vols. (Paris 1827) plts. XLV, XLVI; Cassels, 7, 16-17; Stucchi, 81. There were two other tombs in Cyrene, now completely destroyed, of analogous design to N 180; see Stucchi, 81 n. 4.

72 Cassels, (17) restores "above the entablature more steps" not indicating whether they formed a pyramid or not, but the assumption is such, as has been suggested by Stucchi.

73 G.V. Gentili, "Resti di un grande mausoleo ellenistico a Siracusa," Archivio Storico Siracusano 23-24 (1967-68) 25.

74 Stucchi, 95, 139.

75 Stucchi, 176.

76 Adriani, Repertorio 146 notes: "La località è nota anche col nome di Mafrusa, donche la doppia denominazione con la quale la tomba è citata nella letteratura archeologica, di ipogeo di Suq-el-Wardiyan o di Mafrusa." However, if one wishes to distinguish the two, Wardian is the western section of the district.

77 A. Adriani, Lezioni sull'arte Alessandrina (Naples 1972) 122.

78 A detailed account of the hypogeum is given by H. Thiersch, Zwei antike Grabanlagen bei Alexandria (Berlin

1904) 6.

79 For the possible location of Alexander's Mausoleum see P. Bernhard, "Topographie d'Alexandrie: le Tombeaux d'Alexandre et le Mausolée d'Auguste," BCH 80-81 (1956-57) 129-156; full bibliography in P.M. Fraser, Ptolemaic Alexandria I. (Oxford 1972) 15 with notes.

80 E. Breccia, La Necropoli di Sciatbi (Cairò 1922); I. Noshy, The Arts in Ptolemaic Egypt (London 1937) 30; M. Lyttelton, Baroque Architecture in Classical Antiquity (London 1974) 41-42.

81 Noshy (supra n. 80) remarks that "The Doric half columns decorating the vestibule are identical with the columns of Arsinoe's chapel." See also, H.H. Büsing, Die griechische Halbsäule (Wiesbaden 1970) 59 and 78 "Tempel der Arsinoe."

82 Excavated and published by A. Adriani, Annuaire du Musee greco-romain 1933-35 (Alexandrie 1936); see also his Lezioni (supra.n. 77) 115.

83 Stylistically comparable to the large frieze on the façade of the Lefkadia Great Tomb and to the horseman in the so-called Kinch Tomb near Lefkadia.

84 Tholos representations in a similar funeral context appeared on wall paintings in the Graeco-Agyptian cemetery at Hermopolis. For pictures see S. Gabra, "New Proof of Greek Influence in Ptolemaic Egypt," Illustrated London News (Apr. 21, 1934).

85 H. Kähler, Der grosse Fries von Pergamon (Berlin 1948) 173 n. 69. The author dates the painted panel to the third quarter of the third century.

86 H. Lauter, "Ptolemäis in Libyen, ein Beitrag zur Baukunst Alexandrias," Jdl 86 (1971) 149. On p. 153 Lauter refers to the anta capitals of the kline chamber (oecus No. 10): "in der unvegetabilischen Bildung seiner Helices erinnert es noch an Kapitelle des frühen 3. Jahrhunderts."

87 For Cyprus see, K. Nicolaou, Ancient Monuments of Cyprus (Nicosia, 1968) 23 pl. 22-23; for Cyrene, Stucchi, 151-160.

88 There is one small scale entirely rock-cut Albanian tomb at Pogredac, mentioned above, 259, where the simple, undecorated front of the actual burial place is preceded by a miniature auditorium. In general, however, only the scaenae frons seems to have been reproduced in funerary architecture.

89 Adriani (supra n. 77) 117.

90 See Thiersch (supra n. 78) 1.

91 For Anfushi see Adriani, Repertorio 191-194.

92 These segmental pediments are generally dated late in the Ptolemaic period; see Lyttelton (supra n. 80) 46-47.

93 For Mafrusa see Adriani, Repertorio 146-147.

94 For Wardian see H. Riad, "Quatre tombeaux de la necropole ouest d'Alexandrie," Société Archéologique d'Alexandrie, Bulletin 42 (1967) 82-89 (Tomb No. 1).

95 A major study of the Pharos and its related monuments was published by H. Thiersch, Pharos, Antike, Islam und Occident (Leipzig and Berlin 1909); see also Fraser (supra n. 79) 17-20 with further bibliography.

96 See Fraser (supra n. 79) 17.

97 A. Adriani, Annuaire du Musée Gréco-Romain 3 (1940-1950) 133. The tower was restored in 1937-39, and is still standing to a height of appr. 20m.

98 One of the earliest known combinations of a sailor's landmark (perhaps a lighthouse) with a memorial comes from the late sixth or early fifth century. An epigram from Thasos refers to the twofold purpose of the tower: "I am the memorial of Akeratos, son of Ph...erides, and I lie at the roadstead's utmost point bringing safety to ships and to sailors: so farewell." (M.N. Tod-J. Baker-Penoyre, "Thasos," JHS 29 [1909] 96). Knidos on the Asia Minor coast had a number of tower-like funerary monuments, that could have had a double purpose. Newton, (Discoveries 502) notes that besides being tombs: "they may have served as a chain of watchtowers, and for communication signals." The same might have been the case with the Limyra Heroon, as noted above.

99 A. di Vita, "Il Mausoleo Punico-Ellenistico 'B' di Sabratha," RömMitt 86 (1976) 273. The monument was reconstructed in 1970.

100 C. Poinssot-J.W. Salomonson suggests that Phoenicio-Cypriot (called by them "Aeolic") capitals had been introduced

to Carthage via Cyprus in the fifth or early fourth century; see "Un monument Punique inconnue: le mausollé d'Henchir Djaouf," Oud. Méd. 44 (1963) 82.

101 One relief shows Beş with lions, the other Hercules slaying the Nemean lion, while the third has several figures of uncertain meaning.

102 C. Poinssot, Les Ruines de Dougga (Tunis 1958) 58-61. For the revision of the date to the middle of the second century see Poinssot-Salomonson (supra n. 100) 71. The tomb was restored in 1908-10.

103 Poinssot-Salomonson (supra n. 100) 70 note that the identity of the owner remains questionable. The bilingual inscription removed from the monument in 1842 is not fully preserved, therefore the association of the tomb with Ateban is conjectural only.

104 The socle measures 9.14m, per side, the first storey 6.72m, the second 4.79m, the third 3.04m.

105 C.H. Kraeling, Ptolemais (Chicago 1962) 113; Stucchi, 178.

106 L. Crema, L'Architettura Romana (Torino 1959) 273 considers them to be the forerunners of composite capitals.

107 P. Marconi, Agrigento (Florence 1929) 124.

108 The "Souma" at Khorub can be added to the above group of tombs that have features analogous to the Tomb of Theron; note especially the false doors of the second storey (Poinssot-Salomonson [supra n. 99] fig. 670). Here could be

mentioned the so-called Tower of the Scipios in Spain near Tarragona. Typologically this structure is closely related both to the Tomb of Theron and the Punic monuments, but somewhat later in date. (See Th. Hauschild-J.M. Bigorra-H.G. Niemeyer, "Torre de los Escipiones, ein römischer Grabturm bei Tarragona," Madr Mitt. 7 (1966) 162).

109 M.G. Camps, "Nouvelles observations sur l'architecture et l'age du Medracen, mausolée royale de Numidie," CRAI (Oct. 1973) 470.

110 M. Christofle, "Le Tombeau de la Chrétienne," Arts et Metiers Graphiques (Paris 1951); Lawrence, 189.

111 H. Rolland, "Le Mausolée de Glanum," 21st supplement to Gallia (Paris 1969) 79-84 with further bibliography.

112 P. Bernard, "Fouilles d'ai Khanoum," CRAI (Apr.-Jun. 1975) 180-189; H.P. Francfort and J.C. Liger, "Fouilles d'ai Khanoum: campagne de 1974," BEFEO 63 (1976) 25-39.

113 Francfort-Liger (supra n. 112) 36 n. 4.

114 Francfort-Liger (supra n. 112) 38.

CHAPTER VI

TECHNICAL ASPECTS OF TOMB-TYPES AND ROOF CONSTRUCTION

I. Tumuli

Tumulus burials, the dominant form before the fifth century, were unimpressive structures from the architectural point of view, even when gigantic in scale. Their exteriors conveyed no specific "messages," such as could be derived, for example, from the exterior of the Nereid Monument. At the same time, while the interiors of tumuli and underground tombs might be spacious and elaborate, and might contain a rich collection of furnishings, these interiors remained hidden from mortal eyes after the burial had been completed.

Tumuli have a long history that goes back well into the Bronze Age. In certain regions the tradition of tumulus burials was so widespread and firmly rooted, that such burials were preferred even in Hellenistic times, e.g. in Macedonia and Thrace. The Macedonians retained unchanged the exterior form of the tumulus, as a "protecting cover," concentrating instead on elaborating the façade of the actual burial-chamber, even though this façade was never meant to be seen after the burial. The Macedonian façades seem to have been inspired by examples in Asia Minor, e.g. façade-tombs, in which monumental fronts masked much

smaller burial-chambers. The barrel vaulting of the burial-chambers was probably derived from oriental models, e.g. in Mesopotamia.

The suggestion that the chamber-tombs of Olynthos (datable before 348 B.C.) served as prototypes for the Macedonian series¹ is hardly tenable; the Olynthian tombs are too simple in design and execution to be comparable with those of Macedonia. The Olynthian interiors, painted to imitate marble facing, were probably derived from domestic architecture; in any case such decoration is not peculiar to these tombs or to the Chalkidike region. The fact that the Olynthos tombs were also covered by tumuli is perhaps their strongest link with the Macedonian monuments; both regions were probably following an old, presumably Bronze Age, concept of burial. The same may be said of the chamber tombs of the fifth and fourth centuries on Rhodes (at Pontamo) and Aigina, or of the corbel-vaulted interiors of some Thessalian tombs, e.g. at Pharsalos and Krannon. All of these monuments are of simple design, and lack elaborate architectural façades; though they do have a dromos of varying length and sometimes stepped in front of the entrance to the burial chamber.²

In connection with the "hidden" façades of Hellenistic Macedonia, it is interesting to note that, with a few exceptions, such as the Palatitza Tomb³ or the newly discovered Doric Tomb at Vergina, the overwhelming majority of the known examples were crowned by a pediment.⁴ It may well be that

there was some special significance attached to the pediment, since it occurs even in two-storeyed façades such as that of Lefkadia, the design of which cannot have been derived from temples. In this connection it is interesting to recall that the pediment (fastigium) over the house of Julius Caesar was regarded by Cicero as a great mark of distinction, almost a sign of heroization: "What greater honour had he obtained than to have a couch, an image, a pediment to his house, a flamen?"⁵ Perhaps in the Hellenistic world of the Eastern Mediterranean a similar significance was sometimes attached to pedimental façades, even in two-storeyed designs, e.g. in the propylon of the Athena precinct at Pergamon.⁶

II. True Arches and Vaults

For roofing the chambers of Macedonian tombs constructed between the later fourth century and 146 B.C., barrel vaulting was the preferred technique. Perhaps the earliest example of a barrel vault, not only in Macedonia, but anywhere in the Greek world east of the Adriatic, comes²¹ from the recently (1977) discovered Doric Tomb at Vergina, if one accepts the thesis of the excavator,⁷ that it was the tomb of Philip II, and is thus datable to the third quarter of the fourth century.

The widespread use of the true arch in Macedonia should not be surprising; as already noted, Macedonian military engineers brought the knowledge of this technique with them

when they returned to the west from their eastern campaigns. In the Aegean world early examples of barrel-vaulting seem to be restricted to tombs, gate-openings and passageways, and drainage systems.⁸ Only after an initial period of experimentation, in which the technical aspects of vaulting became better known, did it find a more widespread acceptance; and even then arches and vaults never replaced the columnar orders on monumental façades. Besides the Macedonians, Pergamene architects seem to have been among the first to use barrel vaulting more widely. Actually one of the extant Pergamene tumuli employs the principle of intersecting cross-vaulting⁹ (fig. 170). The stones of the barrel vaults meeting at the same level were cut so as to conform to the curves of the jointed vaults. This vault is probably of Augustan date; but the intersecting vaults found in the theatre at Alinda in Karia probably date from the time of Pergamene control during the second century.¹⁰

To employ the new technique extensively the traditional Greek post-and-lintel system would have required extensive modifications, that would have required a considerable length of time.¹¹ However, in funerary architecture, especially in the case of tumuli and underground tombs, barrel vaulting was relatively widespread by the third century. Thus the new technique was certainly regarded as an alternative to more traditional methods of roof-construction, at least in these types of grave monument.

III. Corbel Vaulting

In the north-eastern frontier-regions of the Greek world, e.g. as Thrace, the Kimmerian Bosphorus and northern Anatolia, tumulus burials remained the dominating form of monumental funerary architecture throughout the Hellenistic period. It has been estimated that in Thracian territory alone, there are 15000 tumuli,¹² a large number of them of Hellenistic date.

The Thracian tribes, like the Scythians, must have profited a good deal from trade with the Greeks; and their new-found wealth was spent among other things, on more sumptuous burials for their chieftains. Thracian tombs lacked ornamental façades, although their interiors might be very richly painted, as can be seen in the well preserved decoration of the early third century Kazanlik tomb in present day Bulgaria.¹³ The technical execution of the domed tomb chamber at Kazanlik (and in others in the surrounding region) is notable for the use of baked bricks. The bricks for the domed chambers were made in special moulds that were segments of circles; those used in the antechamber were rectangular. Outside this single course of corbelled bricks the structure was strengthened by a string of stones set in mortar, upon which the earth was piled (fig. 171). This form of a "layered" tumulus is not unlike some of the great mounds in the Gordion region of central Anatolia, where, however, timber was used extensively for the actual

tomb chamber(s).

As Hoddinott states, the source of the unique technique of construction found in Thrace cannot be determined exactly, but it should perhaps be sought in the south-eastern Mediterranean: "The origin of the craftsmen with the skill not only of brick-making but of building circular domed chambers is, as is their fate, an unsolved mystery. Perhaps a consequential benefit of Seuthes' relationship with Antigonos was a visit from Greco-Syrian craftsmen who took their secret with them when they departed or died."¹⁴

Corbelling had been extensively employed in tomb-chambers, both above and below ground-level, from archaic times onward, and continued to be used by Hellenistic architects. This technique could be adopted to any form of ground plan, whether round, square or rectangular. The Lion Tomb at Knidos, many of the "Lelegian" tombs in Karia,¹⁵ the Mausoleum at Halikarnassos, most of the Thracian tombs, the kourgans of the fifth to the third century in the Kimmerian Bosphorus¹⁶ (Ukraine) and many archaic (seventh-sixth century) Etruscan tombs, e.g. in the necropoleis at Populonia (San Cerbone), Cortona (fig. 172) and Caere, all made use of corbel vaulting.¹⁷

Most of the kourgans lie in the vicinity of ancient Pantikapaion (Kerch), but some have been found on the Taman peninsula and near Anapa. Immediately north-east of the region of the Kimmerian Bosphorus a flourishing tradition of

timber construction, with burials in which a tumulus was erected over a simple wooden chamber¹⁸ (fig. 173), had existed from about 1800 B.C. onward. However, the inspiration, at least, for the cut limestone tomb chambers of the kourgans, came from the West.¹⁹ The remains of one of the most important mounds, the "Gold Kourgan," are located near Pantikapaion. The mound, elliptical in plan (E-W: 88m, N-S 67m), rose to a height of 15-16m; the circumference measured 265m. Inside, three separate tomb-chambers were found, two rectangular and one circular. The latter is a unique example of the circular plan in this region; it measured 6.30m in diameter and 11m in height, and was approached by a dromos, 18m long, 2.22m wide and 6.80m high.²⁰ The exceptional height of the dromos is due to the fact that the corbel vault started ca. 3m above the floor, and stepped gradually inward, toward the top (fig. 174). Interestingly enough, the floor of the circular chamber was at a much lower level than that of the dromos and entrance way.

The circular chamber has been dated to the late fourth century. The other two, also corbel-vaulted rooms but of rectangular plan, are considered to be somewhat earlier. It has been assumed, probably correctly, that each of the earlier burials originally had its own separate mound, and that the large tumulus covering both of them and the circular chamber was erected only at the time that this chamber (undoubtedly of royal origin) was built. At the

same time, the entire complex was enclosed by a large retaining wall of huge "cyclopean," or polygonal blocks; this retaining wall is unique among the kourgans.²¹

Gajdukevic rightly states that the form of the circular tomb must have originated outside the region: "Die Idee von Komposition und Konstruktion ist ganz offensichtlich von auswärts importiert, vielleicht aus Thrakien, wo runde Grabmäler (Tholoi) seit der ersten Hälfte des 4. Jahrhunderts v.u. Z. weit verbreitet waren."²²

Even more intriguing is the design of another huge tumulus tomb, located some 4km northeast of Pantikapaion, and known as the Czarskij Kourgan or Royal Kourgan.²³ Like the Gold Kourgan, this mound was excavated in the thirties of the last century. Its height reached ca. 17m, the circumference ca. 250m. The dromos is 36m long; for the last 20m in front of the entrance to the chamber it was covered by a corbel vault 2.80m wide and 7.14m high. The corridor was faced with beautifully fitted dry-stone masonry; the blocks had a rusticated panel surrounded by smoothly drafted margins (fig. 175). This sophisticated masonry was probably intended to increase the impressiveness and monumentality of the design. The tomb chamber is virtually square (4.22 x 4.37m), but was covered by a corbelled dome. Unlike Mycenaean corbel domes, in which the corbelling begins at floor level, in the Royal Kourgan the vertical face of the wall is clearly set off from the springing of the corbelling.

The problem of erecting a circular dome over a square floor-plan was ingeniously solved. Starting with the fifth course from the bottom, the corners of the chamber have blocks, set diagonally, so that each course slightly overlaps the one below, until a complete circle is formed at the level of the tenth course (fig. 176). The next thirteen courses are corbelled inward to form a conical roof, the apex of the cone rising 8.73m above the floor.

The Royal Kourgan, like most of the others, can be dated in the second half of the fourth century, i.e. in the most prosperous period in the history of the Kimmerian Bosphorus; it was perhaps the burial place of one of the two most venerated kings of the region, Leukon I or Parisades I, who according to Strabo "...were called tyrants, although most of them, beginning with Parisades and Leuco, proved to be equitable rulers. And Parisades was actually held in honour as god ..."²⁴

The roof of the chamber of the Royal Kourgan is designed to carry a great load, and represents a technique of construction, the possibilities of which were not realized until Byzantine times, when pendentives of brick began to be widely employed in the Mediterranean area. Curiously enough, prior to the building of the Pantikapaion tomb, structures of pendentive type seem to be found only in the peripheral regions of Old Greece. The tombs at Praisos in Crete (Tombs B and E)²⁵ have corner solutions reminiscent of pendentives.

Some of the finds from these tombs can be dated in the geometric period; the actual construction of the tombs might be a couple of centuries earlier. On the island of Thera, two small square tombs with domical roofs, supported on pendentive-like corner projections have been found.²⁶ Similar constructions existed at Assarlik in Karia; these were even simpler in character, for "the consequent difficulty of roofing (was) met by the simple device of bracketing out the last few courses of the wall, and laying the roof slabs across the narrower opening which is thus left."²⁷ Especially close to the pendentives of the Royal Kourgan is a chamber tomb discovered near Populonia at S. Cerbone (fig. 177).²⁸ However, the technical execution of the "pendentives" in the corners of the S. Cerbone tomb is less refined; the rough character may have been due to the early date (around 600 B.C.).

Closely related to the above examples of corbel vaulting, but without pendentives, are a large number of Hellenistic tombs in the eastern Mediterranean. In these tombs the blocks of the ceiling narrowed gradually in an overlapping fashion from the four sides, till the opening could be closed without difficulty. A good example of such construction above ground occurs in a tomb of the early first-century B.C. near Olba-Diocaesarea. In south Russia the majority of the smaller tombs have similar pyramid-like roofs, though entirely underground. In most cases the top of

the false vault was closed by a large slab. The well-preserved Melek-Çesme kourgan is an important example of the type.²⁹ The mound itself is almost 8m high and 200m in circumference. The roughly quadrangular tomb chamber (ca. 3.70m) is approached by a dromos, 9m long and ca. 13.5m wide. The corbel vault starts above the fifth course and consists of seven courses (fig. 178), narrowing in the manner described above, until the opening could be closed by a wedge-shaped slab; this solution recalls some of the less sophisticated archaic Etruscan tombs, e.g. at Caere.³⁰ On the basis of the red-figured pottery found in the Melek-Çesme kourgan, the burial has been dated not later than the second half of the fourth century.

IV. Lantern, or "Diagonal," Roofing

During the Hellenistic period the lantern, or "diagonal" roof³¹ was especially popular in Thrace, and in tombs erected in Galatia from the late fourth century onward. This type of roof is made up of long flat slabs forming a series of superimposed "frames" of more or less square shape; the slabs of each "frame" were laid diagonally across the corners of the "frame" below. The squares gradually decreased in ~~size~~ from one course to the next, until the remaining opening was small enough to be closed without difficulty. The origins of this technique are to be sought in timber construction. For instance, lantern roofs of wood have been used in Afghanistan

down to the present.³²

Good early examples of the lantern roof have been found in Bulgaria. The Kurt-Kale tomb in the Mezek region, dated to the late fourth or early third century, is a well preserved specimen of the type.³³ The tumulus contained two chambers without dromos. A rectangular antechamber, 2.00 x 2.60m preceded the larger circular room, covered by a false dome 3.57m in diameter and 3.45m in height; this circular room was the burial chamber. The antechamber has a lantern ceiling of four superimposed frames as described above (fig. 179 a and b).

Also from Bulgaria is the Filibe tomb near Plovdiv,³⁴ in which the same type of roof appears in a tomb that has only a single chamber (fig. 180); the masonry of the walls is pseudo-isodomic. The lantern roof, the pseudo-isodomic masonry, and the size and shape of the chamber all suggest some connection between this Bulgarian tomb and a number of examples in Turkey. Some at least of the diagonally roofed Anatolian tombs were presumably erected by people of the same stock as the builders of the Bulgarian examples; probably these people were the Galatians, who could have brought this type of roof from Thrace to Asia Minor. In Western Asia Minor the lantern roof appears in the vestibule of the rather puzzling tumulus at Belevi.³⁵ There is also an example, rare for the region in question, in a side-room of the rock-cut Gerdek Boğazi tomb at Karakoyunlu in Paphlagonia.³⁶ Also

interesting, although much later, is the lantern roof of the freestanding Gümüş Teken tomb at Mylasa in Karia (fig. 189 a and b).³⁷ This tomb, built in the second century A.D. consists of a podium surmounted by an open pavilion with pilasters at the corners; it has often been compared with the Halikarnassian Mausoleum.

In Asia Minor Hellenistic examples of single chambers covered by a lantern roof come from Gemlik³⁸ (fig. 182) (Kios on the Propontis), where, uniquely, the tomb was built entirely of marble, Mudanya,³⁹ Kepsut,⁴⁰ Iğdir⁴¹ and Hierapolis.⁴² At Belevi (mentioned above), Musahocaköy,⁴³ Gordion⁴⁴ and Karlar⁴⁵ (Tomb C) the tombs have two chambers; however, only the last two have a lantern roof over both chambers.

The Gordion tomb (fig. 183) covered by a small tumulus, was excavated in the nineteen-fifties. A rectangular ante-chamber (2.47 x 1.67m) precedes a square inner room (2.47 x 2.48m). The masonry of the walls is of carefully fitted poros blocks; the lantern roof was built of hard limestone. According to the excavators a specific module, or unit of measurement, occurs repeatedly in this tomb, suggesting "... that the unit of measurement in use in Phrygia in Hellenistic times was a foot of about 0.33m."⁴⁶

Tomb C at Karalar (fig. 184) is one of three roughly contemporary Galatian royal burials found in the area northwest of Ankara. In construction it is related to the Gordian tomb, but is probably somewhat later in date; in one

of the three tombs (though one with a different type of roof) there was found an inscription relating to king Deiotáres II, who died around 40 B.C. This inscription suggests a date in the first century B.C. for all of these closely related burials at Karalar.

In connection with Hellenistic barrel-vaulting we may mention another technique of roofing, that resembled barrel-vaulting in appearance, but was much simpler in execution. Monolithic lunettes were placed above the doorwall and the wall opposite; these lunettes in turn supported the ends of the long wedge shaped stone beams with radially-cut joints, that formed the roof of the chamber. This system of roofing could be used only for chambers of modest size; relatively few examples are known, and the length of the beams seems normally to have been less than three meters. At Hierapolis in Western Asia Minor the technique was used (with rather flat slabs) to roof the chambers of a number of small tumuli⁴⁷ (fig. 185). Curiously enough, the closest parallel for such roofing comes from Italy. The chamber of the so-called Tanella di Pitagora at Cortona⁴⁸ (fig. 186) (2.57 x 2.05m) is roofed with a similar wedge-shaped, but heavier, stone beams set over lunettes. The Hierapolis and Cortona examples also resemble each other in having a stone krepis to support the earth mound above the chambers.

From the point of view of roof construction another Italian tomb at Faggeto⁴⁹ near Perugia can be included here

(fig. 187). According to M.M. Chiari the Faggeto tomb typologically "rientra nel numero esiguo di tombe monumentali con copertura a volta di conci radiali la cui diffusione in Etruria e limitata alle sole Orvieto, Chiusi, Cortona e Perugia."⁵⁰ However, it should be noted that apart from the Cortona (Tanella di Pitagora) and the Faggeto tombs, the others noted by Chiari do not use monoliths to cover the entire span of the burial chamber. In the Faggeto tomb five wedge shaped beams were employed to cover the small chamber (1.26 x 1.12m); because of their relatively modest length they resemble elongated voussoirs. According to Chiari the tomb can be dated before the middle of the second century;⁵¹ the Tanella di Pitagora and the Hierapolis tumuli, because of the analogies of the roof construction may date from about the same period. Schneider Equini, in a recent study of the Hierapolis tumuli, has suggested a date in the first century B.C.;⁵² however, we know that the city was under strong Pergame influence by the time of Eumenes II (197-159 B.C.), and one would expect the earliest burial monuments, erected in the second century to follow the Pergamene custom of tumulus burials.

VI

NOTES

1 For such a suggestion see, Kurtz-Boardman, 193-194.

2 Rhodes (Pontamo), Clara Rhodos II, 118; Aigina, G. Welter, Aigina (Berlin 1938) 57; Krannon, V. Milojcic, "Ausgrabungen in Thessalien, Herbst 1959," AA 75 (1960) 176.

3 For Palatitza see Heuzey-Daumet, pl. 15.

4 It should be noted that few of the extant Macedonian tombs have been published in detail. Dr. Petsas knows of the existence of around 100 Macedonian tombs; yet many of these tombs have never even been mentioned in the literature. Thus the number of façades without pediments is not known exactly. If the two tombs at Vergina are the only examples without a pediment we cannot help wondering why these, and only these, lacked a feature that is invariably found in other examples.

5 Cicero, Philippics 2.43. See also his Orations 3.46.

6 Pedimental theatre-façades, e.g. in the terracotta model in Naples and in the generally accepted restoration of Segesta, may be derived from tombs, though the latter is less likely. Here one might mention the traditional restoration of the Thersilion at Megalopolis with a pediment.

The problem is that we cannot be sure whether the pediment has the same significance for Greeks as for Romans. See also A. Alföldi, "Die Ausgestaltung des monarchischen Zeremoniells am römischen Kaiserhofe," Röm Mitt 49-50 (1934-35) 1-118:

7 Andronicos, Maced Tomb 76.

8 See T.D. Boyd, "The Arch and the Vault in Greek Architecture," AJA 82 (1978) 83-100. Unfortunately little is known of Macedonian architecture. Consequently it cannot be stated whether barrel vaulting existed in Macedonian palatial or domestic buildings.

9 Lawrence, 229.

10 Boyd (supra n. 8) 96, fig. 12.

11 The situation with regard to vaulting is comparable with that resulting from the introduction of concrete in ancient architecture. In Italy this material was known for several centuries before its potential in different types of structure was fully appreciated.

12 Hoddinott, 28.

13 G. Tsanova and L. Getov, Trakiskata Grobnitsa pri Kazanluk (Sofia 1970).

14 Hoddinott, 98.

15 W. Radt, "Die Leleger auf der Halbinsel von Halikarnassos," Antike Welt 6 (1975/3) 3-16.

16 Gajdukevic, 256-302.

17 For a concise study on the development of arches in

Italy see G. Lugli, "Considerazioni sull'origine dell'arco a conci radiali," Palladio 2 (1952) 9-31, especially figs. 17-30.

18 M. Gimbutas, "Timber-Graves in southern Russia," Expedition 3 (1961) 14-22. The arrangement recalls some of the wooden chambers in the Gordion region, but in Anatolia the chambers were much more complex and later in date than those of south Russia.

19 In connection with the "timber" cultures it may be noted that Scythian nobles employed a type of burial that remained unchanged from about the eighth century on. Minns, 194 and some present-day East European archaeologists believe that the kourgans evolved from rather simple local constructions in wood. However, this theory does not seem tenable. Among other arguments against it is the fact that in Lycia and elsewhere, the change from wooden to stone architecture regularly left recognizable timber forms "petrified" in the stone, even when the stone structures were modified and adjusted to the technical requirements of the new medium. In the stone chambers of the kourgans, on the other hand, there are no such reminiscences of wooden prototypes; the stone chambers appeared rather suddenly, and in a developed form, without evidence of previous experimentation in the medium.

The dates assigned to the kourgans by Russian archaeologists are generally accepted and used, although we

cannot check their accuracy.

20 The earliest comprehensive report on the Gold Kourgan appeared in K. Neumann, Die Hellenen im Skythenlande (Berlin 1855) 498. For more up-to-date publications see Gajdukevic, 270 n. 36.

21 The Vergina tumulus still under excavation by Andronicos also contained at least three separate burials, of which the largest, noted above, is said to be that of Philip II. The situation is by and large comparable to that found in the Gold Kourgan; and it is quite possible that a member of the Macedonian royal house (Antigonos Gonatas [?]) decided to cover all three of the Vergina burials by a common earth mound.

22 Gajdukevic, 271.

23 J. Durm, "Die Kuppelgräber von Pantikapaion," Öjh 10 (1907) 230-242. See also Gajdukevic, 271.

24 Strabo, Geog. 7.7.4.

25 R.C. Bosanquet, "Excavations at Praesos I," BSA 8 (1901-1902) 231-270.

26 Thera II, 94, 98.

27 W.R. Paton and J.L. Myres, "Karian Sites and Inscriptions II," JHS 16 (1896) 245.

28 Åkerström, 154. For a special study dealing mostly with Etruscan tombs that have domes over square ground-plans, see J. Fink, Die Kuppel über dem Viereck (Munich 1958).

29 Durm (supra n. 23) 241, and Gajdukevic, 273.

30 Lugli (supra n. 17) 10.

31 M.J. Mellink, "Archaeology in Asia Minor," AJA 71 (1967) 173 calls the technique "Galatian corbeled roof."

32 A. von le Coq, Auf Hellas Spuren in Ostturkistan (Leipzig 1926) 79; MCG. Brambilla, "Tipi di Case Contadine Armene," Palladio 23-24 (1974-76) 197-212.

33 B. Filov, "The Bee-Hive Tombs of Mezek," Antiquity 11 (1937) 303; see also Hoddinott, 344, and A.M. Mansel, "Trakya Kirkklarelei, Kubeli Mezarlari (Die Kuppelgräber von Kirkklarelei in Thrakien)," Belleten 6 (1943) 37.

34 L. Botusarova and V. Kolarova, "Le tombeau à coupole des environs de Plovdiv," Studia in Memoriam K. Skorpil (Sofia 1961) 279.

35 H. Vetters, "Ephesos," Öst. Archaeol. Inst Grabungen (1971-72) 41-46.

36 See above, 117

37 Akurgal, Ruins 248.

38 See A.M. Mansel, "Gemlik Tümülüs Mezari," Belleten 38 (1974) 181-189; with an extensive bibliography, relating to the subject in general.

39 E. Mamboury, "Das Grabmal von Mudanya," Atti del I. Congresso Internazionale di Preistoria e Protoistoria Mediterranea (1952) 472.

40 Mansel (supra n. 39) 187.

41 D. Tokgöz, "İğdire Tümülüs Kazisi Raporu," Türk Ark Derg 22-23 (1975-76) 151-153.

42 E. Schneider Equini, "La Necropoli di Hierapolis di Frigia," Mon Ant 48 (1972) 132.

43 M.J. Mellink, "Archaeology in Asia Minor," AJA 67 (1963) 189.

44 R.S. Young, "The Campaign of 1955 at Gordion: Preliminary Report," AJA 60 (1956) 250-252.

45 Lawrence, 230.

46 Young (supra n. 45) 251.

47 Schneider Equini (supra n. 43) 127.

48 M. Demus-Quatember, "Zur Konstruktionweise der 'Tomba di Pitagora' bei Cortona," Palladio 7-8 (1957-58) 49-51 and "Zur Tomba di Pitagora (Nachtrag)" 193. See also J.P. Oleson, "The Galeotti Tomb at Chiusi; The Construction Techniques of the Etruscan Barrel-Vaulted Tombs," StEtr 44 (1976) 69-85.

49 M.M. Chiari, "La Tomba del Faggeto in Territorio Perugino. Contributo allo studio dell'architettura funeraria con volta a botte in Etruria," Quaderni dell'Istituto di Archeologia dell'Università di Perugia 3 (1975) 25-37, where examples analogous to the Faggeto tombs are discussed.

50 Chiari (supra n. 50) 25.

51 Chiari (supra n. 50) 39.

52 Schneider Equini (supra n. 43) 113-129.

CHAPTER VII

THE RELATIONSHIP OF MONUMENTAL SARCOPHAGI, THOLOI, AND OTHER BUILDINGS TO MONUMENTAL TOMBS

I. Monumental Sarcophagi

The tendency to monumentalize sarcophagi by the addition of architectural elements from large-scale buildings, both sacred and secular, has a long history. The idea, as Rodenwaldt has noted, existed centuries before the first Greek examples were created; "monumentale Steinsarkophage gab es vor der archaischen Epoche Griechenlands in Ägypten, in Assyrien und in Phönikien."¹ Sarcophagi, like monumental tombs, might imitate many architectural forms. Altars, houses, adaptations of temple forms and sometimes a mixture of elements from different sources are evident in the design of sarcophagi. From our present point of view sarcophagi with columnar treatment, or those imitating in some degree the fourth-century "temple tombs" on podia, are of special interest, though the Klazomenian series of sarcophagi must also be mentioned briefly.

The earliest known example of a Greek sarcophagus with applied architectural decoration comes from the island of Samos.² The sarcophagus, measuring 2.10m in length, 0.92m in width and 1.00m in height including its lid (fig. 188),

is made entirely of bluish marble. The form is that of a chest with a gabled lid. The exterior shows engaged Ionic pilasters in low relief three on the long sides, two each on the ends. On the long sides the architectural members are enclosed by a frame of flat carved bands, a feature probably borrowed from the design of wooden sarcophagi. Around the lower border of the gabled lid the vertical faces have an incised decoration resembling long vertical kyma leaves; the same motif adorns the "raking cornice" of the pediments. The central and side acroteria were carved to imitate palmettes. The "pseudoperipteral" design of the sarcophagus, with its Ionic pilasters (or columns) and pedimental roof, seems to have been inspired by local monumental architecture, such as the famous Rhoikos Temple designed around 570-60 B.C.³

On the west coast of Asia Minor similar attempts to monumentalize the designs of sarcophagi occur at Klazomenae and the neighbouring region. The series of Klazomenian sarcophagi starts around the mid-sixth century, probably under Egyptian influence,⁴ and lasts for about 70-80 years.⁵ The material of these sarcophagi was the local reddish clay; extensive painted ornament was applied to the flat top and sides of the "coffin." The earliest of these flat caskets were rectangular but with the passing of time changed to a trapezoidal shape, in order to fit the shape of the human body. According to R.M. Cook, "the strips at head and foot were usually painted with figures, the long sidepieces with

cable and palmette, and panels at each end of the sidepieces with figures or ornaments."⁶

Architectural decoration, whether painted or in relief, is not characteristic of Klazomenian sarcophagi, but is occasionally found. In an example from Izmir⁷ there is a small Ionic column in the centre field under the end of the gabled roof; the column is represented as though it were supporting the curved roof line (fig. 139). Analogous representations of supports under the apex of the pediment are known from earlier rock-monuments in Phrygia,⁸ and the motif can actually be traced back to Hittite times or to designs such as that of the Lion Gate at Mycenae.

It is worth noting that the same motif of a column under the apex of a pediment appears in the western Mediterranean, though as a purely decorative feature. The top of a funerary cippus in the Syracuse museum has the form of a gabled roof with carved roof tiles of Sicilian type.⁹ Beneath the central acroterion of the pediment there is a small engaged fluted column standing on a two-stepped base (fig. 190). The capital is closest to the so-called Aeolic form, with a large palmette springing from the centre where the volutes meet. The rounded top of the palmette is fully developed; obviously it is decorative only and has no supporting function. On either side of the central acroterion a horn-like feature of the type found in earlier Phrygian monuments rises from the top of the raking cornice.

Beneath the rather heavy roof is a Doric triglyph-and-metope frieze (three triglyphs per side); the rest of the cippus below this section is missing. Mainly on the basis of an archaic inscription found on the pedimental section, G.V. Gentili dated this small monument to the middle of the sixth century;¹⁰ this date is in keeping with the style of the architectural features.

Other sixth- and fifth-century sarcophagi with columnar decoration have been found in Sicily. A number of richly painted examples from Gela¹¹ deserve special attention, since architectural ornament was applied to both the interior and the exterior; curiously enough columns appear only on the interior (fig. 191). One of the most impressive sarcophagi in this group has "nel' interno agli angoli quattro svelte colonnine ioniche a nove canellature, sormontate da capitelli angolari, il cui echino ed il tegolino decorati di foglie rosse e bleu."¹² The columns lack bases, and the capitals, above the echinus, are rather abruptly continued in relief rather than in the round. On the exterior of the sarcophagus the only "architectural" decorations are the mouldings at the bottom and top. The sarcophagus is similar in size to the others of the Gela group, measuring 1.85 x 0.67m and 0.78m in height. Some other sarcophagi from Gela are simpler with interior corner columns that lack capitals.¹³ In yet another example, probably of the fifth century, the Ionic columns have both bases and capitals (the bases consist

of two tori enclosing a fillet), but the capitals, interestingly enough, do not perform a supporting function (fig. 192). The concept is analogous to the cippus top from Syracuse, described above; in both cases we have an anticipation of later Hellenistic architectural developments, in which columns often lost their functional load-carrying role, and became more and more ornamental in character.

The origin of the decorative schemes found on these sarcophagi remains a matter of dispute. P. Orsi compared the Gela examples with Klazomenian sarcophagi and stated that "...nei due gruppi la forma e comune probabilmente la origine, tanto degli ionici che dei gelesi dall'arte micenea."¹⁵ Furthermore, he does not exclude the possibility that the more immediate source of inspiration may have been in Asia Minor.¹⁶ Yet there are no known sarcophagi or monumental tombs in archaic Asia Minor with columns placed in the interior of the structures. On the other hand some sixth-century Etruscan chamber tombs, that imitate houses, do have internal supports, e.g. as seen in the Tomb of the Doric Columns at Caere.¹⁷

From the fifth century onward monumental sarcophagi (but not necessarily with columns) became more and more popular, both among the Western Greeks and in Asia Minor. From the necropolis of Montelusa near Akragas comes a monolithic non-columnar sarcophagus, the exterior of which imitates a Doric entablature.¹⁸ The lower half of the

exterior was left undecorated, except for a moulded base; the upper half has a regular Doric frieze course surmounted by a narrow "cornice" section above. Such decorative imitations of Doric entablatures became more elaborate and widespread in Hellenistic times. There are a number of Etruscan sarcophagi¹⁹ of this type; but the best-known example is probably the sarcophagus of Scipio Barbatus, which has Ionic dentils above the Doric frieze.²⁰

In Asia Minor there appeared in the mid-fifth century the first of a series of unique Lycian elevated sarcophagi. These tombs are monumental in form and scale but lack columnar decorations of Greek type; even the use of Greek mouldings or dentils under the ogival roofs is not common. The aim was to reproduce the forms of local timber architecture in a more durable material. As far as architectural ornament, and especially the decorative use of the columnar orders is concerned the completion of the Nereid Monument in the early fourth century had little effect on the typical Lycian sarcophagi, which continued to imitate wooden construction. Perhaps the most readily discernible innovation in the elevated sarcophagi of the fourth century is their large size, greater elevation and the more and more extensive use of relief sculpture (fig. 193).

The representation of the Graeco-Persian columnar sarcophagus, on a stele from Daskyleion,²¹ may be briefly noted. One of the scenes on "Stele No. 1" from this site

shows a funeral procession in which a sarcophagus is placed on a horse-drawn carriage (fig. 194). Along one of the long sides of the sarcophagus are shown three crudely carved Ionic columns, apparently supporting the upper part of the sarcophagus with its ogival roof. Dates from the sixth to the fourth century have been proposed for the stele; the period around 400 B.C. is perhaps the most likely.²² Whether the sarcophagus was designed under the impact of one of the "temple tombs" on a podium is hard to say; in any event it belongs in the same tradition with the Samian sarcophagus discussed above, in which the design is derived from a Greek peripteral structure.

On the other hand the influence of the "temple tombs" on podia is clearly discernible in a number of non-elevated sarcophagi of the fourth century, both in the eastern Mediterranean and elsewhere. These sarcophagi were used as burials in underground chamber tombs.

The sarcophagus of the Mourning Women from the royal necropolis at Sidon²³ is an excellent example of the adaptation of architectural forms of a large-scale monumental tomb to the decoration of a sarcophagus (fig. 195). Here, however, the high podium seen in the Nereid Monument or the Limyra Heroon is reduced to a one-step base, above which follows a Lesbian kyma moulding and a continuous frieze of hunting scenes. The position of the frieze seems to correspond to that of the frieze(s) along the top of the podium on some of

the monumental tombs, e.g. the Mausoleum at Halikarnassos. As in the mid sixth-century Samian sarcophagus, the main, or central, section of the sarcophagus of the Mourning Women has a "peripteral" arrangement, with pilasters at the corners. The engaged columns are small-scale copies of the Attic-Ionic type; in the intercolumniations are eighteen weeping women placed in front of a balustrade between the columns. There is no figure-frieze above the three-fasciae architrave, as in the Mausoleum at Halikarnassos, but only an astragal moulding and a dentil course. The ends of the sarcophagus are crowned by pediments and acroteria. On the long sides the cornice is crowned by a sima embellishment with small lion-heads, as was customary in the large-scale architecture that provided the model for the sarcophagus. Between the pediments, in place of a gable roof there is an "attic" carrying a continuous frieze depicting a funeral procession with mourning male servants at regular intervals. While the mourning or weeping female figures wear a long chiton comparable with the type shown in mid-fourth century Athenian sculptures, the scene on the attic shows carriages of Persian type and long Persian garments. Furthermore, the winged sphinxes of the corner acroteria also betray oriental influence in the otherwise purely Greek decorative forms of the sarcophagus.

On the basis of style the sarcophagus can be assigned to the mid-fourth century. It was presumably the final

resting place of the Pheonician king Straton I, who died around 360 B.C. From historical sources it is known that "he led a life of debauchery surrounded by courtesans imported from the Peloponnese. The eighteen women depicted on the sarcophagus presumably represent those courtesans mourning their lord and master."²⁴

In the so-called Alexander Sarcophagus²⁵ of the late fourth century, the central section of the body of the sarcophagus is filled with relief sculpture (fig. 196). Thus the work is more decorative and less "architectural" in appearance than the Sarcophagus of the Mourning Women. However, V. von Graeve has aptly observed that "wie sich der 'lykische' Sarkophag in der Steilheit des Kastens seinen Vorbildern annähert, so erinnert der Alexandersarkophag in seiner auffallenden Breitenlagerung an die Massverhältnisse eines griechischen Tempels."²⁶ As far as the origins of the actual decorative elements are concerned, the style seems to point to a Peloponnesian rather than an Attic source, such as lay behind the sarcophagus of the Mourning Women. Indeed in the selection and richness of the ornamental features the Alexander Sarcophagus stands quite close to the Tholos at Epidauros.

Among the very few extant Hellenistic wooden sarcophagi is a beautiful example from Pantikapaion.²⁷ It was discovered in 1874 on Mount Mithridates, and has been referred to ever since as the "Niobid Sarcophagus." Along the sides and ends

there are engaged columns; thus the sarcophagus is related to the archaic example from Samos, and even more closely to the sarcophagus of the Mourning Women (fig. 197). The slender Ionic columns stand on a continuous four-stepped base or "podium." There is a balustrade in the lower section of the intercolumniar spaces; the corners are closed by quarter columns engaged in plain pilasters. The treatment of the ends is especially interesting, the "columns stand in front of pilasters with imposts from which arches are turned across."²⁸

In the intercolumniar spaces, above the balustrade, were figures of colored plaster; some of these (a Niobid and a Paidagogos) were found in situ. There is no architrave or frieze (in the traditional sense) above the columns; instead, a number of architectural mouldings form the transition to the dentil course along the top of the sarcophagus. Unfortunately the lid, which perhaps imitated the roof of a temple, was never found.

This wooden sarcophagus was dated by the excavators to the early Hellenistic period. However, the presence of an apparently true arch supported by corner piers, the use of quarter-columns engaged in pilasters as a decorative corner motif, the slender proportions of the columns, and the combination of architectural elements in purely decorative schemes, divorced from their original functional role, all seem to argue against a date earlier than the third century. Perhaps the best basis for dating would be to determine the

earliest appearance of such features in the architecture of the Aegean world and in the Seleucid and Ptolemaic kingdoms, then add 25-30 years to allow for the penetration of the new ideas to the distant northern shores of the Black Sea.

Other wooden sarcophagi from southern Russia too were quite pretentious in design; unfortunately the best preserved examples lack columnar decoration. One example dated in the fourth-century, has panels inlaid with figured scenes³⁰ along the central section of the sarcophagus (fig. 198), i.e. in the position of the continuous frieze on the Alexander Sarcophagus.

Mainland Greece, as already noted, has produced no monumental tombs of the types seen in Asia Minor and elsewhere; it is thus not surprising that there should be no monumental sarcophagi imitating such tombs. However, an unusual example of a sarcophagus-like cist-grave, with "columns" inside, was discovered in 1962 near Volos in Thessaly.³¹ According to the excavator, the grave has seven slabs, "one at each of the 4 sides, one at the bottom and one larger (slab) in 2 pieces at the top" and "looks (like) a sarcophagus." Furthermore, "the surfaces of the slabs are rough outside; inside, they bear an incised decoration of columns supporting friezes."³² The overall workmanship is rather crude and the decorative Ionic "columns" appear to be pilasters in low relief, with incised capitals (fig. 199). The find has been dated to the Hellenistic period, possibly to the third century. The

design may imitate some sort of a monumental building, e.g. the interior of a Hellenistic peristyle court. Yet it seems more likely that the architectural decoration was placed inside simply because the "exterior" was not intended to be seen at all. It seems also possible that the arrangement imitated in a simplified form interiors such as the Lefkadia Tomb.

Columns were applied not only to sarcophagi but sometimes also to cinerary urns. The use of the forms of monumental architecture in such a context begins at least as early as the fourth century, on a limestone urn now in the Museo Barracco, in Rome (fig. 200).³³

The urn, measuring 0.60 x 0.33m and 0.47m in height including its lid, is much smaller than a sarcophagus. The form of the urn again recalls the earlier Samian sarcophagus with its applied Ionic decoration, and pilasters closing the corners. There are two engaged Ionic columns in antis along the sides, one in the middle of each end. These columns "support" a gabled roof with pediments and acroteria, as was customary in temple architecture, or in tomb structures of temple form. Numerous other Hellenistic ash-urns with figured sculpture along the sides of the urn are derived from types such as the Alexander Sarcophagus. However, the discussion of such works is beyond the scope of the present study.

To return to sarcophagi, the columnar type, the origins

of which are to be sought in peripteral temple-plans, continued in use in later Hellenistic times. Sometimes, but rarely, the original forms and appearance of the Samian sarcophagus were retained, e.g. in a Hellenistic example in Iznik (fig. 201).³⁴ However, in Roman Imperial times, if not before, the type became extremely elaborate, with complex decorative schemes and iconographic "messages."

Some Hellenistic sarcophagi outside Asia Minor, perhaps as the result of Lycian influence, were elevated on pedestals or podia. A number of such second-century sarcophagi were found on the island of Paros.³⁵ One of the best preserved specimens of the Paros group has a rectangular podium (fig. 202), placed above a three-stepped base. This podium consists of neatly cut ashlar above an orthostate course; the corners are closed by pilasters. The podium was filled with rubble, and its back, i.e. one of the longer sides, was left rough. A simple gabled sarcophagus was set on top of the podium; in the middle of the roof-line was a pedestal for the display of portrait busts.

Closely related to the Parian example, but larger and more elaborate, is an elevated sarcophagus monument found on the island of Rheneia (which served as cemetery for Delos) in 1898 (fig. 203).³⁶ The structure was built for one *Tertia Horaria*, and consisted originally of three "storeys." The lowest of these was a podium measuring 2.64m x 1.60m, and 1.58m high; above a plinth and a base course there were

three Corinthian half columns along the main face, while the corners were closed by pilasters. Both columns and pilasters had Attic-Ionic bases. The entablature was Doric, with two triglyphs over each intercolumniar space; above the Doric frieze was a row of Ionic dentils and a projecting cornice. This podium, of highly eclectic style supported the gabled sarcophagus, which in turn carried in the centre of the roof a small but richly carved funerary "naiskos." The total height of the monument was 4.43m.

The tripartite arrangement of the tomb undoubtedly reflects the influence of the large tombs of Western Asia Minor. However, in the monument described above the order of the different sections has been changed, so that the "peristyle" now supports the sarcophagus; this arrangement is certainly more effective in view of the form and scale of the units involved. The combination of elements from the different orders in the decoration of the podium is striking, though far from unique. The detailed analysis of this feature is not the subject of our study; but it should be noted that Tertia Horaria is an Italic name, and that she was doubtlessly a member of one of the many Italian merchants and families resident at Delos from the second century onward. Thus there may well have been western influences at work in the design of this tomb; on the other hand combinations of elements from different orders are also found in second-century Asia Minor, e.g. the Bouleuterion at Miletos. This

tomb from the Delian cemetery and other structures of similar nature, including the Parian sarcophagi, can probably be dated to the later second century.³⁷

II. Tholoi

The relationship between tumuli and tholoi in the archaic period has already been briefly discussed. With the passing of time built tholoi acquired their own architectural forms and functions. It is clear from the known examples that by the early fourth century the tholos built above ground had become a separate and very popular architectural type; virtually every locality of any importance had at least one tholos building.

Tholoi varied in size and architectural elaboration as well as in function. Most of them were commemorative structures, and were often used as functional buildings for rituals or ceremonies on special occasions. They were rarely, if ever utilized for actual burials, though some of them, like the Tholos at Epidauros, may have been conceived as a cenotaph.³⁸ Yet even in the case of this well known, highly decorative and extremely puzzling building the presumed funerary association (i.e. as the cenotaph of Asklepios) is just one of a number of possible roles of the structure, and not necessarily the primary one. The Nereid Monument and its successors, though they could and did convey other than funerary connotations, were built and employed in the

first place as tombs; their other functions were secondary, and resulted from the increasing elaboration of the tombs themselves. Fourth-century and Hellenistic tholoi, on the other hand, should in general be considered as related to, but different from, funerary buildings, and thus a separate type of Greek structure.

Nevertheless, there are a number of tombs in which the tholos form appears to be the dominating element of the overall design, though examples are rare in the Hellenistic period. One such tomb is a third-century funerary monument that seems to imitate the design of the Lysikrates Monument at Athens. In 1974 the remains of a tomb, 5.80 x 5.90m on plan, built entirely of local tufa and stuccoed over, came to light at Marsala in Sicily.³⁹ Fragments of Corinthian columns and capitals, painted screen-walls and parts of the sima, cornice and a "cupola" were found. According to Di Stefano the grave monument can be reconstructed as follows: "un piccolo edificio a pianta pressocche quadrata, sormontato da una tholos di ordine corinzio, con intercolumni chiusi da transenne. I dati di scavo suggeriscono una datazione al pieno III sec. a.C."⁴⁰

III. Choragic Monuments and Monumental Altars

The "temple tomb" on a podium, the most pretentious of the varieties of Hellenistic monumental tombs was also influential outside the sphere of funerary architecture.

Buildings of commemorative nature and monumental altars with columnar decoration seem to have been the types of structure likely to be influenced by the designs of the Nereid Monument and its successors. The monument of Lysikrates at Athens or the Arsinoeion on Samothrace (essentially a form of tholos raised on a high podium) certainly betray such influence. The architects of some non-circular choragic monuments, such as one found on the island of Thasos⁴¹ or the monument of Thrasyllus⁴² at Athens may also have borrowed elements from built or rock-cut monumental tombs.

The Thasian choragic monument, in the north east corner of the local sanctuary of Dionysos, stood on a high, stepped platform; a tetrastyle prostyle Doric porch gave access to the "cella," with its curved platform for the display of statues. The plan is reminiscent of the temple of Athena Nike in Athens or the "Athenian Temple" on Delos, the latter of which also had a semicircular platform in the cella. However, both lacked a podium, a feature which was perhaps borrowed from the design of podium tombs. In the case of the Monument of Thrasyllus (fig. 204), in which a rock-cut chamber has a simple Doric façade, set against the foot of the southern cliffs of the Athenian Acropolis, both location and execution are reminiscent of the rock-cut façade tombs of Western Asia Minor, some of which also have a single column in antis.⁴³

As far as monumental altars are concerned Şahin in his

study of the subject sees rightly the Mausoleum at Halikarnassos as the actual predecessor of large columnar altars: "Für seinen (i.e. the Mausoleum's) Einfluss auf die Entstehung der Säulenaltäre spricht erstens seine Erbauungszeit kurz vor der Erscheinung der Säulenaltäre und zweitens, das die ersten Säulenaltäre gerade in Tegea und Ephesos errichtet wurden, also in Orten, wo ein Künstler des Maussolleions, nämlich der Bildhauer-Architekt Skopas, weiterbeschäftigt worden war. Eine weitere Unterstützung für diese Behauptung ist die Ähnlichkeit der Bauformen des Maussolleions mit dem Altar der Artemis in Ephesos."⁴⁴

The influence of monumental tomb-architecture upon other types of building, and vice versa, is a difficult question, which becomes more and more complex in the course of the Hellenistic period. Within the scope of the present study, it seems sufficient to indicate the existence of such, sometimes puzzling problems.

VII

NOTES

1 G. Rodenwaldt, "Sarkophagprobleme," RömMitt 58 (1943)
4, with earlier bibliography relating to the subject in general.

2 I. Kleemann, "Der archaische Sarkophag mit
Säulendekoration in Samos," Festschrift für Friedrich Matz
(Mainz 1962) 44-55.

3 H. Walter, Das Heraion von Samos (Munich 1976) 70

4 K.F. Johansen, "Clazomenian Sarcophagus Studies,"
ActaA 12-13 (1941-42) 1-64. Johansen (64) says that the
"knowledge of the Egyptian mummy coffin caused them (i.e.
Clazomenians) to reshape the rectangular $\theta\eta\kappa\eta$ in the
direction of the anthropoid idea."

5 R.M. Cook, Greek Painted Pottery (London 1972) 136,
345, with earlier bibliography related to Klazomenian
sarcophagi.

6 Cook (supra n. 5) 137.

7 Akurgal, Phryg Kunst 129, 283 fig. 258.

8 Akurgal, Phryg Kunst figs. 69-72, 52-53.

9 G.V. Gentili, "Iscrizione arcaica sul coronamento
di cippo gelese del Museo di Siracusa," Epigraphica 8 (1946)
11-18.

10 Gentili (supra n. 9) 18.

11 Orsi, see especially 340, 380, 515-535, 737.

12 Orsi, 386.

13 Orsi, pl. XLVI. They are comparable with some sarcophagi from Aegina, where there are also interior corner columns without capitals; see fig. B.

14 Orsi, pl. XLVI. From the drawing provided it is hard to tell whether we are dealing here with an engaged column, or with one fully in the round, placed in the corner.

15 Orsi, 529.

16 Orsi, 528.

17 A. Boethius and J.B. Ward-Perkins, 544 n. 14 fig.

18. The tomb chamber is entirely rock-cut, consequently, from the technical point of view the supports were not needed.

18 P. Marconi, Agrigento (Florence 1929) 102 fig. 64.

19 See for example W. Altmann, Architektur und Ornamentik der antiken Sarkophage (Berlin 1902) 35 fig. 11.

20 F. Coarelli, "Il Sepolcro degli Scipioni,"

DialAr 6 (1972) 93 n. 133; V. Saladino, Der Sarkophag des Lucius Cornelius Scipio Barbatus (Würzburg 1970) and Wo. Hornbostel, Gnomon 45 (1973) 576 (review of Saladino's book).

21 P. Bernard, "Les bas-reliefs Greco-Perses de Dascylion a la lumière de nouvelles découvertes," RA (1969/1) 17-18.

22 Bernard (supra n. 21) 20.

23 O. Hamdy Bey and Th. Reinach, Une Nécropole Royale à Sidon (Paris 1892), and von Graeve, Der Alexandersarkophag und seine Werkstatt Ist. Forschungen 28 (Berlin 1970) 19, 22, 165 with further bibliography.

24 E. Akurgal, C. Mango and R. Ettinghausen, Treasures of Turkey (Geneva 1966) 55.

25 von Graeve (supra n. 23).

26 von Graeve (supra n. 23) 21.

27 Hamdy Bey and Reinach (supra n. 23) 262; Minns, 332; C. Watzinger, Griechische Holzsarkophage aus der Zeit Alexanders des Grossen (Leipzig 1905) 45.

28 Minns, 333.

29 Minns, 322; Gajdukevic, 294 figs. 87-89.

30 Gajdukevic, 295.

31 T. Papazaphiri, "Ellenistikos tafos Agrias (An hellenistic cist-grave from the neighbourhood of Volos)," Thessalika (1962).

32 Papazaphiri (supra n. 31) 34.

33 Roma Medio Repubblicana (Rome 1973) 274.

34 G. Kleiner, "Hellenistische Sarkophage in Kleinasien," Ist. Mitt 7 (1957) 7.

35 O. Rubensöhn, "Parische Künstler," Jdl 50 (1935) 67.

36 M.T. Couilloud, "Les Monuments Funéraires des Rhénée," Explorations Archéologiques de Délos 30 (École Française d'Athènes 1974).

37 See M.T. Couilloud, "Monuments Funéraires de Rhénée," BCH 94 (1970) 545.

38 G. Roux, L'Architecture de l'Argolide aux IV^e et III^e siècles avant J.C. (Paris 1961) 131-200

39 C.A. Di Stefano, "Scoperta nella necropoli di Lilibeo," Kokalos 20 (1974) 162-171

40 Di Stefano, (supra n. 52) 168

41 A.H. Borbein, "Die griechische Statue des 4. Jahrhunderts v. Chr.," Jdl 88 (1973) 43-212. See especially 48-55 with further bibliography.

42 Dinsmoor, 239 fig. 82; Borbein, (supra n. 41) 58 n.

59

43 For instance the well preserved Ionic rock-cut tombs with one column in antis, at Kyanei (Petersen and von Luschan, Reisen II pl. III)

44 Şahin, 86

CONCLUSIONS

It is difficult to draw detailed conclusions concerning the relationship of Hellenistic monumental tombs to their predecessors since in all periods these structures were likely to be highly individualistic creations. In contrast to other types of building tomb-designs emphasized variety; we need only recall the large number of tombs and tomb-designs surveyed to appreciate multiplicity of sources behind the various types. Nevertheless within the limits of specific periods or geographical locations it is possible to distinguish certain major trends and "fashionable" forms.

The appearance and subsequent popularity of the "temple tombs" on podia during the fourth century was not so much the result of religious practices or beliefs, as of political and economic conditions. These huge tombs, whether built or rock-cut, were effective displays of wealth and political power within their respective communities. As has often been emphasized, conspicuous and magnificently decorated tombs fulfilled several different functions. Besides serving for interments, they were also shrines for the worship of the heroized dead, and were thus related in function to other commemorative buildings. Moreover they could also be conceived as victory monuments, keeping the glorious

achievements of the deceased fresh in the minds of his own and later generations. Of course similar ideas had existed in monumental funerary architecture during the archaic age and even before; but they were not as dramatically expressed as in later monuments. Since monumental tombs were to be the "living substance" of the deceased, the emphasis was on permanence and on designs that commanded the attention and respect of the living. For this purpose all aspects of the architectural vocabulary current at a given time might be utilized in a single tomb; the type thus created, if successful, might then be further developed by later architects.

In tumuli and underground tombs the exterior forms changed little over the centuries. Perhaps the chief "novelties" of Hellenistic examples lay in the smaller scale of the mounds, in the erection of a number of tumuli entirely of stone. The addition of a masonry krepis, to keep the piled-up earth (and other materials) of the mound in better shape, is already found in early examples, but seems not to have been generally adopted before Hellenistic times. Inside the mound, the most significant modifications took place in the roofing of the burial-chamber, and, in the case of Macedonian tumuli in the addition of elaborate architectural facades. By the third century true barrel-vaulting, which appears in Macedonian tumuli during the last third of the fourth century, was widely used throughout the Hellenistic world. In certain territories (e.g. Macedonia proper) barrel-vaulting was the

principal technique for roofing tomb chambers.

With built tombs of monumental proportions the question of ancestry is more complicated. There is no clear "line of descent" for the "temple tomb" on a podium before the construction of the Nereid Monument at Xanthos in Lycia. The sources of the Nereid Monument and of analogous projects seem to go back to the archaic period. It is at this time that the search for an effective form of a large-scale tomb exposed to view and expressing other than just funerary aspirations can be clearly documented within our general area of interest. However, in spite of their elaborate designs, neither the "Tomb of Hyakinthos" nor the burial monument of Porsenna (i.e. the two that were discussed above in some detail) achieved an overall "expressive" quality, worthy of imitation in later structures.

Two important aspects, that later proved to be the decisive factors in the popularity of "temple tombs" on podia, were missing: first, the sacred nature of the building, expressed in clear and simple visual terms by borrowing the peristyle of the Greek temple, and second, the extensive sculptural decoration celebrating the "heroization" of the person(s) who commissioned the tombs. At least in the tomb of Porsenna a third feature of the "temple tomb," i.e. the podium was presumably present; if so, the idea was perhaps derived from some external source. In non-funerary monuments podia were already utilized in the earlier sixth century. The

podium of the Temple of Athena at Miletos¹ was constructed around 580 B.C.; and there were doubtless statues around the precinct, even if not in any regular pattern. In the palace complex of Croesus at Sardis there were supporting terraces, but not on the scale of "...the Assyrian-Persepolis type of palace on one grandiose terrace."²

In tomb architecture an early example of an elevated platform appears in the Tomb of Cyrus at Pasargadai. Here a pyramidal podium (perhaps with a symbolic meaning attached to it) was used to increase the overall height. However, the gradually narrowing platform could hardly have supported an elaborate structure such as a Greek peristyle enclosing a cella.

The custom of elevating tombs on podia must have spread from the neighbouring regions to Lycia, where the existence of raised terraces in tombs is documented from the first half of the fifth century onwards. The peripteral second storey of Lycian and other tombs is Greek in origin, as noted previously. It was only in the sixth century that Greek temples regularly began to use stone for the columns of the peristyle that enclosed the cella; thus the idea can hardly have been copied in tombs until a later period. Perhaps not too surprisingly in view of the eclectic nature of funerary architecture, designers of tombs were quick to take advantage of the idea, as can be seen in the sarcophagus from Samos discussed above.

It is far from clear when, where and why the two

separate architectural elements, i.e. podium and peristyle, were first combined in a single tomb. In the present state of our knowledge, which in many respects is admittedly scanty, Lycia, in the Nereid Monument of ca. 400 B.C., provides the first datable example of a tomb consisting of a supporting podium and a Greek cella with an enclosing peristyle. Several factors may have encouraged the appearance of this feature in Lycia at an earlier date than elsewhere. The Lycians had no established native tradition of monumental stone architecture, with fixed conventions and rules; moreover, tombs were not utilitarian structures, so that easy access to the upper storey was not a practical necessity. It may further be argued that the extra elevation gave a better view of the monument, and may have been thought to provide some extra protection for the burial. The local Lycian custom (in all likelihood of Persian origin) of burying the dead above ground may also have played a part.

Of course the lavish sculptural decoration of Lycian tombs, from the late fifth century onward, required modifications in the conventional Greek temple plan. One consequence of these modifications was the breaking up of the serenity of Greek temples and the introduction of a certain flamboyant, or "baroque," quality that appeared in many other buildings during the Hellenistic period. In Western Asia Minor, where there has been competition in erecting self-glorifying tomb monuments, the "temple tomb" on a podium

reached its zenith in the Mausoleum at Halikarnassos. This structure was carefully thought out, and the site well prepared; a great part of the resources of a powerful local ruler was used to achieve a sort of immortality. In fact new elements were added to those of earlier designs, i.e. the pyramidal third storey (an architectural form, that was certainly not without symbolic significance), crowned by the figure of Mausolos in his chariot.

Naturally, once the ground was broken new trends soon appeared in the development of Hellenistic monumental architecture. The "temple tomb" on a podium lived on in many variants and in many different regions of the Mediterranean world; but the Hellenistic architects realized that several other types of large-scale building (e.g. theatres, houses, altars and so on) could be modified to produce some new variety of monumental tomb-structure. Moreover, as the larger tombs became more famous, their designs were borrowed and adopted for more modest graves, such as sarcophagi, cinerary urns and naiskoi, as well as for other religious or secular projects.

From the technical point of view, built tombs, like temples, had to conform to certain mathematical and technical standards. In the large tombs modules were used to determine the overall measurements and the relation of the component parts to one another and to the project as a whole. Clamping was extensively used when needed; unusual or new forms of

cuttings sometimes appear on blocks, for example, on the column drums of the Belevi mausoleum. Tombs also provided an excellent opportunity for the decorative styles of masonry and for the use of materials of different colours. The existence of masonry with drafted edges is now documented in Lycia as early as the first half of the fifth century; and we have encountered sophisticated rustication of the blocks in a kourgan in the Kimmerian Bosphorus, which has been dated to the fourth century. In the excavations of the Mausoleum at Halikarnassos a large number of differently coloured stones came to light; presumably all these materials were actually used in the building.

Landscaping, especially in connection with elaborate heroa, also seems to have been an important aspect of the overall design.

The history of rock-cut funerary architecture runs more or less parallel to that of the built tombs. Often rock-cut monuments were simplified, and thus they were cheaper versions of built tombs. The most popular form was the facade tomb, which from the visual point of view was "two-dimensional" in character. The origins of Hellenistic rock-cut designs go back at least to the archaic age. The Phrygians, and later the Persians, were among the first to demonstrate the effectiveness of large decorative facades that included both architectural and sculptural elements. We have noted the existence of earlier rock-cut tombs in Urartu and Egypt,

and the possible influence of these early tombs on isolated examples of later times; however, the extent of these influences remains questionable. Here again acquaintance with Greek temple designs must have provided the main impetus for the development of entire rock-cut necropoleis in which most of the tombs employed the Greek orders (e.g. in Paphlagonia, Cyrene, and Lycia).

Large tombs were likely to be constructed anywhere in the Hellenistic world where money was available and political conditions were favourable. In the fourth and early third centuries Western Asia Minor was the centre of monumental tomb-building activity; later, the emphasis shifted to other regions of the Mediterranean. New centres, all with their own particular antecedent arose, producing not only strongly modified versions of the tomb-types of Western Asia Minor but also almost completely new forms. Moreover, new non-funerary types of building, such as the triumphal arch, soon found their way into the vocabulary of funerary architecture, as can be seen, for example, in the Monument of the Julii at St. Rémy in the Provence (fig. 205). Such interaction was especially likely to occur where non-funerary forms symbolized ideas which were also relevant to tomb architecture.

In Roman Imperial times employment of concrete, in connection with arches, vaults and domes, eventually revolutionized all types of architectural design including that of monumental tombs, and made it possible to discard

the Greek post-and-lintel system as an essential structural element. However, by the first century B.C. larger Hellenistic tombs and their Italo-Hellenistic offshoots, had already provided the inspiration for a number of important funerary monuments of the later Republic and the early Empire.

CONCLUSIONS

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1 Akurgal, Ruins 120 fig. 41a

2 G.M.A. Hanfmann, "On the Palace of Croesus," in
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204. Athens, Thrasylos Monument (AA 53 [1938] 66 fig. 39).
205. St. Rémy, Monument of the Julii.
- Fig. A, Salapia tomb, façade (Economia e Società nella Magna Grecia [Naples 1973] pl. 38).
- Fig. B, Aigina sarcophagus (AA 46 [1931] 275).

ABBREVIATIONS AND SELECTED BIBLIOGRAPHY

The abbreviations, whenever possible, follow the system of AJA (Winter 1978).

AA: Archäologischer Anzeiger

AAA: Athens Annals of Archaeology

AbhBerl: Akademie der Wissenschaften, Berlin. Abhandlungen.

ActaA: Acta Archaeologica

Adriani, Annuaire: A. Adriani, La Nécropole de Moustafa Pasha
(Annuaire du Musée gréco-romain 1933-35 Alexandria
1936)

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- AnatSt: Anatolian Studies
- Andronicos, MacedTomb: M. Andronicos, "Regal Treasures from a Macedonian Tomb," National Geographic Magazine 154 n. 1 (July 1978)
- AnnArch: Annales archéologiques
- AntDenk: Antike Denkmäler
- AntK: Antike Kunst
- AntP: Antike Plastik
- AnzAlt: Anzeiger für die Altertumswissenschaft
- AnzWien: Anzeiger der Akademie der Wissenschaften, Wien, Phil.-hist. Klasse
- Archaeological Newsletter (New York 1946-)
- ArchCl: Archeologia Classica
- Archivio Storico Siracusano (Siracusa 1955-)
- ArchMitt aus Iran: Archeologische Mitteilungen aus Iran
- ArtB: Art Bulletin
- Arts et Metiers Graphiques (Paris 1927-)
- AsAtene: Annuario della R. Scuola Archeologica di Atene
- AthMitt: Mitteilungen des deutschen Archäologischen Instituts, Athenische Abteilung

AthMitt-BH: Athenische Mitteilungen, Beiheft

AZ: Archäologische Zeitung

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BASOR: Bulletin of the American Schools of Oriental Research

BCH: Bulletin de correspondance hellénique

BdA: Bolletino d'Arte

Bean, Aegean: G.E. Bean, Aegean Turkey (London 1967)

Bean-Cook: G.E. Bean, J.H. Cook, "The Cnidia," (BSA 47/1952/171-212)

BEFEO: Ecole Française d'Extrême-Orient, Bulletin

Belleten: Belleten Türk Tarih Kurumu

Benndorf-Niemann, Gjölbaschi: O. Benndorf, G. Niemann, Das Heroon von Gjölbaschi-Trysa (Vienna 1889)

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- DarSag: Daremberg and Saglio, Dictionnaire des antiquités grecques et romaines
- Deltion: Archailogikon deltion
- Demus-Quatember, EtGrab: M. Demus-Quatember, Etruskische Grabarchitektur (Baden-Baden 1958)
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EAA: Enciclopedia dell'arte antica, classica e orientale

EtCl: Etudes classiques

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d'Athènes 1974)

FA: Fasti Archaeologici

FdD: Fouilles de Delphes, Ecole Française d'Athènes (Paris
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Jdl: Jahrbuch des (k.) deutschen archäologischen Instituts

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JHS: Journal of Hellenic Studies

JNES: Journal of Near Eastern Studies

JRS: Journal of Roman Studies

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Instituts
- ÖjhBeibl: Jahreshefte des österreichischen archäologischen
Instituts, Beiblatt
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- RBibl: Revue biblique
- RE: Pauly-Wissowa, Real-Encyclopädie der klassischen
Altertums-wissenschaft
- REA: Revue des études anciennes
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- RHist: Revue historique
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Note on indication of date in text:

Dates down to the end of the second century are assumed to be B.C. when not in figures.

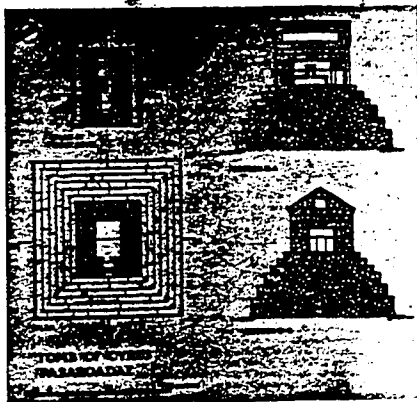
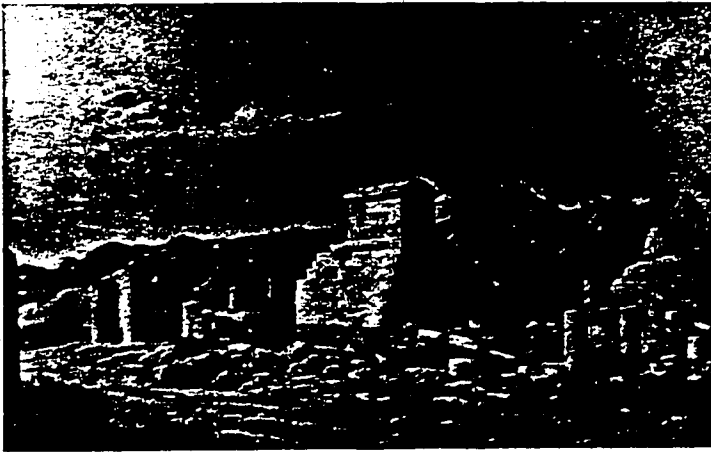
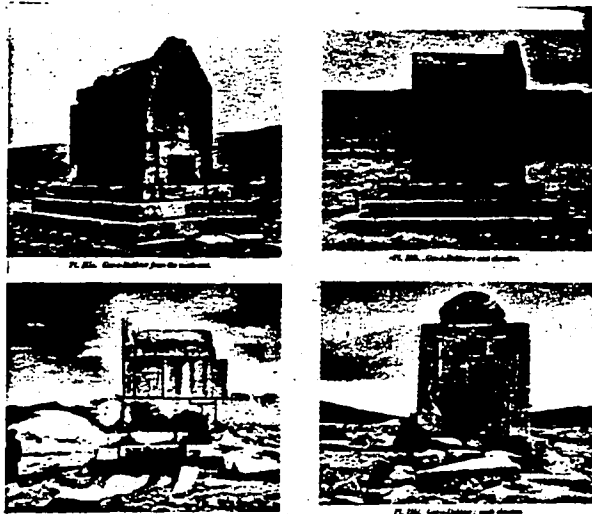


fig.1 Tomb of Cyrus

a/general view

b/plans and sections

fig.2 Buzpar tomb



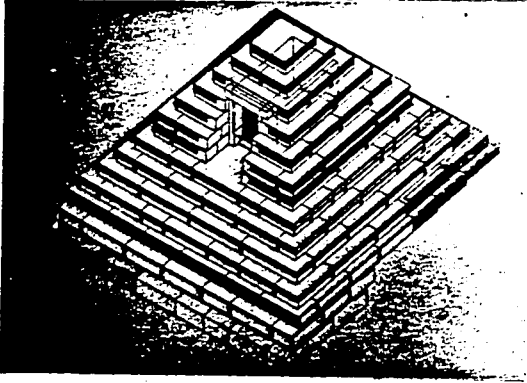


fig.3 Sardis, stepped
pyramid tomb

fig.4 Is-Safiyeh, stepped
pyramid tomb

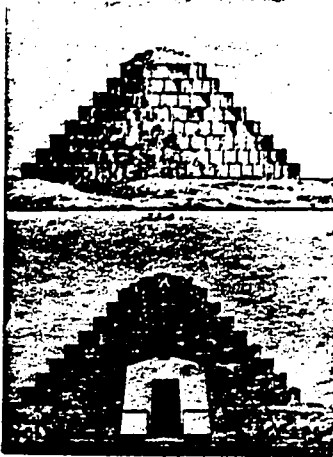
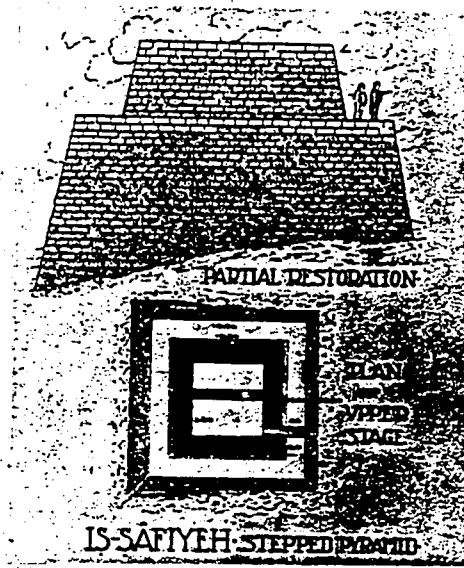


fig.5 Etruria, stepped
circular tomb

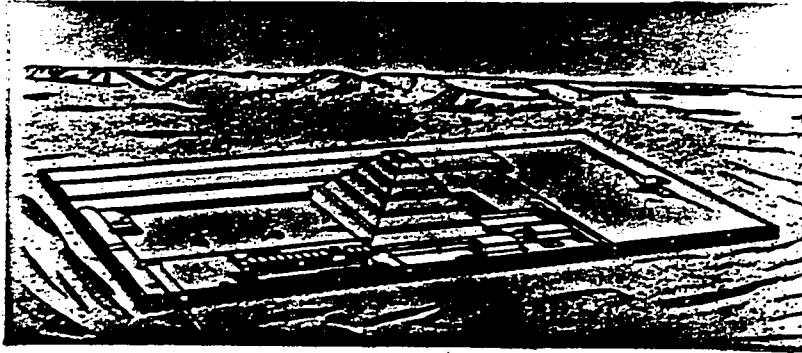


fig.6 Djoser stepped pyramid



fig.7 Assyria, obelisk-like victory stele



fig.8 Egypt (Deir
el-Medineh), smooth
sided pyramids

fig.9 Jerusalem, "Tomb of the
Pharaoh's Daughter"

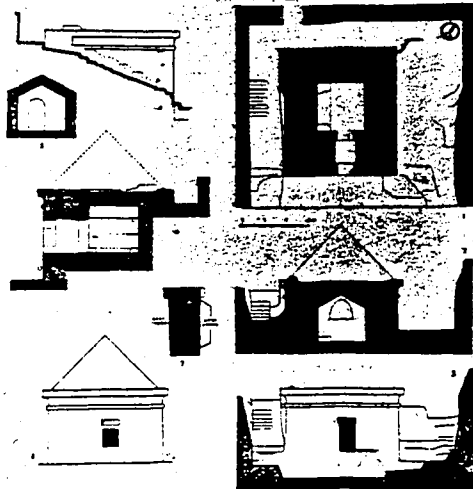




fig.10 Midas city, Pyramid Tomb

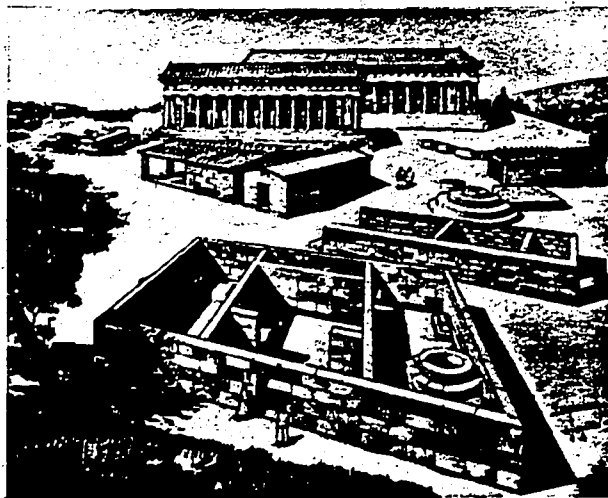


fig.11 Akragas, stepped circular altar

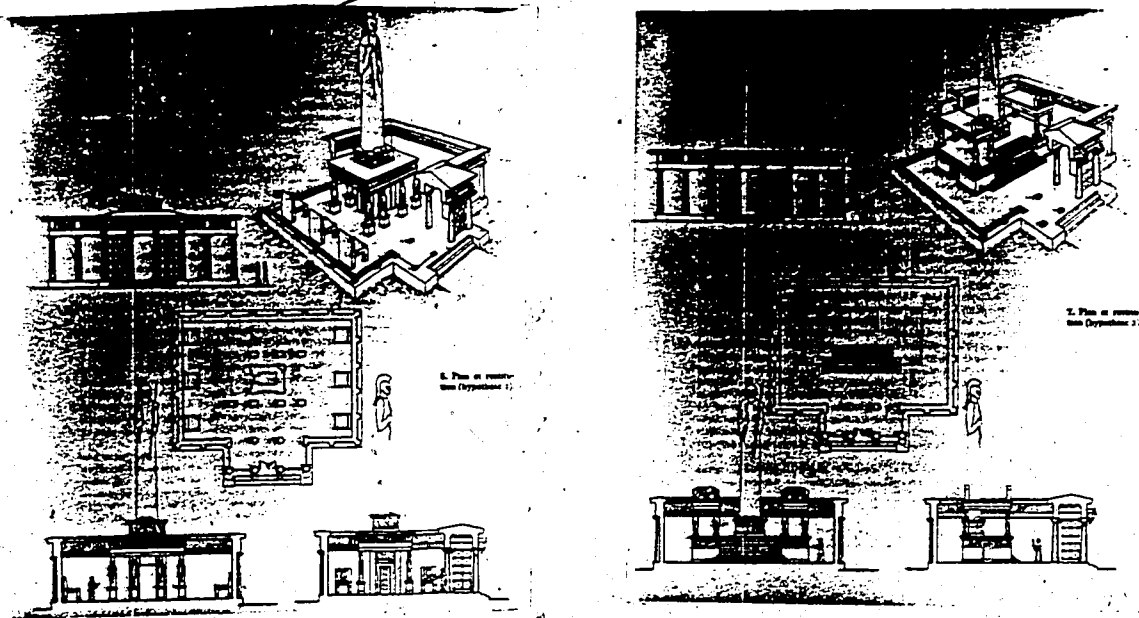


fig.12 Amyklai, "Throne of Apollo" a/ and b/ reconstructions

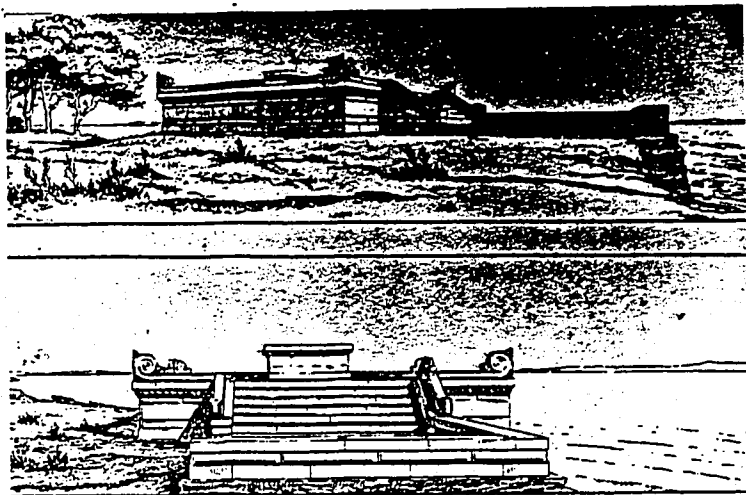


fig.13 Monodendri altar

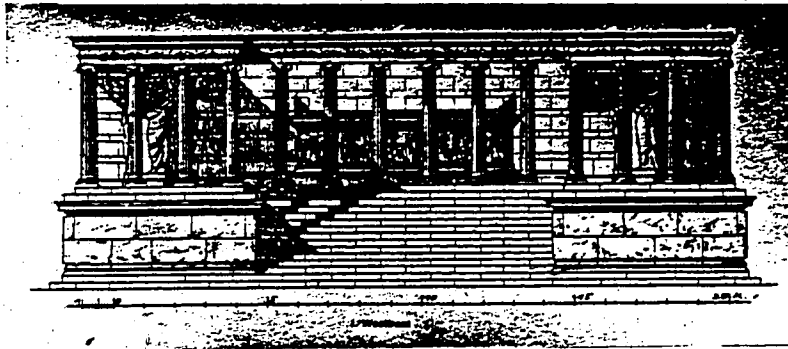
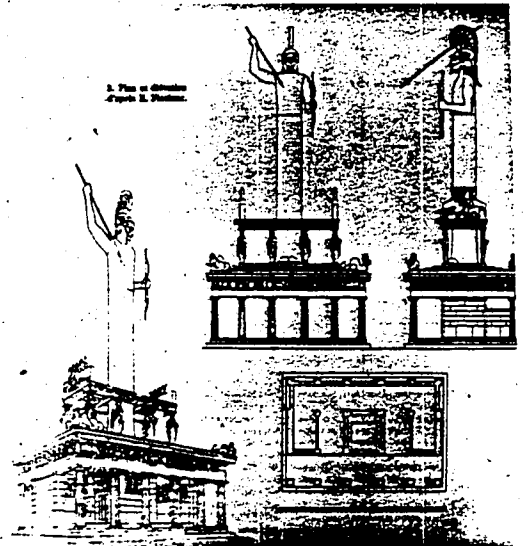


fig.14 Magnesia on the Maeander, columnar altar



fig.15 Sardis, columnar shrine
to Kybele

fig.16 Fiechter's reconstruction
of the "Throne of Apollo" at
Amyklai



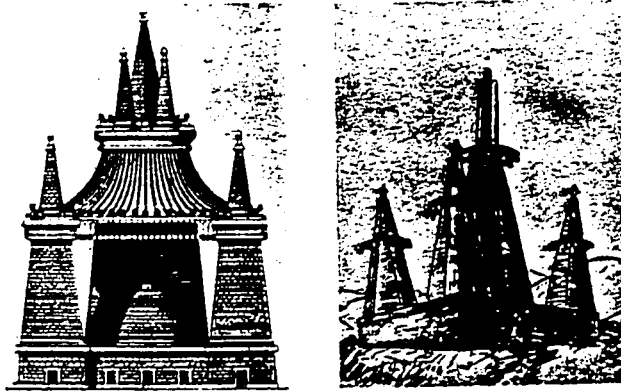


fig.17 Tomb of Porsenna, reconstructions



fig.18 Albano, tomb on the Via Appia



fig.19 Cucumella at Vulci

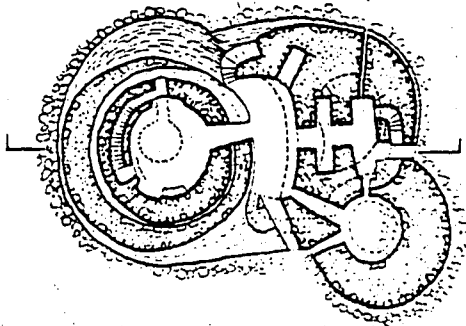
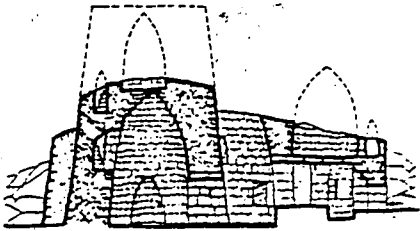


fig.20 Palmareva, Sardinian
nuraghe

fig.21 Phaistos Disk





fig.22 Xanthos, inscribed pillar

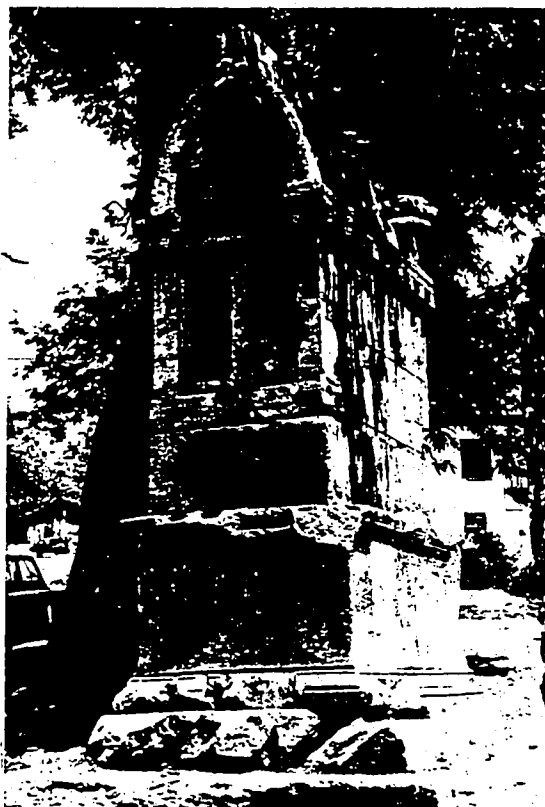


fig.23 Antiphellos, elevated sarcophagus

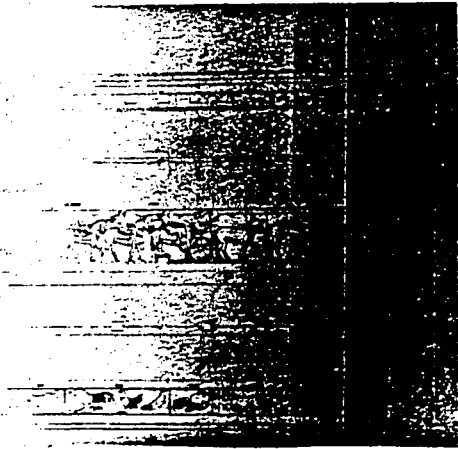


fig.24 Xanthos, Heroon G, "cella"
wall with friezes

fig.25 Apollonia (Lycia),
dynastic tomb

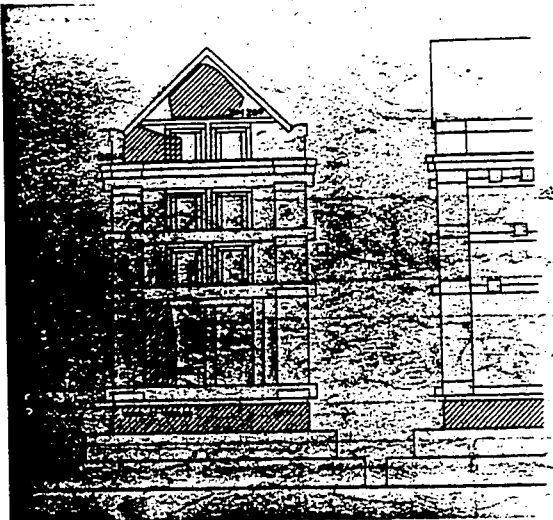


fig.26 Xanthos, Heroon F

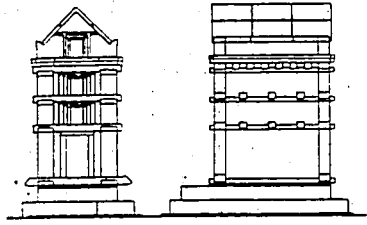


fig.27 Xanthos, Heroon H

fig.28 Xanthos, Heroa
F, G, H, reconstructed
view

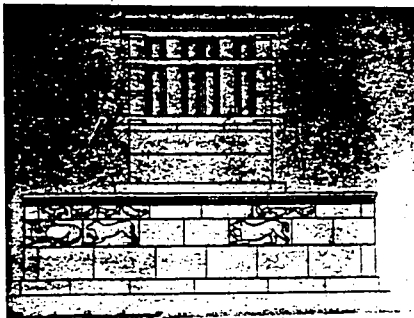
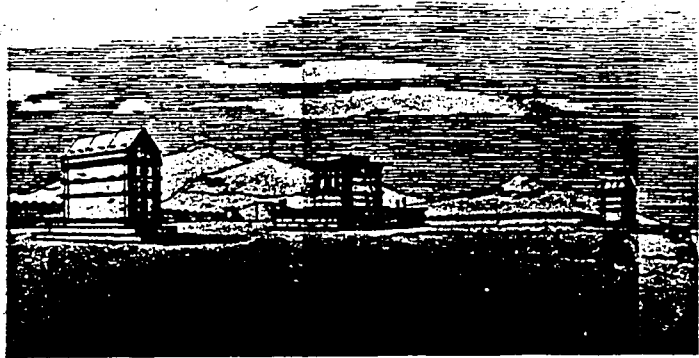


fig.29 Xanthos, Heroon G,
Bernard's reconstruction



fig.30 Sardis, Pactolus
pediment

fig.31 Sardis, Lydian
chamber tomb

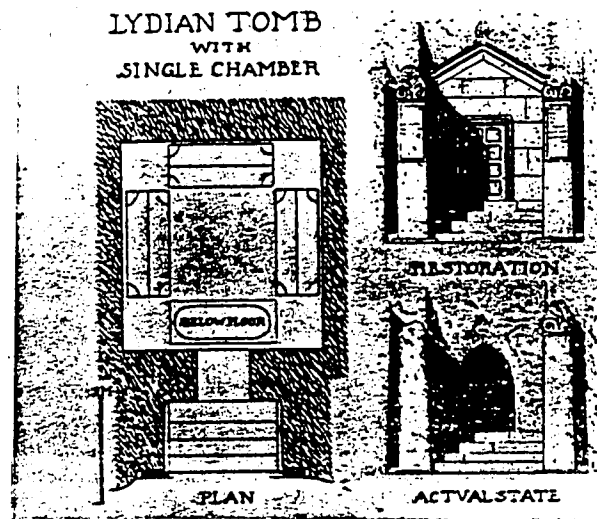


fig.32 Midas city, Midas
monument



fig.33 Köhnüş (Phrygia), "Lion Tomb"

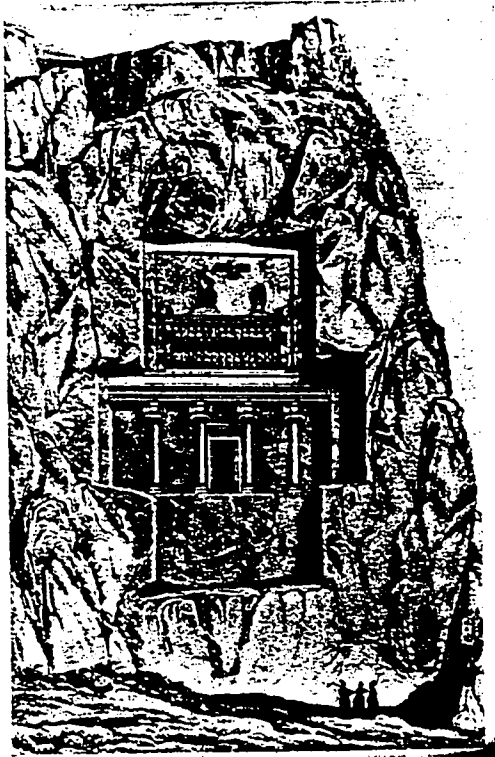


fig.34 Naqsh-e-Rostam, rock-cut Persian
royal tomb

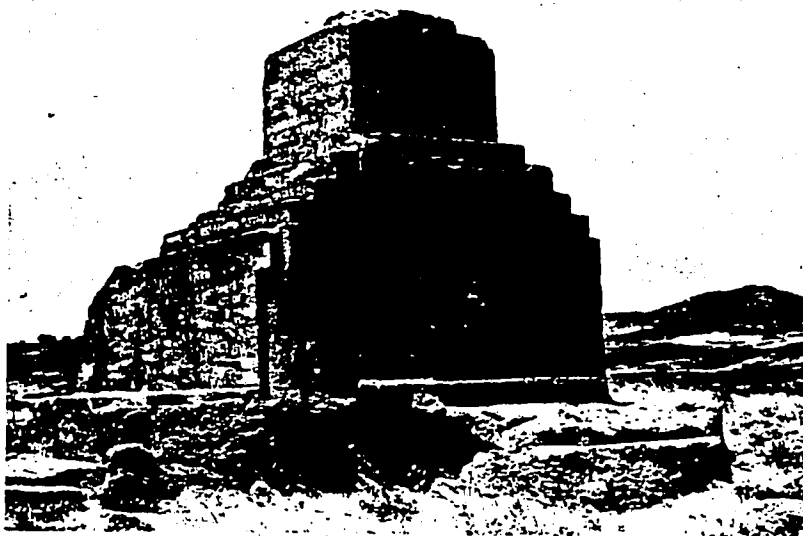


fig.35 Eski Foça,
"Taş Kule"

a/ general view

b/ plan

c/ section elevation

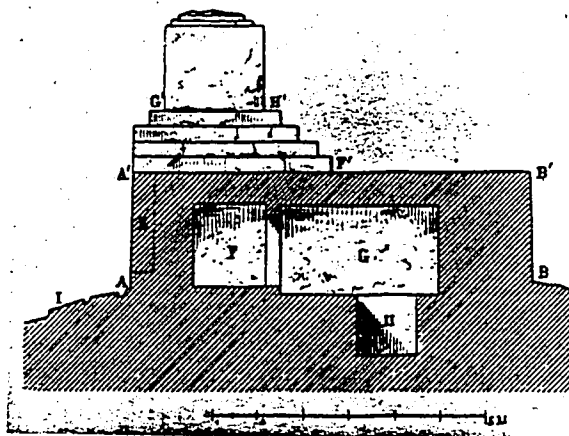
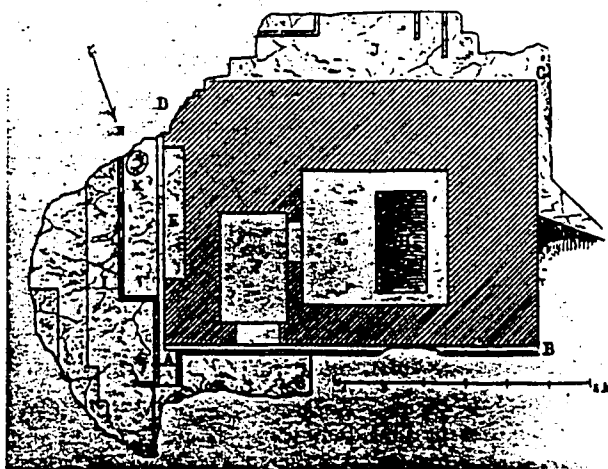




fig.36 "St. Charalambos"
tomb near Magnesia ad
Sipylum

a/ general view
b/ plan

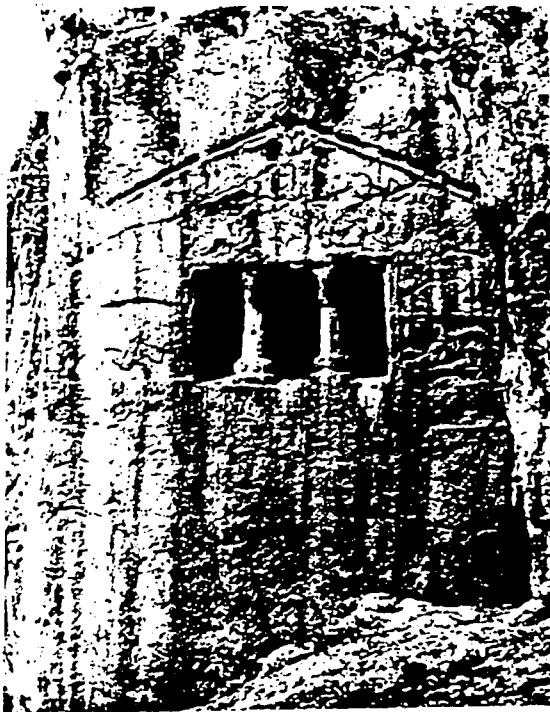
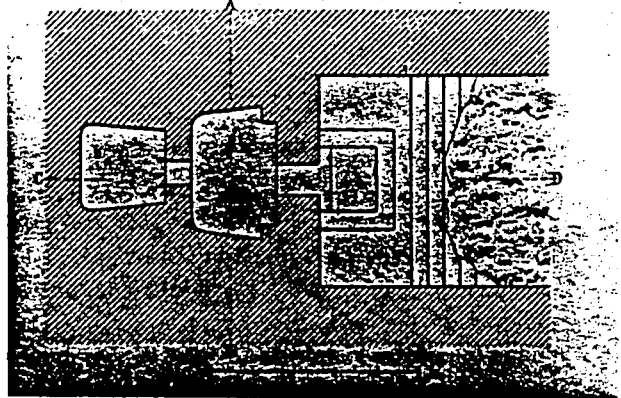


fig.37 Paphlagonia,
Kalekapi tomb

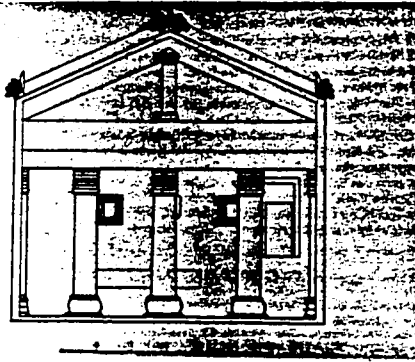


fig.38 Paphlagonia, Gerdek Boğazi tomb at Karakoyulu

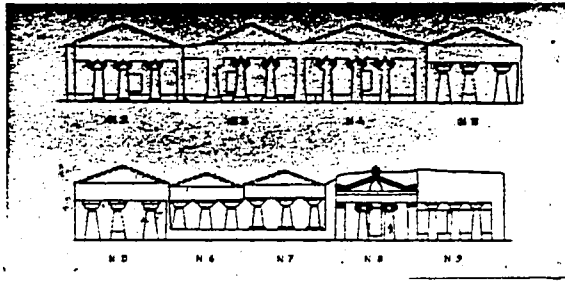


fig.39 Cyrene, rock-cut tombs, N₂-N₉



fig.40 Egypt (Beni Hassan), rock-cut tomb

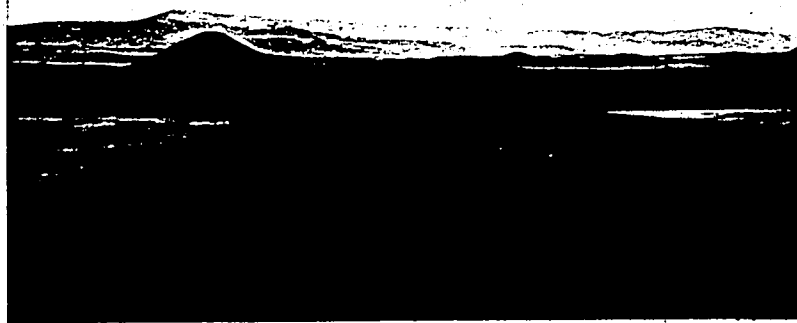


fig.41 Gordion, tumulus of Midas, distant view

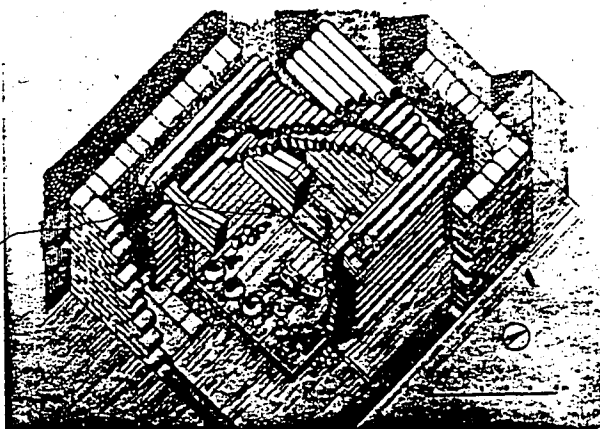


fig.42 Gordion,
tumulus of Midas,
chamber

fig.43 Sardis, tumulus of
Gyges a/plan

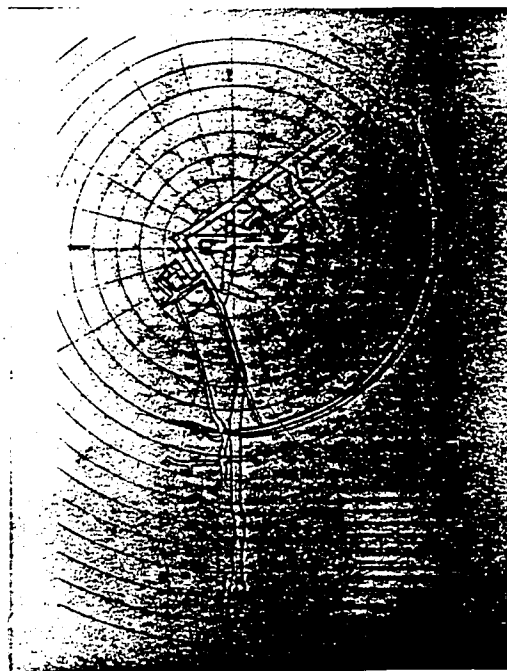
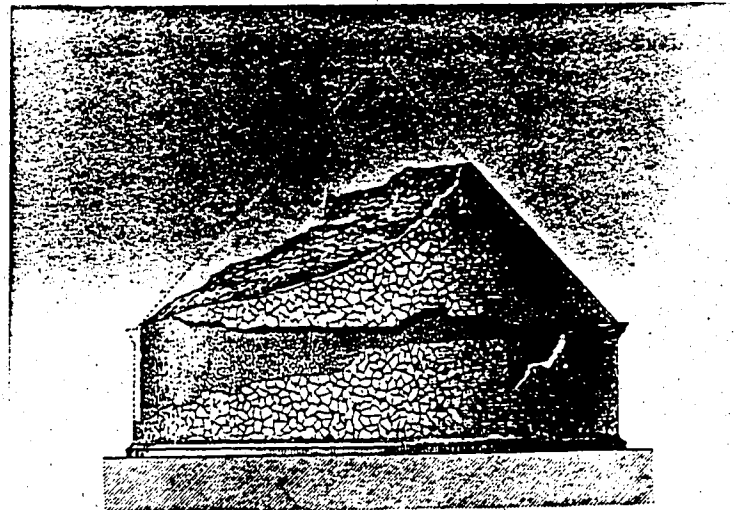
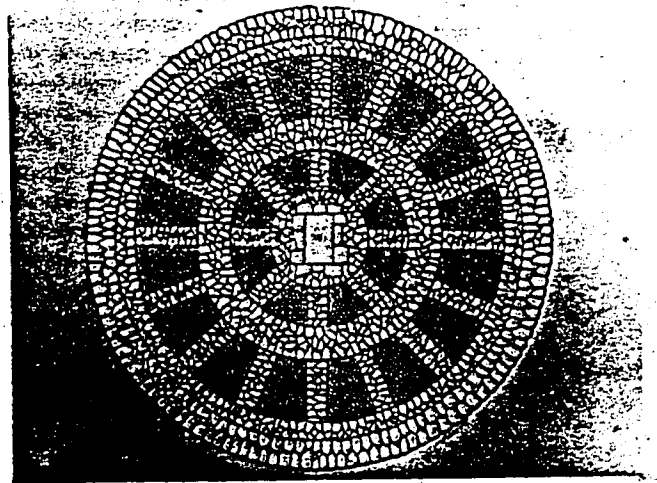




fig.43 Sardis, tumulus of Gyges b/inside girde

fig.44 Bayrakli (ancient
Smyrna), tomb of Tantalos
a/plan
b/reconstruction



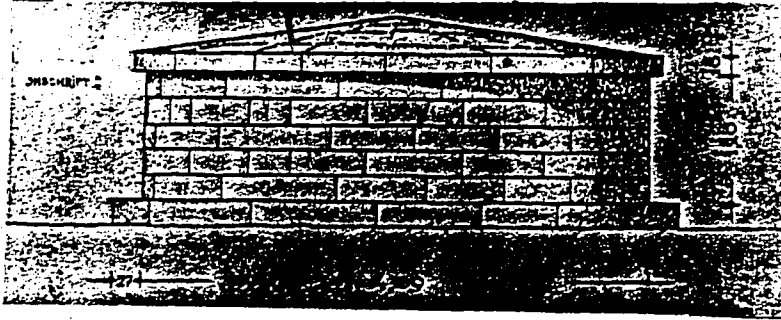


fig.45 Korfu, Menekrates tomb

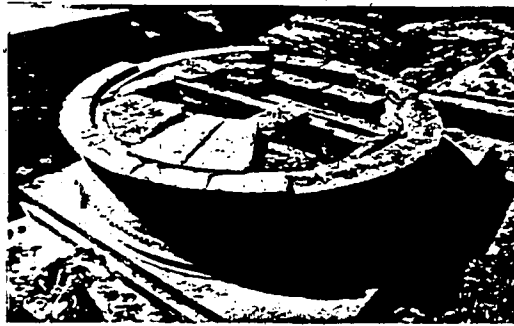


fig.46 Cyrene, built tumulus



fig.47 Lindos, tomb of Kleoboulos

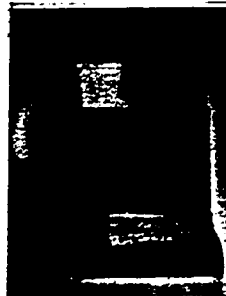


fig.48 Kerameikos,
"Rundbau", fragments from
the superstructure

fig.49 Cyprus, Royal Tomb V

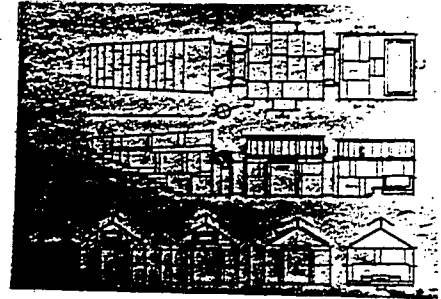


fig.50 Mycenae, Treasury of
Atreus

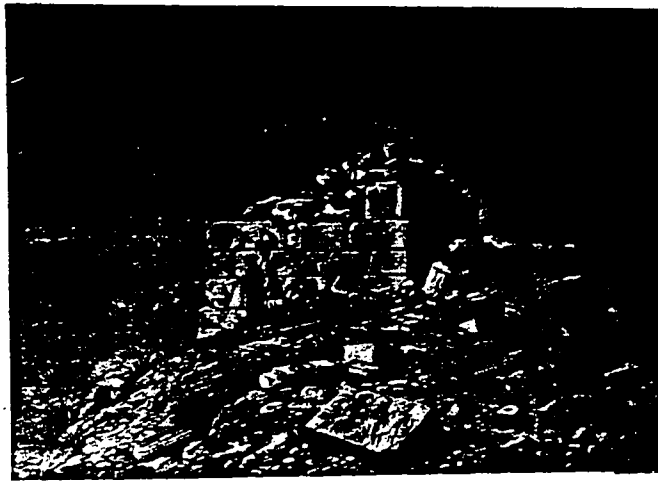


fig.51 Xanthos, Nereid Monument a/ view in the nineteenth century b/ view today



fig.52 Xanthos, Nereid
Monument, southeast corner
of the podium

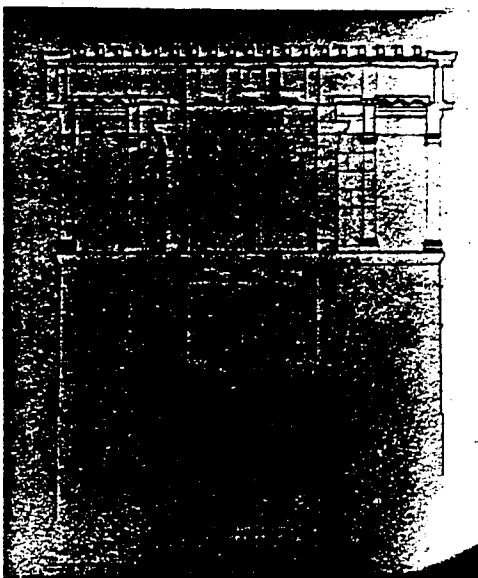


fig.53 Xanthos, Nereid Monument, cross-section

fig.54 Xanthos, Nereid
Monument, restored view

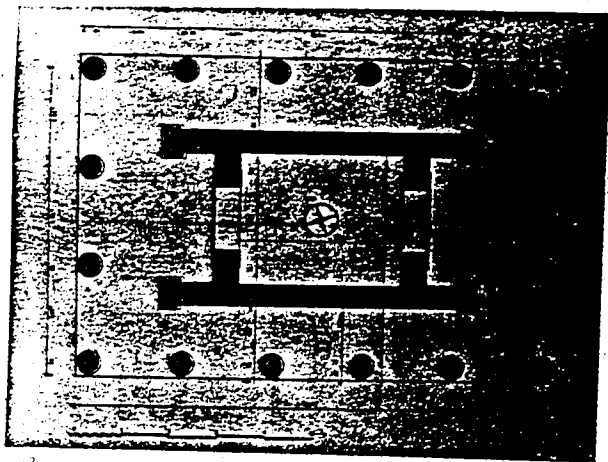


fig.55 Xanthos, Nereid
Monument, plan

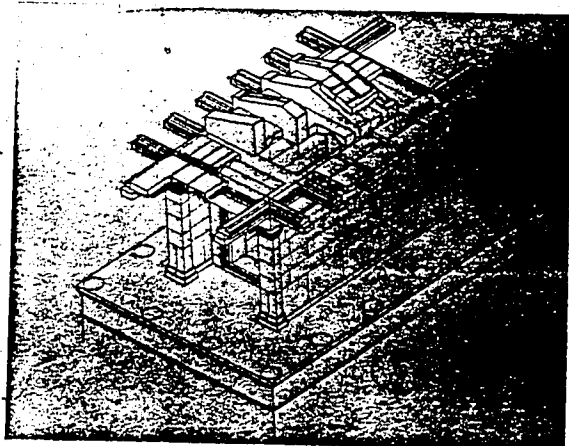


fig.56 Xanthos, Nereid
Monument, roof-
construction

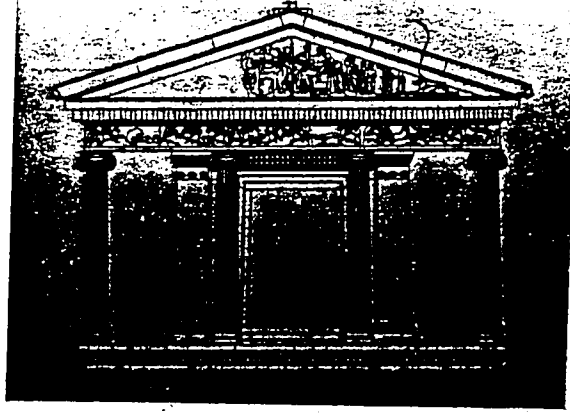


fig.57 Xanthos, Nereid Monument, east pediment

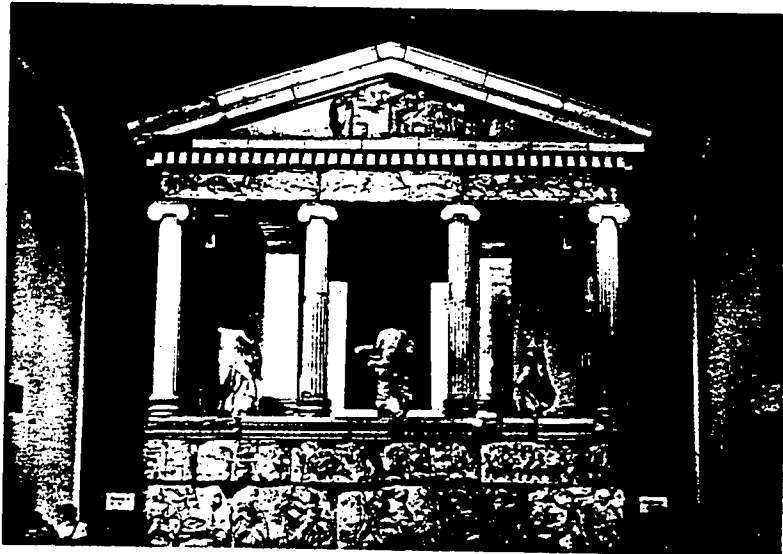


fig.58 Xanthos, Nereid Monument, reconstruction in the
British Museum

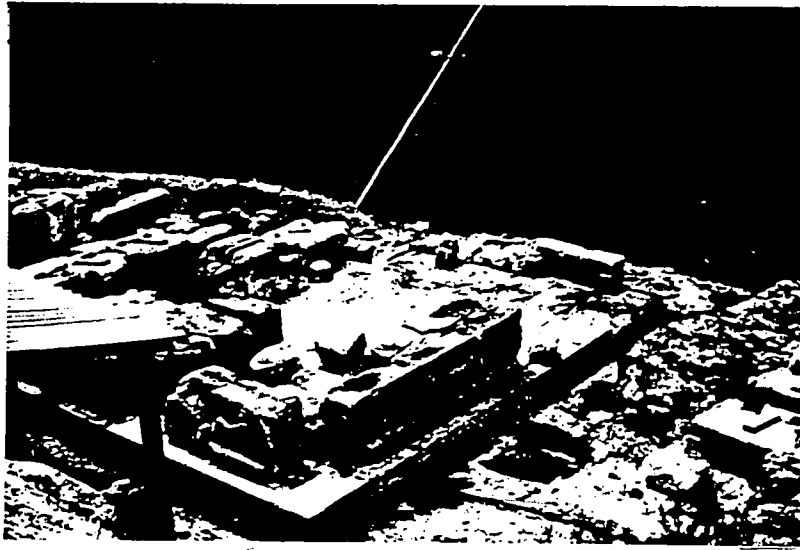


fig.59 Limyra, Heroon, actual state

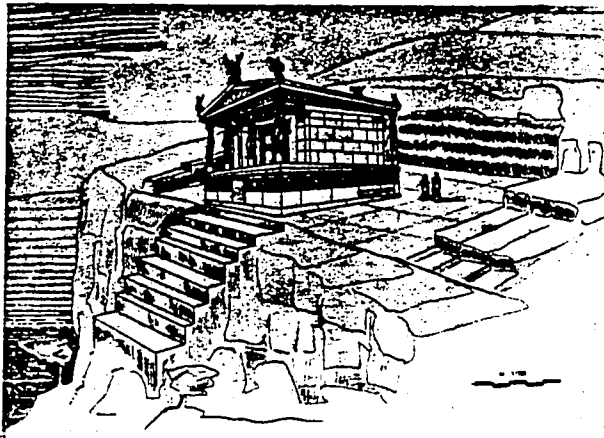
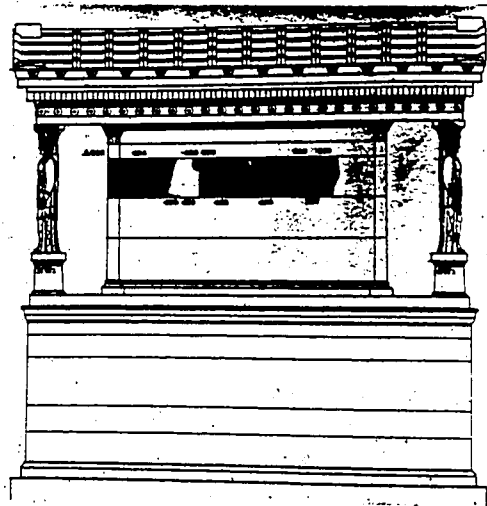


fig.60 Limyra, Heroon,
restored view of
complex

fig.61 Limyra, Heroon, west side



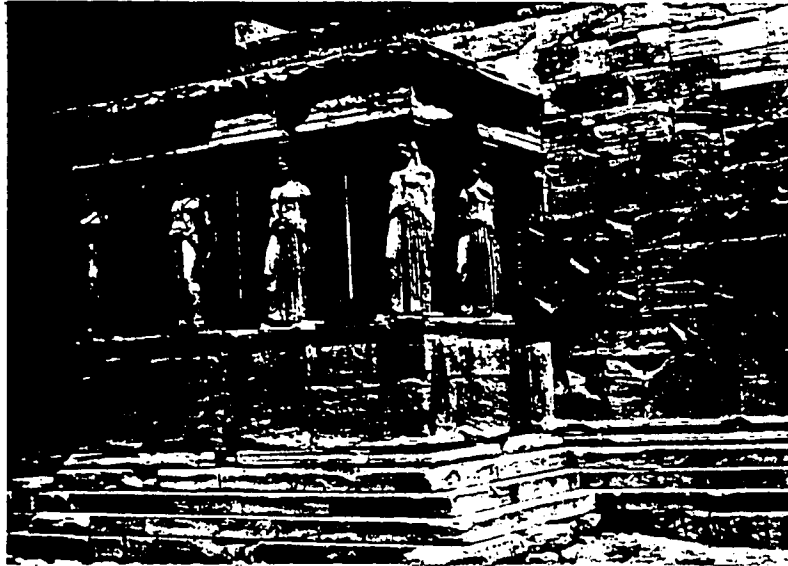


fig.62 Erechtheion, Karyatid Porch



fig.63 Limyra, Heroon,
north side

fig.64 Delphi, Siphnian treasury



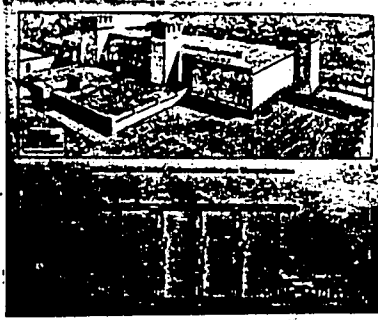


fig.65 Tell Halaf, entrance
gate to the temple-palace

fig.66 Limyra, Heroon,
acroteria of northern
facade

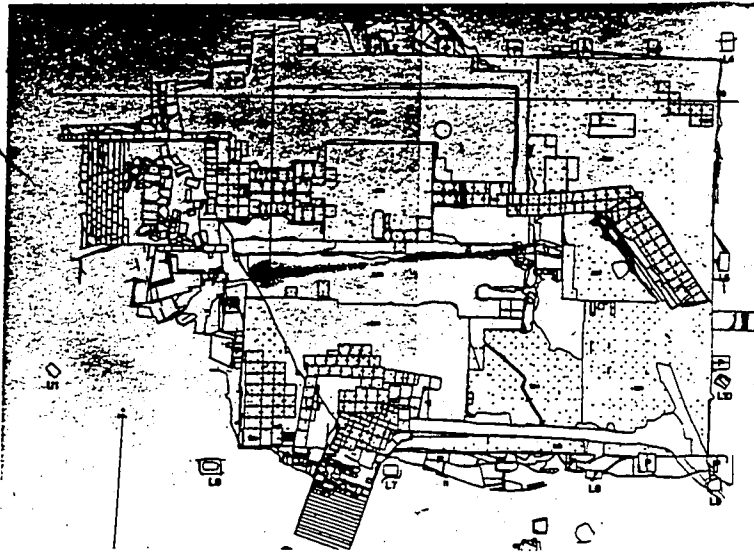
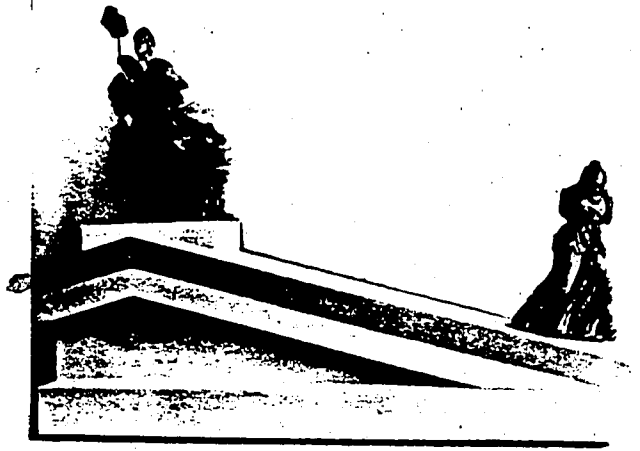


fig.67 The Mausoleum at Halikarnassos, plan

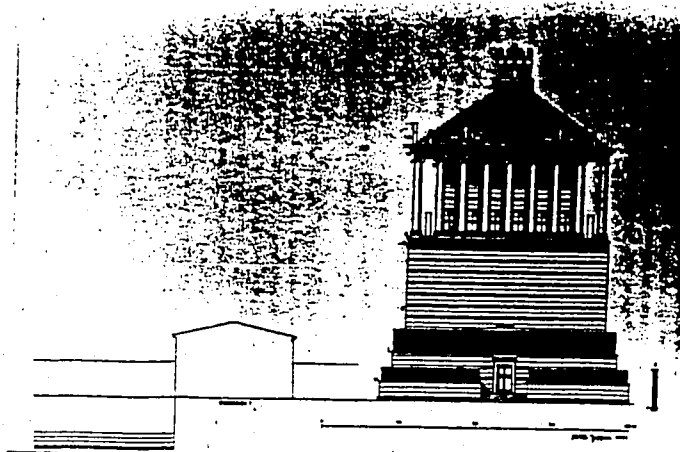
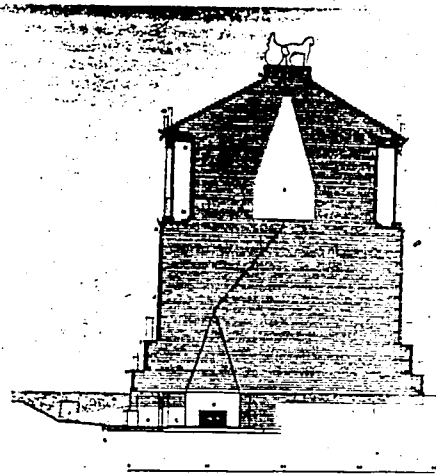


fig.68 The Mausoleum at Halikarnassos, Jeppesen's re-
construction



fig.69 "Mausolos and
Artemisia" (British
Museum)

fig.70 The Mausoleum at
Halikarnassos, cross section



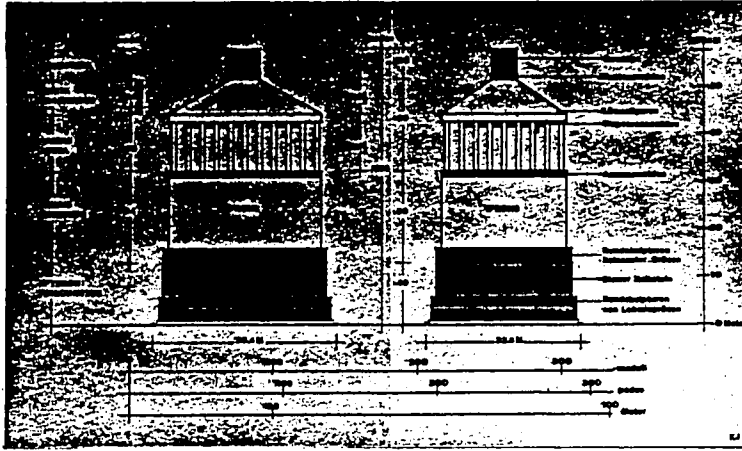


fig.71 The Mausoleum at Halikarnassos, Jeppesen's reconstruction with measurements



fig.72 Labraynda tomb, drawings of Le Bas

fig.73 Labraynda tomb, general view





fig.74 Labraynda tomb, interior

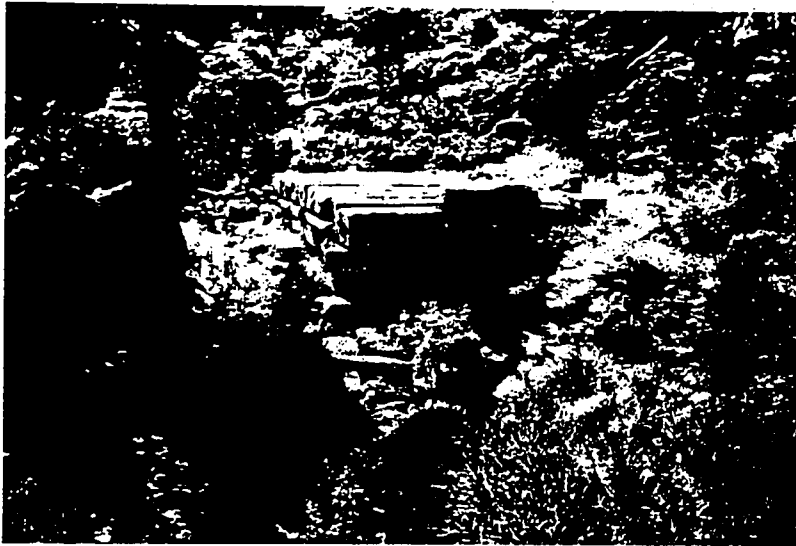


fig.75 Labraynda tomb, entrance wall a/distant view

fig.75 Labraynda tomb,
entrance wall b/close up
view



fig.76 Labraynda tomb, view of gneiss slabs

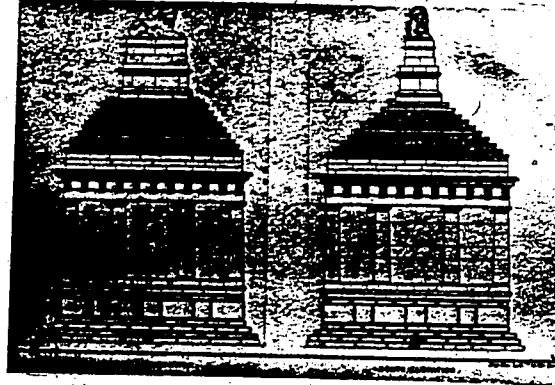


fig.77 The Lion Tomb at Knidos, reconstruction



fig.78 The Lion Tomb at Knidos, core of the structure

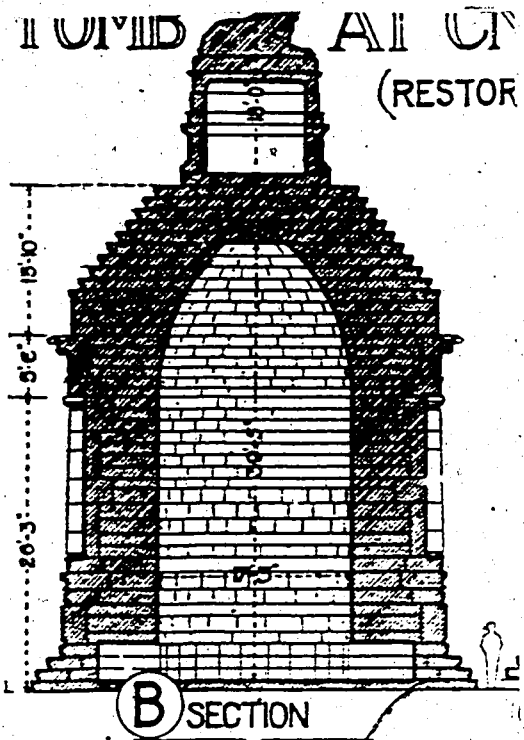


fig.79 The Lion Tomb at Knidos, a/cross section b/interior

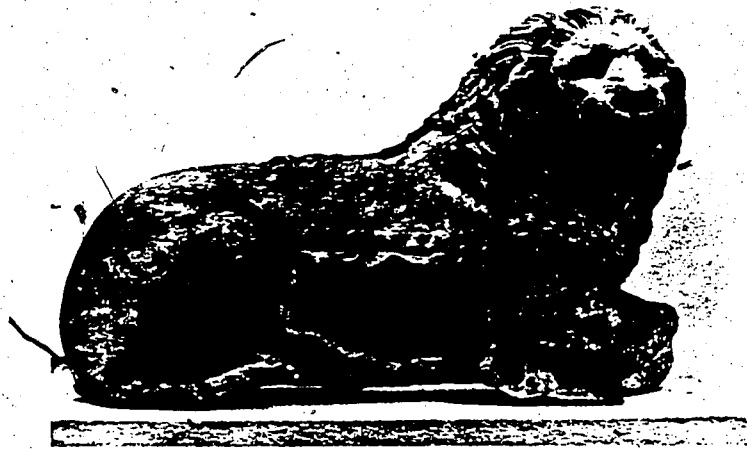


fig.80 The Lion Tomb at Knidos, lion

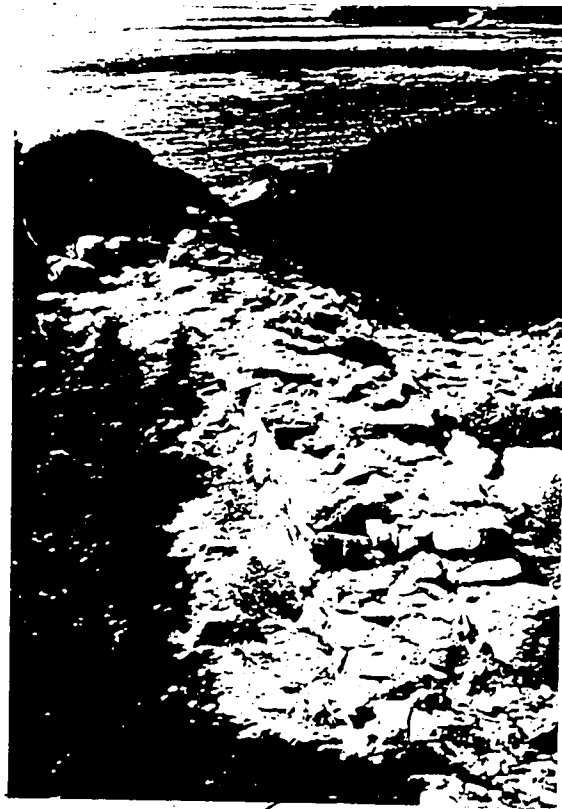


fig.81 The Lion Tomb at Knidos, traces of the temenos wall

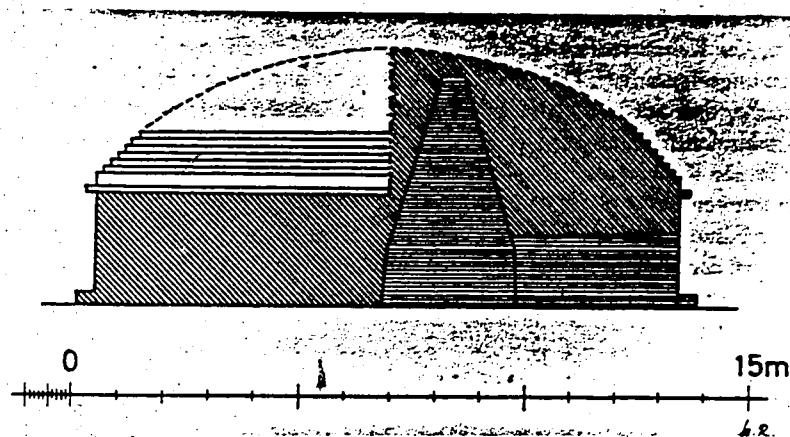


fig.82 Gebe Kilisse tomb

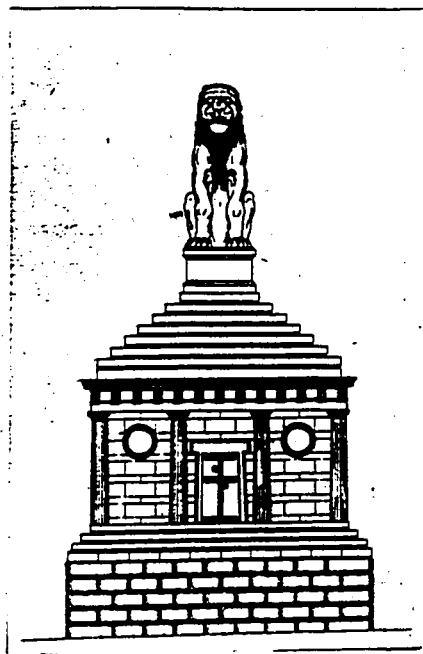


fig.83 Amphipolis, Lion

Tomb

fig.84 Alinda tomb

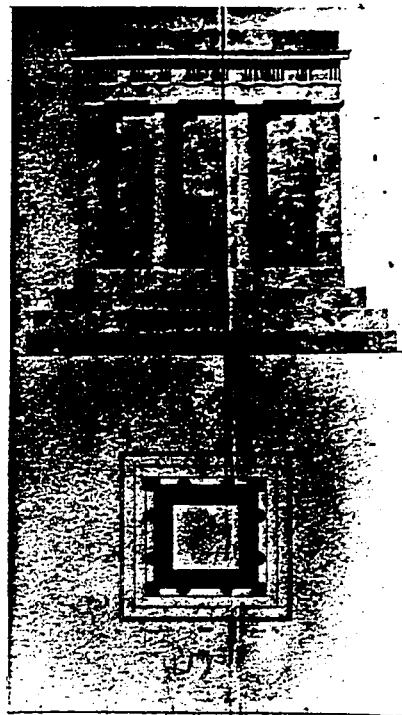
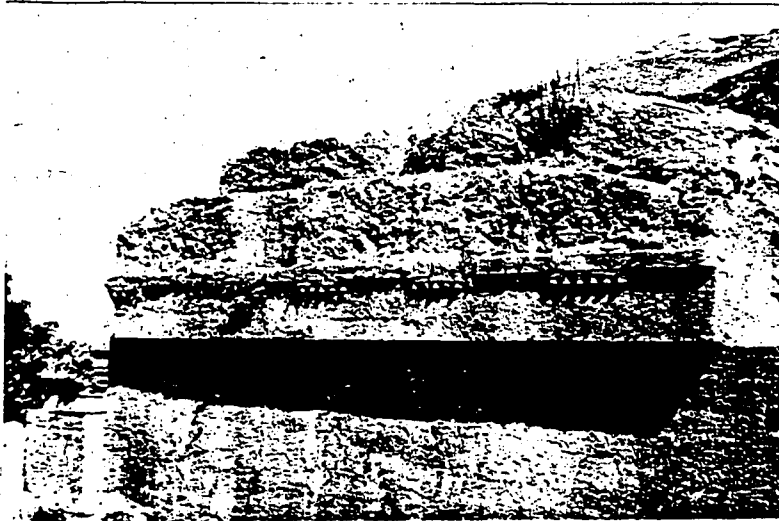




fig.85 Kaş tomb a/general view b/entablature



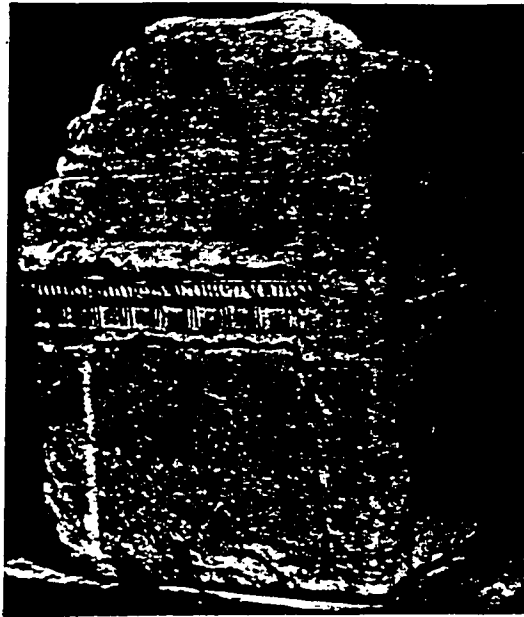


fig.86 Syracuse Museum,
model of funerary cippus

fig.87 Turgut (Rhodian
Peraea) tomb

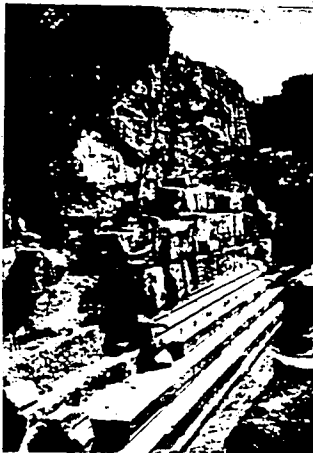
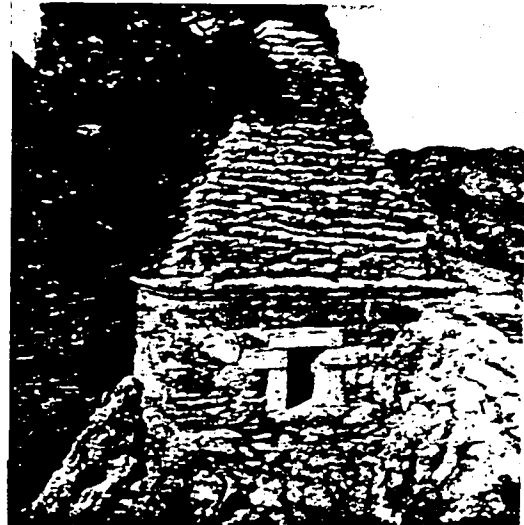


fig.88 Belevi Mausoleum, side view
of the rock-cut core



fig.89 Belevi Mausoleum a/view of south side b/reconstructed tomb chamber

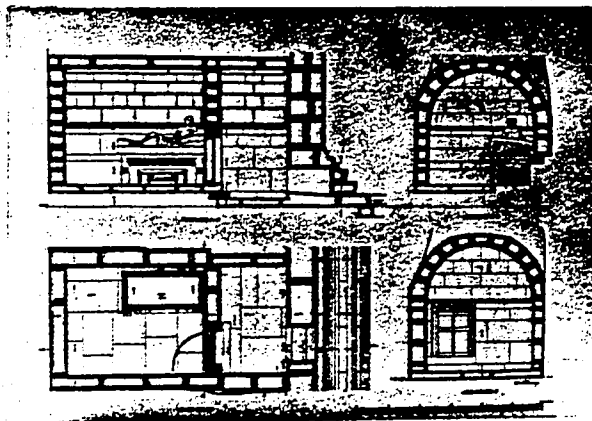
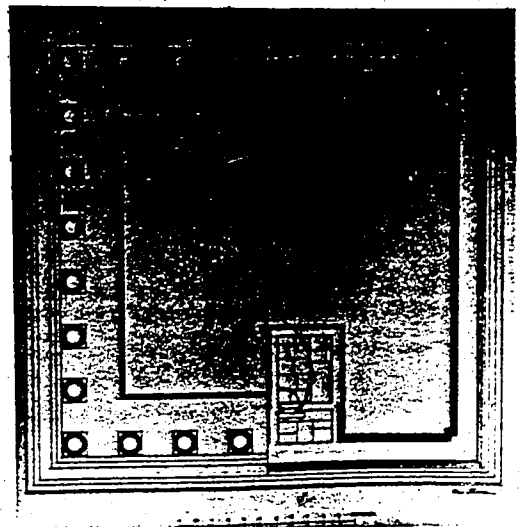


fig.90 Belevi Mausoleum, plan of lower and upper storeys



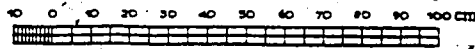
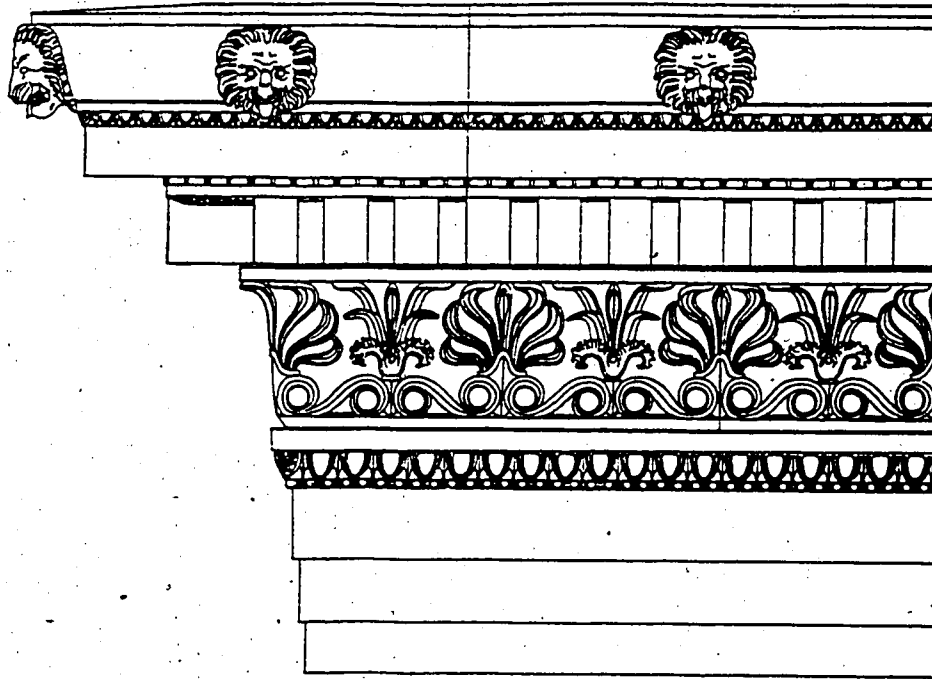


fig.91 Belevi Mausoleum, entablature



fig.92 Belevi Mausoleum, present state of upper floor



fig.93 Belevi Mausoleum, reconstruction according to
Praschniker



fig.94 Belevi Mausoleum, unfinished moulding

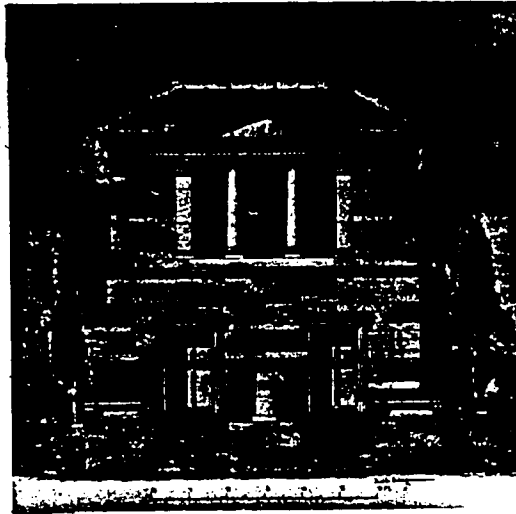


fig.95 Charmyleion,
restored elevation of
façade

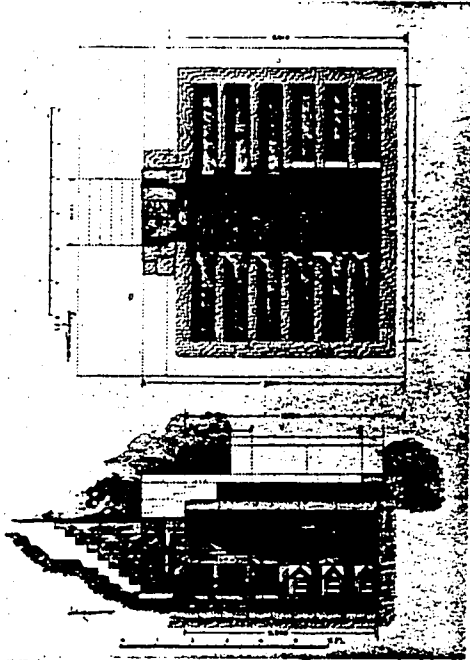


fig.96 Charmyleion,
plan and cross-section of
basement

fig.97 Charmyleion, plan of
ground floor

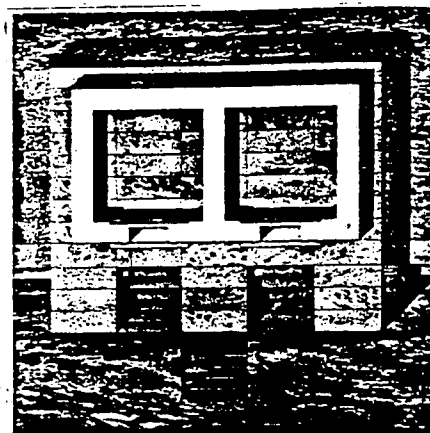




fig.98 Archokrateion, view of monument today

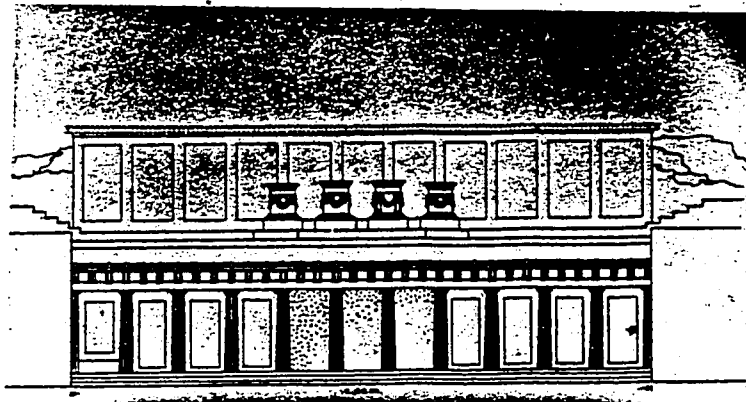


fig.99 Archokrateion, reconstruction



fig.100 Rhodini tomb, general view



fig.101 Rhodini, façade tomb



fig.102 "Ta Marmara" heroon, reconstruction and plan



fig.103 Diocaesarea-Olba, "tomb of Priest King"



fig.104 Gölbaşı-Trysa, Heroon, general view

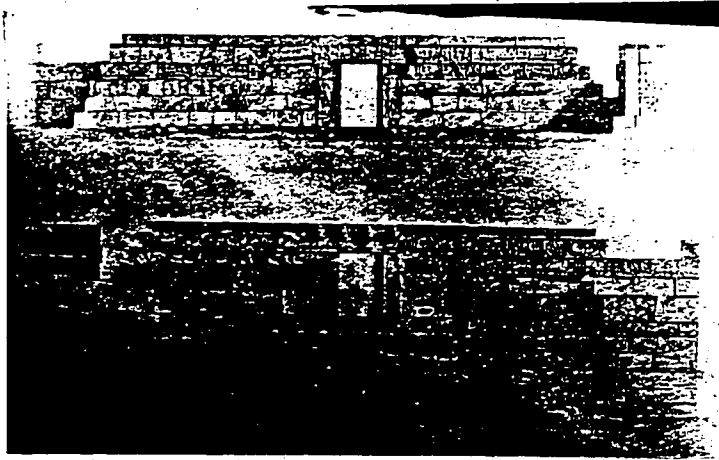


fig.105 Gölbaşı-Trysa Heroon, south wall

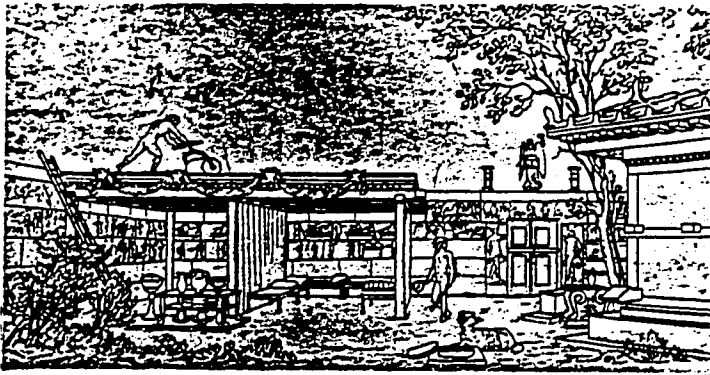


fig.106 Gölbaşı -Trysa, Heroon, "cult corner"

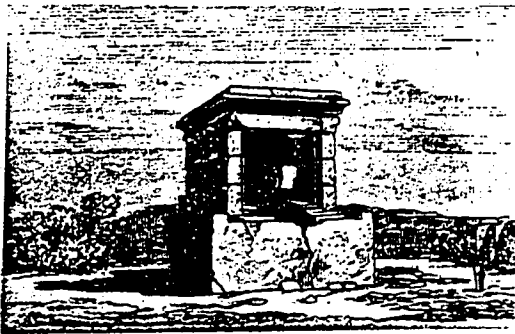


fig.107 El Maabed, Heroon

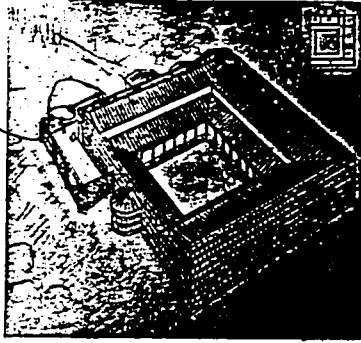


fig.108 Kalydon, Heroon



fig.109 Miletos, Heroon on the theatre hill



fig.110 Termessos, Alkestas tomb, view



fig.111 Termessos, Alkestas tomb, drawings

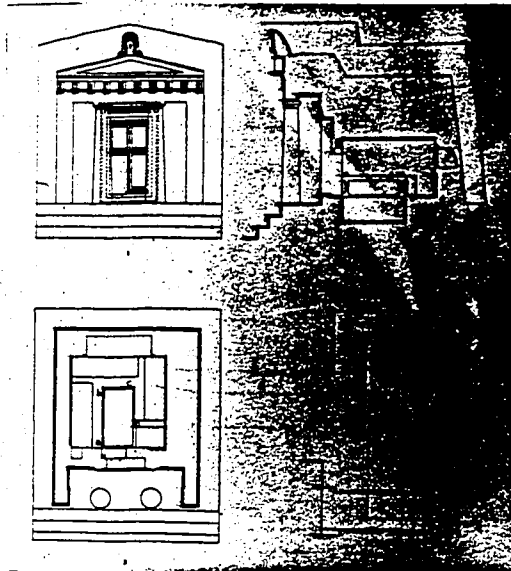


fig.112 Kaunos, Doric facade tomb

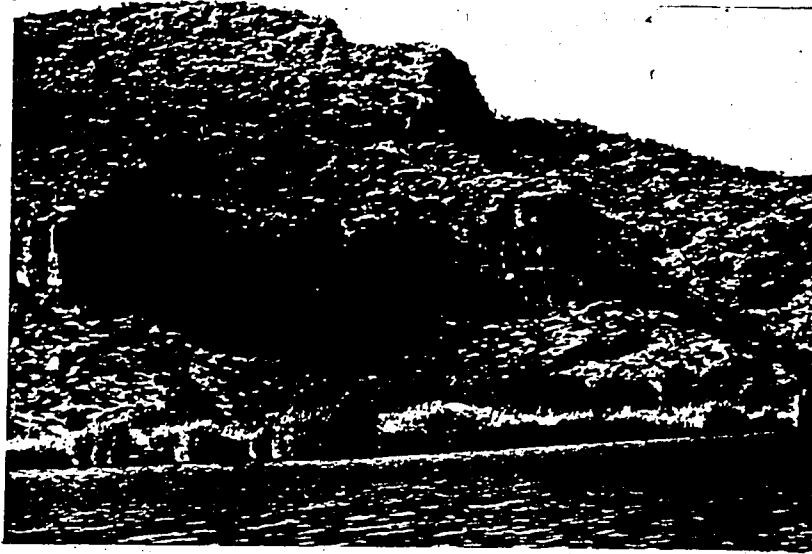


fig.113 Kaunos, general view of rock-cut tombs



fig.114 Telmessos, Amyntas tomb

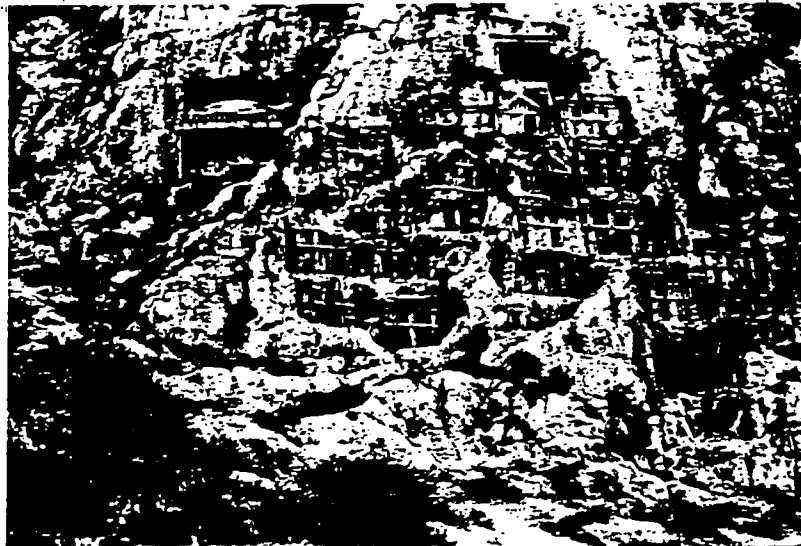


fig.115 Myra, general view of river necropolis



fig.116 Myra, Tomb No.69



fig.117 Myra, Tomb No.69, back wall a/actual state

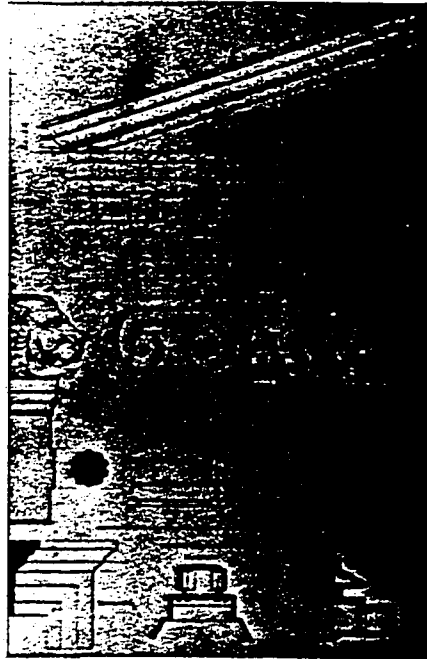


fig.117 Myra, Tomb No.69, back wall b/drawing

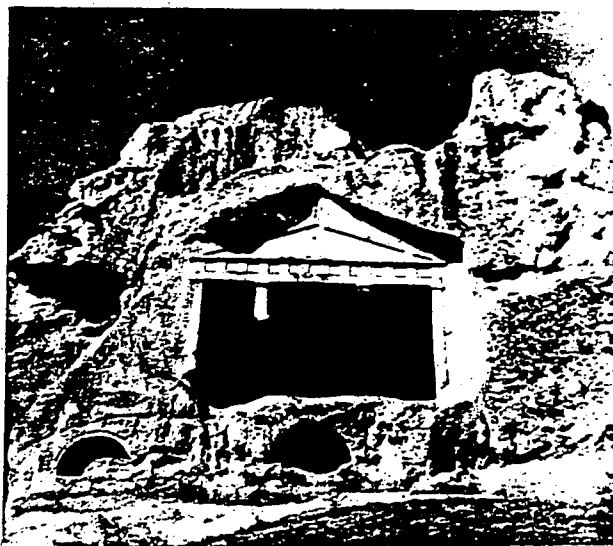


fig.118 Gerdek Kaya tomb



fig.119 Maziköy tombs

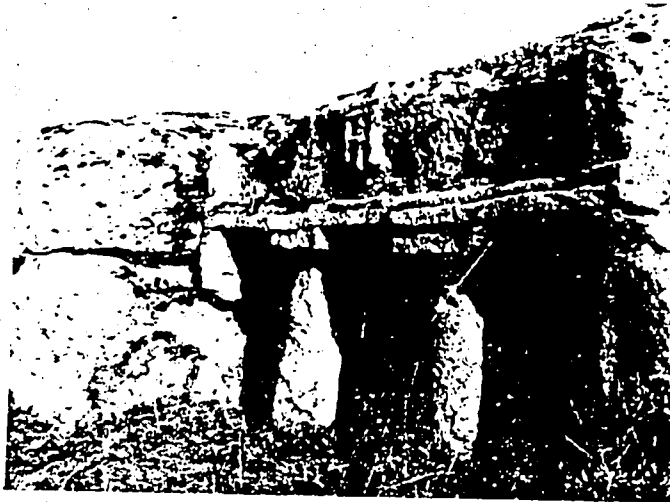


fig.120 Maziköy, tomb with large "frieze"

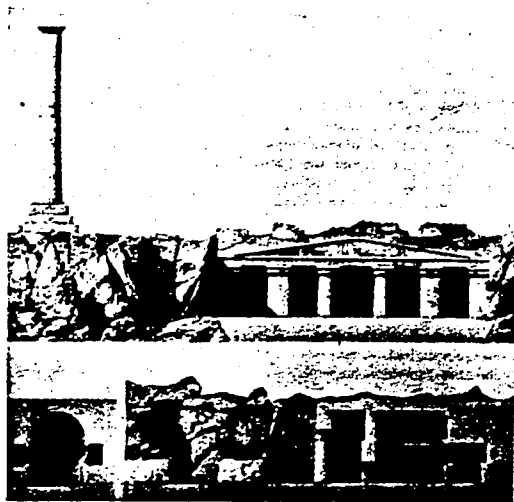


fig.121 Dikili Taş
tomb, drawing

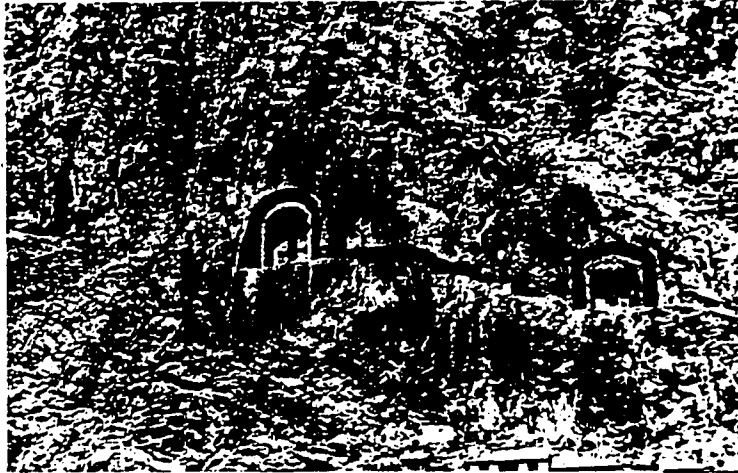


fig.122 Amaseia tombs

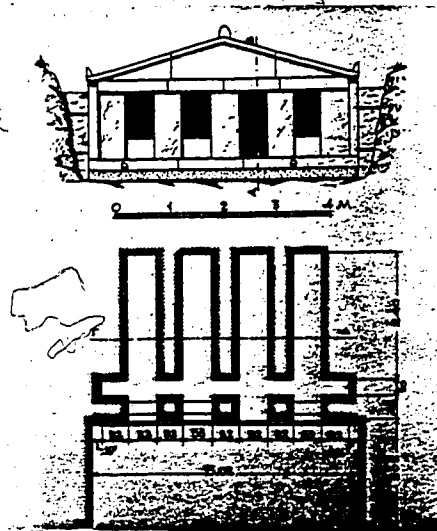


fig.123 Alipheira tomb, plan and façade



fig.124 Vergina, Ionic tomb

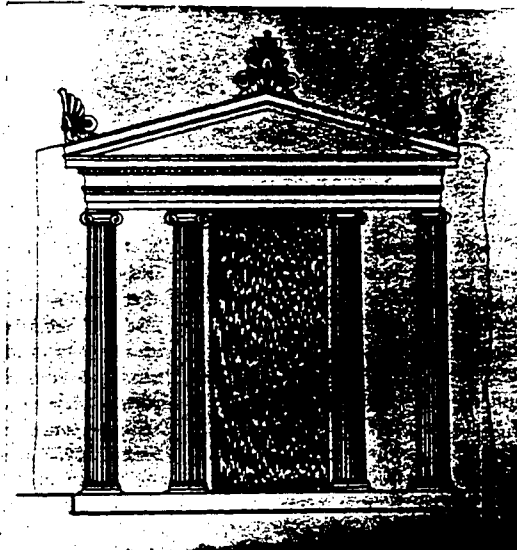


fig.125 Lefkadia-Naoussa tomb

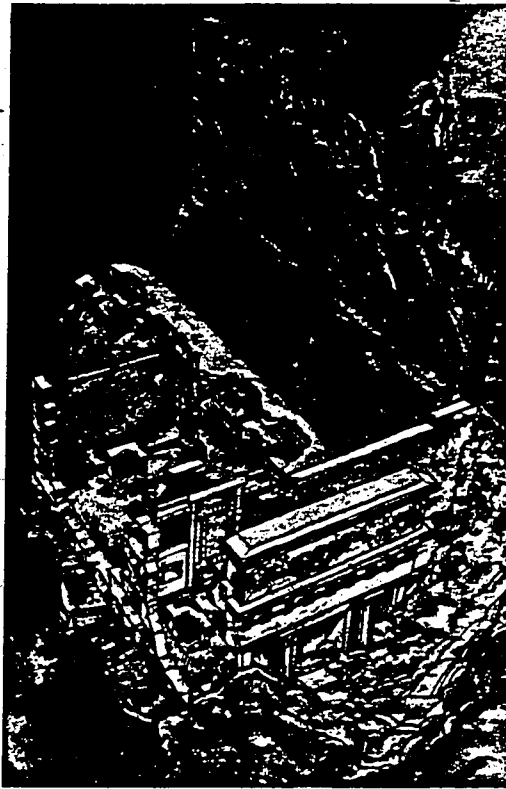


fig.126 The Doric tomb at Vergina

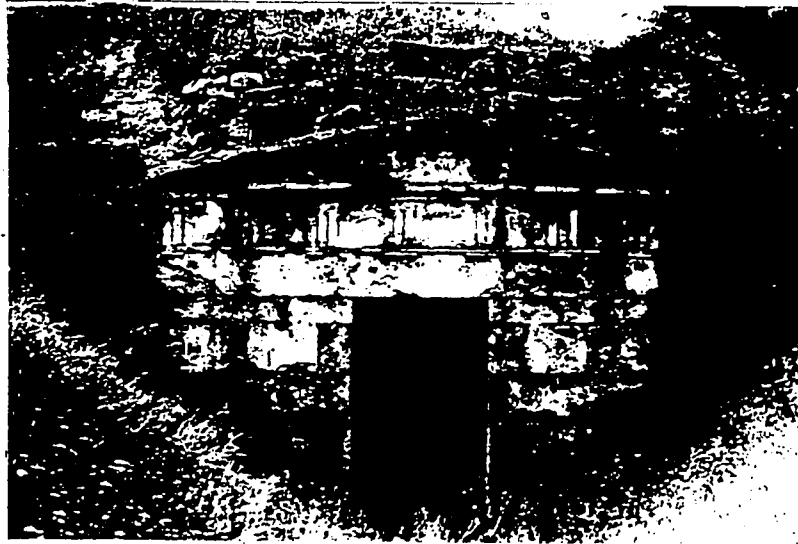


fig.127 Dion tomb, exterior



fig.128 Dion tomb, interior



fig.129 Lefkadia, Great Tomb, façade

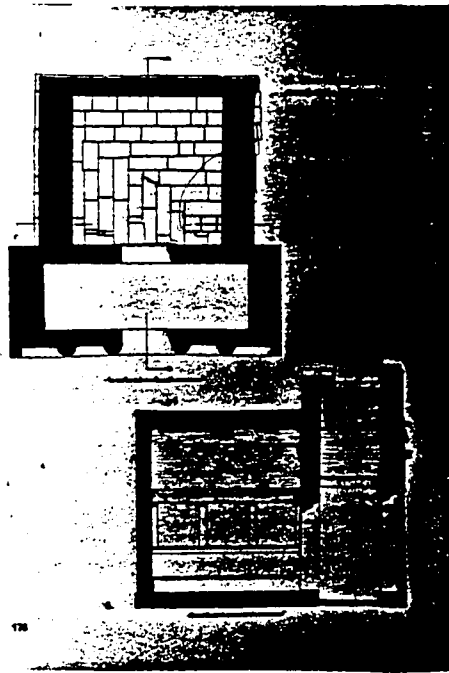


fig.130 Lefkadia, Great Tomb, cross-section and plan

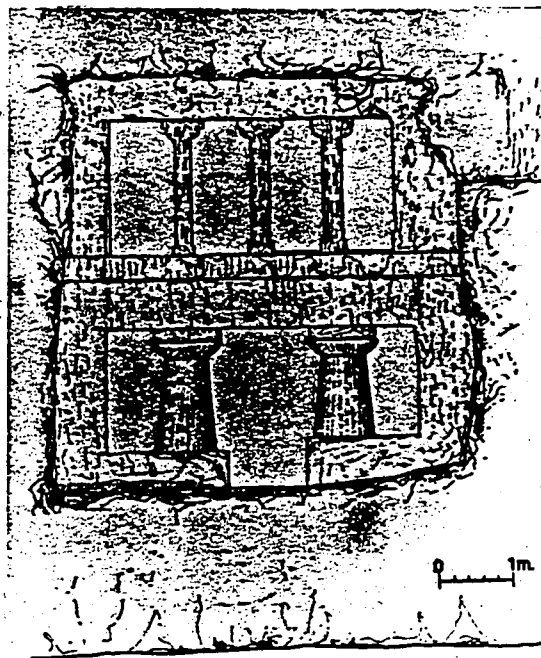


fig.131 Cyrene (Barka) tomb

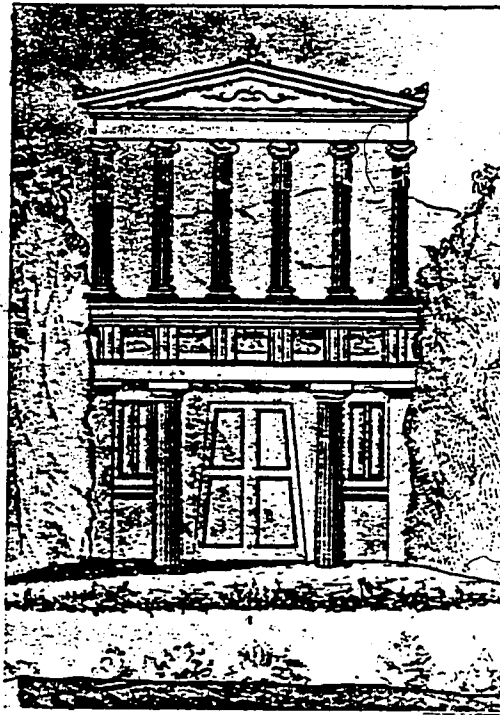


fig.132 Canosa tomb No.3, façade

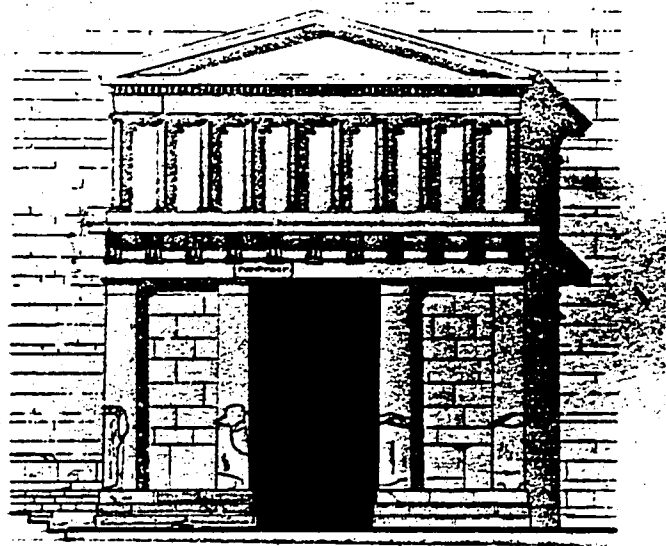


fig. 133 Thasos, Gate of Zeus and Hera

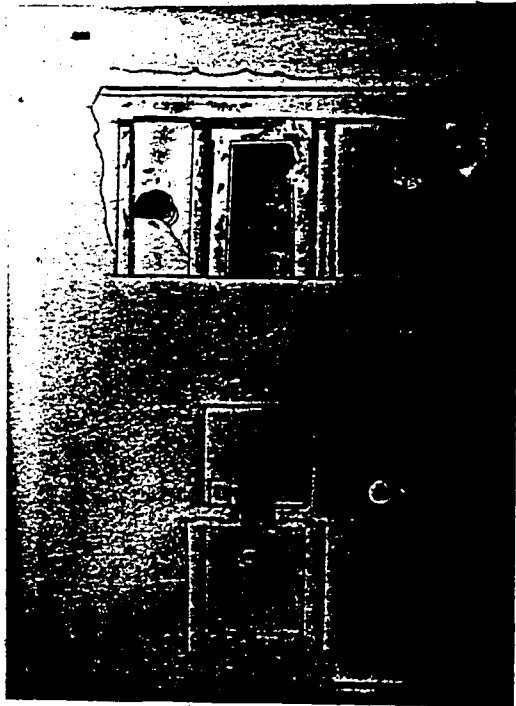


fig.134 Basse Selce,
(Albania), Tomb 1

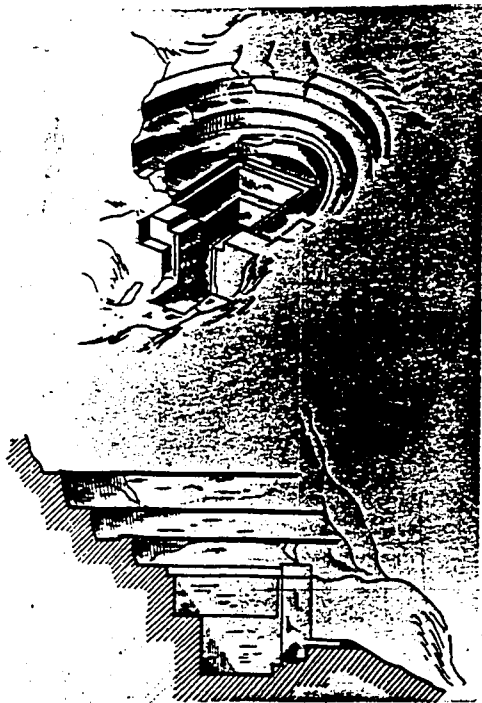


fig.135 Basse Selce,
(Albania), Tomb 2

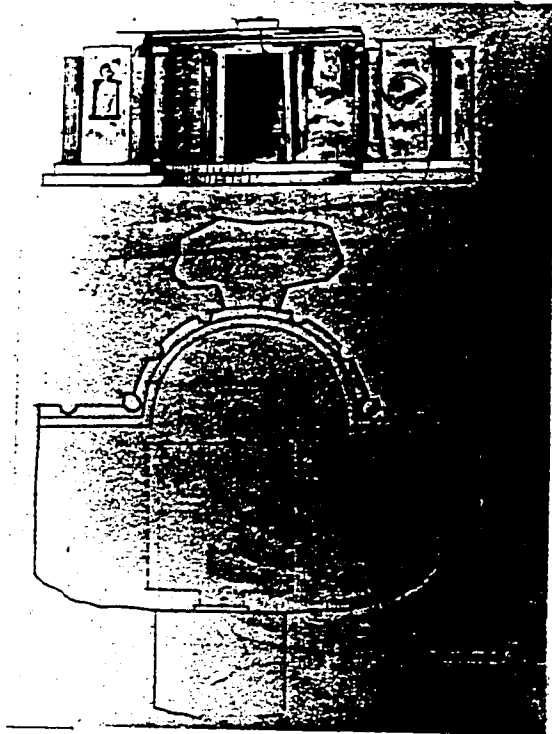


fig.136 Basse Selce,
(Albania), Tomb 3

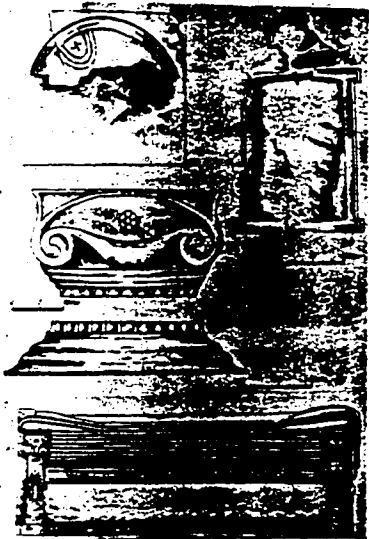


fig.137 Basse Selce,
(Albania), Tomb 3, details



fig.138 Basse Selce,
(Albania), Tomb 4

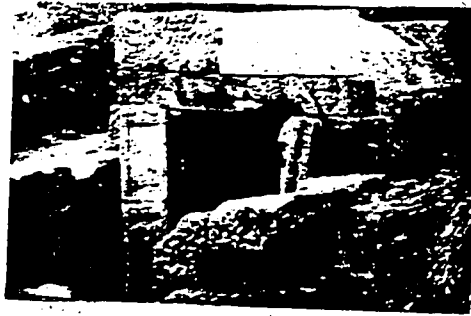


fig.139 Basse Selce,
(Albania), built vaulted
tomb

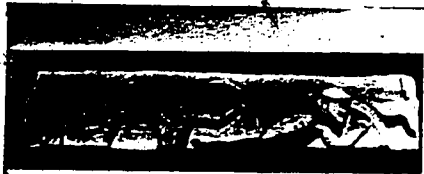


fig.140 Albania,
Apollonia relief



fig.141 Canosa, Tomb No.3

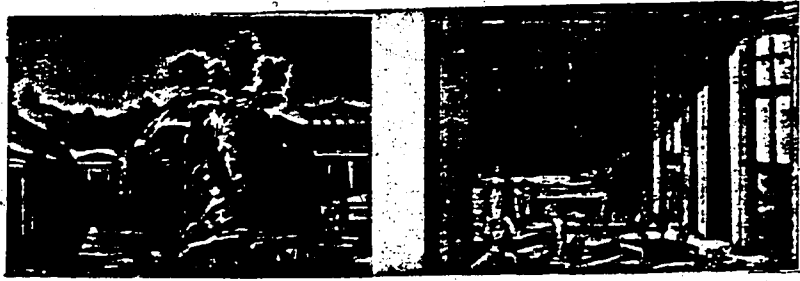


fig.142 Canosa, Tomb No.2

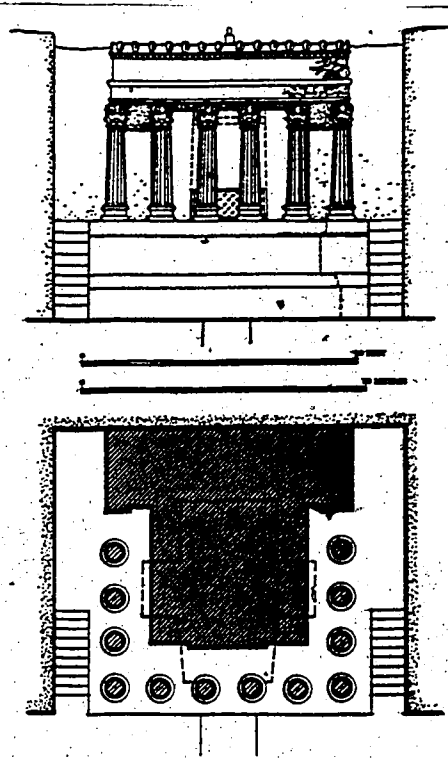


fig.143 Sovana, Tomba Ildebranda, plan and façade

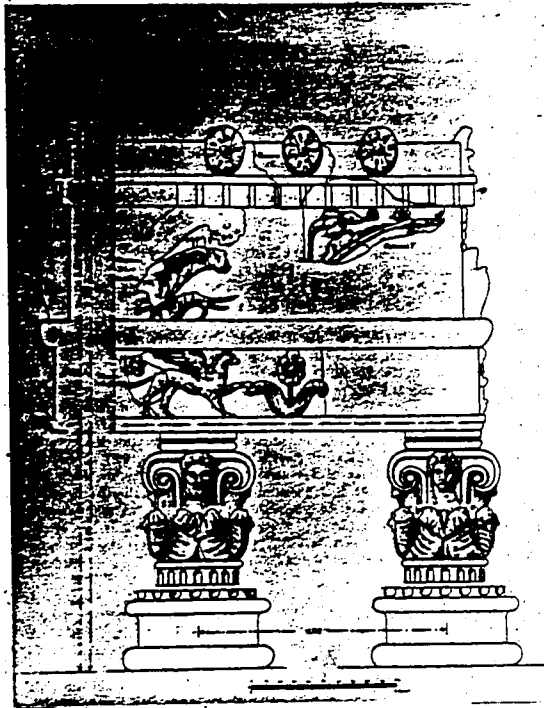


fig.144 Sovana,
Tomba Ildebranda,
drawing of columnar
order

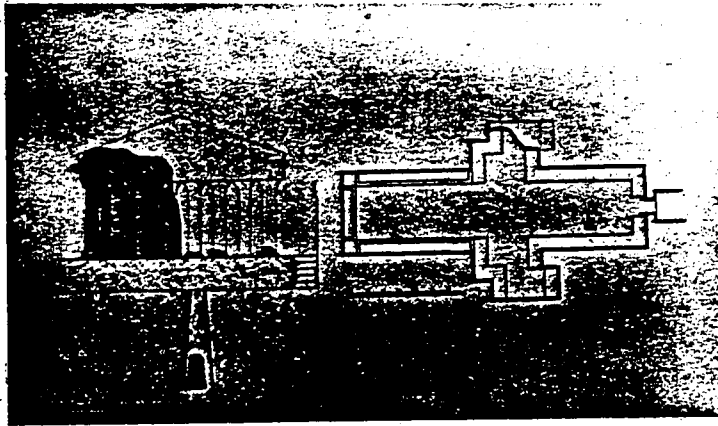


fig.145 Sovana, Grotta Pola, plan and facade



fig.146 Norchia, Doric tombs

fig.147 Norchia, Tomba Lattanzi,
façade

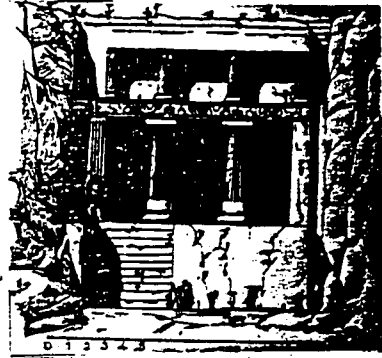


fig.148 Norchia, Tomba Lattanzi,
cross-section

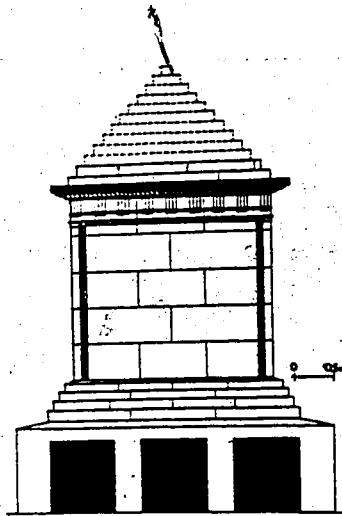


fig.149 Cyrene, Tomb N180

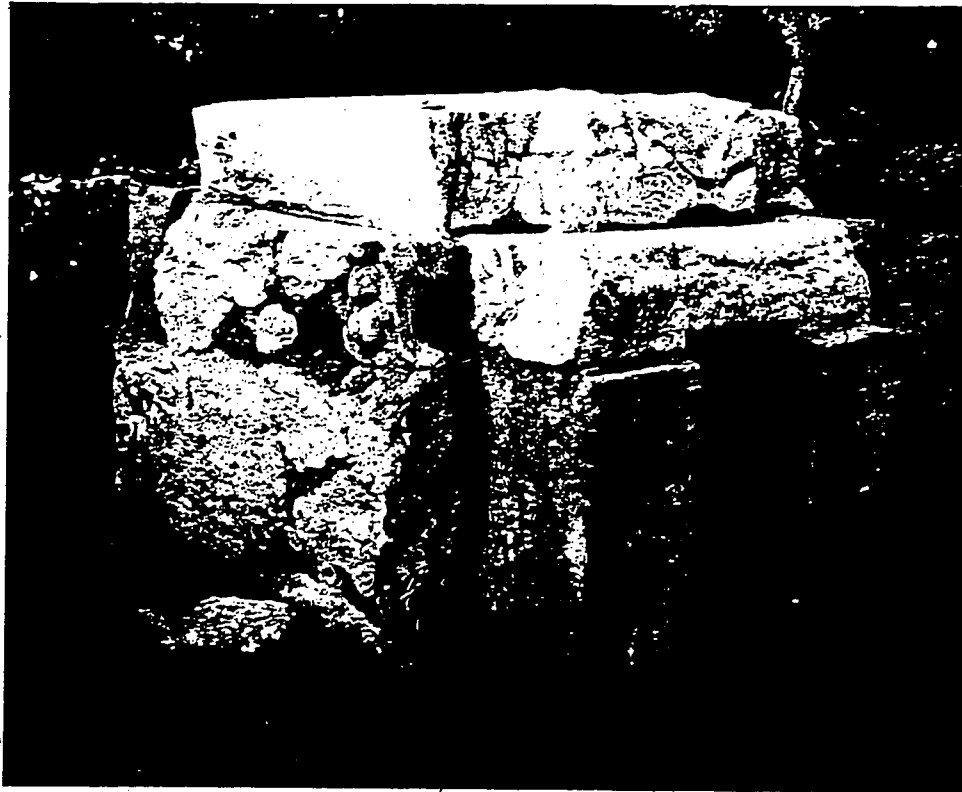


fig.150 Alexandria, Alabaster Tomb a/general view

b/ interior



fig.151 Alexandria,
Shatbi, engaged orders

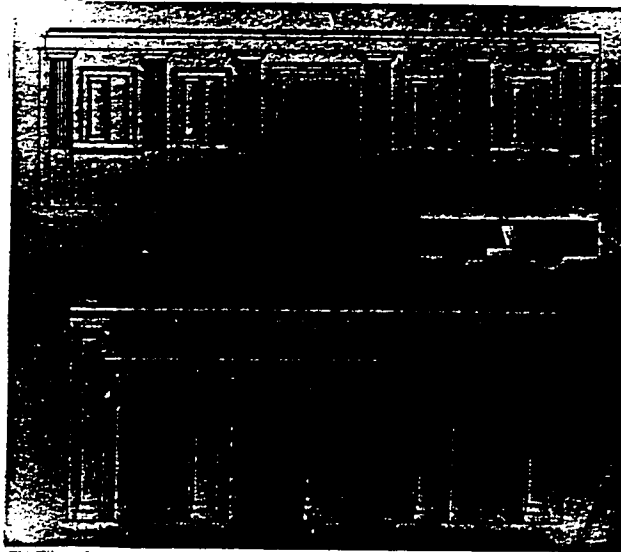


fig.152 Alexandria, Shatbi,
plan and back wall of room g

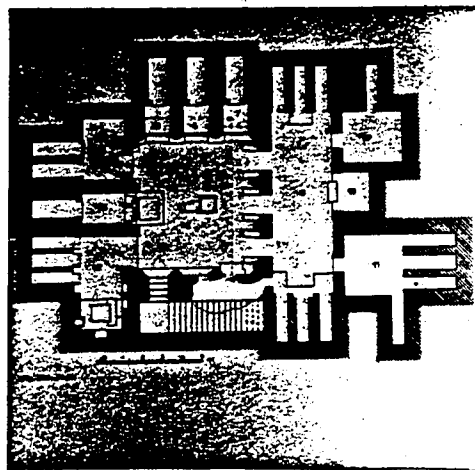
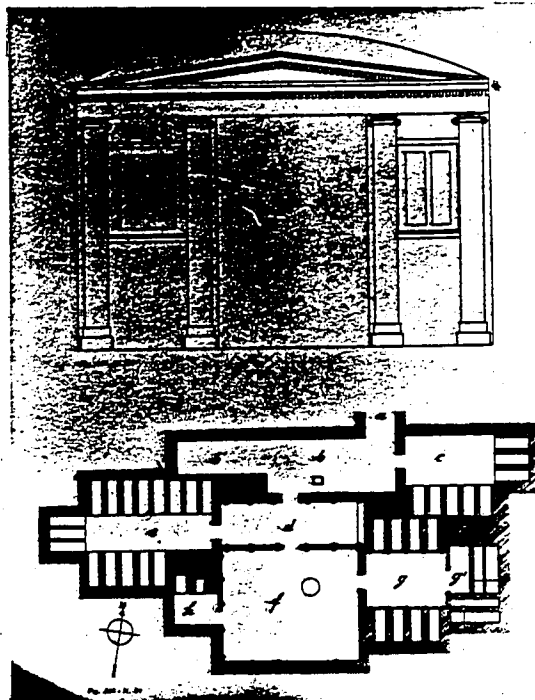


fig.153 Alexandria, Mustafa
Pasha I, plan



fig.154 Alexandria, Mustafa Pasha I, corner

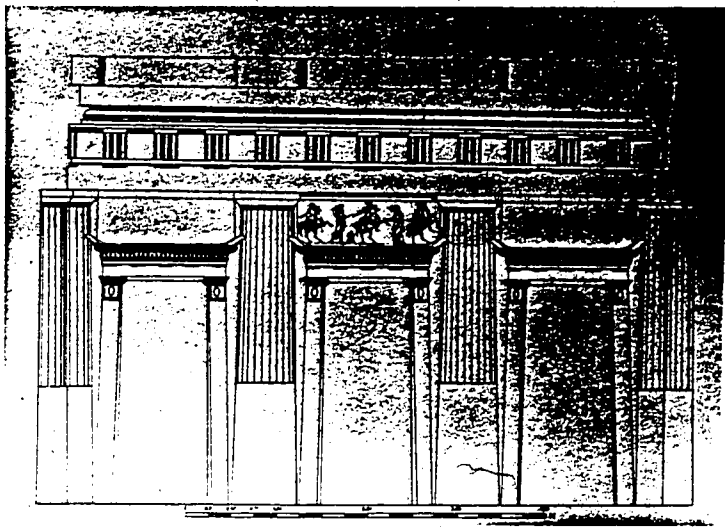


fig.155 Alexandria, Mustafa Pasha I, façade with paintings

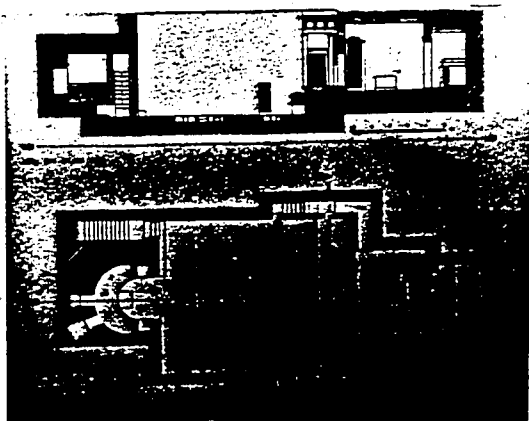


fig.156 Alexandria, Mustafa Pasha III

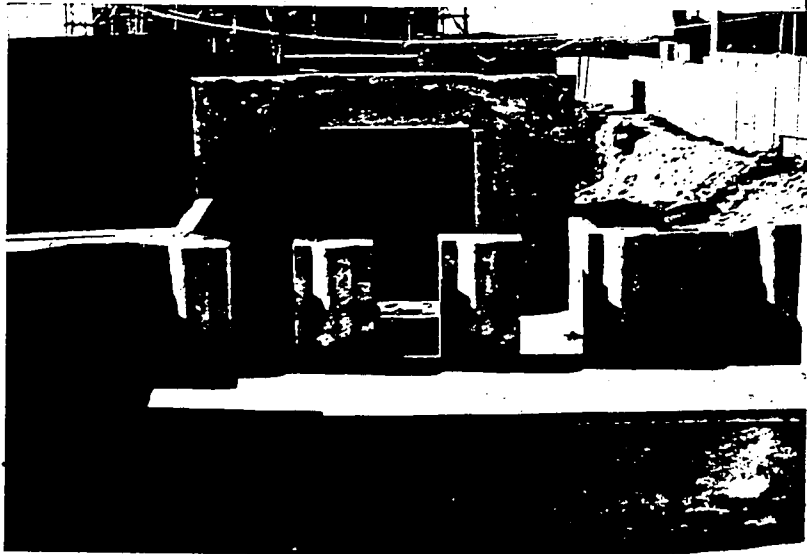
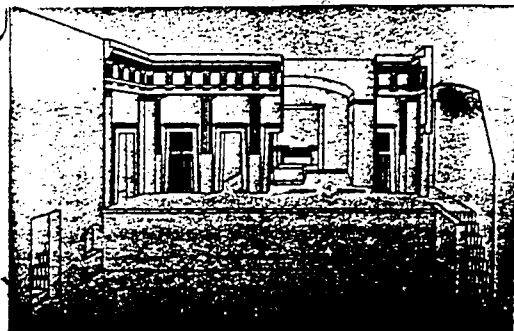


fig.157 Alexandria, Mustafa Pasha III a/general view

b/ reconstructed view



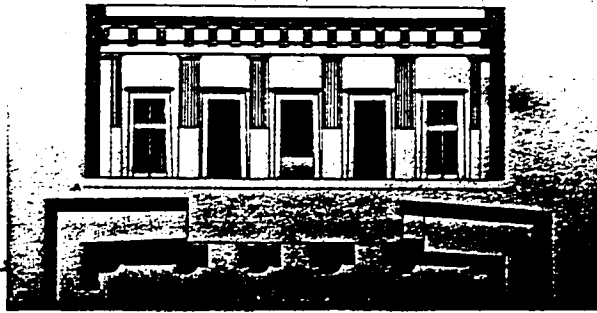


fig.157 Alexandria, Mustafa Pasha III c/north facade

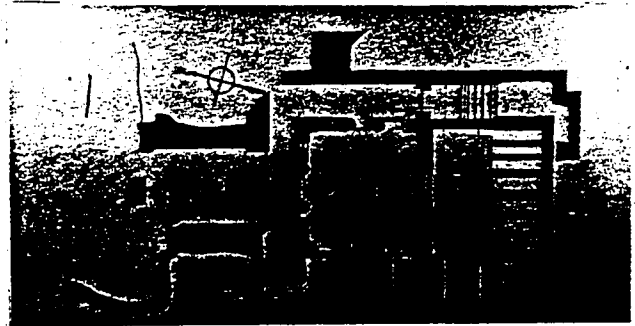


fig.158 Alexandria,
Mustafa Pasha IV

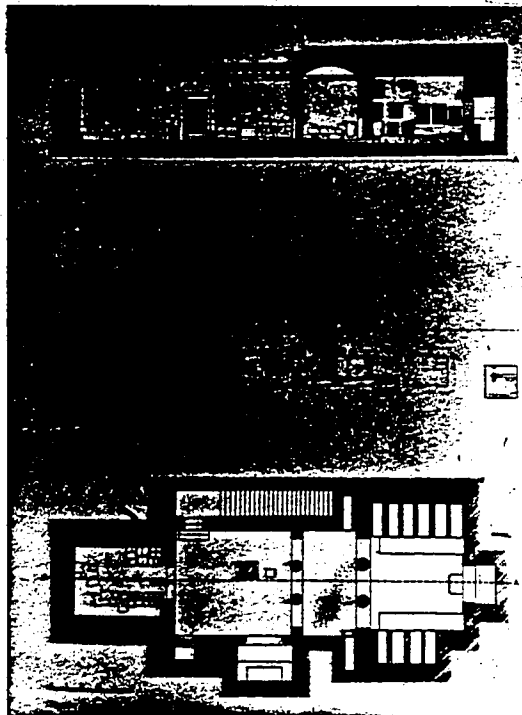


fig.159 Alexandria,
Mustafa Pasha II

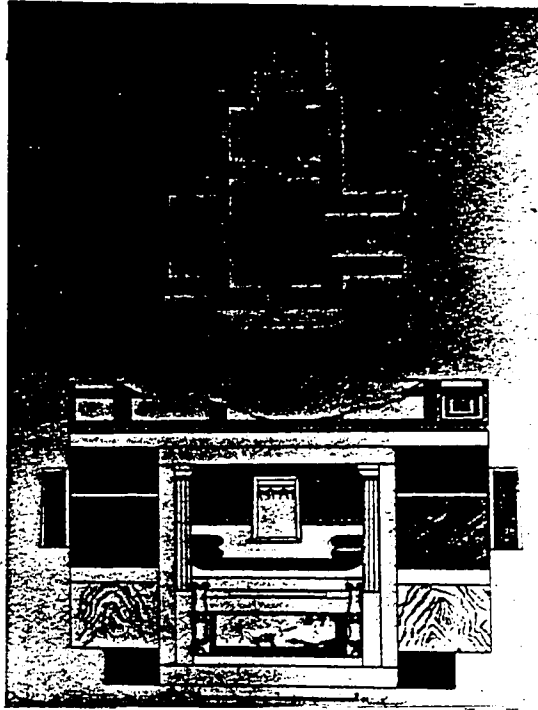


fig.160 Alexandria, Sidi Gaber, plan and cross section

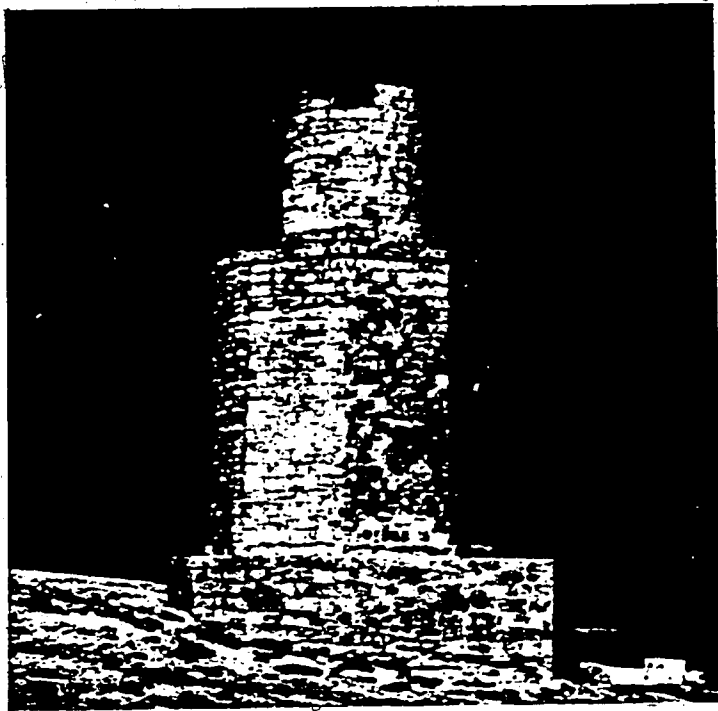


fig.161 Taposiris Magna, general view

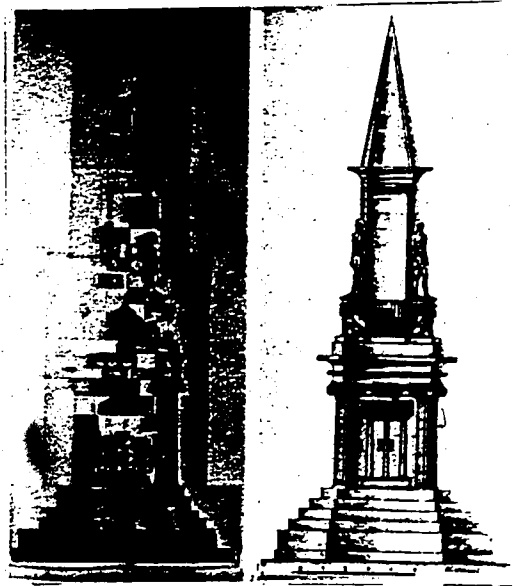


fig.162 Sabratha, Mausoleum B

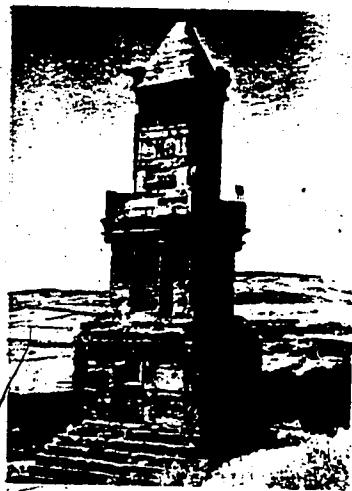


fig.163 Dugga, Tomb of
Ateban

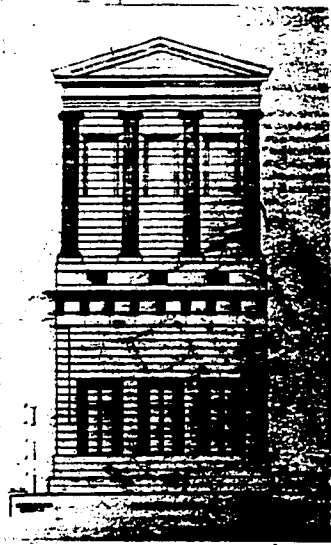


fig.164 Ptolemais, mausoleum

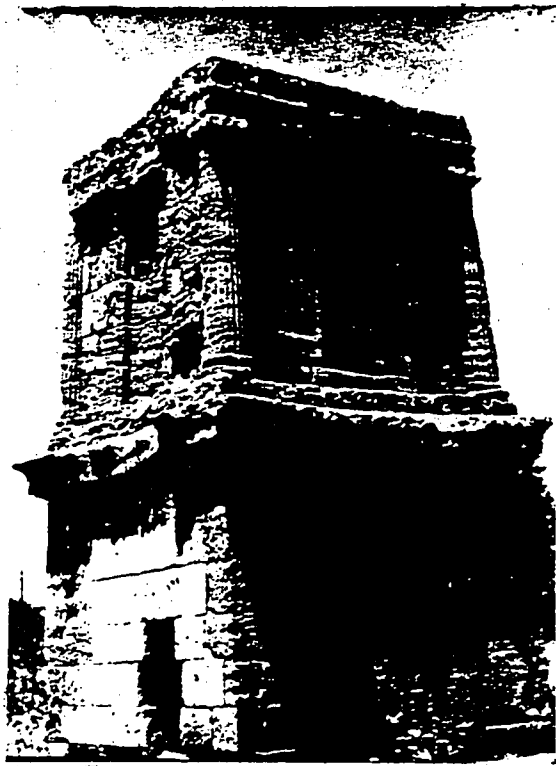


fig. 165 Akragas, Tomb of Theron



fig.166 Algeria, Medracen
tumulus a/general view

b/side view

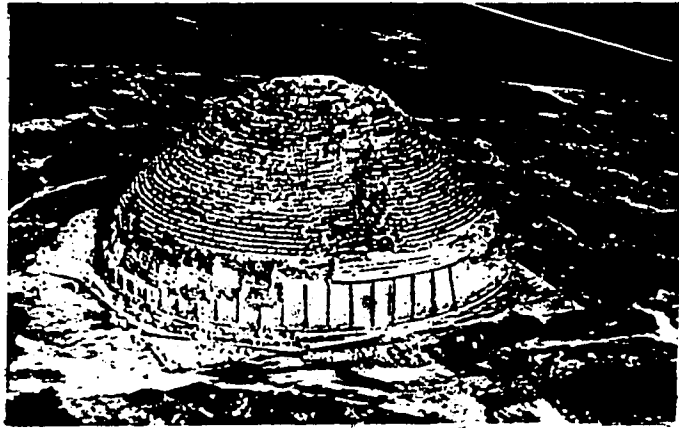
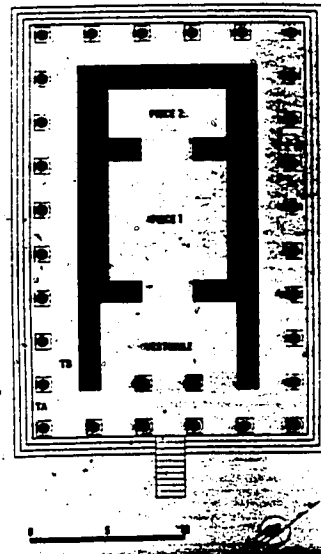


fig.167 Algeria, "Tombeau de la Chretienne"

fig.168 Ai-Khanoum,
mausoleum, foundation course



fig.169 Ai-Khanoum, mausoleum,
plan



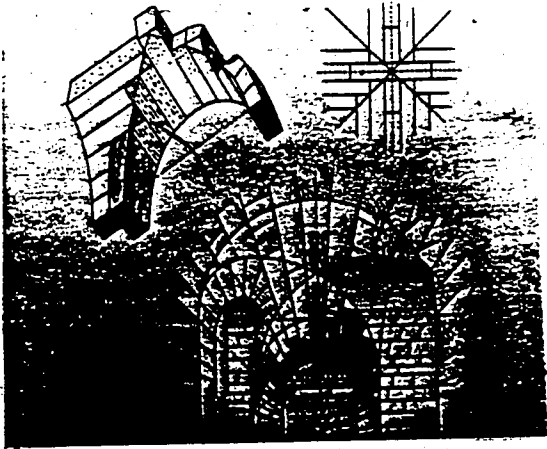


fig.170. Pergamon,
intersecting vaults

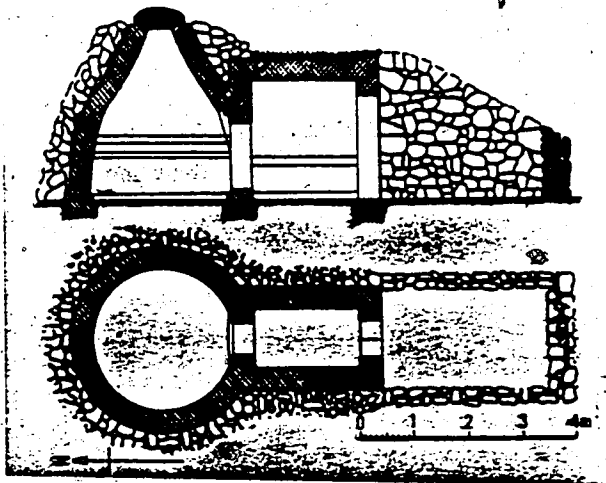


fig.171 Kazanlik,
plan and cross section

fig.172 Cortona, "Secondo Melone
del Sodo", tomb





fig.173 South Russian timber grave

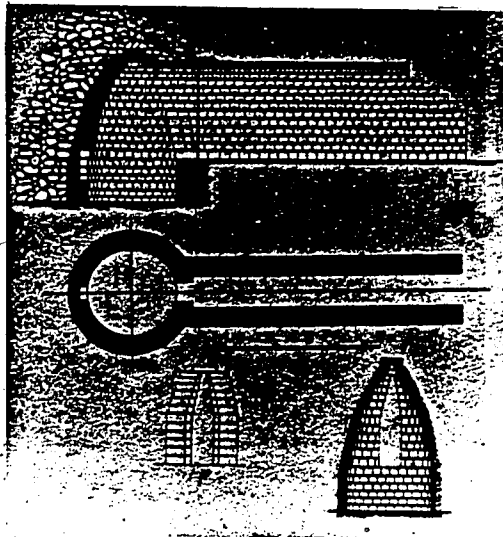


fig.174 Gold Kourgan, plan and cross section

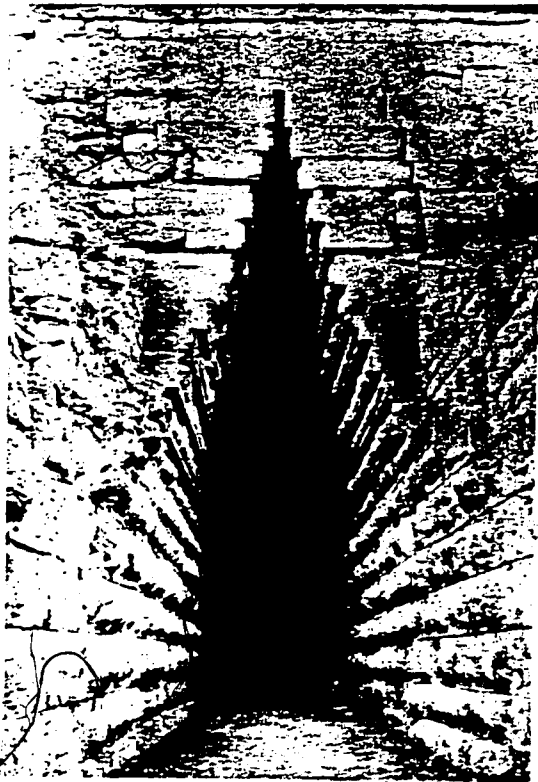


fig.175 Czarskij Kourgan, dromos

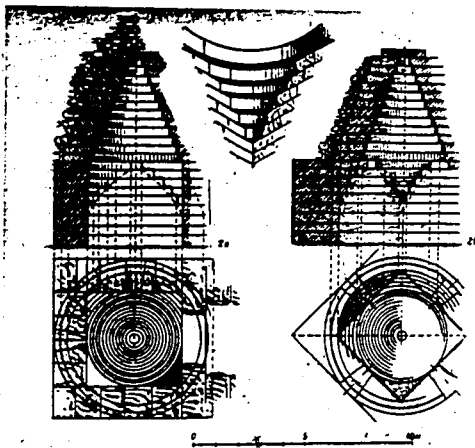


fig.176 Czarskij Kourgan, plans and cross sections



fig.177 Cortona, corbelled corner

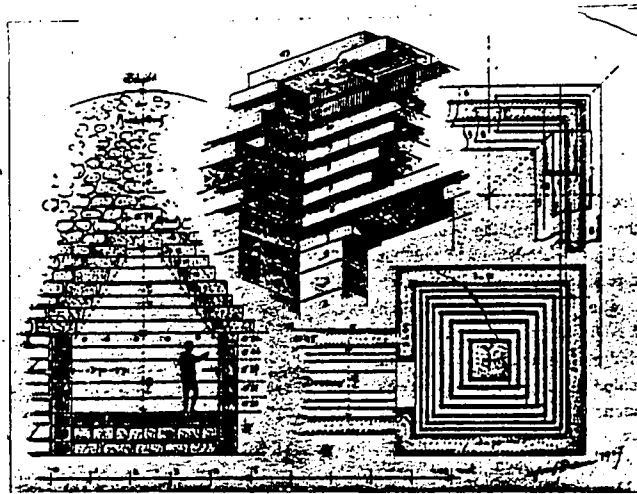


fig.178 Melek Çesme tomb, drawings according
to Durm

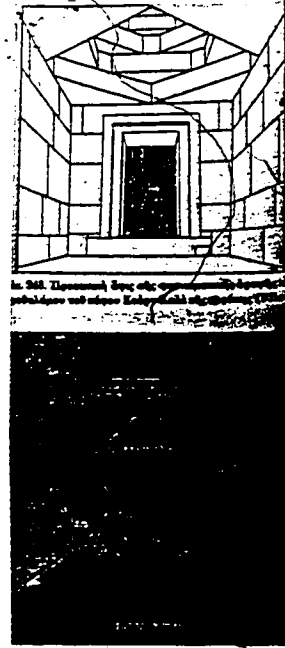
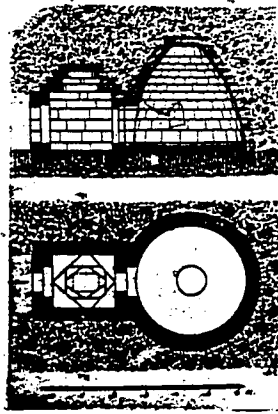


fig.179 Kurt Kale tomb
 a/plan and cross section
 b/roof construction

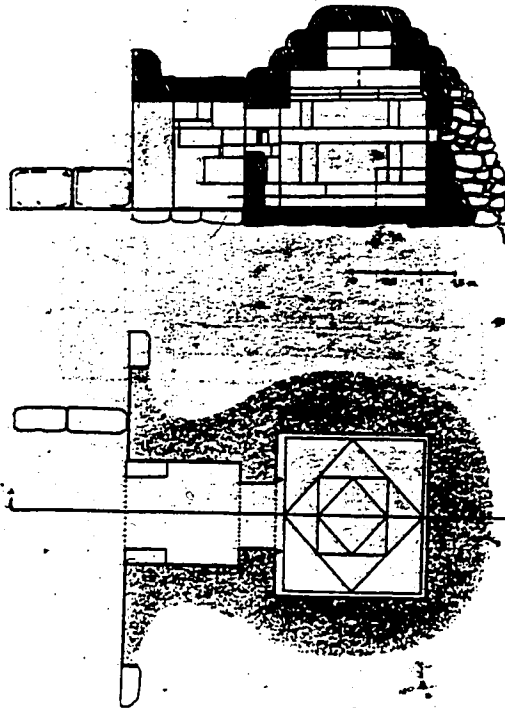


fig.180 Filibe tomb, plan and cross section

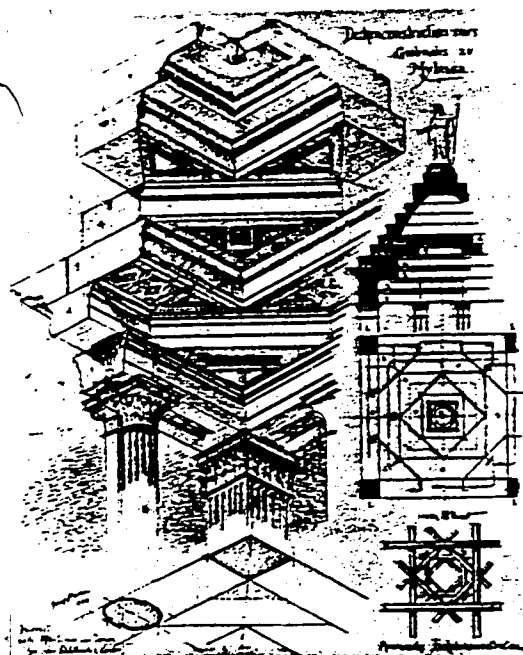
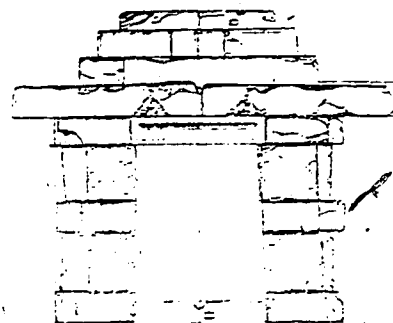


fig.181 Mylasa tomb a/roof construction, b/ drawings of roof construction



fig.182 Gemlik (Propontis), tomb



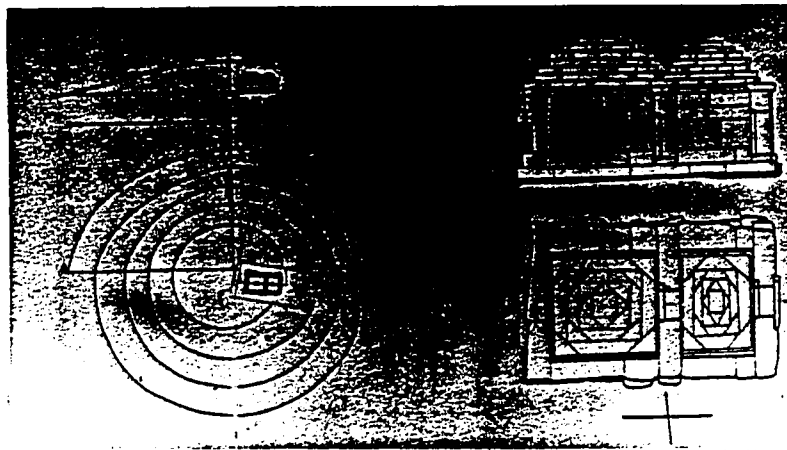


fig.183 Gordion tomb, plan and cross section

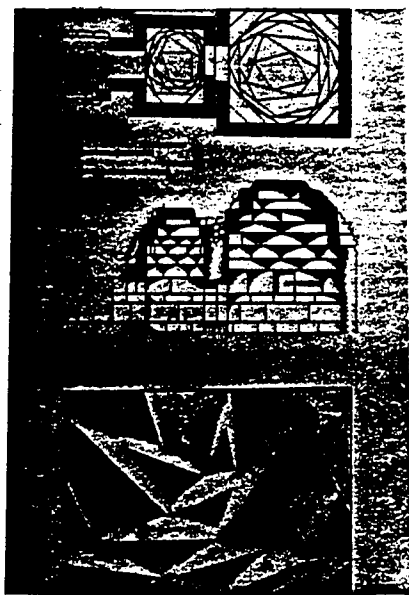


fig.184 Karalar tomb, plan, cross section, roof construction

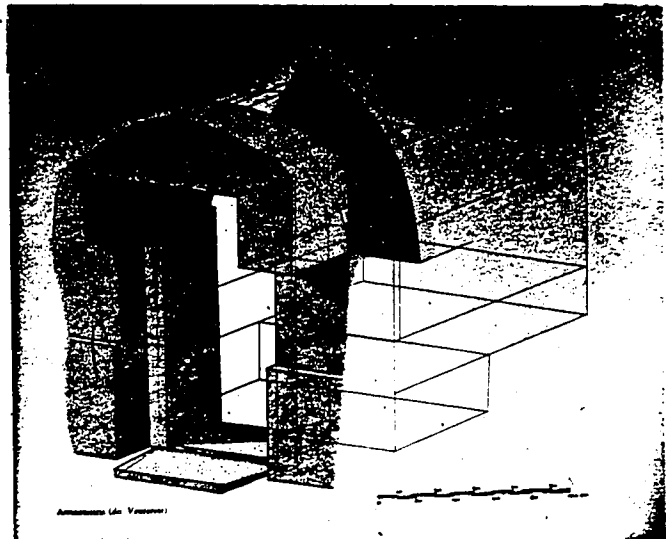


fig.185 Hierapolis tumulus, tomb chamber exposed



fig.186 Cortona,
"Tomb of Pitagoras"

fig.187 Perugia,
Faggeto tomb



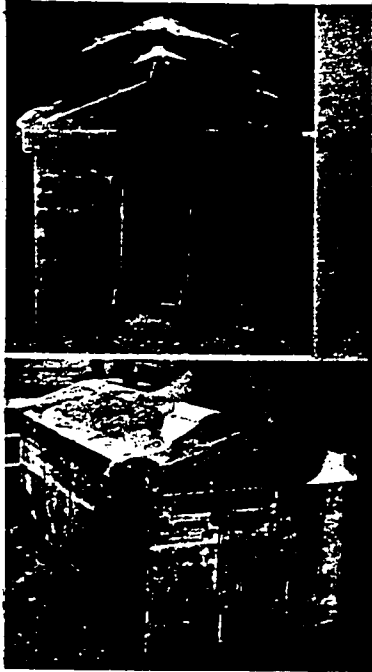


fig.188 Samos sarcophagus

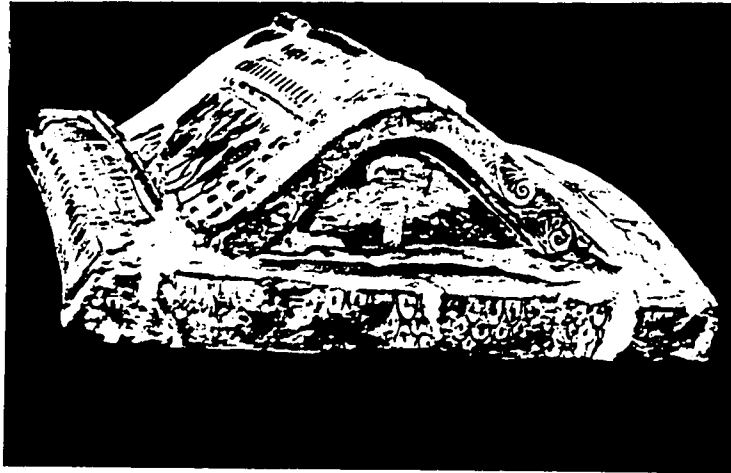


fig.189 Izmir, Klazomene sarcophagus, lid

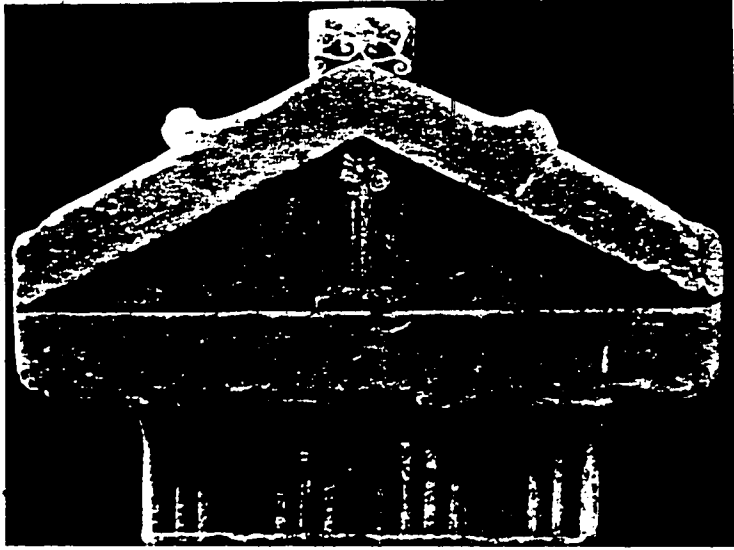


fig.190 Syracuse museum, top of funerary cippus

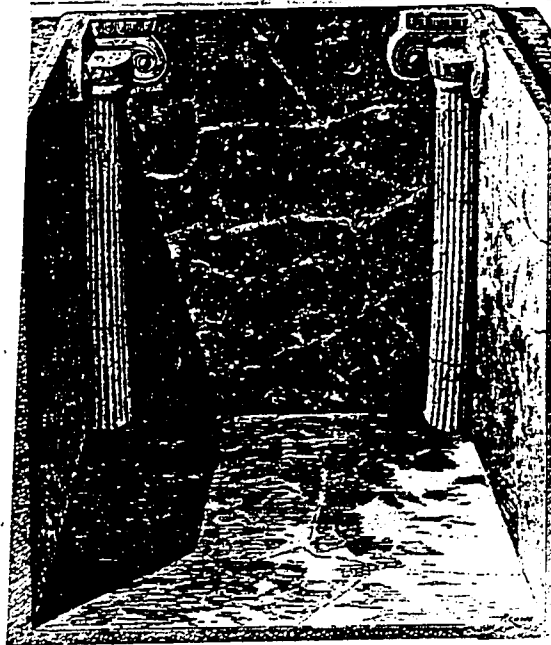


fig.191 Gela sarcophagus, interior columns

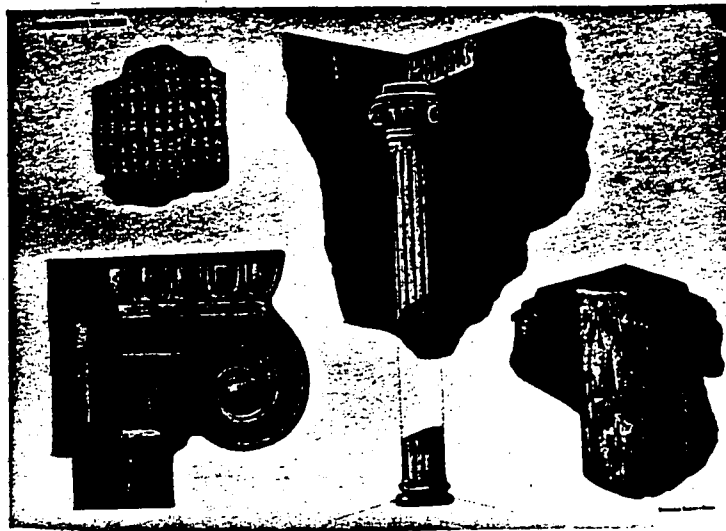


fig.192 Gela sarcophagi, details

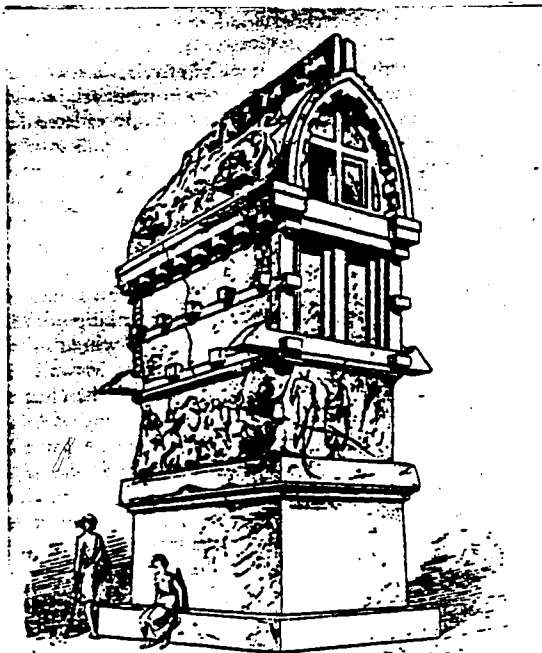


fig.193 Payava sarcophagus

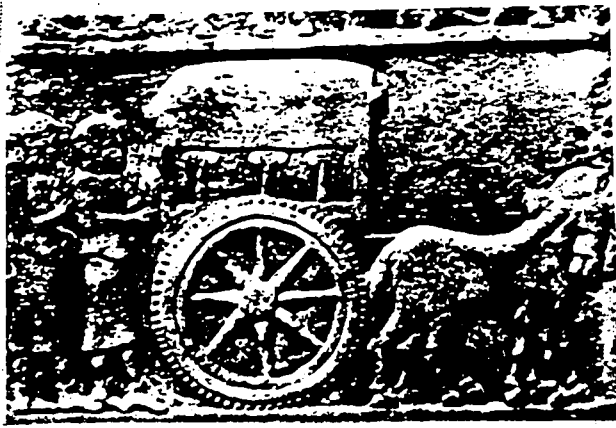


fig.194 Daskyleion stele, detail

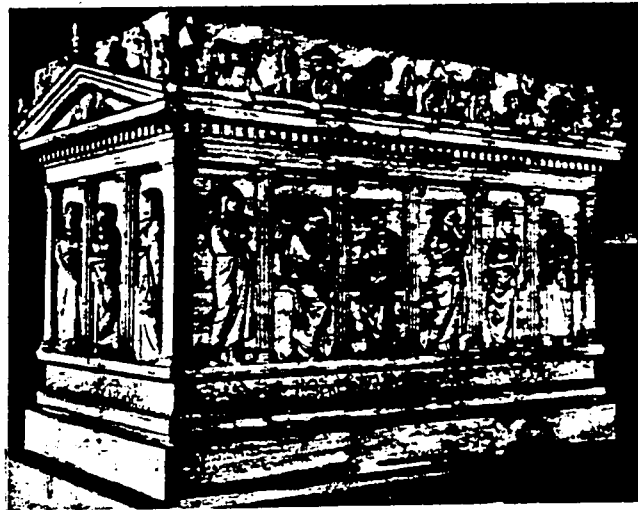


fig.195 Mourning Women
sarcophagus

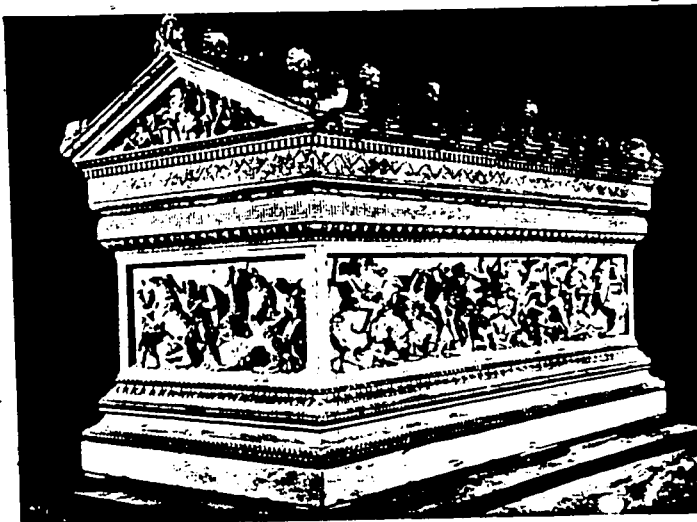


fig.196 Alexander
sarcophagus



fig.197 South Russian columnar sarcophagus

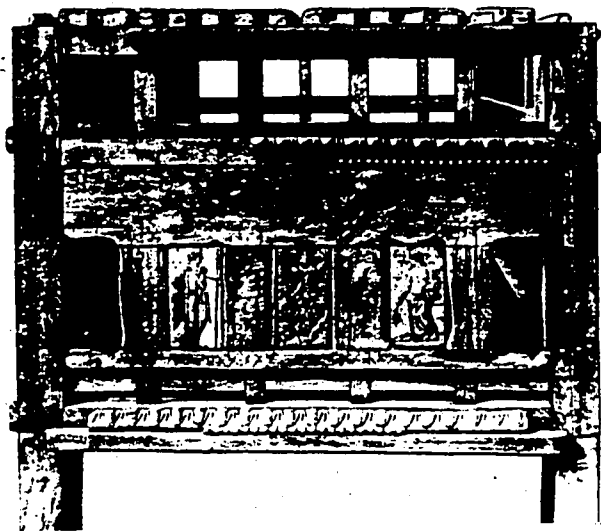


fig.198 South Russian sarcophagus with inlaid panels

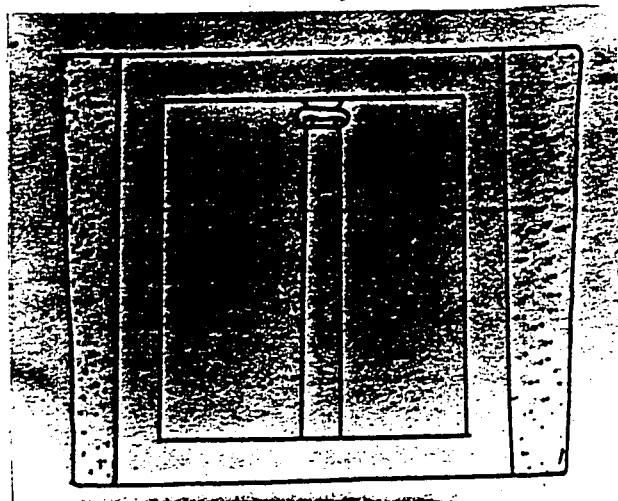


fig.199 Volos, cist grave, panel

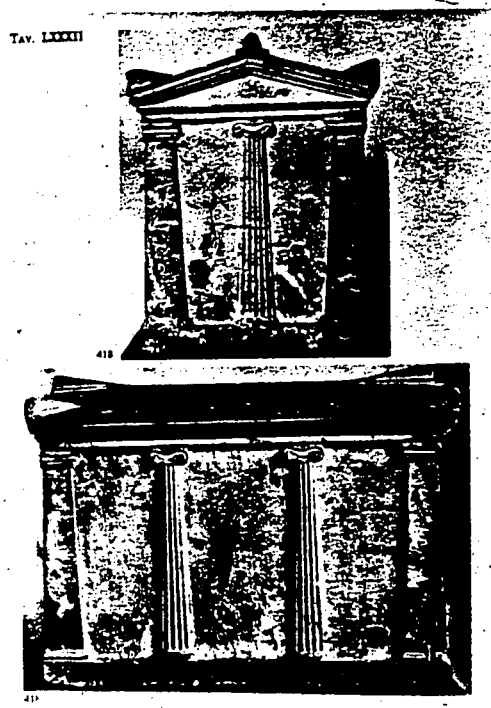


fig.200 Rome (Museo Barracco), cinerary urn



fig.201 Iznik
sarcophagus

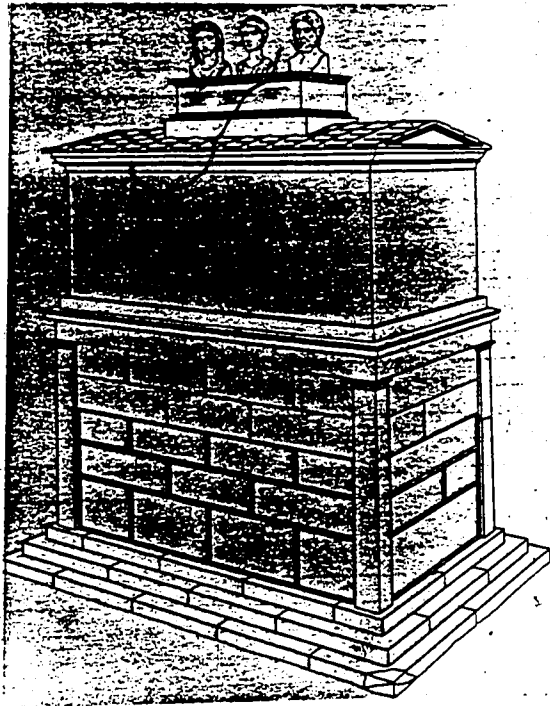
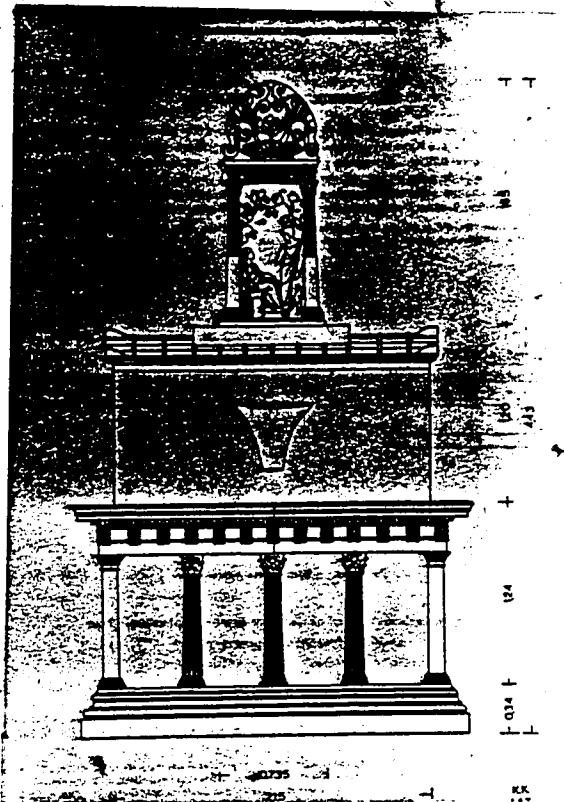


fig.202 Paros,
elevated sarcophagus

fig.203 Delos, elevated
sarcophagus



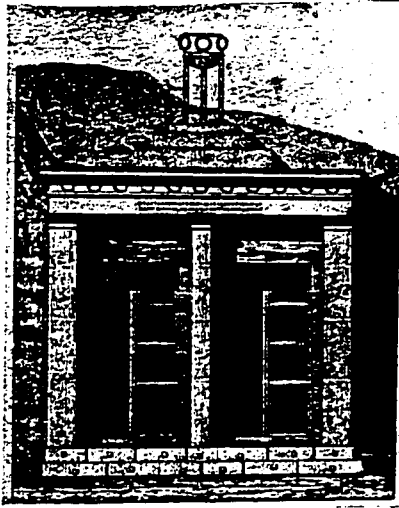


fig.204 Athens, Thrasylos Monument

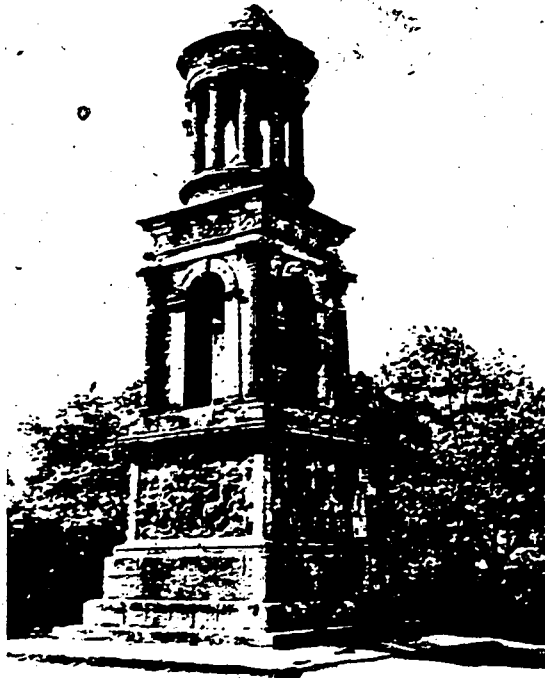


fig.205 St. Remy, Monument of the Julii



Fig. A/ Salapia tomb, façade



Fig. B/ Aigina sarcophagus