THE NATURAL AND THE ARTIFICIAL GROTTO

I. THE SACRED GROTTO AND SPRING

In ancient Greece the sanctuaries of Apollo were frequently situated close to springs of water. Near his temple on Mt. Ptooon was a mantic cave with a spring.

Fig. 1. The Entrance to the Sacred Spring at Corinth

Fig. 2. The Triglyph Frieze from the North

At Delphi above the great temple was the spring of Kassotis the water of which flowing underground inspired the priestesses of Apollo.¹ Near another temple of the god at Hysiai in Boeotia Pausanias saw a sacred well from which people drank and

then divined. At Klaros near Kolophon where there was a very ancient oracle of Apollo, his priest entered a cave to drink from a *fons arcanus*, and then deliver oracles in verse. The Apolline Sibyl Herophile of Erythrai went to both Klaros and Delphi. When in Roman times her statue was set up in a small semicircular *Quellgrotte* in her native city, an inscription represented her as saying that she sat upon a stone and sang her prophecies. Since a spring gushed out behind the statue, the implication is that the Sibyl drank of the water before chanting her oracles. At Corinth a peribolos of Apollo lies in front of the famous fountain of Peirene. Even Klitias the Athenian vase-painter was aware of the close connection of Apolline cult with a spring when he represented Apollo near a fountain.

Yet another spring, the Sacred Spring at Corinth, seems to have been mantic. Its water trickled from beneath a ledge of conglomerate whence on occasion it was carried to a sanctuary nearby. In the late fifth century the grotto was shut in by a wall with a triglyph frieze (Fig. 1) to which the outside ground level was raised, and a flight of steps built to permit access to the water. The triglyph frieze extended beyond the limits of the spring (Fig. 2) and was provided near its northern end with a movable metope behind which was an underground passage (Fig. 3). By this tunnel one could approach close to the altar (?) in an apsidal temple (Figs. 4-5). The fact that the frieze continued so far to the right as to serve this strange purpose is sufficient to prove that the spring and the temple belonged to the same deity. The water of the spring was carried to the temple for some ritual use.

That Apollo was the deity of the grotto is made very probable by the tripods which were set upon the triglyph wall. The triangular base of one is above the spring

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2 IX, 2, 1. For a spring under a temple of Apollo see Pausanias, VIII, 34, 5.
6 *Guide*, p. 52.
while the second, a round base, is set on the other side of the steps (Fig. 1). The position of the first of these may be stated in the words of Strabo about the Delphic cave: ὑπερκείσθαι δὲ τοῦ στομίου τρίποδα ύψηλών, while the descent to the grotto between the two tripods reminds one of the descent at Delphi as described in the Homeric hymn to Apollo:

"εἴς δὲ ἀδυτον κατέδυσε διὰ τριπόδων ἐρυτίμων."

There the original oracular spring by which the priestess was inspired must have been down in a grotto of some sort. To approach the adyton the priestess had to descend and this action at an Apolline oracle was correctly described by the words κατέδυσε, καταβαίνει, and degressus. Later when a temple was built and the oracles were rendered within it, the same verbs were used to describe the approach to the adyton. The mantic cave at Delphi became a mantic crypt in the temple. At Corinth Pausanias saw neither the temple nor the sacred spring, but he mentioned as standing in the agora and perhaps near the site of the spring a statue of Apollo Klarios whose priest near Kolophon descended to a fons arcanus.

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7 Strabo, IX, 419. He describes the cave as ἄντρον κοῖλον κατὰ βάθους.
8 III, 443 (the numbering of the hymns cited in this paper is that used by Allen in his Oxford edition). On the dedication of tripods at the oracles of Apollo see Adler, Pauly-Wissowa, R.E., s.v. Ismenios, p. 2143. Two tripods appear outside the temple of Apollo in a vase painting (Daremburg et Saglio, Dict., s.v. omphalos, p. 200, fig. 5405).
11 Tacitus, Annales, II, 54.
The foundations of the temple of the spring at Corinth are partly preserved (Fig. 5). According to the accepted theory it contained an altar of which the base remains (Fig. 4). To the smoothly worked circular top of this base nothing was doweled and whatever stood upon it was removable. This object was more likely a basin with a high cylindrical support similar to that in a vase painting where the circular base is provided with a raised edge. Traces of a corresponding edge survive on the base at Corinth. Water from the sacred spring, if poured into the basin, could have found its way by the channel in the underground passage to the stone jar outside the triglyph frieze (Fig. 3). A concave cutting was made in the three courses below the frieze so that this jar might be set closely against them. The peculiar features of the temple may be simply explained as copied from the sacred spring. The artificial channel underground reproduces the natural channel while the opening in the triglyph frieze reproduces the opening in the back wall of the spring, an opening which a priest could have entered, and finally the conduits of both ended at a jar outside the wall.

That this water was miraculously transformed into wine, as at Andros where wine flowed from a spring in the sanctuary of Dionysos, is quite possible as Bonner has suggested. But this theory should be modified to harmonize with the obviously close association of Apollo and Dionysos at Delphi. The pedimental groups of Apollo's temple there represented Artemis, Leto, Apollo, the Muses, the sun and Dionysos with the Thyiads. According to a scholiast on Pindar, Dionysos was the first to mount the prophetic tripod of Pytho to reveal the future. No wonder that in the theatre

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13 The choice of a krater or mixing bowl for wine and water as the Mithraic symbol of a spring may have been due to such a spring as that at Andros or to one with which water was mixed.
16 Pausanias, X, 19, 3.
17 Schol. Pyth, argum. a. In the phrase ὁμφαλὸν ἑμβρώμων χθωνίς Pindar (Pyth., VI, 3) may have transferred to Ge an appellative of Dionysos (Hym. Hom., VII, 56). Cf. Oppé, J.H.S., XXIV, 1904, p. 233, who remarks the inappropriateness of the adjective when applied to Delphi. For a vase painting of Dionysos welcoming Apollo see Farnell, Cults, IV, p. 316, pl. Cf. Rohde, Psyche (trans. by Hillis), pp. 289-90.
at Athens the priest of Dionysos who sat at the center of the first row had immediately upon his right the Πιθώροητος Ἐξηγητής. The date of the inscription is here of less moment than the juxtaposition of the two priests. The Thyiauds of Apollo’s temple and the ability of Dionysos to turn water into wine indicate that the Pythian priestesses received their prophetic exaltation not so much from the water of Kassotis as from the wine which was mixed with it. Οἶνος καὶ ἀλῆθεια. The Phrygian king Midas, who had something Dionysiac about him, mixed wine with the spring at Thymbrian in order to capture Seilenos. This motive is of value here only as it shows that tradition did know of the trick of mixing wine with a spring. If this was done at Delphi and at Corinth and the priestess put into a raving state by drinking water strongly flavored by Dionysos then the theory proposed by B. H. Hill that the temple of the sacred spring at Corinth was an oracle can be easily reconciled with the theory advocated by Bonner that a Dionysiac miracle was performed in the sanctuary. Both are right. The presence of two spouts in the sacred spring and the two channels which led the water to a tank where it was drawn at two places only (Fig. 6) may mean a dual priesthood of Apollo and Dionysos. In the great procession of Ptolemy Philadelphus at Alexandria there was a large wagon upon which was carried an artificial cave overgrown with ivy. From it flowed two springs, one of wine and the other of milk. This is a secondary use of the cave from which naturally only water flowed. An Homeric hymn (XXVI) represented the child Dionysos as reared in a cave. Hence the god of wine had ample opportunity to give its water mantic potency.

The story then of the sacred spring at Corinth seems to be as follows. It was a mantic spring of Apollo. In the earliest period the priest drank the water at the

18 For the same title cf. Dittenberger S.I.G. II, no. 697E9 (128-7 B.C.).
19 Philostratos, Vit. Apoll., VI, 10, says that Apollo could easily make the spring of Kastalia pour forth wine.
20 Strabo, IX, 419, speaks of the inspiring air which rose from the cave to the Delphic priestess seated on the tripod. There is no geological evidence whatever for this at Delphi. Cf. Parke, op. cit., p. 21. The tradition may have been due to the refuse from a wine-press, the alcoholic fumes from which could be intoxicating. These disjecta membra of the wine god may have been deposited near the tripod (cf. Etym. M., p. 255, 13). But the traditions of the mantic art at Delphi are against the theory of a prophetic state induced by inhalation. The priestess chewed the leaves of the laurel according to one tradition, while another represents the three Semnai of Parnassos as prophesying truthfully when they rave after eating honey (Hym. Hom., IV, 560-61). Here honey in the form of mead is the intoxicant instead of the later wine. The verb used to describe the state of the Semnai θείωσεν almost identifies them with the Thyiauds of Dionysos in the gable of Apollo’s temple.
22 Ibid.
23 The close relationship of Apollo and Dionysos points to a common origin for the Apolline tripod and that given as a prize in dramatic contests. Tripods as prizes for choreigic victory were set either in a temple of Dionysos or in a Python (Isaios, V, 41). For Delphic tripods in Dionysiac company see Athenaios, V, 196f-197a; cf. 198b-c. Apollo may have shared his Corinthian temple with Dionysos. Cf. Cook, Zeus, II, pp. 243 ff.
24 Athenaios, V, 200c.
spring itself and prophesied as did his colleague at Klaros. The water had received its inspirational powers from a generous admixture of wine. Later when the wall with spouts was constructed, an opening was left in it so that the channel behind was accessible. Still later when the ground level about the spring was raised, and it was completely enclosed save for a flight of steps, the apsidal temple of Apollo was built, and the mystic rite regularly performed there. The mixture of water from the sacred spring and wine flowed in an artificial channel at a higher level to a jar in the open air where the priest continued to drink and to utter oracles.

Fig. 6. Wall of Tank in Front of Sacred Spring Showing Two Grooves Worn by Jars

Since the Delphic priestesses gave their prophecies in a μαυτεῖον which was called an ἄντρον, it is evident that the cave preceded the oracular temple. Certain titles survive from this earlier period. Apollo Pythios owes his appellative to Pytho the snake which haunted the spring and the cave 25 from which the spring issued. The Melissa, “Bee,” another title of the Delphic and Apolline priestess, was due to the presence of the bees in a cave of which Homer was aware. 26 The laurel the leaves of which the Pythia chewed may have covered the Pythia's cave as it did the cave described by Homer. 27 The significance of the laurel and the bee in Apolline cult is apparent in the tradition that the first temple of Apollo at Delphi was of laurel, and that the second was made by bees out of wax and feathers. 28 These are not empty

25 Cf. ἄντρα ὁράκωντα (Euripides, Phoen., 232).
26 Odyssey, XIII, 103. The cave had “everflowing water.” For bees in a cave of Zeus see Cook, Zeus, II, p. 929, pl. 42.
27 Odys., IX, 183.
28 Pausanias, X, 5, 5. Philostratos (Vit. Apoll., VI, 10) says birds gave their feathers. Cf. also Ransome, The Sacred Bee, pp. 98-100. Perhaps one should explain the third temple of bronze χαλκός in the light of Euripides' description of the Pytho as κατάχαλκος (Iph. Taur., 1245-48). Then the first three temples are described in terms of the flora and fauna of the mantic cave. κατάχαλκος may allude to the color of the serpent. Athena however had a brazen house at Sparta.
fancies. They are rather allusions to the laurel which "covered" the cave of prophecy, to the bees which swarmed there while the feathers were those of the rock doves which likewise haunted the cave of Apollo. From the artificial Dionysiac cave which appeared in the Ptolemaic procession flew doves, περιστεραί, φάσοι, and τρυγώνες. Although this list does not include the οἶβας, the rock dove, which derived its name according to Aristotle from the wine-dark color of its feathers, it is obvious that the Dionysiac character of the cave described in Athenaios would have been greatly enhanced by a dove suggestive of wine. At Delphi the importance of the dove is clearly revealed by Euripides in the Ion where a flock of doves significantly described as κώμος flies into the banquet hall and drinks of the libation of wine which has been poured upon the floor. These doves which dwell in the house of Apollo are the successors of the doves that long before haunted the cave of the oracular god. The early consultants of the mantic cave had observed the habitat of these birds and put their feathers into the traditions of the cult as they did also the snake, the laurel and the bee.

Since the original mantic grotto at Delphi contributed so much to the traditions of the cult, the question arises whether the grotto influenced in any way the form of the temple which was built near the mantic spring. One may conjecture that the apse of the small archaic temple at Delphi is a reminiscence of the mantic grotto whether the little temple belonged to Ge, Themis, or any other mantic predecessor of Apollo. The later oracular temple did not retain the apse. Neither did the later temple of Apollo in the Athenian agora retain the apse of the earlier temple beneath it. In Corinth the temple to which water was carried from the sacred spring of Apollo had an apse, the survival in conventionalized form of the primitive mantic grotto nearby.

It is probable that some of these mantic grottoes put on a temple front. The Klarian grotto has a pediment carved in the rock. The Corinthian has a frieze of triglyphs and metopes which crowns a solid wall, but close behind this wall are stone pillars which served in the earlier period to support the projecting roof of the grotto. Such frieze was part of the traditional decoration of a spring; as vase paintings of the sixth century show. The fountain-house of the François vase has a Doric façade

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29 Athenaios, V, 200c.
30 1197-98. This passage may give a better explanation of the name οἶβας.
31 The priestesses at Dodona were called "doves" according to Herodotos, II, 57, because they spoke a strange language which seemed to the people like the voice of a bird. Cf. Frazer, Pausanias, IV, p. 149.
32 Furtwaengler-Reichhold, Griech. Vasenm., pl. 11 and reconstruction in text vol. I, p. 57. The curved roof suggests the rock against which the fountain-house was built. For another vase painting of a cave which is curved on the outside see Mon. Ined., X, pl. 53. Cf. Longus, Daphnis and Chloe, I, 4. On the curved roof in question see Orlandos, Αρχ., Εφ., 1916, p. 102. He also figures a façade built against a rock from which water issues.
with spouts in the wall behind the colonnade as in the sacred spring at Corinth where they were once visible between pillars. The conception of the Quellgrotte as a sanctuary may have facilitated its evolution into a separate temple nearby. A suggestive illustration of such development is the apsidal Mithraeum. Examples of it are of Roman date. It received the name σπηλαίον and spelunca "cave" because the first sanctuaries of the cult were caves. It is conceivable that such a cave was extended by construction against its opening, and that when this hybrid of nature and architecture moved away from a mountainous region to a plain the cave became an apse while the sanctuary as a whole was called a spelunca. The relief of the tauroctony which was set up before the apse of the Mithraeum represents the cave in which Mithras slays the bull. The cave is arched as is the actual cave of Apollo in the north scarp of the Athenian acropolis. The marked peculiarities of the oracular temple of Apollo at Didyma should be attributed at least in part to the presence of a sacred spring. The two vaulted passages which descend from the pronaos to the low level of the hypaethral cella are the translation into architecture of a tunnel-like entrance to a mantic spring. To consult the oracle of Trophonios it was necessary to go through a narrow passage to his cave.

The general conclusion is then that the sacred grotto containing a spring of water served the purpose of a temple, was consequently embellished with part or all of a temple façade, and finally yielded an independent structure to which was transferred the mantic function of the primitive cave. The best illustration of the development is the sacred spring and its temple at Corinth. So important was the flowing water in these numerous and early mantic grottoes that the general Greek word for temple νά-ός, a word of unexplained origin, may be a congener of νά-μα "flowing water."  

II. THE ARTIFICIAL GROTTO AND ARTIFICIAL SPRING

Just as the Apolline mantic grotto with a Doric façade yielded a Doric temple in which the cave survived as an apse, so the natural grotto with a spring was reproduced in a completely artificial grotto to which water was conducted by aqueduct. A most elaborate example of this architectural metaphor is the so-called exedra of Herodes Atticus at Olympia (Figs. 7-8). This was a large half dome with two tanks for water which was brought by subterranean aqueduct from a tributary of the

34 Cumont, however, believed that the Roman Mithraists borrowed from the Neo-Pythagoreans both the name cave for sanctuaries and the conception of them as an image of the world (Rev. Arch., VIII, 1918, 2, p. 64, note 1).
35 Figured by J. Harrison, Mythology and Monuments, p. 541.
37 Olympia, Die Ergebnisse, II, pl. 85.
Fig. 7. Plan of the So-called Exedra of Herodes Atticus

Fig. 8. Reconstruction of the Exedra
Alpheios. Its resemblance to a grotto was enhanced by its position against the steep slope of the Kronian hill in which the aqueduct was buried. The water thus seemed to come out of the earth. It is quite likely that the earth reached up higher than at present so that the half dome seemed more like a cave. At either end of the lower tank stood clusters of columns enclosing a single statue and supporting a circular roof of which the tiles were carved to resemble leaves, either olive or laurel. One recalls the olive near the Nymphaeum in which there was ever-flowing water and the laurel which covered a cave by the sea. In vase painting too the fountain-house appears with a tree at either end. The clusters of columns with their leafy roofs which flanked the Quellgrotte of Herodes were then suggested by the trees which actually grew on either side of a grotto with a spring.

It is significant that Regilla, the wife of Herodes and priestess of Demeter, dedicated the imposing monument to Zeus, and inscribed the dedication upon a marble bull which was set up in a conspicuous position at the center of the lower parapet. This bull neither commemorated a sacrifice to Zeus nor symbolized the water but was rather the god himself who in the form of a bull had sped over the water to Crete. Somewhere near the site of the grotto of Herodes, perhaps on it, was a replica of the Idaean cave which Pindar says Zeus honored:

\[\sigma\omega\nu\eta\rho\ \upsilon\mu\nu\epsilon\phi\varepsilon\ \Z\alpha\i, \ K\rho\omicron\nu\omicron\omicron\omicron\nu \tau\varepsilon \nu\alpha\i\omicron\omicron\nu \lambda\omicron\phi\omicron\omicron\omicron\nu
\tau\i\mu\omicron\omicron\upsilon \tau\i\omicron \ 'A\lambda\phi\omicron\omicron\upsilon \epsilon\i\omicron\ro\nu \rho\acute{o}\omicron\omicron\tau\alpha\tau\alpha\acute{o}\nu \tau\i\omicron \delta\i\omicron\alpha\alpha\i\omicron\omicron\nu \tau\i\omicron \sigma\i\epsilon\mu\i\omicron\nu \\acute{\alpha}n\tau\rho\omicron\upsilon - - - .\]

The closely related sequence of ideas in this passage seems to be realized in the Olympian artificial grotto. Zeus dwelling on the hill of Kronos received the water of the Alpheios in the "Idaean" cave of Herodes. It is significant that the hill of Kronos had an Idaean rather than a Dictaean grotto. The cult of Zeus was established first in the Dictaean and later in the Idaean cave which became famous in classical times. Deposits in the former date down to the Geometric period. Hence the appearance at Olympia of the Idaean cave rather than the Dictaean indicates that the borrowing took place when the Idaean had superseded the Dictaean, i.e., not earlier than the Geometric period. The distinctly Cretan environment of the "grotto" of Herodes accounts for the number of statues of his family which were set up in rectangular niches of the half dome. There were fifteen including the great benefactor who were thus honored by the Eleans. Since Herodes was an Athenian it is tempting to believe that the Eleans intended a comparison of Herodes and his fourteen Athenians with Theseus and his fourteen young Athenians whom he accompanied

\[38 \textit{Odys.}, XIII, 103.\]
\[39 \textit{Ibid.}, IX, 182-83, \delta\alpha\varphi\nu\gamma\alpha\i \kappa\alpha\tau\i\nu\rho\epsilon\varphi\varepsilon\i.\]
\[40 \text{Daremberg et Saglio, } \textit{Dict.}, s. v. fons, p. 1231, fig. 3144.\]
\[41 \text{The artificial cave with a spring was not a new idea as that of the Ptolemaic procession at Alexandria shows (Athenaios, 200c).}\]
\[42 \textit{Olym.}, V, 40.\]
\[43 \text{Cf. Cook, } \textit{Zeus}, I, p. 149; II, 2, p. 932.\]
to Crete. Theseus was also a benefactor of Athens. The extant ten bases of these statues supported six male and four female figures.\textsuperscript{44} Hence it is not known whether the entire group consisted of eight male and seven female figures as required by the assumed comparison of Herodes with the mythical benefactor of his city.\textsuperscript{45} Such comparison seems confirmed by the title Soter for which there is evidence on the pedestal of the statue of Herodes.\textsuperscript{46} The grotto was further enriched by statues of eight members of the imperial family which alternated with those of the family of Herodes. About the same time in Erythrai one Marcus Claudius dedicated a similar but smaller \textit{Quellgrotte} to Demeter, Marcus Aurelius, and Lucius Verus.\textsuperscript{47} The dedication included not only the artificial grotto but the spring, aqueduct, and statues as did the dedication of Regilla. The water entered the small semicircular grotto behind a centrally placed statue of the Erythraean Sibyl Herophile.

III. THE GROTTO AND THE APSIDAL BOULEUTERION

Yet another reminiscence of the sacred grotto is found in the Bouleuterion at Olympia the plan of which is unique (Fig. 9). A central square is flanked by apsidal wings. The similarity of these in plan to the early apsidal foundations between the Heraion and the Metroön is so great as to indicate a continuity of type.\textsuperscript{48} The apse of two of the foundations is separated from its chamber by a cross wall as in the Bouleuterion. The purpose of the early buildings is not known. Their proximity to the Heraion, the oldest temple in the Altis, favors the assumption that they were not ordinary houses. Their orientation north may mean that they were not occupied in winter but in the summer when a cool exposure was desirable. They may have been the houses of the administrators of the earliest games.

That the Bouleuterion played an important part in the administration of the Olympic games is a certain inference from the statement of Pausanias\textsuperscript{49} that all athletes took there a solemn oath before a statue of Zeus to observe the regulations of the contests. This statue seems to have stood in the central square which in origin was a court of Zeus Herkeios. The two apsidal wings flanking this court are the megara which reflect a dual kingship. Gardiner noting that the monarchy disappeared

\textsuperscript{44} \textit{Olympia, Die Ergebnisse}, V, nos. 619-628; cf. \textit{Textband} III, p. 266, fig. 298.

\textsuperscript{45} In the cave above the theatre at Athens the slaying of the children of Niobe was represented (Pausanias, I, 21, 5). Pausanias does not say how many of her children were portrayed but according to Athenian tradition there seem to have been fourteen (Apollodoros, III, 5, 6). When Cyrus placed δις ἵππα παῖσας on the pyre with Croesus, there were probably seven young Lydians of each sex, since παῖς may designate both. But cf. How and Wells on Herodotos, I, 86.

\textsuperscript{46} \textit{Olympia, Die Ergebnisse}, V, no. 622.


\textsuperscript{49} V, 24, 9.
from both Elis and Pisa after the victory of the former over the latter in 576 suggests that the first appointment at this time of two Hellanodikai was designed to continue the sacred functions formerly exercised by the two kings.\textsuperscript{50} Since the Eleans did not destroy Pisa it would seem that there was one Hellanodikes for each rival. This duality then found expression in an apsidal chamber for each with a common herkos between them. But what reason could there have been for the apse? Since oaths were taken to observe the laws of the contests before the statue of Zeus it is logical to believe that all cases involving such infractions were considered in the Bouleuterion. When Minos received a law-code from Zeus in the Dictaean cave,\textsuperscript{51} the sacred cave acquired distinction as the source of divine law for a king. Cretan traditions found their way to Olympia. Hence it is possible that the incorporation of a cave, conventionalized as an apse, in a royal megaron symbolized the dependence of the laws of the administrators at Olympia upon the law of Zeus, the supreme god of the Altis.

\textsuperscript{50} Gardiner, \textit{op. cit.}, p. 101.
\textsuperscript{51} Dionysios of Halikarnassos, \textit{Ant. Rom.}, II, p. 61.

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\textbf{Fig. 9. The Bouleuterion at Olympia}
If the relation of the word μέγαρον to the Hebrew me'ārāh 52 "cave" is real, then the original megaron becomes a cave with a semantic history corresponding to that of the Mithraic spelunca. The Greek use of the word μέγαρα to designate the pits into which offerings were thrown during the Thesmophoria seems to retain its original meaning. It was no mere chance that a statue of Zeus stood in the court between the two apsidal megaras of the Bouleuterion. The two kings of Sparta were priests of Zeus. 53

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52 Cf. Boisacq, s. v. μέγαρον. Another word for megaron was θάλαμος which has been etymologically connected with θάλασσα (Buck, Classical Studies Presented to Edward Capps, p. 44). It may have designated first a cave by the sea like that of Polyphemos in front of which was a court (Od., IX, 182-86).

53 Wide, Lakonische Kulte, p. 11.