Archaic Temple Architecture in Arcadia

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A surprisingly rich tradition of monumental temple architecture, which has so far received little attention, existed in Arcadia in the archaic period. The impressive, late 7th century temple of Athena Alea at Tegea is now known to have been preceded by two simple cult buildings of Late Geometric date, of small dimensions and of simple materials reflecting, probably intentionally, early prehistorical architecture. Based on the early archaic temple, a fine tradition of Doric temples using local marble developed and can be traced through the 6th century B.C., coming to an abrupt end in the first half of the 5th century. Some of its characteristics, such as the open spacing of the colonnades and the avoidance of angle contraction, are significantly different from the mainstream of archaic Dorism, as exemplified e.g. in the temple of Apollo at Corinth.

The traditional view of Arcadia as a remote and backward district compared to the rest of the Greek world is today slowly giving way to more balanced views, thanks to recent research in the region. In this reassessment the rich and varied material of archaic temple architecture which is still preserved here must take an important part. These temples precede the famous 5th and 4th century temples of Apollo Epikourios at Bassai and of Athena Alea at Tegea; both figure as key monuments in the general history of Greek temple architecture, but according to Pausanias they were created by artists hired from abroad, Iktinos and Skopas, and for that reason they cannot easily be claimed as products of local traditions and influences. It is now clear, however, that there was a surprisingly rich activity of temple building in Arcadia in the archaic period, and those buildings are so numerous and distinct that a local tradition must certainly be claimed for them.

1. This material is more thoroughly described in the works Østby 1986, Østby 1990-91, and Forsen, Forsen and Østby 1999. The contributions to this volume by Y. Goester, M. Petropoulos and Y. Pikoulas add more, previously unknown material.
2. For recent discussion of these buildings see Gruben 2001, 128-40.
3. Bassae, Paus. 8.41.9; Tegea, 8.45.5.
Recent research has provided some positive knowledge of the archaic temple of Athena Alea at Tegea, which Pausanias mentions almost six centuries after its destruction in 396 B.C. This was an ambitious building fully abreast with the development of early archaic Doric architecture elsewhere in the Peloponnese, and it had a decisive influence on the building activity in the region later on. (Fig. 1) The preserved traces of this temple are sufficient for a satisfactory reconstruction of the cella, although some questions must remain open. There is very limited evidence for the reconstruction with a conventional pronaos, and that pronaos would have to be unusually shallow; several early archaic temples might offer parallels for the alternative reconstruction with an open cella front without any divisory wall between cella and pronaos, and this possibility cannot be rejected out of hand. But the difference of level between the foundations of the cella front and those for the inner colonnades in the cella clearly indicates that there was a similar difference between a lower floor level in the pronaos and a slightly higher one in the cella. This feature recurs in the Heraion at Olympia; but is otherwise unusual in Greece, and is one of several indications that the two buildings were closely connected. The few remaining blocks at the rear of the cella were first explained as toichobate blocks for a closed rear wall, but a different interpretation as blocks from the stylobate in an open opisthodome front has recently been suggested. If so, this opisthodome would precede the one in the Heraion at Olympia, which is usually considered an innovation there. It seems impossible, however, to reconcile this interpretation with the markings on the two remaining marble blocks, which cannot be understood as column traces and do not make any sense in the open spaces between columns. They are most easily understood as anathyrosis markings for orthostate blocks covering the lowest part of a mud-brick wall, with an additional, rectangular marking for a vertical, wooden post inserted between those blocks and projecting slightly in front of them so that it would remain visible as a sort of pilaster. 

4. 845-4.
5. Østby 1986. The same conclusion was approached, but in less precise terms, by Norman 1984, 171. I cannot concur with the position expressed by F.E. Winter in this volume (p. 486, n. 19) that this temple can be seen as a purely local product, independent of outside influences; at the site of Tegea it represents a clear break from previous, far more modest building activity. The temple of Hera at Olympia is in any case clearly later. See below.
6. Several such buildings from Eretria, Kommos, Samos, etc. are presented together by Mazarakis Ainian 1997, Table I, but the open front is not ascertained in all those cases.
7. Østby 1986, 79-81 and 99 n. 110, with references to the temple at Olympia as well as Corfu and Samos. Temples in Sicily and Southern Italy often have the same feature.
9. Østby 1986, 88-90. See ibid., 98, and Mazarakis Ainian 1997, 166 with n. 1190, for the
that interpretation the rear of the cella must be reconstructed with a closed aptyon, rather than with an open opisthodomos which otherwise appears only once, and much later, in the series of archaic Arcadian temple buildings.

Probably this cella was surrounded by a peristasis, but it has been totally destroyed by the foundations for the classical temple; no evidence for it remains. But a hypothetical reconstruction of it can be attempted on the analogy with the Heraion at Olympia, where the positions of the columns in the flank colonnades correspond precisely with the cella columns, with the same axial spacings. The peristasis which can be reconstructed on these terms, turns out to surround symmetrically the cella not only crosswise, but also lengthwise. If those inner colonnades are direct reflections of a perfectly symmetrical overall plan, although asymmetrically placed within the cella building, this is at least a strong indication that a peristasis did exist, and from the outset, not as a later addition. In that case, the peristasis can only be reconstructed with 6 x 18 columns, as proposed in the first publication. There are strange and unexpected features in this building: marble appears here surprisingly early as building material, and this has been used as an argument for down dating the temple from the late 7th to well into the 6th century. The recent investigations in the temple cella have proved beyond doubt that the remains we have are really of the archaic temple mentioned by Pausanias, but they have not provided material for a precise chronology. Essentially the problem still rests on the comparison with the closely related temple of Hera at Olympia, whose date in the early 6th century is well established. In this context, the earlier date of the Tegea temple is well supported by the clear and immediate proportional relation between the two cellas: the proportion 4:15 is common to both, but at Olympia the dimensions are slightly increased, very probably in order to cite and also outdo the Tegean building. The reduction from 6 x 18 to 6 x 16 columns in the peristasis, assuming that it existed at Tegea, puts the Olympia temple at a later stage in this

early temple of Artemis Orthia at Sparta, where a similar construction is used at the inside of the wall.

10. Østby 1986, 94-5. F. Winter 1991, 200 and n. 20 p. 199, and again in this volume, considers a shorter peristasis (6 x 16) and/or a peristasis added later, but does not consider these points. With 6 x 16 columns, the space between colonnade and cella would be narrower on the fronts than on the flanks, which is unlikely; moreover, the front colonnades would coincide with open areas inside the classical foundations, where they would probably have left traces.

11. Felten 1987, 32.


14. Ca. 10.00 x 37.50 m at Tegea, 10.72 x 40.21 m at Olympia. See Østby 1986, 93 with ns. 51-2.
generally acknowledged, typological development. The date for the Tegea temple in the late 7th century thus remains likely. Recent field-work in the sanctuary has added one element of importance: an early archaic tile of so-called Argive type, so large that it can hardly be connected with any other building. This indicates that the temple had a tiled roof from an early date, possibly from the beginning. But the object is isolated and found out of context, and should be treated with caution.

Recent field-work has shown that this temple, which in the late 7th century must have been at the very forefront of architectural development, was preceded by modest structures which must also be defined as temples, although of a somewhat unusual kind. Traces have been identified of two simple huts, one replacing the other, built of wattle and daub, without stone socles. (Figs. 2 and 3) This is a building technique which reminds more of the early Neolithic than of the Greek Iron Age. The archaeological material discovered in these buildings is clearly of votive character, ensures their function as cult buildings, and indicates the late 8th and early 7th century as their date. The earlier building, probably used in the last quarter of the 8th century, was hardly much more than 3 m wide (inner width between the walls, the only so far safely established, arriving at 2 m), and the length so far excavated is about 6 m and was originally somewhat more. The external dimensions of its later successor, of basically the same shape, were about 4 x 12 m. Both have a characteristic hair-pin shape with an apsidal rear end which follows a widespread typology of Geometric cult buildings — although that shape is by no means confined to religious structures. These buildings raise, however, functional problems which put them somehow apart from the various recent hypotheses concerning early Greek temples. They could not possibly be residential buildings: the open front which has been safely established for the more recent structure, the total lack of fire-places inside them, and the extremely cramped dimensions particularly of the early building make them totally unsuitable for such use. The vague character of the floor surfaces inside them can only be explained on the assumption that access to the interior

15. Østby 1986, 97-102.
16. For which see N.A. Winter 1993, 149-87. I thank her for identifying the piece during a visit to the site in 1998.
18. See for general discussions of this shape Drerup 1969, 92-4; Mazarakis Ainian 1997, 111-3; Fagerström 1988, 106-10; and the important paper by Hiller 1996.
19. As admitted by Mazarakis Ainian 1997, 80-2, who generally attempts to connect early temples with such functions.
was strictly limited; they must be understood as some kind of show-pieces, rather than functional buildings. Nor can they easily be understood as shelters for cult figures, which seem to be a late phenomenon in Arcadia generally; there are traces of simple installations in the apsis area of the early building, but no obvious explanation can be found for them. Probably the buildings were themselves conceived as some kind of visual manifestation of divine forces, related to the ideas which were otherwise mostly expressed by the cult figures; such ideas might also contribute to explain the old-fashioned and by this time absolutely obsolete wattle-and-daub building technique, which probably was chosen for its associations with ancient traditions rather than for its functionality. Religious ideas connected with the buildings as such, rather than with what they sheltered, may also be reflected in the two building models of terracotta, attested by fragments which have been found at the site.\(^{20}\)

The destruction of the second building can be safely dated about 680-70, thanks to a Protocorinthian aryballos discovered in a useful context;\(^{21}\) this leaves a time-span of at least half a century before the probable date of the archaic temple, which was based on radically different conceptions and increased ambitions. A radical change in the whole situation at Tegea must have taken place during this period, but the investigations at the site have so far not given any clear explanation for it. At the temple site, the evidence for building activity in this period is limited to a large platform or paved area which cuts off the apses of the early cult buildings, but is itself covered by the foundations for the inner colonnades of the archaic temple.\(^{22}\) There is also some evidence for a transversal trench probably from a building front approximately coinciding with the front of the Geometric cult building.\(^{23}\) If these observations are correct, the structure must have been a good deal larger than the Geometric buildings, but smaller than the archaic temple. The real leap of quality must have come with the large, early Doric temple in the late 7th century, which introduced truly monumental architecture as it had by then developed probably in the Argolis. There must have been a background for this, at political, social and economical levels, which escapes us.\(^{24}\)

There can be no doubt that the late 7th century temple of Athena Alea set a model for later temples in Arcadia, and in some respects it remained unsurpas-

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20. See the contribution by G.C. Nordquist to this volume.
21. Østby 1997, 95, and fig. 12 p. 100; Nordquist 2002, 152-3 with fig. 9; Voyatzis 2002, 163-4 with fig. 13.
24. See Østby 1986, 97, for the connection with the early temple at Argos, and 101-2 for some preliminary considerations on the historical background.
sed: no later archaic temple in the region reached similar dimensions.25 (See Fig. 1) But the use of local marble, which was as yet very cautious and limited in the Tegean temple – only in the stylobates and the toichobate, while columns and walls almost certainly were of wood and mud-brick – was quickly developed. The small temple near Mavriki, possibly dedicated to Artemis Knakeatis and entirely built of the local Doliana marble from the quarries near by, is one of the very earliest all-marble buildings anywhere in Greece; it was probably constructed somewhat before, rather than after, the middle of the 6th century.26 There is no real evidence for the highly unusual amphiprostyle plan, proposed by Rhomaios, which has created some perplexity; it has been demonstrated that the frieze-block on which this hypothesis rests, must belong to a different, later structure.27 The prostyle tetrastyle front can be reconstructed quite precisely, and the traces of columns on the front stylobate demonstrate conclusively that there was no angle contraction here. Such a contraction was actually not needed, since the triglyph width was almost identical with the architrave thickness. This approach to the angle problem seems to remain with Arcadian architecture throughout the archaic period, in clear contrast to Corinthian and Attic Doric building tradition where the conventional angle solution with a single contraction was applied already in the first half of the 6th century;28 the Arcadian model has its parallels in the archaic architecture of Sicily and Southern Italy.

In the large, peripteral temple at Orchomenos29 mud-brick and wood seem still to have been the basic materials, marble appearing only in the fine series of capitals which probably rested on wooden shafts; they date the temple about 530. This temple is outstanding for other reasons: it is the first known temple in Greece to apply the classical 6 x 13-colonnade, with identical axial spacings on the fronts and the flanks, except for the angle intercolumniations which are contracted in the regular way. (Fig. 1) This is a pattern which is otherwise first attested in the temple which was under construction at Cape Sounion when the Persians destroyed it in 480,30 and which became normative in classical architecture; by applying standard dimensions for the axial spacings, 5 x 12 in number, it allows the colonnade to be constructed as a Pythagorean triangle with

25. As conveniently demonstrated by the comparative drawings of their plans in Østby 1991, fig. 174 at p. 300, and Id. 1999, fig. c p. 173.
28. With certainty in the early temple of Aphaia at Aegina, and in the temple of Apollo at Corinth; for the temple of Artemis at Corfu it is discussed. See Østby 1991, 385-6 with n. 803.
29. Østby 1991, 327-38. The first publication, Blum and Plascart 1914, 81-4, is superficial and contains some serious mistakes.
30. Gruben 2001, 230, for this temple; see also Østby 1991, 337.
5 and 12 units in the cathetes and 13 in the hypotenuse – with a small adjustment for the angle contraction, however, which was applied here for the first time in Arcadia. This planning system seems foreign to the region and premature in the 6th century development of the Doric order on the whole: unexpectedly, it pulls the introduction of some important innovations far back in time. But Arcadia can hardly take the credit for them, since they were not followed up in the successive buildings. They must reflect developments at another, important centre: possibly, but hypothetically, Corinth. 31

The local tradition of marble architecture, introduced with the temple at Mavriki, was continued in the small temple for Athena and Poseidon at Vigla, at the frontier between Asea and Pallantion; several details of workmanship confirm the connection. 32 The temple was built toward the end of the 6th century, replacing an earlier construction only attested by architectural terracottas. This temple continued the local tradition of external colonnades with 6 x 13 columns, which the temple at Orchomenos probably had introduced, but without the standardized axial spacings and probably also without the angle contractions, like the Mavriki temple. (Fig. 1) In other respects the temple shows considerable awareness of developments elsewhere: it is the only temple in the archaic Arcadian series where there is evidence for an open opisthodome, and the krepis with three steps appears here for the first time in this group. This temple clearly inspired a successive project at the near-by site of Pallantion, where an earlier oikos temple without external columns was now surrounded by the foundation for a peristasis. 33 Only the euthynteria blocks had been posed when the project was abandoned, but it is clear that another 6 x 13-colonnade with differentiated axial spacings was intended, probably to be executed in Doliana marble. (Fig. 1) The dimensions of this additional peristasis were clearly related to the Vigla temple, with practically identical width, but adding ca. 1.50 m to its length; evidently that temple, built by the neighbouring community, was considered a challenge to be outdone. An interesting feature of this building, which goes back to its initial phase, are the two column bases behind the rectangular base for the cult statues, which seem to divide the cella into an outer part and an inner adyton which remained visible behind the columns. If the disposition is correctly understood in this way, it may somehow be connected with the idea of inaccessible visibility which apparently was a feature of the early Tegean cult buildings, and it could also be considered a forerunner of the cella at Bassae where the famous Corinthian column sets off and defines an inner part of the interior in a similar way. 34

The temple at Vigla had another follower in the territory of Asea, located on the top of the Hagios Elias hill at about 1100 m above sea level, in a position so difficult that the transportation of the building material all the way from the marble quarries at Doliana must have been a major undertaking. A full investigation of its remains has taken place only recently. It is clear that in spite of the difficult position, considerable pains had been taken to make this an impressive building, once more with the intention of outdoing the earlier temple at Vigla. This probably explains such developments as the peristasis with 6 x 14 instead of 13 columns, and the krepis with four steps instead of the more normal three which seem to have been used at Vigla; there seem to have been specific references to this temple also in the increase of the external dimensions. There was no opisthodome, however, and the shape of the cella, with the closed rear wall and the unusually shallow pronaos, rather recalls the earlier temples at Tegea and Orchomenos. (Fig. 1) But some pains were taken to reduce the problems of transportation to this difficult site by using light and open architecture. Earlier Arcadian temples had regularly used columns with lower diameter only 1/3 of the axial spacing, but at Hagios Elias the spacing is still more open; and the remains of the epistyle, which is fairly well documented, also indicate a very light and low structure. This light-weight architecture continues a tradition from the earlier Arcadian stone buildings, but it is here carried to extremes. Axial spacings must still have been different on the flanks and the fronts, and an angle contraction would hardly have been necessary. A well preserved capital and other details of the superstructure date the building to the years about or immediately after 500; the capital repeats so closely the shape of the capitals from the slightly earlier temple of Apollo at Delphi, on a reduced scale, that it seems intentionally to have been copied from them.

The last building in the Arcadian series comes some twenty years later with the temple of Athena at Alipheira, at the western extremity of ancient Arcadia. (Figs. 1 and 5) Local limestone was used here, instead of the Doliana marble; transportation of that material this far clearly was not feasible. In some ways the building seems to return to more archaic forms, with the unusually long colon-

35. Preliminary report: Forsén, Forsén and Østby 1999; see also Østby 1991, 350-60, written and published before this project. The results of initial Swedish field-work at the building in 1939 are summarized by Holmberg 1941.

36. As originally proposed by Holmberg 1941, and confirmed by the recent field project; see Forsén, Forsén and Østby 1999, 172-3. The alternative proposal of a colonnade with 6 x 13 columns (Østby 1991, 354-8) has now been disproved.

37. Forsén, Forsén and Østby 1999, 175-6, fig. d; Østby 2000, 260-1, for the comparison with the capital from Delphi.

nade with 6 x 15 columns and the long and narrow, unstructured cella of oikos type which closely resembles the cella in the unfinished temple at Pallantion and even repeats the same width, 5.20 m. There is actually some reason to believe that the interrupted project at Pallantion was consciously followed up here, but now with cella and peristasis planned and executed as a unit, not by surrounding an earlier oikos with a peristasis. Typical Arcadian features remain in the open colonnade with differentiated axial spacings and the light epistyle, but the situation in the frieze would now make an angle contraction necessary – possibly even a double one, since the conflict to be neutralized has now suddenly become very large.

These Arcadian temples, which cluster particularly in the half century from about 530 to 480, must reflect a period of economical and artistic flowering whose historical background escapes us. They have been overlooked in general discussions of Greek temple architecture, but they provide a unique opportunity for studying the development of Doric temple architecture in a crucial period and a defined environment. As far as the Peloponnese is concerned, only the Arcadian temples illuminate this development in the period between the temples of Hera and Zeus at Olympia. The temple of Apollo at Corinth is the only exception; this temple clearly introduced the late archaic development toward the classical definition of Doric temple architecture, but it is radically different from the Arcadian buildings. It is for that reason not easy to establish to what extent the Arcadian temples may represent a specific, local tradition, or rather reflect influences from some Peloponnesian centre where the documentation is lacking; in this context, both Argos and Laconia come to mind. It is at any rate clear that the Arcadians felt temple building to be an important task for their communities, developed it in terms of interstate competition, and created impressive buildings surprisingly early. The end was abrupt; the temple at Alipheira has no sequel until the masterpieces at Bassai and Tegea appear after a break of several decades, and they were created by architects hired from outside and repeat only to a limited extent the distinctive, formal characteristics of the archaic buildings. But in the Arcadian landscape those temples must also in later centuries have been an impressive and a constant reminder not to neglect building in honour of the gods.

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39. The reasons for this are given Østby 1991, 381.
BIBLIOGRAPHY

Fig. 1. Comparative plans of archaic temples in Arcadia, drawn to the same scale. (Drawing: author.)
Fig. 2. Reconstructed plans and outlines of the early cult buildings in the cella of the temple of Athena Alea at Tegea. (Drawing: author.)
Fig. 3. Post-holes and other remains of the early cult buildings in the cella of the temple of Athena Alea at Tegea. (Photo: author.)

Fig. 4. The temple at Hagios Elias near Asea. (Photo: author.)

Fig. 5. The temple of Athena at Alpheira. (Photo: author.)