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## The Temples of Apollo at Sikyon

### Introduction

In the 1920's and 1930's, the Greek archaeologists A. Philadelphus and A.K. Orlandos excavated a complicated temple foundation near the agora of ancient Sikyon. These works were only published as short, preliminary reports<sup>1</sup>. Hellenistic building material was found, but also some of archaic date, and the long, narrow plan opened for the suggestion that an early hellenistic temple had been built on the foundations of an archaic predecessor on a similar plan<sup>2</sup>. The temple has been variously identified either as one for Artemis Limnaia, mentioned by Pausanias between the theatre and the agora (2.7.6), or the one for Apollo which he discusses at some length at the agora itself (2.7.8-9)<sup>3</sup>.

In the 1980s, after Orlandos' death, work at the site was continued by Dr. K. Krystalli-Votsi, then ephor of antiquities in Argolis and Corinthia, on behalf of the Archaeological Society in Athens. Dr. Erik Østby, then at the Norwegian Institute in Rome, collaborated for the study of the architecture of the temple. Additional excavations at the site from 1987 to 1990 were directed by Ms. Krystalli-Votsi on behalf of and with contributions from the Archaeological Society, and a state plan of the remains was made by two Norwegian architects, Hans Olav Andersen and Dag Iver Sonerud, with grants from the Norwegian Research Council (NFR, then NAVF) (fig. 1).

It is now clear that the temple had three building phases of very different aspect: a long and narrow, peripteral hellenistic temple, from the years after the



Fig. 1 - Survey work at the temple site in June 1984: Dag Iver Sonerud and Hans Olav Andersen. (Photo: Erik Østby).

<sup>1</sup> Philadelphus 1926; Orlandos 1937.

<sup>2</sup> As suggested by Orlandos 1937, 95.

<sup>3</sup> See Roux 1958, 143-4, and Musti and Torelli 1986, 242-4, for commentaries to these passages. Orlandos 1937, 94, identified the temple without discussion as the one for Artemis; the case for Apollo was argued by Roux. See also Griffin 1982, 16-7, for a discussion of the two alternatives.

urbanistic reorganization of Sikyon imposed by Demetrios Poliorketes in 303 BC<sup>4</sup>; an archaic temple of the early 6th century, shorter and narrower, without peristasis; and some indications of a predecessor probably of 7th century date. Above the remains of the hellenistic temple, an early Christian church was constructed probably in the 5th century AD and is not discussed here.

### **The hellenistic temple** (fig. 2)

The foundations are those of a long and narrow, peripteral temple, more than three times as long as it was wide, with an almost precise East-West orientation coinciding with the direction of the hellenistic agora (fig. 3). Only the lowest foundation shift is preserved, but at three different levels, adjusted to a slight slope descending from West to East. Blocks from the euthynteria level are preserved in the western front where the slope is highest. Even there their external outline is irregular and does not form a regular euthynteria, but cuttings on their surface show that they projected about 10 cm in front of the next course. This next course could not have been more than 90 cm wide, and must have been the stylobate, which was thus placed immediately above the euthynteria as in early archaic temples, without a normally developed krepis in between. Some fragments of stylobate blocks have been found and identified.

The external dimensions of the stylobate can be reconstructed as about 11.40 x 37.60 m. The long and narrow shape was repeated still more emphatically in the cella, 6.25 m wide. The precise length is not documented, but the western wall must have been located somewhere over the trench for the foundations of an earlier building, and we have a maximum and a minimum possible length, 31.40 and 30.70 m respectively, which move around 31.25 m, five times the width of the cella. Its side walls coincide approximately with the positions of the second and fifth columns in a normal, hexastyle front.

The inner distribution of this long and narrow cella is very unusual. The deep pronaos was entered through a valve door in a closed wall; three blocks carrying the threshold of this door are preserved. From each side of the room two foundations project

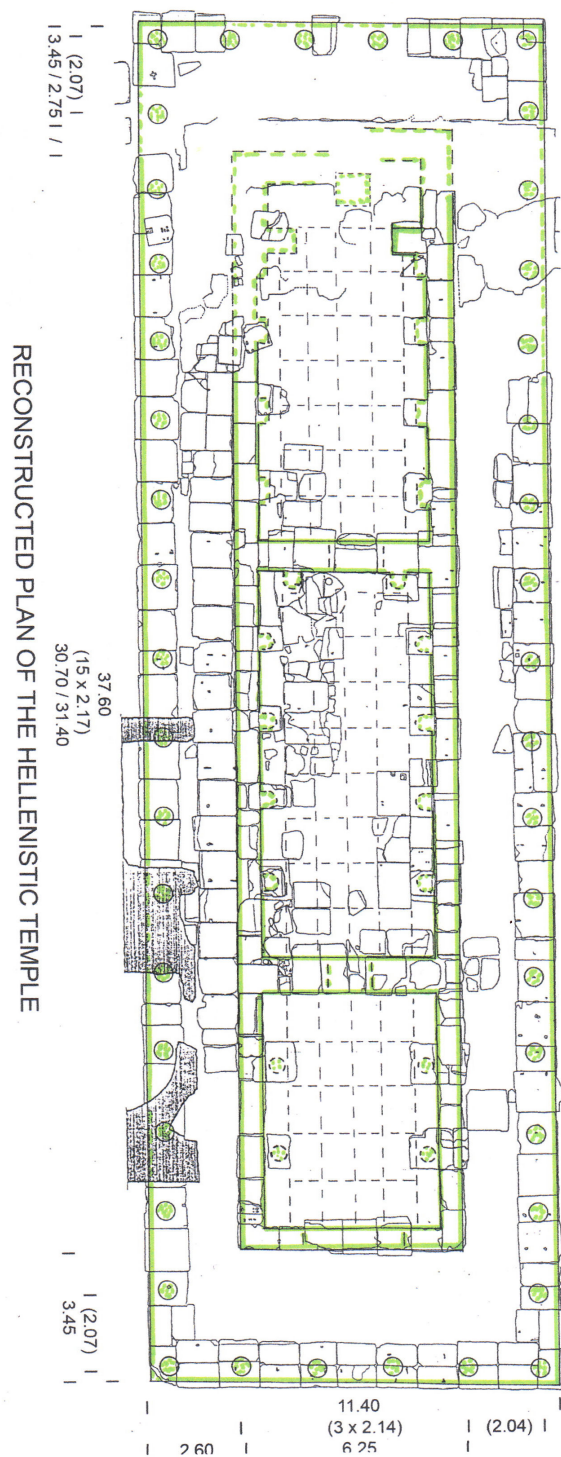


Fig. 2 - The foundations of the temple, with proposed reconstruction of the hellenistic building. (Drawing: Erik Østby).

<sup>4</sup> See for these events conveniently Griffin 1982, 78, with a list of the relevant sources n. 21.



Fig. 3 - View of the temple, from West. (Photo: Erik Østby).



Fig. 4 - The interior of the Hellenistic cella, seen from East. (Photo: Erik Østby).



Fig. 5 - The cult complex in the SE corner of the Hellenistic cella, with rests of a circular base probably for a monumental tripod. (Photo: Erik Østby).

into it, probably for a system of decorative columns or supports near the wall. The divisory wall between pronaos and cella was built on earlier foundations. The cella room behind it is normally shaped, somewhat more than twice as deep as it is wide (4.90 x 10.70 m), and a system of decorative supports along the walls probably existed also here, carried by blocks with deep foundations placed at regular intervals in a bench slightly raised above the surface of the floor (fig. 4). Three pavement slabs are left of a system which could cover the entire floor between those benches with 8 x 4 slabs of the same dimensions. A special arrangement would have been necessary in the inner left corner, where the pavement had to respect a circular slab resting on a complicated system

of very irregular blocks. (fig. 5) This partially preserved, circular slab had a deep hole near its edge, and is better explained as the base for monumental tripod than for a cult statue<sup>5</sup>. This would obviously strongly support the identification as the temple of Apollo mentioned by Pausanias. In order to respect the tripod, the divisory wall behind it had to be pushed farther back than the rhythm of the supports along the wall would require, and the door into the next room had to be dislocated to the right, off axis.

This inner, rear room was equally deep and important as the cella, and should be called an opisthonaos<sup>6</sup> rather than an adyton. The decorative supports at the walls continued in the same rhythm as in the cella, here probably as Ionic pilasters, of which one fragment has been found (see fig. 3). The inner part of the opisthonaos was separated from the rest by a pair of stronger foundations, projecting further into the room. Here we must reconstruct stronger wall tongues, probably framing a sort of niche in the innermost part of the interior for the cult statue<sup>7</sup>.

From the external colonnade we have some Doric capitals of late classical or early Hellenistic type, with a diameter of 44 cm on the upper end of the shaft and an abacus width of 57 cm. The lower column

<sup>5</sup> See for such tripods the important article by AMANDRY 1987.

<sup>6</sup> Term applied by ORLANDOS 1937, 94.

<sup>7</sup> Dedicated together with the temple by an otherwise unknown Pythokles, according to Paus. 2.7.9. A life-size, marble hand probably from this statue was found during the recent excavations.

diameter must, according to contemporary practice, have been slightly less than the abacus width, somewhere between 50 and 55 cm. The axial spacing in a hexastyle column front would have been about 2.10 m, about four times this diameter, creating an unusually open and spacious colonnade. The fragments of frieze and geison are unfortunately too limited to provide independent evidence for the axial spacings, or for the angle contraction (fig. 6). But since the triglyphs were only 31 cm wide, a contraction of 10 to 12 cm would probably be sufficient to compensate for the angle conflict; this would increase the three central axial spacings to 2.14 m. On the flanks a reconstruction with 18 columns and the same contraction would give slightly wider axial spacings, 2.17 m. This difference is unusual, but small, and could be avoided altogether if the contraction was slightly stronger on the fronts.

We have no direct evidence for the height of the frieze, or the width of the metopes. With axial spacings as calculated above, the metopes would have had the improbable width of about 75 cm, 2½ times the triglyph, if the classical system with two triglyphs and two metopes per intercolumniation was used. It seems more likely that this temple used the later system with three triglyphs and three metopes, which would give fairly narrow metopes, about 40–42 cm. This seems a better solution also because the very open colonnade would require the light and low entablature which such a reconstruction would imply, and it could in this way easily be associated with stoa architecture, where this new relation between colonnade and frieze was first developed.

The association with contemporary stoa architecture is particularly interesting considering the location of the temple at the early hellenistic square created by the urbanistic rearrangements after 303 BC. In this position the altar discovered near the northern flank of the temple, of substantial dimensions with an unusual, almost square shape, is concealed from the agora (fig. 7). We almost receive the impression that the religious and cultic associations connected with the temple were intentionally toned down by making it appear like a small stoa, in a modest position near the corner of the agora, and without an altar in the normal position in front of the temple. Since the architectural material from the temple – capitals, mouldings, etc. – seems to date precisely to the years about 300 BC, we may safely conclude that it was intentionally built for this effect and for this urbanistic context.

The plan of the temple is a refined and subtle mixture of old and new elements. The elongated proportions of the plan reach back to very early temples, of the 7th rather than the 6th century, and are unthinkable without a knowledge of them. With such a consciously archaizing plan the old traditions of the temple were adequately emphasized. If this actually was the temple of Apollo mentioned by Pausanias, it had according to him been founded by Proitos at the site where his daughters had been cured of their madness, and ancient relics had been kept in it before it was destroyed by fire: Meleager's lance, the cauldron where the Peliads had boiled their father, and the voting stone used by Athena during the final



Fig. 6 - Block with triglyph and metope from the hellenistic temple. (Photo: Kalliopi Krystalli-Votsi).



Fig. 7 - Foundations for the altar, at the northern flank of the temple. (Photo: Erik Østby).

proces against Orestes. If any such objects had survived the fire (according to Pausanias, they had been destroyed), they might have been kept in the inner of the two cella rooms, and might contribute to explain this almost unique solution<sup>8</sup>. In this way it was also possible to combine the archaic, stretched plan with inner rooms of normal shape, including those decorative support systems along the walls which had by now become common. A direct model can perhaps be identified in the temple of Bassae, where the floor pavement as well as the support system follow the same arrangement. Perhaps the special interior arrangement of the Bassai temple, with the Corinthian column separating the interior in two rooms, may even have provided the inspiration for the two-room arrangement at Sikyon.

### **The archaic temple** (fig. 8)

The tradition linking Proitos' daughters and the ancient relics with the building would be difficult to explain if no temple had existed at the site until about 300 BC. During the prewar excavations some material, such as palmette antefixes of a 6th century type<sup>9</sup>, was recovered from an earlier building which must have been located at the same site. It has now been confirmed that an archaic temple preceded the hellenistic one, but the relation between the two structures has turned out to be far more complex than earlier realized.

The analysis of the archaic temple plan may part from the long stretch of foundations between and parallel to the southern peristasis flank and the southern cella wall of the hellenistic temple (fig. 9).

In the hellenistic temple it supports only the pavement slabs in the pteron and is structurally superfluous; in the northern pteron it is omitted. In the western end it continues as a trench carved into the rock for the same foundation, which then turns north and crosses the hellenistic cella; later, the western wall of that cella was constructed there (see fig. 3).

The trench continues through the northern pteron and joins the foundation for the northern peristasis flank, turning east in a corner which has been identified immediately outside that foundation. It emerges that the northern colonnade of the hellenistic peristasis actually was constructed on the archaic foundation. The width of the building is documented by the trench in the western end, for the length we have an indication in a joint going through two courses of the northern

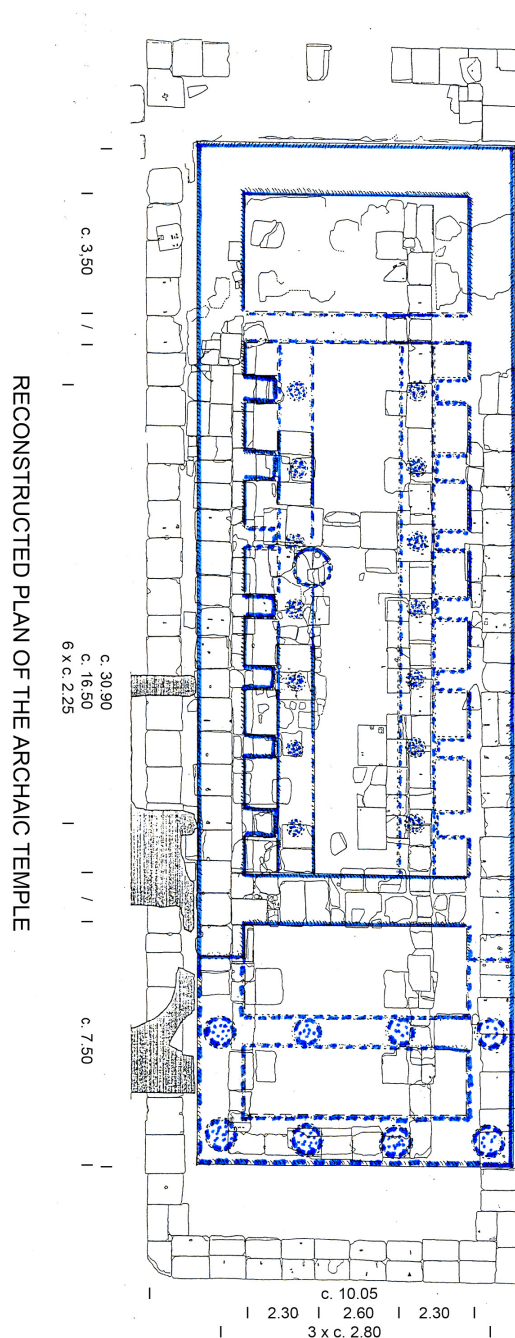


Fig. 8 - The foundations of the temple, with proposed reconstruction of the archaic temple. (Drawing: Erik Østby).

<sup>8</sup> See GRIFFIN 1982, 17, for this question. Another source, Ampelius (*Lib. Mem.* 10), gives a longer list of these objects than Pausanias and describes them as if they were still to be seen.

<sup>9</sup> Illustrated by ORLANDOS 1937, 96 fig. 4. (The archaic building fragments fig. 3 are from a different site).



Fig. 9 - The southern flank of the temple foundation, with a possibly early archaic line of blocks inside the hellenistic (far left) and archaic (to the right of those) foundations. (Photo: Erik Østby).

foundation not very far from its eastern end, thus defining the transition to the foundations which were added later for the hellenistic temple front. We consequently have three sides of a rectangle measuring about 10.05 x 30.90 m, with foundations 1.40 to 1.50 m wide. There was no peristasis surrounding this building.

A transverse wall, whose foundation was later used for a similar wall in the hellenistic temple, separated the 7 m deep pronaos from the cella. In the southern half of the cella, behind this wall, it is possible to trace with some interruptions a line of rectangular blocks through the cella and into the hellenistic opisthonaos; they could have no function in the later building, and must be connected with the early one. The inner width between the walls of the archaic cella was so considerable, 7.20 m, that the roof construction almost certainly needed inner supports; such an inner colonnade might have been placed on this foundation. A similar colonnade should in that case have existed in a symmetrical position on the northern side of the cella, on a line coinciding with the hellenistic cella wall, which seems to have obliterated all traces of it and does not even seem to have used old foundations underneath. The reconstruction is for that reason not free from problems, but it provides a normal division of the interior into three bays, the central one slightly wider than the lateral ones: 2.60 against 2.30 m.

Another problem in this context is raised by the curious complex with the presumed tripod basis which also the hellenistic structure incorporates (see fig. 5), and which the archaic inner colonnade must have crossed. The basis itself need not, however, have been an obstacle for a column if their positions were indicated, as in the temple of Hera at Olympia, by those short wall tongues on the foundations which connected the southern wall with the foundation for the inner colonnade, and which were later used to carry the inner supports along the southern wall of the hellenistic temple. The axial spacings of these systems are for that reason identical at the southern and northern wall, 2.25 m. These transverse foundations at the southern wall continue into the hellenistic opisthonaos, and connect there with the foundations for the inner colonnade in such a way that they cannot be explained as a later addition. The inner colonnades cannot, however, have stretched all the way back to the rear wall, since they would have to cross rock formations which were never cut to receive any foundations. For this reason it must be assumed that the temple had an adyton in the rear, separated from the cella with a wall probably coinciding with a couple of blocks projecting from the northern cella wall which conform with the hellenistic arrangement, but may be of archaic date.

There is no doubt that this was a building of Doric style. Archaic guttae have been found, some with horizontal and some with slanted lower surface, respectively from the regulae and from the mutuli. The guttae from the regulae are worked freely without contact with the architrave surface behind them, as in the first half of the 6th century, and this date is confirmed by the echinus curve of a fragmentary capital. There are several wall blocks of local limestone, some of them with cavities for lifting and hoisting similar to those in the temple of Hera at Olympia, but more complex. A column drum of about 55 cm diameter might fit the presumed dimensions of the inner colonnade, but there are also fragments of considerably larger columns. There must consequently have been a colonnade also in the front, either in a tetrastyle prostyle or a distyle in antis arrangement, in either case with axial spacings about 2.70–2.8 m. The prostyle arrangement may actually be the more likely solution, if an otherwise unexplained feature in the south-western corner of the pronaos, where the width of the foundation is suddenly reduced, can be explained as the position of an anta. The pronaos was in that case so deep that a return column had to be placed in the space between the anta and the column front, and an additional colonnade across the pronaos at this point would probably be necessary in order to support the roof of the deep pronaos space. One block is still preserved in a position suitable for such an inner column front, between the northern peristasis and the northern pronaos wall, and no other convenient explanation can be found for it.

### ***A possible early archaic temple***

The foundation complex includes some elements which do not fit neither with the hellenistic nor with the archaic building, and may relate to a still earlier building phase. Such an unexplained foundation line goes underneath and supports the southern wall of the hellenistic cella, and blocks from it are also visible between it and the foundation of the archaic south wall. They supported the inner part of the next course in the archaic wall, but their surface level is 10 cm lower than the archaic foundations themselves, so they were hardly put there for that purpose (see fig. 9). Other blocks at the same, slightly lower level have appeared in the prolongation of the divisory wall between pronaos and cella beyond the hellenistic cella wall. The transverse foundations between the southern wall and the presumed inner colonnade of the archaic temple must also belong with this group, since they are located on the same level and bonded with the southern foundation. If these actually are foundations left over and to some extent reused from a very early building at the site, its overall dimensions must remain unknown, since only one corner can be identified; it does seem, however, that the archaic temple was constructed around it. But in any case the strange foundation under the presumed tripod basis would have been located inside this temple, in a position similar to the one it had in the archaic temple, where it is a far from convenient one. It seems reasonable to assume that it goes back to this early temple building which may have been the first at the site.

### ***Parallels to the archaic temple***

No typological or stylistic analysis of this earliest building can be attempted, but its archaic successor can easily be connected with traditions in the north-eastern Peloponnese. The closest parallel is undoubtedly the temple for Hera Akraia at Perachora, also without a peristasis and with almost identical dimensions, about 9 x 30 m, and an adyton and a cella with two parallel foundations for inner colonnades<sup>10</sup>. Unfortunately the shape of the front, prostyle or in antis, is unknown, but the preserved remains from the entablature suggest a date in the late third or early fourth quarter of the 6th century BC<sup>11</sup>. This temple is consequently later than the one at Sikyon, and may have been modelled on it. The somewhat smaller, early temples of

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<sup>10</sup> Payne 1940, 78–89; Menadier 1995; Pfaff 2003, 119–121. While Payne, 80, proposed an ordinary distyle in antis front, Menadier, 18–9, prefers a prostyle reconstruction.

<sup>11</sup> Payne 1940, 88–9, suggested about 530; Pfaff 2003, 167, pulls it down to the end of the century.

Aphaia at Aegina and at Psilikorphi near Tegea, the former probably and the latter certainly prostyle, are from the same period as the Sikyon temple, the first half of the 6th century<sup>12</sup>. Similar temples existed in the Western colonial world, at Cyrene and Selinus<sup>13</sup>. A reconstruction of this type has also been considered for the early archaic temple of Apollo at Delphi, and is interesting as far as Sikyon is concerned<sup>14</sup>. If the archaic temple there is correctly dated about 570 to 550, it falls into the period immediately after the First Sacred War, in the final period of the Orthagorid leadership, when contacts between Sikyon and Delphi were particularly strong and when it is easy to believe that a new temple for Apollo on the Sikyonian acropolis could have been modelled on the principal temple in the Pythian sanctuary<sup>15</sup>.

## **Conclusion**

In the early archaic period the peripteral temple was only one of several possible forms of monumental temple architecture, but it soon developed into a dominating type. When a peripteral temple was to replace an earlier, non-peripteral one, this could easily be done just by constructing a peristasis surrounding the older building; one might believe that this would be possible also at Sikyon. Here, however, the older building influenced the new one in a highly unusual way. The total length of the archaic cella was preserved almost without changes, and the inner division in three rooms as well; but the width of the cella was strongly reduced, stretching its proportion from about 1:3 to 1:5. In this way the northern flank of the new peristasis could be built on the same foundations as the northern wall of the archaic temple. The primary reason for this surprising move may be found in the relation to the altar, so close to the northern flank of the temple that there would not be space available for adding an external colonnade in that direction. With a cella as long and narrow as this, the long peristasis with 6 x 18 columns became as inevitable as it had been in the initial stage of Greek temple architecture. The consequences for the cella interior might have been disastrous, it might have been nothing more than a long, narrow and dark corridor on a pattern which already the archaic temple had abandoned. The strange division in two almost equally deep inner spaces solved this problem in an almost genial way, and made it possible to shape the interiors after contemporary fashion with decorative supports at the inner wall faces. Another consequence of the shift of the central axis to the south was that the tripod basis moved closer to the centre, becoming an obvious focus of attention in the first of the two rooms, as the cult statue must have been in the inner room. If the statue was dislocated to the right of the central axis in a similar way, so that its position coincided approximately with the off-centre position of the door between the two rooms, it might already from the pronaos have been possible to get a glimpse of the two monuments, tripod and statue, as focal points in the two successive rooms. Such a term as "archaizing", which easily comes to one's mind when confronted with a temple plan such as this, is only partially adequate for this building. The allusions to archaic shapes and patterns are certainly deliberate, and coincide with a tendency represented also by other structures from that period<sup>16</sup>. But they express only one of those artistic intentions which have here been combined in order to resolve an unusually complicated and difficult situation. It is tempting to define this many-faceted and accomplished structure as the last true masterpiece left to us from the rich tradition of Doric temple architecture.

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<sup>12</sup> Aigina: Schwandner 1985. Psilikorphi: Østby 1990-91, 307-27.

<sup>13</sup> Kyrene: Pernier 1935, 11-44; Stucchi 1975, 16-19. Selinus, Temple E 1: Gullini 1983.

<sup>14</sup> Kalpaxis 1976, 56, considers this solution, but sees it as less likely than a peripteral building.

<sup>15</sup> See for Sikyon's part in the Sacred War and her particular relations with Delphi at the time Griffin 1982, 52-4.

<sup>16</sup> The best example is probably the temple of Apollo at Thermon, where, however, the old plan was preserved as well as the building technique.



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