The Exploration of Ancient Stymphalos, 1982 – 2002

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From 1982-84 the Canadian Archaeological Institute at Athens and the University of British Columbia in collaboration with the Archaeological Society of Athens carried out topographical and geophysical surveys of the site of ancient Stymphalos; the work revealed an orthogonally planned city of the late classical period under farmers' fields. Since 1994 the University of British Columbia has excavated a number of different sites around the city, revealing houses, roads, a sanctuary with an archaic kore statue, fortifications, theatre seating and a Hellenistic stage building, several unidentified structures, and five small, early Christian cemeteries. The work has added considerably to our knowledge of the history of the city, uncovering, for example, Mycenaean pottery, an Augustan Roman resettlement possibly after the destruction by Mummius in 146 B.C., as well as five small cemeteries from an early Byzantine community.

The site of ancient Stymphalos lies in a narrow mountain valley some 600 m above sea level on the north shore of Lake Stymphalos, on Arcadia’s borders with more settled regions of the northeastern Peloponnesse. Small scale and only briefly published excavations by Anastasios Orlandos for the Archaeological Society of Athens between 1924 and 1931 uncovered several buildings near the lake, but work stopped when he undertook new excavations at Sikyon. (Note: numbers 1 and 2 should be second level headlines, not plain text.)

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1. I would like to acknowledge the generous co-operation of a number of organizations in our work, especially the Archaeological Society of Athens for permitting our initial collaboration and for transferring the site to the Canadian Institute and to the Ephorate of Prehistoric and Classical Antiquities at Nauplion and its successive ephors and staff for their support of our work. We also thank the Social Sciences and Humanities Research Council of Canada and the University of British Columbia for funding our research at Stymphalos, and the Canadian Institute at Athens and the Canadian Embassy for their constant support. Thanks are due to the many colleagues and students who have taken part, especially Prof. Gerald Schaus and Dr. Susan-Marie Cronkite Price who have been senior supervisors. And lastly it is a pleasure to acknowledge the help that we have received from the people of Stymphalia and area around over the past twenty years.

2. Orlandos 1924 to 1930.
Archaeological exploration of the site of ancient Stymphalos by the Canadian Archaeological Institute and the University of British Columbia began in 1982 in collaboration with the Society, with three years of topographical and geophysical survey. Since 1994 there have been annual campaigns of archaeological excavations of increasing size until the summer of 2002 when study seasons began.

Our work at the site began with a topographical survey in the summers of 1982-84 which mapped all visible remains of the ancient city that now lies under farmers' fields. Such a survey was timely because plowing has been gradually eroding much of the surface and near surface architectural remains. It quickly became apparent that although Stymphalos had been in existence for some centuries, it had been laid out anew on an orthogonal plan some time in the 4th century B.C., probably during the reorganization of the Peloponnesian after Spartan defeats to Thebes in 371 and 362 B.C. Within a rough triangle of fortification walls about 800 x 800 m the builders laid out a grid of streets usually 6 m wide running north-south crossed by a few broader avenues 8 m wide running east-west. Blocks were long and narrow, usually 30 m wide by over 100 m in length, which suggests a module (including the street width) of 110 Doric feet. Some areas like the rocky acropolis, a long tongue of land extending across about half the southern part of the site, were not included in the grid plan. The fortification walls with their mud-brick superstructure on a 2.5-4.5 m wide stone socle, their mixture of semicircular and rectangular towers and overlap style gates, resemble very closely those of Mantinea, rebuilt in the 360s. Improvements like massive rectangular and polygonal artillery towers and a gateway with a 'killing court' like the Arcadian Gate at Messene appeared around the end of the 4th century.

Plotting and drawing up parch marks in the soil in the dry summer of 1983 revealed another aspect of the site's building history: at one site near the eastern end of the acropolis a building had encroached on the line of a north-south road.

5. Dr. Thomas Boyd made the first site plan in 1982 with the assistance of Rob Loader; Richard Anderson added further details in 1983-84, and since 1999 Ben Gourley, University of York, has been site architect and is responsible for Fig. 1 as well as for preparing the study and publication of the fortifications.
6. While some coins (dated by our numismatist, Dr. Robert Weir, University of Windsor) and pottery from our excavations date to the early-mid 5th century B.C., most of our discoveries belong to the mid-4th century B.C. and later.
7. Date based on a hoard of 14 coins (latest of which was of Demetrios Poliorketes) found in the Western Tower which replaced a smaller original rectangular tower at the end of the 4th century B.C.
We turned to this area in the summer of 1994 when we began actual excavations because we thought it might indicate a period when central authority had broken down, allowing individual house owners to expand into public property. The second area that we investigated that summer was a small sanctuary on a terrace at the western end of the acropolis, a site briefly explored by Orlandos in 1924 and 1926, which contained a temple, an altar, and a rectangular auxiliary building. Subsequently we have examined sixteen areas in and around the city, including the start of the famous aqueduct built by Hadrian to carry water down to Corinth.

Another aspect of our initial work at the site was to attempt a large scale geophysical survey of the ancient city; as far as we know this survey was one of the first to be attempted on a Greek urban centre.

Our survey work on the eastern side of the city revealed not only clear evidence of the city's streets and some major rectangular structures that were probably courtyards or peristyles, but also traces of the city's fortifications. Indeed the only evidence for the city’s northernmost gate comes from a resistivity survey in a plowed field: it seems that most of the northern area of the city’s defences was robbed out in the 13th century for building material for the nearby Cistercian monastery of Zaraka. Visible in the print-out are the semicircular towers near and flanking the gate as well as the overlapping city walls. The main survey plan clearly reveals that the streets are moved 15 m west from the southern line of streets in the northern part of the site, probably to impede an enemy that had broken through the walls and was fighting down the streets. Aristotle suggests such anomalies in the new orthogonally gridded towns of the 4th century in order make attack more difficult.

The largest area of excavation lay just east of the acropolis where both parch marks and geophysical survey had indicated remains of potential interest. Our eight seasons of excavation have revealed here parts of two north-south streets and of several houses built in the mid to late 4th century B.C., probably abandoned in the mid 2nd century B.C., and reoccupied and rebuilt in the late first century

8. Orlandos 1924, 121 and 1926, 134.
9. Our survey added to the important general study of the aqueduct by Lolos 1997; we found a low level as well as high level aqueduct running across the plain from the spring that is the source.
10. Most of this work was carried out by students from Bradford University whose important contributions, along with those of Dr. Richard Jones of the British School at Athens, made the survey possible. A limited survey by Dr. Stavros Papamarinopoulos with a proton magnetometer yielded much less information while experiments by Dr. Guy Cross in 1989 and 1996 with different kinds of remote sensing equipment (ground penetrating radar, electro-conductivity, seismic reflection) produced occasionally interesting results.
11. Williams 1985, 220, fig. 3.
12. Arist. Pol. 7.10.4-5.
B.C. for about half a century until their destruction by earthquake. Interpretation of the archaeological and architectural data is far from complete, however, and the picture may change somewhat with further study. At least two successive periods of encroachment took place into the line of the 6 m wide street on the eastern side of the block, gradually narrowing it to an alley 1.5 m wide and then closing it completely. There was no such encroachment on the corresponding street on the western side of the block and indeed here the surface, covered in its last stage by broken pottery sherds as a sort of paving, remained unbuilt over although a massive drain was inserted at a diagonal where the street met an east-west avenue; we were able to carry out a sondage some 1.2 m deep, recovering the building history of the road from the late classical period onward. In the wet fill at the bottom some Mycenaean pottery appeared, but we are still uncertain whether it came from a fill brought in for the road or from undisturbed deep levels. The whole question of earlier settlement at the site is far from settled; we have a handful of Mycenaean (LH IIIB) sherds scattered from across the site as well as two apparently Early Helladic lithic tools, but all are from later levels.

The best preserved building period in this area was the early Roman when a pair of courtyard houses was installed in the largely abandoned city, perhaps at the time of the resettlement of Corinth in the later 1st century B.C. The dark lines on the site plan indicate the remains of the western house with its well and central courtyard paved with broken tiles set on edge and its large open area, perhaps a garden, to the south. (Fig. 2) The most interesting material came from another house across the street where the new residents had utilized a large well built ashlar structure with fine four metre long cut blocks on its facade along the street. This site provided us with the clearest evidence for the mid 1st century earthquake in the form of nearly three dozen complete but shattered kitchen and common ware vessels very similar to late Tiberian period pots from Corinth. Striking discoveries were extensive remains of drafted wall plaster resembling the First Pompeian style in a room laid out like an andron with a raised border for couches, an iron sword 81 cm long (spatha?) still in parts of its sheath, a dagger, a round bronze shield cover, and a pair of large marble lions' feet, perhaps supports for furniture of wood. Over thirty bronze decorative door bosses in four different styles and a bronze door lock also came from the floor level amid destruction debris.

13. For example, there are a number of coins from the period between 146 B.C. and the Augustan times.

14. Professor Gerald Schaus, Wilfrid Laurier University, supervised this area and is preparing the final publication of it. Professor Mary Sturgeon is preparing the publication of the statue.
Few ancient sources touch on the history of ancient Stymphalos and our work has allowed us to begin to determine some critical events from the archaeological evidence. Most striking was the general absence of pottery and other finds from the mid 2nd century B.C. to the Augustan period. Our initial hypothesis was that a major event must have taken place about the mid 2nd century B.C. to cut the site suddenly off. The likely cause was Roman military activity during the Achaean War which destroyed the city of Corinth in the autumn of 146 B.C. and which likely had effects on surrounding towns. Among the four hundred or so coins from the excavation there is a remarkable forgery of a Roman denarius of 149 B.C. generally agreed to have been the money issued to pay the Roman army in Greece. Perhaps discarded at Stymphalos by some Roman soldier after the silver wash wore off the coin, it seems to confirm a Roman military presence after 149 B.C. We also have coins of Syria (including a fine silver tetradrachm), Egypt, Sicily and even Carthage ca. 300 B.C. that may have come back as part of the pay of Stymphalians serving as mercenary soldiers. The presence of large numbers of coins from Sikyon, Philus and Corinth indicate our major nearby trading partners; indeed they far outnumber local issues of the Stymphalian mint.

One of the most interesting areas of the site lies on a terrace near the western end of the acropolis where a small temple has always been visible. Partially cleaned although not excavated by Orlandos, the structure has revealed some remarkable features. It seems to have been destroyed by fire in the mid 2nd century B.C., but not before at least two marble statues were broken up and burned in its fiery end; in the temple were parts of a half life-sized, late archaic kore of Parian marble as well as parts of a possible temple child, suggesting a kourotrophic divinity. The kore seems to be of Greek island origin and must somehow have found its way to Stymphalos after the mid 4th century when the sanctuary was constructed. We recovered about a third of it; we found no fragments elsewhere, and where it originally stood and what actually happened to it is still a mystery. Of note is a thin green glass eye that may have been inset in the missing face. For the temple child there are only the pudgy arms and feet attached to a rough base. The archaic statue appears to date to the late 6th or early 5th centuries B.C., but the child looks like a mid to late 4th century statue. Orlandos found near the temple part of an inscription, now lost, referring to Athena Polias but the kourotrophic nature of the statue might otherwise have suggested Artemis. Indeed the discovery of over two hundred pieces of gold, silver and mostly bronze jewellery from around the sanctuary again suggests a divinity like Artemis to whom women might donate such offerings before or

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15. For a recent discussion of this sanctuary see Schaus and Williams 2000.
after childbirth.¹⁷ Finds include earrings of different forms, finger rings of both bronze and iron (many with decorated bezels), bracelets and armlets. There were also nearly two hundred terracotta figurines, some of female worshippers and of animals as well as several small bronze figurines of animals.

The temple was a simple structure, 11 x 6 m, of mud-brick on stone orthostates with pronaos and main chamber. In front, however, was the foundation for a five-step stairway with a circular cutting on a block on its north side that probably was the site of a perirrhanterion; we found fragments of bases and basins of several of these terracotta 'holy water' basins around the site. In front of the temple was a large altar made up of large blocks of cut local limestone that were no doubt covered with plaster in antiquity; a roughly paved area surrounded it. North of the altar and temple was a tripartite auxiliary building that included a kitchen in its final form and to its west an annex that produced a number of loom weights. Interesting to the west as well was a series of five aniconic anepigraphic stelai set in a row in the earth, which may have been rude cult images like ones mentioned elsewhere in Arcadia by Pausanias.¹⁸ We know of remains of a second temple (tetrastyle prostyle) cleared by Orlandos near the south city wall by the lake and much to our surprise in a joint project with the local Ephorate we found evidence for a substantial Doric temple of classical date about two kilometres north of the ancient city at the edge of the modern village at Monastiraki; we found remains of columns, entablature and over twenty marble roof tiles, but the foundations still elude us and may lie under recent houses. We still have no evidence, however, for the location of the temple of Artemis mentioned by Pausanias, nor for his temple of Hera, although the latter may lie outside the present city site if an earlier Stymphalos does indeed lie somewhere else in the valley.¹⁹ Certainly there is evidence for substantial Doric structures, probably temples, elsewhere in the valley near the village of Lafka at the church of Agios Konstantinos, and the convent of Agia Kyriaki from which we have capitals and pieces of entablature.

The Monastiraki site also produced the first early Christian graves that we uncovered; in one was a coin of Justinian about A.D. 535. Since that time we have found 5th and 6th century interments in five areas of the site itself, possibly individual family cemeteries belonging to an as yet unlocated early Byzantine settlement.²⁰ Groups of graves appeared on the west side of the city in and around two early Hellenistic artillery towers, including one with a panoramic

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¹⁹. Pausanias 8.22.1-9; nor do we know the location of the local sanctuary of Brauronian Artemis attested epigraphically (Mitsos 1946-47).
²⁰. For a more complete discussion see Williams et al. 1998, 297-300.
view over lake and city at the western height of the acropolis; others appeared in the pronaos of the temple of Athena and outside it, while more have emerged in the last two seasons at the eastern end of the acropolis above the theatre. Our human remains specialist, Dr. Sandra Garvie Lok, has uncovered much interesting information about them, including a group with an hereditary extra vertebra in the neck bones. Another oddity is the presence of a dog burial in a well built Christian tomb in the acropolis tower that had been cleaned of most of its human remains. As for earlier burials we know the location of three Hellenistic cemeteries from the discovery of nearly twenty funerary stelai at different locations north of the city, each with the name of an individual and little else apart from a toponymic “from Phlius”. It is striking that the majority belong to women; perhaps many men went off to serve as mercenary soldiers and simply never returned home.

A striking success with the resistivity meter was the discovery of the stage building of the city’s theatrical area on the flat land south of the eastern end of the acropolis. (Fig. 4) Clearly visible here were stoa-like remains that on excavation turned out to be an unexpected skene. The city had no regular theatre, but a long line of rock cut seats along the eastern end of the acropolis had suggested a theatrical area, perhaps a one-sided stadium. Although much of the skene had been robbed out there was clear evidence of two building stages of early and middle Hellenistic times with Doric façade with stone screens between the columns. Most interesting was the presence of pairs of letters – alpha/alpha to tau/tau at matching ends of stylobate blocks, suggesting that the structure had been dismantled and transplanted from elsewhere; similar letters are present on the façade of the theatre at nearby Sikyon. The plan has clear resemblances to other Hellenistic skenai like those at Eretria or Assos, with three rooms behind. A few Doric elements of cornice and mutules are all that remain of the superstructure. The stage building is substantial, over 50 m in length, and includes reused masonry in its walls and foundations.

The condition of the seating is very mixed: many of the upper rows of seats are still well preserved although at times weathered, but the lower rows have disappeared entirely, perhaps in part because of unidentified reuse of the area in late Roman/early Byzantine times. We recovered human remains from two partly robbed graves cut out of bedrock at the eastern end of the seating, and with them was a 5th century, early Christian lamp. Similarly above the seating on the flat terrace of the eastern acropolis were a number of both disturbed and

21. Harding and Williams 1992. Orlandos reported at least six other stelai and in 2004 a shepherd brought in another from a field half a kilometre west of the city.
22. See Bieber 1961, 116, fig. 440 (Assos); 118, fig. 452 (Eretria).
undisturbed Christian graves along with remains of several dog burials. The poorly preserved and as yet unidentified structures here seemed to go back to the Hellenistic period but had been abandoned in the mid 2nd century B.C. and never reused until late antiquity when graves had been excavated through the layers of collapsed roof tiles that overlay the scanty foundations. The upper parts of the walls were of mud-brick, as were most other upper walls in the ancient city.

We have also resurveyed a number of structures that Orlandos uncovered west of the theatre, including a klepsydra. Most striking on the central south side of the city near the lake were the foundations of a previously unrecognized monumental propylon resembling in plan the Ptolemaian propylon at Samothrace, and just to the south the substantial propylon to a possible palaestra.23 (Fig. 5) Of interest as well in a nearby area quarried out of the south side of the acropolis, probably a source for much of the building stone at the site, are the remains of a keyhole-shaped building that Dr. Hans Lauter has identified as an inspiration for the Pantheon in Rome.24 In fact, however, its lengthy entrance is more suggestive of a Mycenaean tholos tomb, and one might suggest a deliberate copying of such structures for a local heroion. Unfortunately about fifteen years ago treasure hunters ripped out some of the substantial polygonal blocks that made up its south side; cleaning up the damaged area provided some evidence to suggest that although late classical or early Hellenistic in date, it was still in use in Roman times.

We have paid particular attention to the fortifications of the city, both examining areas dug by Orlandos like the “Phlious Gate” in the southeast, which clearly was inserted into the existing circuit at a later date, probably around the start of the 3rd century B.C., or the “Pheneos Gate” where there appears to have been a propylon and benches lining the gateway through the city wall.25 We also uncovered new areas including three artillery towers, like the Phlious gate apparently inserted at a later date: each encapsulates in its walls remains of a more modest original tower. The largest tower lies at the southwestern corner of the city at the highest point of the acropolis, and dominates the approaches from the south and the west, i.e. exposed flat plains that could be swept by artillery fire. Some 20 x 11 m with internal rooms, it consists of a outer 3 m thick masonry and mud-brick circuit of walls with polygonal masonry and a superstructure of mud-brick. Indeed the mud-brick may also have served to support catapults and to absorb their recoil on firing. The second largest tower lies along the western walls and produced the coin hoard referred to earlier; the third and smallest new tower lies just south of the Athena sanctuary and is hexagonal in

23. Orlandos 1925, foldout pl. I which presents this area of the city.
shape, an innovation of the early Hellenistic period to allow more sweep for catapults. Evidence for the catapults comes from over 130 iron projectile points, some pyramidal and some conical in form, found in the sanctuary and occasionally elsewhere on the site. Of note from the acropolis tower was also a hoard of 30 late 4th century B.C. lead sling bullets inscribed with initials in relief.

Our excavations have finished for the time being and we are planning several seasons of conservation, study and publication. One project of particular importance is the conservation of the still flowing late classical fountain house whose back wall bends out more and more each year and threatens to collapse from the pressure of earth and water behind. Colleagues from the Pontifical Institute of Medieval Studies in Toronto have also worked on the nearby 13th century Cistercian abbey which has produced scattered earlier material from the ancient site including a Hellenistic tomb relief of a cavalryman and a coin of Septimius Severus.

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26. Williams et al. 1998, 310-1. The majority belong to mid 2nd century B.C. contexts and can be associated with the probable Roman attack, but some also came from contexts of the late 4th century B.C.


28. For a summary report of this excavations see Campbell 1997.
BIBLIOGRAPHY

Fig. 1. General plan of ancient Stymphalos. (Drawing: Ben Gourley.)
Fig. 2. Remains of Roman house in eastern domestic quarter. (Drawing: Ben Gourley.)
Fig. 3. Plan of sanctuary on western acropolis. (Drawing: Ben Gourley.)
Fig. 4. Plan of area of theatre and stage building. (Drawing: Ben Gourley.)
Fig. 5. Plan of southern central area of city cleared by Orlandos. (Drawing: Ben Gourley.)