

# THE SANCTUARY OF ARTEMIS AT JERASH

## An Architectural Survey

by

Roberto Parapetti

The work of the Italian Mission in Jordan, promoted by the "Centro Ricerche e Scavi di Torino per il Medio Oriente e l'Asia" within the framework of the Cultural Agreement between the two countries<sup>1</sup> has been undertaken, particularly at Jerash, with the intention of making clear the architectural significance of the Sanctuary of Artemis, the most important complex of buildings in the city.

To the American and English expeditions between 1928 and 1935<sup>2</sup> we owe, apart from the outline of the ancient city's history, (above all through the numerous inscriptions found), the credit for the first major field work, although many questions about the city layout as a whole, and the single monuments, are still unanswered.

Such is the case with the Sanctuary of Artemis, one of the least known of the major complexes. Although evidently of the greatest interest because of the variety and richness of its architectural design, which is for the greater part decipherable due to its relatively good state of preservation, there had been little excavation to date.

Our work is being directed to making a "Reconstruction on Paper" of the whole complex, to producing a final plan of restoration for the consolidation of the structure, and to give a clearer presentation and appreciation of the monument.

The campaign started in the spring of 1977 with 4 weeks field work, followed by a second season in 1978 and we are now at Jerash for our third season<sup>3</sup>.

Together with the plans made of what was visible above the ground, we dug stratigraphical trial trenches this year and the last.

This account is therefore a brief outline of some of the tasks lying ahead.

After measuring and drawing a large contoured site map, as a base, we made the photogrammetric survey of the temple and of the monumental approach west of the *cardo*. For the temple we made the survey by means of four external elevations, and, for the interior we surveyed the rear and the north wall of the *cella*.

For the *propylaea* we surveyed the only *façade* toward the temple while the opposite one, onto the *cardo*, was concealed by a massive ramp, built for the reconstruction works in the 1960's of the colonnaded road, and the four giant columns facing the *propylaea* itself.

The drawings of the Sanctuary structures, related to an area of 320 metres east to west, and 120 metres north to south, were done by traditional methods based on the same contour map.

The monumental complex develops along a main axis at right angles to, and astride the *cardo*, with successive vistas from the changing levels, each framed along the ascending approach. The temple is built on a rock platform on the brow of a hill which rises up from Wadi Jerash (classical *Chysorhoas*), and was reached by a range of terraces.

Of the street plan of the city, at present only the *cardo*, running roughly north to south parallel to Wadi Jerash, and the *decumanus* crossing its southern stretch, are uncovered. At the crossing of both these colonnaded streets was a monumental *tetrapylon*. Another colonnaded street, crossing the *cardo* at its northern stretch, is identifiable but not yet uncovered.

Furthermore, the latest excavations<sup>4</sup> allowed us to deduce evidence of a smaller scale subdivision of building land, which may give us a lead for further studies of the growth and change of the ancient urban fabric.

West of the *cardo*, at the south end, two side street entries regularly spaced south and north of the south *tetrapylon*, show space of 350 Roman feet "pedes" (about 103.30 metres) from street to street. A third street on the same side of the *cardo* and 175 "pedes" north of the last mentioned street, marks the south side of the ground covered by the Sanctuary of Artemis.

A final street, discussed below, can be seen again 175 "pedes" east of, and parallel to the *cardo*.

The main frontage of the Sanctuary, onto the west side of the *cardo*, does not however fit the same land division as the street above described, being about 122 metres wide (Fig. 1).

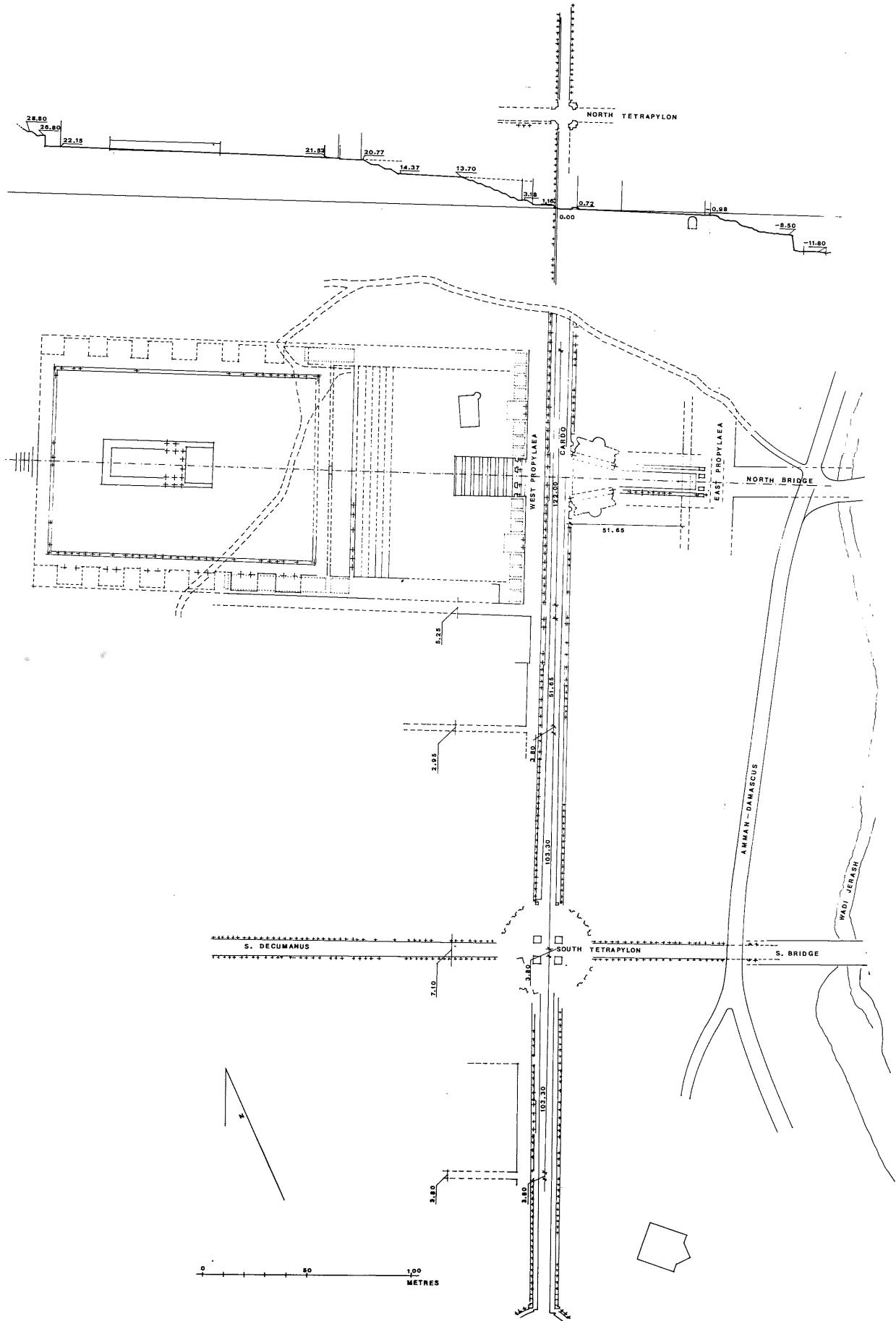


Fig. 1

Clearly this fact makes us question the land division of the second century A.D. to which most of the visible monuments belong, but to which the Sanctuary dimensions do not conform.

Further we must question the land division of the city of an earlier age since we know practically nothing about the Republican or Hellenistic city from excavations. Neither do we have data about whether the layout of the Imperial Gerasa superseded or reaffirmed the earlier one.

The northernmost bridge of the two which spanned Wadi Jerash, still recognizable, connected the east side of the city to a Sacred Way which rose up to the temple. What remains of it is only the west abutment, but enough to relate it to the same planning phase as the Sanctuary complex.

Its slight offset from the main axis may be explained by the need to connect to a pre-existing street on the east side of the wadi.

The Sacred Way started at its east end with a propylaea giving access to an inclined colonnaded street. This bridges the street parallel to the *cardo* previously mentioned, supporting the other observations about the evolution of the city plan. At the same time the unusual bridge-like solution emphasizes the intention of making a specialised route.

The Sacred Way next opens into a trapezium shaped square, opening into the *cardo*. The two flank walls are deepened by *exedras*, most probably for fountains, and they ended with detached columns symmetrical to the walls. Backing the columns are square pillars engaged to the wall, on which are visible, in shallow relief, smaller scale pilasters on bases, which in spite of later byzantine levelling, give the scale of ornament of the *exedras* (Pl. XC,1).

The long side of the trapezium matches exactly a second propylaea opposite.

This is set in a double storey parade of shops, imposingly designed, which forms the retaining wall of a terrace about 14 metres above the *cardo*.

The terrace, which is reached by a staircase (seven flights of seven steps) rising through the backfill, was probably framed by porticoes, yet to be uncovered, its floor being hidden by a great depth of overburden. From the terrace, rising up a second flight of stairs (three flights of nine steps each), we finally reach the *temenos* level, about 7 metres higher.

The enclosure, roughly rectangular, was framed with porticoes on all four sides.

The east side, next to the approaching staircase, must have had at least one or more portals. Standing parallel to this side is a row of columns at the top of the staircase, which suggests the image of an upper colonnade street parallel to the *cardo*. We found the threshold of the portal on the main axis and fragments of the stones of its flat-arch of the three band type.

The right side arch-stone abutment block, entirely preserved, shows that the flat-arch was presumably supported by pilasters engaged in the wall, rather than by the usual architrave-like jambs.

The west portico enclosing wall was a retaining structure for the hill behind. A staircase in the backfill has recently been brought to light<sup>5</sup> on the main axis starting from a level 4.65 metres above the portico pavement.

The wall of the south portico is deepened by alternating *exedras* and rooms supported at the eastern end by vaulted structures accessible from the street adjacent that side of the Sanctuary. Most probably the north side of the enclosure, invisible at present was similar.

From studying the stone blocks found in the *temenos* we made deductions helpful in the reconstruction of the temple.

The temple, of the corinthian order, has columns on all four sides, with six columns on the short, and eleven on the long side; it was raised on a podium and supported by vaulted structures reached from the temple *cella*.

Dozens of pairs of segments of cornice-like architrave of the three-band type, have been identified. These have had to fit at the top of the *cella* walls corresponding to the architrave of the peristyle. One of the segments shows the lower two bands and the two astragals separating them. The other shows the upper band followed by a twisted ribbon decoration, egg-and-dart, and "cane corrente" patterns.

The height of the segments varies from 57 to 59 centimetres giving a total cornice height of about 118 cms. The length of the blocks found complete is 160 cms. maximum, while the depth varies from 50 to 90 cms. (fig 2/c8, d5; Pl. XC,2 and Pl. XCI, 1). A few of the segments were obtained from re-using older corinthian capitals, a fact that is remarkable but puzzling (Pl. XC1,2).

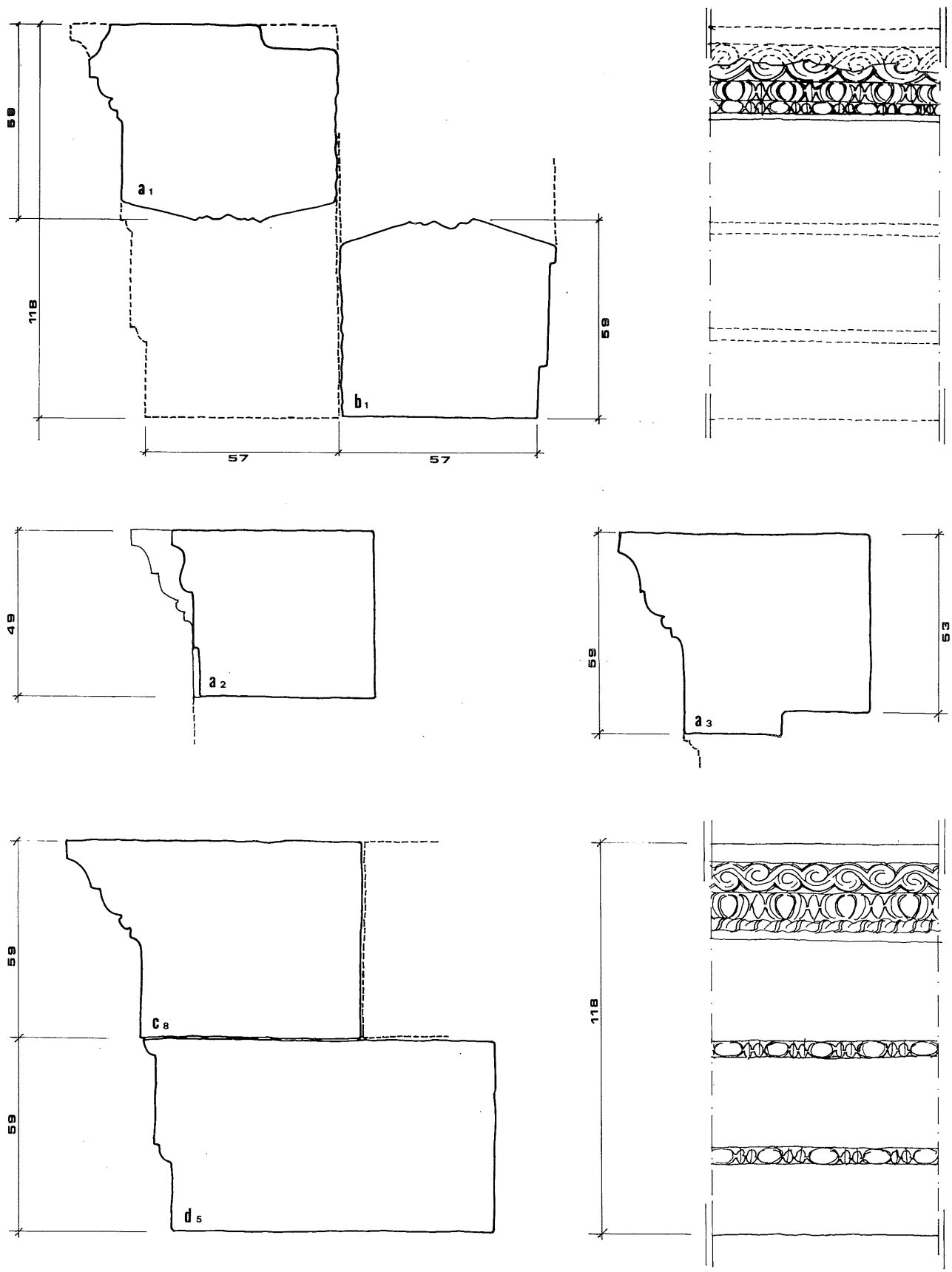


Fig. 2

The peristyle architrave was presumably made from two facing stones joined back-to-back along the center line of the columns.

Of these we identified only two fragmentary blocks near the temple. These were split in two, with the split face being left rough. One of the pieces shows the upper external face, similar in pattern to the above mentioned blocks, with a row of astragals instead of the twisted ribbon separating the upper band from the egg-and-dart (fig. 2/ a1). The other shows the lower part of the internal face, on which are recognizable three simple rebated bands. The dimensions of the first block are 59 cms. high x 63 deep x 150 long. The other is 59 cms. high x 63 deep x 120 long (fig. 2/ b1). The total height must originally have been about 118 cms. like the architrave finishing of the cella walls. The entire bottom bedding face must have been 114 cms. as shown by setting the two face stones back-to-back so that they fit the bedding face of the top of the capitals.

Other architrave blocks in great number have been identified already re-used or re-worked, or where the mason has started cutting them into smaller blocks (fig. 2/ a2; Pl. LXXXIX, 1); this is especially evident in St. Theodore's church. One of these pieces in particular was re-used as the lintel of the middle doorway of the church, and is the one showing inscription n° 300 in the publication already mentioned in note (fig. 2/ a3; Pl. LXXXIX, 2). Its length is 366 cms., and it must fit one of the corners of the temple. In fact its right end is cut as a 60° corner mitre joint.

No fragments of the cornice or frieze of the peristyle of the temple have been identified.

Comparisons of the elements of the Artemis temple, with that of the corinthian order of Zeus temple, contemporary to it, (even if capitals and architraves show slightly different ratios,) suggest that the frieze and the cornice of the Artemis temple would respectively be about 90 and 100 cms. high.

The lack of such elements however is rather difficult to construe, especially as cornice blocks are not readily re-used. This would be reasonably comprehensible if we conceive that the temple was never finished.

The lacy capitals of the pronaos columns still standing are largely intact, suggesting that the entablature, even if made, was never erected, since had it crashed down it would have broken off much delicate ornament.

Unfortunately most of the archaeological levels above the temenos floor have been removed, without an accurate record, in order to uncover the courtyard, so that it is now very difficult to reconstruct the full history of the area.

A small trial trench opened next to the north west corner of the temple, has exposed, below the sediments of the west hill occupations, fragments of bases and columns of the peristyle, partially re-worked, intended for re-use, and immediately above the court level, which, in that place is just above the bedrock.

Blocks in the same condition have been seen, even if out of their stratigraphical context, in other parts of the court, and show that the area of the temenos was used as a quarry and stone-cutter's yard very shortly after the temple was built.

On the north and south podium walls we noticed incised lines of particular interest, some of them showing long sequences of regular divisions corresponding to a "pes" of 29.45 cms.

These will be very useful in understanding the system of measurement underlying the planning and the building of the temple, particularly after we have the photogrammetric drawings of the façades at 1/20 scale.

For next season's work we are planning large excavations intending to bring to light those parts of the sanctuary still buried, and essential for a deeper understanding of the detailed design.

Among the first projects will be moving blocks that obscure the cella in order to put down the internal plan, and also to gather more pieces helpful to a "Reconstruction on Paper" of the upper and roof levels.

The final plan for any re-erection of fallen stones will result from these explorations on site and on paper.

## NOTES

1. The Cultural Agreement was signed between the two governments on October 26th 1975. Prof. G. Gullini, director of "Centro Scavi di Torino", headed the entire project.
2. C.P.C. Kraeling, *Gerasa, city of the Decapolis*, ASOR, New Haven, Connecticut, 1938.
3. We thank the Jordan Antiquity Department and especially Dr. Adnan Hadidi and the late Dr. Jacoub Oweis, who made possible our work, for the support given in providing us with labourers and in helping in every circumstance.  
Dr. G. Bergamini, archaeologist, Mr. G. Fino, surveyor, and Prof. C. Sena, cartographer, who planned the photogrametric survey, were members of the first campaign. Dr. G. Barbieri, archaeologist, Mr. M. Musso, surveyor, were members of the second campaign. Dr. R. Pierobon, archaeologist, Mr. G. Fino, are members of the present campaign. The writer, Dr. R. Parapetti, architect, Field Director, supervised the works from the beginning.
4. The Jordan University Department of Arts, headed by Dr. Assem Barghouti dug between the south tetrapylon and the south plaza, west of the cardo.
5. The Jordan University Department of Arts, headed by Dr. Mohammed Haer Yaseen, made the trenches west of the western enclosure wall of the temenos.