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Preliminary Report

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DURING the seventh season of excavations at Tel Dor,[1] eight areas were excavated (Fig. 1). In *Area C1* — the only part of Field A-C still being excavated — a section was cut through the eastern fortifications of the town, in order to reveal the stratigraphy of the various Iron Age fortification systems. For the same reason, part of the Hellenistic town-wall in *Area B* was dismantled, in order to uncover the point where the earlier fortifications joined the gate. The excavation of the Iron Age I strata in Area B north-east of the gate complex also continued, and a new unit north of the previously excavated area was opened, exposing an additional section of the ashlar-built Hellenistic city-wall and the Late Iron Age/Persian offset-inset wall beneath it. The goals of the excavation in *Area B2* this sea-

[1] The excavations took place between 1 July and 14 August 1986, and were directed by E. Stern on behalf of the Institute of Archaeology of the Hebrew University of Jerusalem and the Israel Exploration Society. The Tel Dor consortium includes teams from the California State University in Sacramento, directed by H.P. Goldfried; McMaster University in Hamilton, Ontario, directed by T.R. Hobbs; University of California at Berkeley, directed by A. Stewart, and an unaffiliated group directed by H.N. Richardson. Other staff members were: Dr. Renate Higginbottom-Rosenthal of Göttingen University; Bracha Goz-Zilberstein and Ayelet Gilboa — registrars; J. Berg, Mirella Tran, Ditza Shmuel, Vanda Maestro — architects; S. Dahan, K. Raveh, I. Stern — administrators; L. Lanigan — photographer; I. Sharon, Orna Cohen, Dinah Kauphman, A. De Groot, Ann Kopzyck, Lynn Banks, Tami Singer, S. Lumsden, J. Zorn, Ann Stewart and Gilah Gross — field and area supervisors; Delilah Eliyahu — restorator; Florence Salomon, A. Boaz and Sara Halbreich — artefact draftsmen. The expedition also included some fifteen unit supervisors and other junior staff members and over two hundred student volunteers, mainly from the United States, Canada and Israel. The expedition was lodged at the Pardes Ḥanna Agricultural School, and was assisted by the Centre for Regional and Maritime Archaeology in Kibbutz Naḥsholim. A concise review of the results of the first five seasons may be found in E. Stern: Five Seasons of Excavations at Tel Dor, in E. Lipiński (ed.): *The Land of Israel — Crossroad of Civilizations*, Leuven, 1985, pp. 169-192. For the results of the 1985 season, see E. Stern and I. Sharon: *Tel Dor, 1985*, Notes and News, *IEJ* 35 (1985), pp. 101-104 (hereafter: *Dor 1985*).

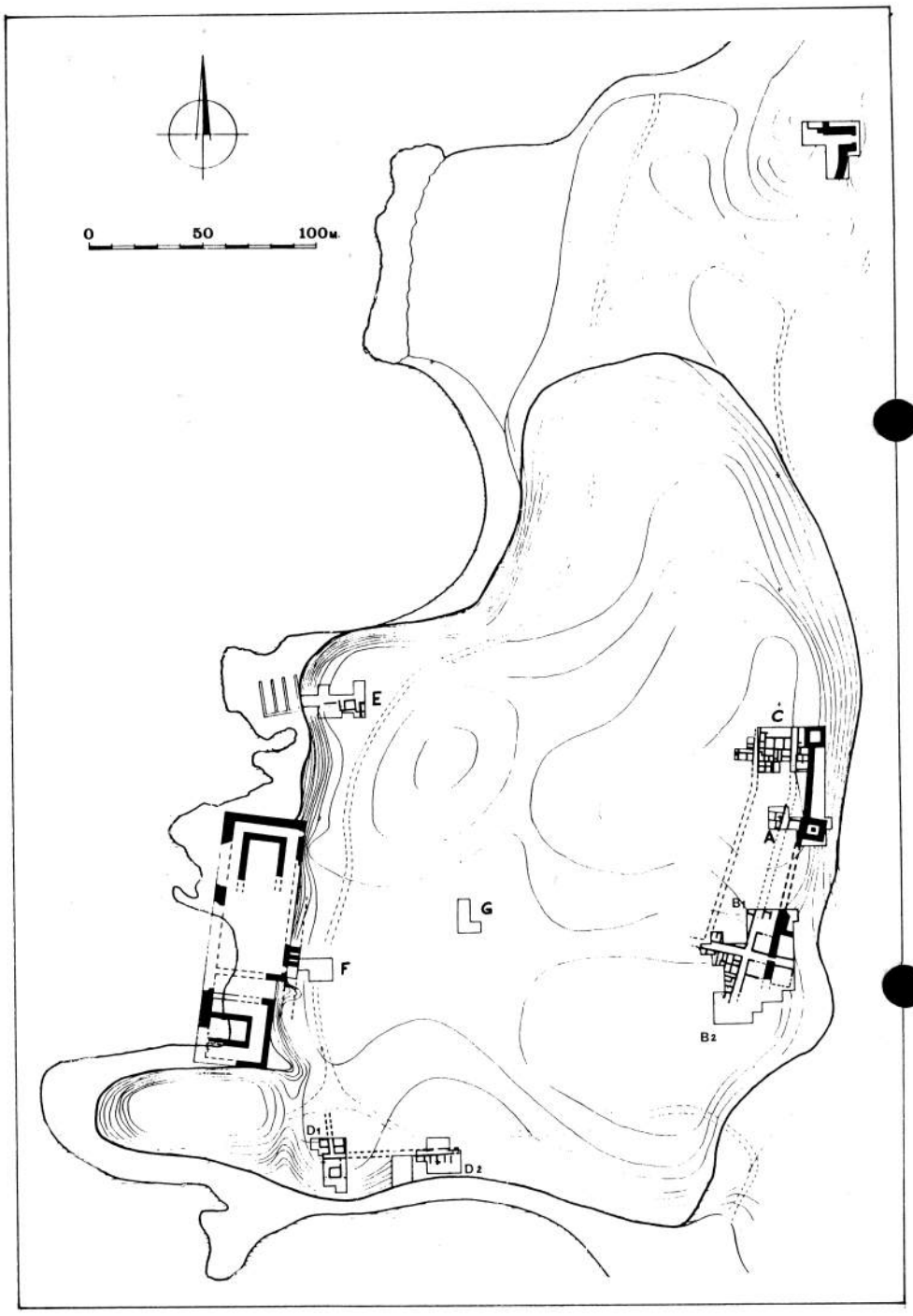

Fig. 1. Dor: general plan of the excavations.

son were twofold; first, to extend the area southwards and eastwards to clear a large section of the Roman strata, and secondly, to clear further sections of the two Iron Age gates — the four-chambered gatehouse of the ninth-eighth centuries B.C.E., and the Assyrian-Persian two-chambered gate on top of it (Fig.2).

Area D1, above the southern bay, was extended to the south of the line of the Roman-Hellenistic street, in order to expose wider areas of the Iron Age strata. Besides this, a large Persian period building north of this street was revealed. *Area D2* was also expanded northwards.

In *Area E*, which was opened last year at the north-western corner of the mound, new units were excavated on the middle 'step' of the slope above the central bay, where last year's preliminary trench indicated the presence of Iron Age remains close to the surface.[2] In addition, the trial trench from last season was extended all the way down the slope. A secondary objective was to re-examine the [illegible]e of the stone-hewn dry docks that Raban cleared just beyond the edge of the mound,[3] by linking the eastern wall of the dockyard with structures within the area of the tell. This proved impossible, however, since this wall is only the last of several successive revetments packed closely one next to the other, to shore up the slope of the tell and protect it from the sea. On top and next to these walls was only topsoil material, and the pottery retrieved from within or beneath the walls was insufficient to allow any of them to be dated. It thus follows that the docks are also undatable from the available evidence.

Two new areas — F and G — were excavated this year. *Area F* was opened in order to date the two large podium temples at the western end of the site (which Garstang claimed were Hellenistic).[4] It was intended to re-expose the monumental staircase leading to the southern gateway of the temenos excavated by Garstang (which has since been covered up) and to connect it to the well-stratified deposits inside the mound. *Area G* was laid out in the exact centre of the tell, at the estimated site of the intersection of the main east-west and north-south streets of the city.

We present below a review of the major results of the 1986 season, arranged in [illegible]ronological order.

THE EARLIEST REMAINS

In Area E, in the unit at the bottom of the slope of the mound, a Middle Bronze IIC/Late Bronze IA horizon was reached, less than 1 metre above bedrock. Not far from this point, Raban located MB IIA deposits, the earliest recorded at

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2 *Dor 1985*, p. 104.

3 A. Raban: Dor 1977, *RB* 85 (1977), pp. 410-411.

4 J. Garstang: Tanturah (Dora), *Bulletin of the British School of Archaeology in Jerusalem* 4 (1924), pp. 35–45.

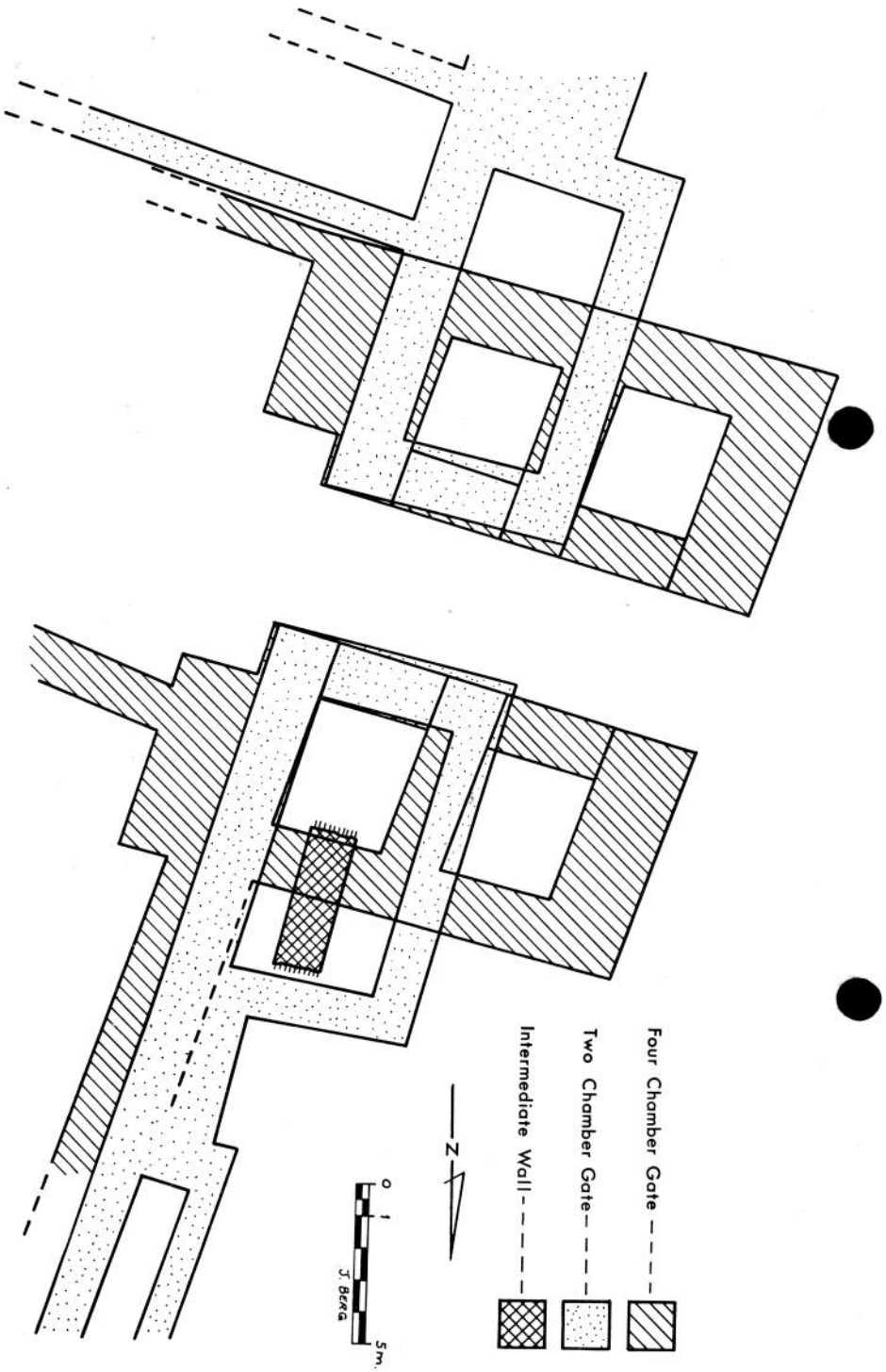

Fig. 2. Dor: Area B, plan of the gates.

Dor.[5] The MB IIC remains include a wall, made of boulders of 'cyclopean' dimensions, and parts of the beaten earth floor of a room. The finds at this spot include large quantities of fragments of imported vessels, including Monochrome bowls, Red-on-Black sherds, White Painted wares, faience tiles and fragments of a faience bowl.

IRON AGE I

The excavations in Area B1 this season were designed to expose as much of the Iron I strata as possible. This proved to be quite difficult, as the depth of the pit at this point is over six metres.[6] While the uppermost Iron I phase (probably of the end of the eleventh-first quarter of the tenth centuries B.C.E.) contains a relatively large assemblage of Cypriote pottery, the lower phases do not contain any imported vessels. The most abundant decorated wares are the unburnished bichrome bowls and jugs. Very few Philistine sherds were found in these deposits, and not enough to indicate that there was any Philistine habitation of these strata.[7] The small finds from this period include a scarab and an ivory ruler incised with a bull in a style reminiscent of Mycenean art (Pl. 25:A); the latter may well be an heirloom or a re-deposited piece originally from the Late Bronze Age.

IRON AGE II

One of this season's goals was to reveal the stratigraphy of the eastern fortifications of the town. This was investigated in three sections, in Areas C1, B1 and B2. The most significant find from a stratigraphic point of view came from Area C1. It was previously thought that there were three fortification systems here — a large boulder offset-inset wall with ashlars at the offset corners; a thick offset-inset mud-brick wall (henceforth referred to as the upper mud-brick wall); and an additional mud-brick wall, found not on the crest of the mound but at the bottom of the slope (termed the lower mud-brick wall).[8] Last year it was established that both the boulder wall (built in the Iron Age, although it was used well into the Persian period) and the upper mud-brick wall are later than the lower mud-brick wall.[9] The supposition was that the boulder wall is later than the upper mud-brick wall (as in Area B1, where a boulder wall, associated with a two-chambered gate, supersedes a mud-brick wall, associated with a four-chambered gate). There was no proof of this, however, because at no point in Area C1 were both these walls found in a direct stratigraphical relationship. It was decided that this point should be investigated, so part of the intermediate Persian-Hellenistic insula was removed

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5 A. Raban: Dor 1981, *Haifa University Centre of Maritime Studies News* 6 (1981).

6 E. Stern: *Tel Dor, 1984*, Notes and News, *IEJ* 35 (1985), pp. 60-64 (hereafter: *Dor 1984*).

7 Trude Dothan: *The Philistines and their Material Culture*, Jerusalem, 1982, pp. 4–5, 69, 229.

8 *Dor 1985*, p. 102.

9 *Ibid.*

in order to follow both underlying walls to a meeting-point. Contrary to expectations, it was discovered that the boulder wall and the upper mud-brick wall, though so different in construction technique, are simply two sections of the same fortification system (Fig. 3). This discovery poses the problem of dating the walls and of correlating them with the Area B1 sequence. Two hypotheses are possible: the first supposes that the composite wall is of Late Iron Age date — corresponding to the boulder wall and the two-chambered gate in Area B — and that the wall contemporary with the four-chambered gate is the lower mud-brick wall. This hypothesis is contradicted by the material found sealed below the upper mud-brick wall and behind the lower mud-brick wall, which is too early to support an eighth century date for the destruction of this phase. A second, more probable hypothesis is that the composite wall corresponds in date to both fortification systems in Area B1. Perhaps the builders of the boulder wall had incorporated standing sections of a previous mud-brick wall, while rebuilding the gate and sectio[redacted] of the earlier mud-brick wall which had collapsed.

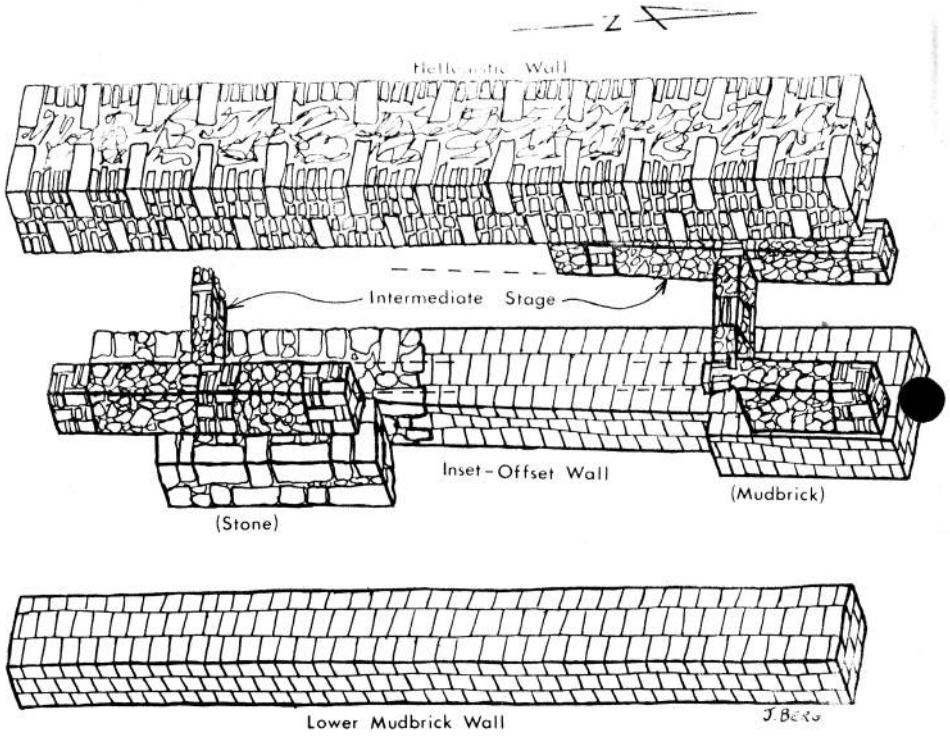

Fig. 3. Dor: Area C1, reconstruction of the fortification systems.

A further obstacle to our understanding of the history of the Iron Age fortifications is presented by finds in Area B1. Here a stretch of wall foundations, about 1.5 m. thick, was found sandwiched between the northern room of the two-chambered gate and the north-eastern room of the four-chambered gate (Fig. 2). It had earlier been assumed that the two-chambered gate (originally dated to the Persian period)[10] was actually built by the Assyrians,[11] mainly because of the discovery of a typical Assyrian gate socle, of a type previously found at Megiddo and at Gezer.[12] It is now clear that this gate was not built immediately after the destruction of the four-chambered gate, because the two are separated by a phase represented by the wall foundations mentioned above. The gap may have been a short one; the wall might represent an attempt by the local population to reuse the town-wall, following the destruction of the gate, and just before major reconstruction of the fortifications. If so, it is still possible that the reconstruction of the fortifications and the building of the new two-chambered gate were carried out during the period of Assyrian occupation.

In Area B2, work continued both inside the gate area and in front of the gate. The entire area of the southern cell of the two-chambered gate was cleared down to the top of the older gatehouse (Pl. 25:B). Two massive walls, one partly overlying the other, run at right angles to the gates, and are related to the two-chambered and four-chambered gates respectively (Fig. 2). It thus appears that both gates had 'bastions' or outer gate complexes.

One other important discovery of the Iron Age II was made this season. It has been suggested that there is a connection between Iron Age ashlar construction and early Hellenistic ashlar architecture, and that the 'missing link' is to be found in the same ashlar technique used in the Persian period at Dor and at other Phoenician sites.[13]

An obvious drawback for the use of Dor as a key site to demonstrate this theory was that while ashlar architecture is abundant in the Persian and Hellenistic strata at Dor, it was not found in the Iron Age deposits — except for some ashlar facing of the gates and of offsets of the Late Iron Age/Persian boulder wall. This season, however, in both Areas D1 and E, ashlar pier structures were found which displayed all the usual attributes of the Phoenician mason's art, including marginal dressing (Pl. 25:C), in definite Iron Age contexts. It is as yet too early to judge whether these buildings are part of the town destroyed by the Assyrians, or the settlement rebuilt after this destruction.

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10 E. Stern: Excavations at Tel Dor, 1981, *IEJ* 32 (1982), p. 116.

11 E. Stern: *Tel Dor, 1983*, Notes and News, *IEJ* 33 (1983), p. 260.

12 R. Reich and B. Brandl: Gezer under Assyrian Rule, *PEQ* 117 (1983), pp. 43–44.

13 I. Sharon: Phoenician and Greek Ashlar Construction Techniques at Tel Dor, Israel, *BASOR* 267 (1987), pp. 21–41.

THE PERSIAN AND HELLENISTIC PERIODS

The most important find from this season was the discovery of an intact purple dye manufacturing installation in Area D1 (Pl. 26:A), which provides a unique opportunity to investigate this most famous of Phoenician industries. The installation consists of a deep pit filled to the brim with crushed murex shells. A small channel leads to some sort of collecting vat which has not yet been discovered; originally it was at least partly covered. The bottom of the channel was filled with a thick deposit of lime, with some residue of pigment still adhering to it. It seems that quicklime was used to extract the dye from the molluscs.

North of the dye installation is a large structure — part of a public building or a well-to-do residence. Its various phases span the Persian period and continue into the Hellenistic (Pl. 26:B). In the later phases of this building, the roof was supported by a massive square ashlar pillar. The walls of the building are constructed in a peculiar technique. The rubble walls are strengthened at intervals by a single larger ashlar block — reminiscent of the *a telaio* technique common in the western Phoenician colonies,[14] but here the ashlars are staggered between courses, rather than being placed one on top of the other to form constructional supports, as in *a telaio* construction.

In 1980 a concentration of Persian figurines was found in Area B1, in a small trench between the Persian and the Hellenistic city-walls.[15] It was suggested that these were the contents of a Persian *favissa*, disturbed by the digging of the foundations of the Hellenistic wall, and that more objects might be found underneath it. When the Hellenistic wall was dismantled this season, a necklace made of 16 faience amulets (Pl. 27:B) and two semi-precious stone beads were discovered. Another significant small find from this period was a nearly complete white-ground *lekythos* (about 15 cm. high), found in Area C1, though unfortunately not in stratigraphical context (Pl. 27:A).

In the centre of the town, in Area G, a thick deposit from the Persian period was excavated. No architecture was found, and the only visible feature was a large dump containing several intact vessels and wastes (shells, lime etc) from the dye industry (Pl. 27:C). Hellenistic remains were equally poor in Area G. The area was built up, but the structures were so throughly destroyed by subsequent Roman building operations that little can now be made of them.

Several phases of Persian and Hellenistic structures were revealed in Area E. They seem to have been residential in nature, and are characterized by ashlar pier construction similar to that found elsewhere at Dor.

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[14] Italian archaeologists coined the term '*a telaio*' to refer to a type of construction common in the western Phoenician colonies. It is characterised by standing monoliths with a rubble fill between them. See discussion and further bibliography in B.S.J. Isserlin and Joan du Plat-Taylor: *Motya*, I, Leiden, 1974, pp. 90–91.

[15] E. Stern: A Favissa of a Phoenician Sanctuary from Tel Dor, *Journal of Jewish Studies* 33 (1982), pp. 35–54.

THE ROMAN PERIOD

A considerable part of the work of this season was devoted to improving our understanding of the last urban phases at Dor. In Area B2 the large-scale exposure of the Roman quarter south of the gate was continued. The plan and function of the public building south-west of the gate 'piazza' are still unclear, but it has been established that the colonnade in this structure contained architectural elements of two distinct sizes. The building therefore probably had two storeys. Few decorative elements were found. Columns and capitals are made of local *kurkar* (sandstone) and finished in stucco, in a debased Doric order. It was established that the building was built at the same time as the paved street to its east, the elaborate drainage system, and the entrance 'piazza', probably in the late first or early second century C.E. It was used until the final resurfacing of the street, which should probably be dated no later than the mid-third century C.E. — a date in keeping with the end of the autonomous coinage of Dor.

Opposite the building, on the eastern side of the street, the excavation of a row of rooms or shops was continued. These have sometimes been described as water pools in earlier publications,[16] but an increasing amount of evidence indicates that this is incorrect, though some of them were reused as pools in the final phase of their existence. The units excavated this season are unplastered, and one appears to have had a doorway facing onto the street.

Area D2 was extended to the north of the east-west street that bisects Area D1 and continues on through Area D2. Two Roman strata are clearly discernible. The upper one consists of thick concrete foundations cutting the lower stratum, which is built of ashlars whose plan continues the lines of the Hellenistic houses below. An identical situation was previously encountered in Areas A, B2 and perhaps E. The lower stratum is part of a residential unit, consisting of rooms around a paved and colonnaded courtyard.

The Roman remains in Area E reveal the processes affecting the morphology of the seaward side of the mound. Whereas the Bronze Age, Iron Age, Persian and Hellenistic strata are fairly level and do not appear to have been affected by their proximity to the outer edge of the mound, the Roman remains are found on terraces which closely follow the existing slope. Thus, although at the top of the mound Hellenistic remains are found beneath the Roman strata, in the central 'step' the Roman remains cut into Persian structures and cover Iron Age buildings, and near the bottom of the slope a Roman industrial installation directly overlies the late MB and early LB deposits.

It seems that there was a massive erosional episode or some large-scale earth-moving operations here in the Hellenistic or early Roman period, which caused the collapse of the outer edge of the tell at this point. No major changes appear to have taken place at this spot later than the Roman era.

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[16] *Dor 1984*, p. 63.

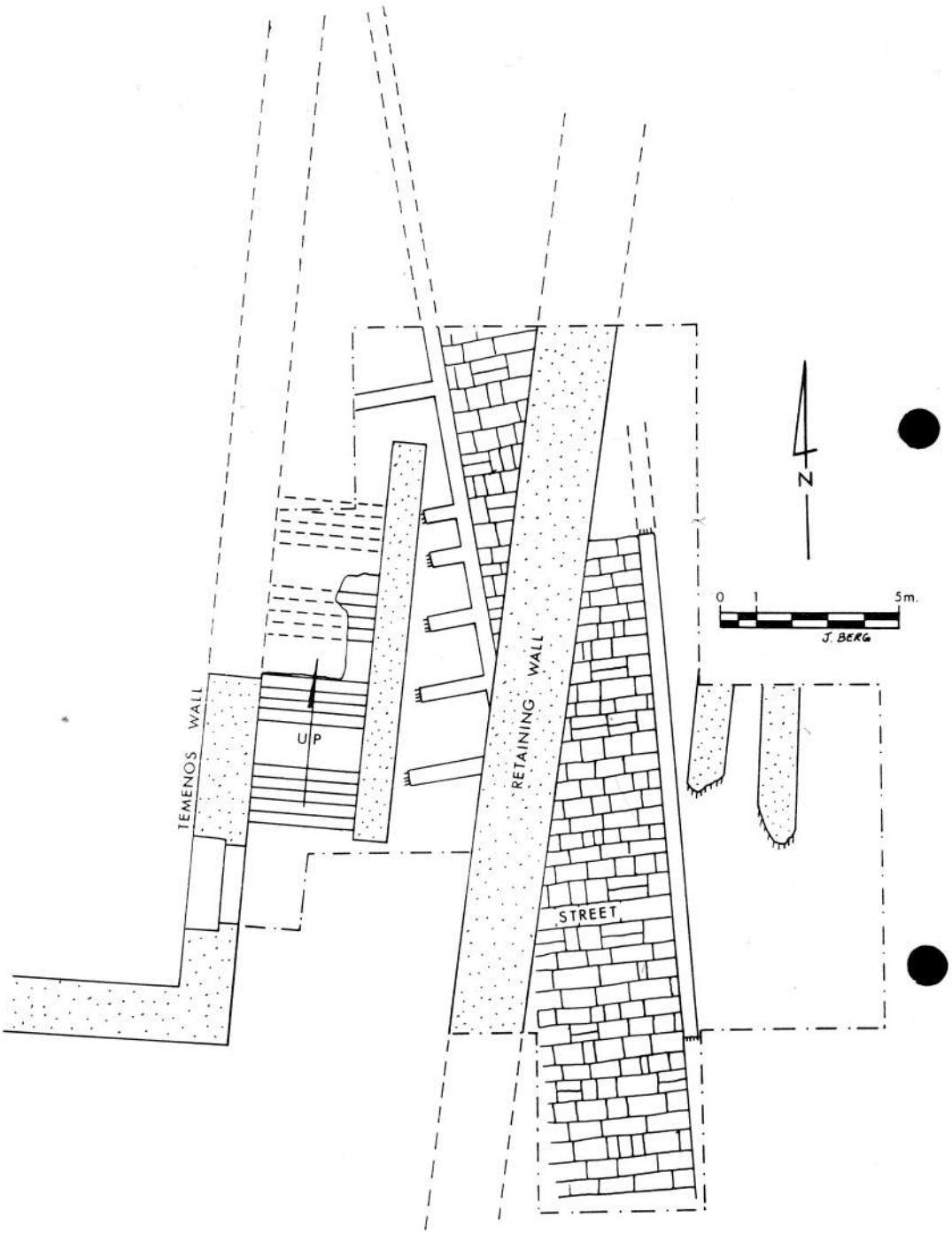


Fig. 4. Dor: Area F, schematic plan of the Roman strata. Dotted areas indicate the later of the two strata.

Area G was opened in order to find the intersection of the two main streets of the town. Some 20 cm. beneath the surface, a large pavement of well-dressed flagstones was found, with a north-south drain running under it. No definite evidence of the location of the east-west street has so far been discovered. Some massive foundations of a structure to the north-west of the presumed intersection were also found.

In Area F, the southern entrance to the temenos excavated by Garstang[17] in the 1920s (and dated by him to the Hellenistic period) was excavated, and an attempt was made to connect the features he found to elements undisturbed by his excavations.

It appears that the structures in the area underwent major reorientation late in the Roman period (Fig. 4). The initial orientation, as shown by walls of the Persian, Hellenistic and early Roman periods, was north by north-west. This orientation is not in alignment with the walls of the temple. The last element to be built following this orientation was a stone-paved street with a drain underneath it, rather similar in appearance and in its associated pottery to streets in Areas A, C, B2 and D, which were all dated to the late first or the second centuries C.E. Soon afterwards, however, the layout was completely changed. The new orientation is north by north-east, and is aligned with the walls of the temenos. Parallel to the eastern wall of the temenos a street was built, descending in a series of steps to the gate in the temenos wall. The level of this gate is some four metres lower than the contemporary level of the tell. To compensate for this, two terrace walls were built, parallel to the temenos wall on the eastern side of the street. These walls cut through all the previous strata, including the early Roman street. A date in the late second or early third centuries C.E. should be appropriate for these building operations.

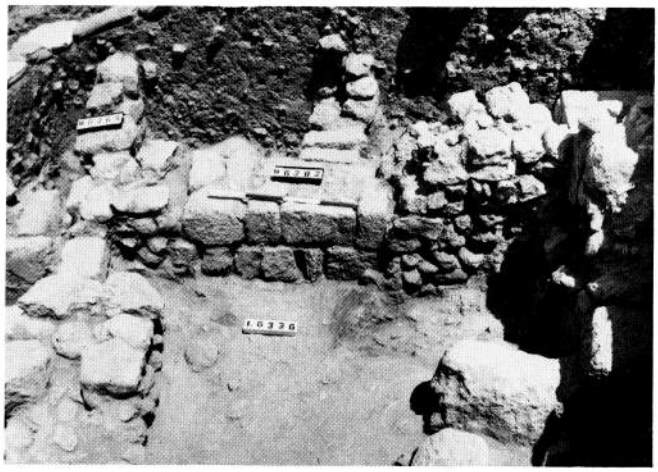
It is tempting to identify the changes in the layout of the town with the erection of the temple itself. Should this be the case, then far from being Hellenistic, as suggested by Garstang,[18] the temple would represent the very last major building operation at Dor, and may be as late as the Severan period. On the other hand, it is definitely possible that the re-organization of the area in front of the temple did not coincide with the construction of the temple itself, but was merely a realignment of the streets to fit an already existing temenos. It is intended to investigate this question in future seasons.

[17] Garstang (above, n. 4), p. 67.

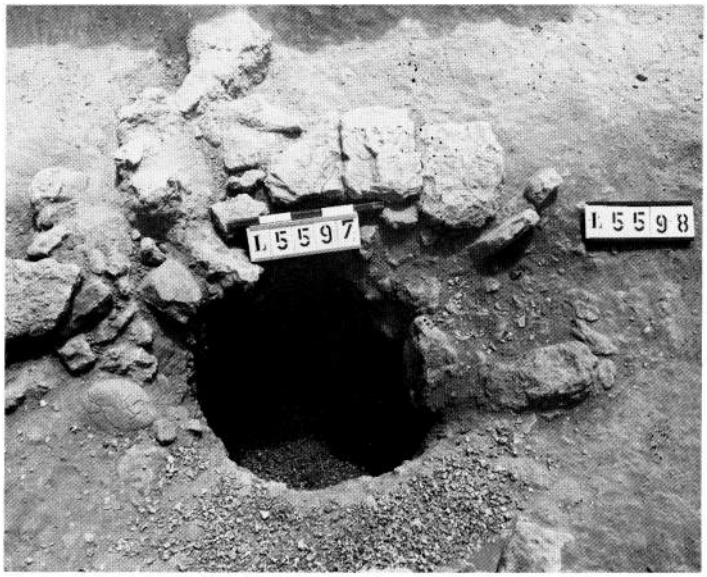
[18] *Ibid.*, p. 73.

A: Dor, Area B1. Ivory plaque depicting a bull (about 10 cm. long).

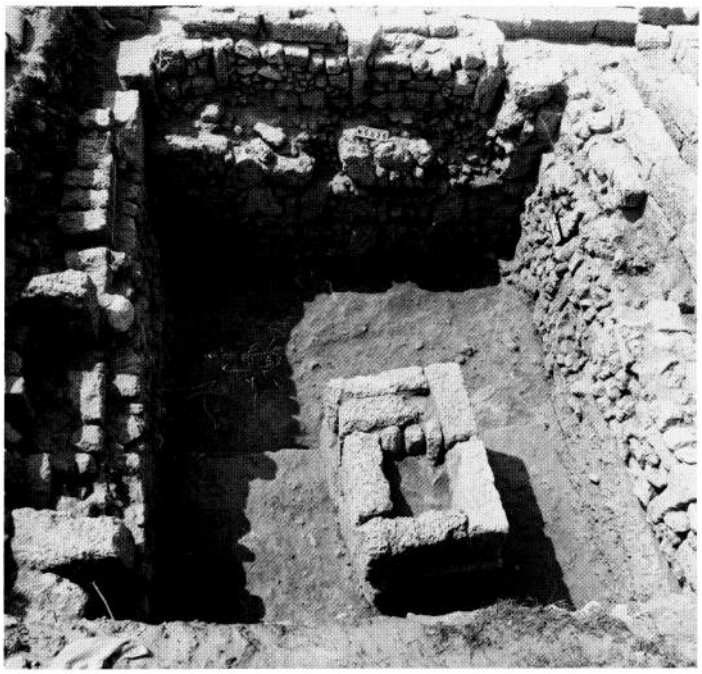
B: Dor, Area B2. Southern chamber of the two-chambered gate.



C: Dor, Area E. Iron Age ashlar masonry.

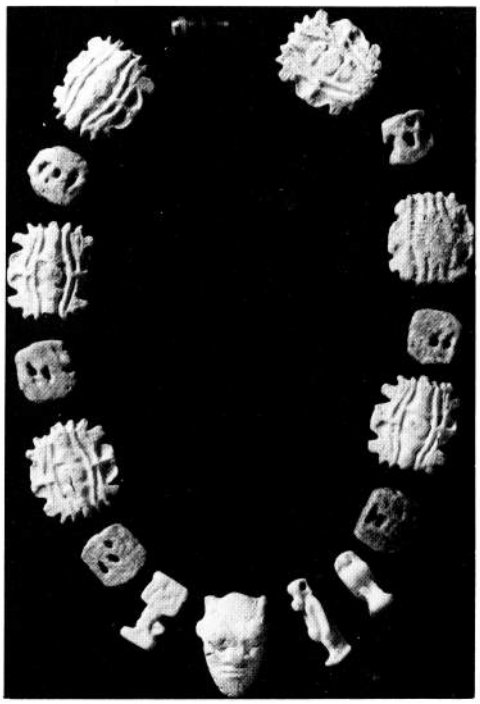


A: Dor, Area D1. Dye manufacturing installation.



B: Dor, Area D1. Public building of the Persian period, with central ashlar pillar.

A: Dor, Area C1. *Lekythos* (Persian period).



B: Dor, Area B1. Necklace (Persian period).

C: Dor, Area G. Dump from the Persian period.