Tel Dor, 1988-1989: Preliminary Report

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THIS report will summarize the findings of the ninth season of excavations at Tel Dor, held during July–August 1988, and the tenth season, conducted during July–August 1989.[1] E. Stern directed the excavations on behalf of the Hebrew University of Jerusalem and the Israel Exploration Society. Also participating were teams from the California State University, Sacramento, directed by H.P. Goldfried; the University of California, Berkeley, directed by A. Stewart; Southern California College, directed by Nancy Heidebrecht; McMaster University, directed by T.R. Hobbs; the University of Saskatchewan, directed by C. Folley; and a small team from the University of Minnesota which joined the UCB group. Renate Rosenthal of Göttingen University also participated.[2]

The report is organized in a goal-oriented fashion. It first presents the general strategy followed in both seasons and the specific goals we set out to attain and problems we wished to resolve in the various areas. This is followed by a section on each period. Every section begins with the specific hypotheses we set out to verify in each area, followed by the results of our investigation, and finally sets out working hypotheses inferred from these results, to be investigated in future seasons.

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1 The results of these seasons may be found in: E. Stern: Tel Dor, 1980, *IEJ* 30 (1980), pp. 209–213 (henceforth Dor 80); E. Stern: Excavations at Tel Dor, 1981: Preliminary Report, *IEJ* 32 (1982) pp. 107–117 (henceforth Dor 81); E. Stern and I. Sharon: Tel Dor, 1982, *IEJ* 33 (1983) pp. 117–119 (henceforth Dor 82); E. Stern: Tel Dor, 1983, *IEJ* 33 (1983), pp. 259–261 (henceforth Dor 83); E. Stern: Dor 1984, *IEJ* 35 (1985), pp. 60–64 (henceforth Dor 84); E. Stern and I. Sharon: Tel Dor, 1985, *IEJ* 36 (1986), pp. 101–104 (henceforth Dor 85); E. Stern and I. Sharon: Tel Dor, 1986, *IEJ* 37 (1987), pp. 202–211 (henceforth Dor 86); E. Stern, A. Gilboa and I. Sharon: Tel Dor, 1987: Preliminary Report, *IEJ* 39 (1989), pp. 32–42 (henceforth Dor 87). For general surveys of the results, see E. Stern: The Excavations at Tel Dor, in: E. Lipiński (ed.): *The Land of Israel: Crossroads of Civilizations*, Leuven, 1985, pp. 169–192 (henceforth Dor 80–84); E. Stern: The Walls of Dor, *IEJ* 38 (1988), pp. 6–14 (henceforth Walls of Dor).

2 The staff also included I. Sharon as assistant to the director, J. Berg and Ruchama Bonfil as architects, S. Wolff as draftsman and L. Lanigan as photographer. Field supervisors were A. De-Groot, Ayelet Gilboa and J. Zorn, and area supervisors were Roni Vander, Idit Saragusti, Isabelle Dunaux, Eva von Dassow, Colette Kruyshaar, Jo-Beth Powell, Traci and B. Scott, E. Ben-Ari, A. Estes and K. Karhi. Bracha Zilberstein was registrar; Alegre Savariego, assistant registrar; Vered Rosen, restorator; Z. Attar and Dvora Avni, artifact draftsmen; and S. Dahan, D. Stanfill and E. Stern, administration. The expedition was lodged at the Pardess Hanna Agricultural School, and had the use of the facilities and the support of the Centre of Nautical and Regional Archaeology at Kibbutz Nahsholim, directed by K. Raveh.

EXCAVATION AREAS AND RESEARCH GOALS

In the first excavation seasons we concentrated mainly on the Hellenistic and Persian periods. These periods are the main thrust of the final report on Areas A–C, now in the process of publication.[3] The 1988 and 1989 seasons concentrated on the Iron Age and the Roman period, with the intervening strata dealt with only in passing. The first millennium in the history of Dor — the Middle and Late Bronze Ages — is still largely unknown, and will be investigated only in future seasons.

Six areas were excavated: Areas B1, B2, D2, E, F and G (Fig. 1). Three goals were set in the excavation of Area B1. One was to continue exposing the early Iron Age levels in its northern part and to determine the relationship between these features and the rampart discovered in previous seasons. Another objective was to continue the work of dismantling parts of the fortification walls to clarify their relationships with the two- and four-chambered gates. The third goal was to try to locate remains of an outer gate, related to the late Iron Age two-chambered gatehouse and the offset-inset fortification line.

Area B2 was expanded to expose more of the Roman structures discovered in previous seasons. Work also continued on the two- and four-chambered gates and their related features.

In Area D2, work continued in the same squares as the previous year. The goal was to reach the earlier levels and relate them to features in the area's southern part, which has not been excavated for a number of seasons.

Area E was not excavated in 1988, and was dug by a limited work force in 1989. In past seasons we found that, due to its topographical characteristics, the Hellenistic, Persian and Late Iron Age remains were preserved only in the centre of the area, while in other places Iron Age IIA is encountered immediately below the Roman strata.[4] Our goal was to remove the overburden of all late remains, and to expose as much as possible of the Iron Age remains in the entire area.

In Area F, work was limited to a small portion of its south-western part. The objectives were to remove the dump from Garstang's 1924 excavations, to look for a gap in the large concrete retaining wall which would have provided access to the temples on the western edge of the mound and to obtain further evidence for the dating of the temple complex.

Area G was expanded to the east and west to expose more of the Roman concrete foundations running parallel to one another, and thus to determine the limits of the square, or forum, at the centre of the Roman city. Work also continued on the Iron Age structures uncovered the previous season in the deeper pits in the centre of the area.

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3 The report on Areas A–C is forthcoming in *Qedem*.

4 Dor 86, p. 209.

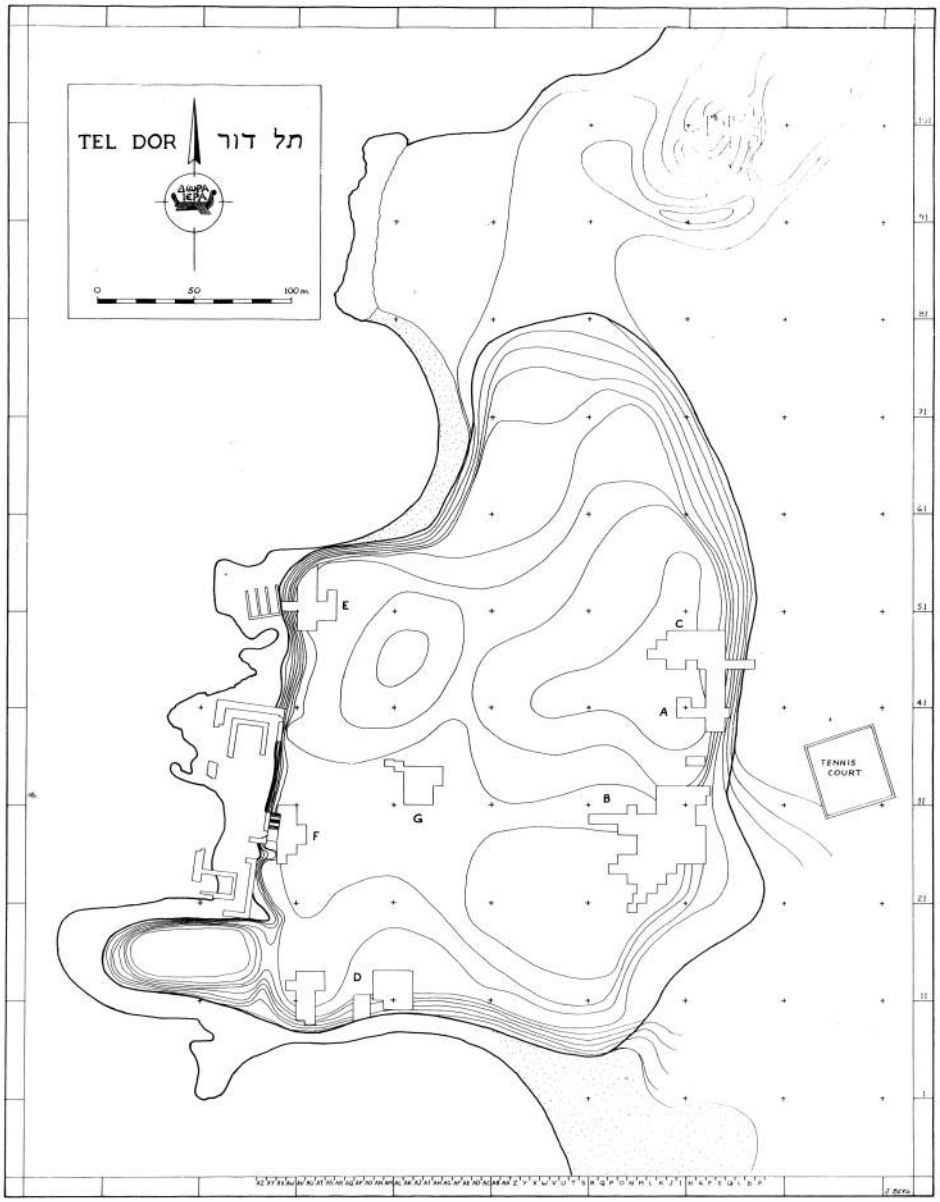

Fig. 1. Tel Dor, general plan.

THE ROMAN PERIOD

Area B2 was expanded to the east, west and south, allowing further exposure of the three main architectural complexes associated with the *piazza* at the city entrance: the aqueduct, the courtyard building to the east of the main north-south street and the large colonnaded building to the west of this street.

In 1984 we unearthed a structure, identified as the extreme western two piers of a Roman aqueduct entering the city just south of the *piazza*[5] (remains of the aqueduct leading from Wadi Milk to Dor were discovered in the course of work on the Tel Aviv–Haifa highway).[6] Eastward expansion of the area exposed the foundations of another two piers, confirming the identification of the aqueduct.

South-east of the entrance *piazza* we have been excavating a large courtyard building, possibly a caravanserai or a barrack.[7] The southward expansion exposed a number of additional rooms off the courtyard and the building's south-western corner. A wall of an adjacent building to the south was also exposed, establishing the total width of the latter as 35 m. An iron sword and the jaw-bone of a horse were found on the floor of one of the rooms. The rooms bordering the 10 m. wide courtyard on three sides have been exposed, while the fourth side is presumed to have eroded. The central courtyard of the building has not been fully excavated yet. Apparently it consists of a flag-stoned open courtyard, surrounded by a 3 m. wide passage with an earth floor. It is possible that this passage was originally roofed, and that the bases of the supporting columns project from the flag-stone pavement. We plan to complete the building's excavation next season to enable a full reconstruction of its plan.

South-west of the *piazza* there is a large colonnaded public building. Its north-eastern corner was exposed in 1981.[8] Since then we have been trying to trace its plan and deduce its function. It has been severely damaged by stone-robbing, and only its deep foundations remain, found where they disturb earlier strata. Expansion to the west revealed a robbers' trench, corresponding to the southern wall of the colonnaded building. It has now been established that the pavement discovered in 1987 south of this building is indeed the corner of an east-west street.[9] The building itself appears to be a long structure, 25 × 35 m., quadrisected lengthwise into east-west divisions.

In the Roman period the town spread eastward from the ancient mound. The eastward extension of Area B revealed more walls of structures belonging to the lower city. We also followed the course of the main sewage drain, which leaves the mound at the gate and meanders down to the lower city. A gold ring, with a gem showing Eros chasing a bird, was found inside the drain.

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5 Dor 84, p. 63.

6 A. Ovadiah: Soundings on the Hadera–Haifa Road between Nahsholim and Ha-Bonim, *ʿAtiqot* 17 (1985), pp. 164–165 (Hebrew).

7 Dor 87, p. 37.

8 Dor 81, p. 114.

9 Dor 87, p. 37.

Work in Area F was minimal, consisting primarily of the removal of Garstang's dumps in the area between the two temple platforms. Our reconstruction of the Roman city's layout presupposed a gap in the cement retaining wall east of the temple complex at this point. Two side entrances were discovered by Garstang in the 1920s (and re-excavated by us) in the long eastern wall. However, we assume that the main entrance to the temple courtyard was in the centre of its southern wall, opposite the supposed façade. If this were the case, there should have been an opening in the retaining wall to allow access to the temples from the city. Our test excavation at this point has revealed, however, that at least one of the stages of the eastern retaining wall did *not* have such an opening, as evidenced by a wide robbers' trench. Major changes in the general layout of the area of the propylaea appear to have taken place within the timespan of these temples (probably from the second century to mid-third century C.E.). These changes need to be further elucidated.

The above-mentioned robbers' trench cuts across the remains of an Early Roman residence, some of which were found sealed under the roadway to the temples. This house was situated west of the Early Roman street found in Area F in previous seasons.[10] It is not oriented in relation to the temples, and its western half has disappeared, possibly due to the construction of the temenos walls of the temple. Parts of a courtyard, several rooms and a cistern were found. Many fragments of stucco and frescoes were discovered on the floors of the house and in the cistern. Other significant finds relating to this house are several oil lamps of the 'southern' (or 'Bar-Kochba') type. These may serve to define further the chronology of Garstang's temples. If one accepts the premise that this house predates the temple, the latter was definitely constructed after 70 C.E., and, in all probability, after 135 C.E.

Area G was opened in 1986 in the exact centre of the city. Roman remains include a large paved square and two sets of massive cement foundations north of it running east-west (Fig. 2). The southernmost wall is aligned with the southern curb wall of the main

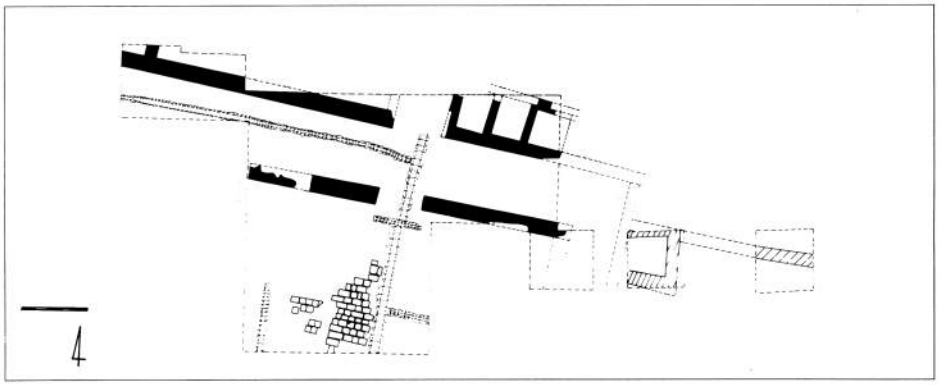

Fig. 2. Tel Dor, Area G, Phase 1: Roman remains including paved square and massive cement foundations.

10 Dor 86, p. 211, Fig. 4.

street in Area B2. Assuming that the city's layout was strictly orthagonal, these two walls must mark the borders of a street running from Areas G to B. To test this hypothesis, we opened four non-consecutive units on the line of the supposed street. The results were disappointing: the Roman remains in this area were completely robbed, and even the Hellenistic walls were fragmentary. Nevertheless, the tracing of the lines of the robber trenches of the Roman walls, which criss-cross all of the units, established that the street was not situated in these units. This bears a number of implications: 1) the main street must lie south of the line of units we opened; 2) the north-eastern corner of the square, or forum, in Area G must lie in unit AF32; 3) the streets of the Roman city were not laid out in ruler-straight lines; instead, they curve slightly to conform with the topography.

In the building north-east of the open forum, a well-preserved cellar was found, with several complete vessels on its cement floor.

THE HELLENISTIC PERIOD

One of the perplexing problems in Area B2 for a number of seasons was the question of the continuation of the fortification wall, since the visible part ended abruptly only a short distance south of the gate. It was first assumed that later disturbance had destroyed the rest of the wall, and that evidence of its continuation would come to light as the area was extended to the south. However, this did not happen. Even more puzzling was the occurrence of other Hellenistic walls in places where the fortification wall was presumed to have stood. It was postulated that the wall did not continue in a straight line to the south, but instead turned to the east for a distance before continuing southward.

Area B2 was expanded eastward to test this hypothesis. A wall running east-west was discovered, constructed in the same distinctive 'compartment' building technique as the fortification wall (Fig. 3).[11] A great deal of later disturbance in this part of the area prevents the independent dating of this wall. However, its construction and alignment suggest that it is the continuation of the Hellenistic fortification system.

A gate system consisting of a simple opening, protected by a large bastion or a jog to one side of the wall line, is a well-known feature of Greek fortifications,[12] but is so far unattested in the East. Further corroboration of the identification of the structure south of the gate as a bastion is provided by a large pile of catapult stones found in it. Over 50 ballista of various sizes were extracted during the 1987–1989 seasons, and more remain unexcavated. A similar, though smaller, pile was found in 1981 north of the gate.[13] Two batteries of catapults were apparently carefully positioned to protect

11 I. Sharon: Phoenician and Greek Ashlar Construction Techniques at Tel Dor, Israel, *BASOR* 267 (1987), pp. 28–29.

12 F.E. Winter: *Greek Fortifications*, London, 1971, p. 210.

13 Dor 81, p. 116.

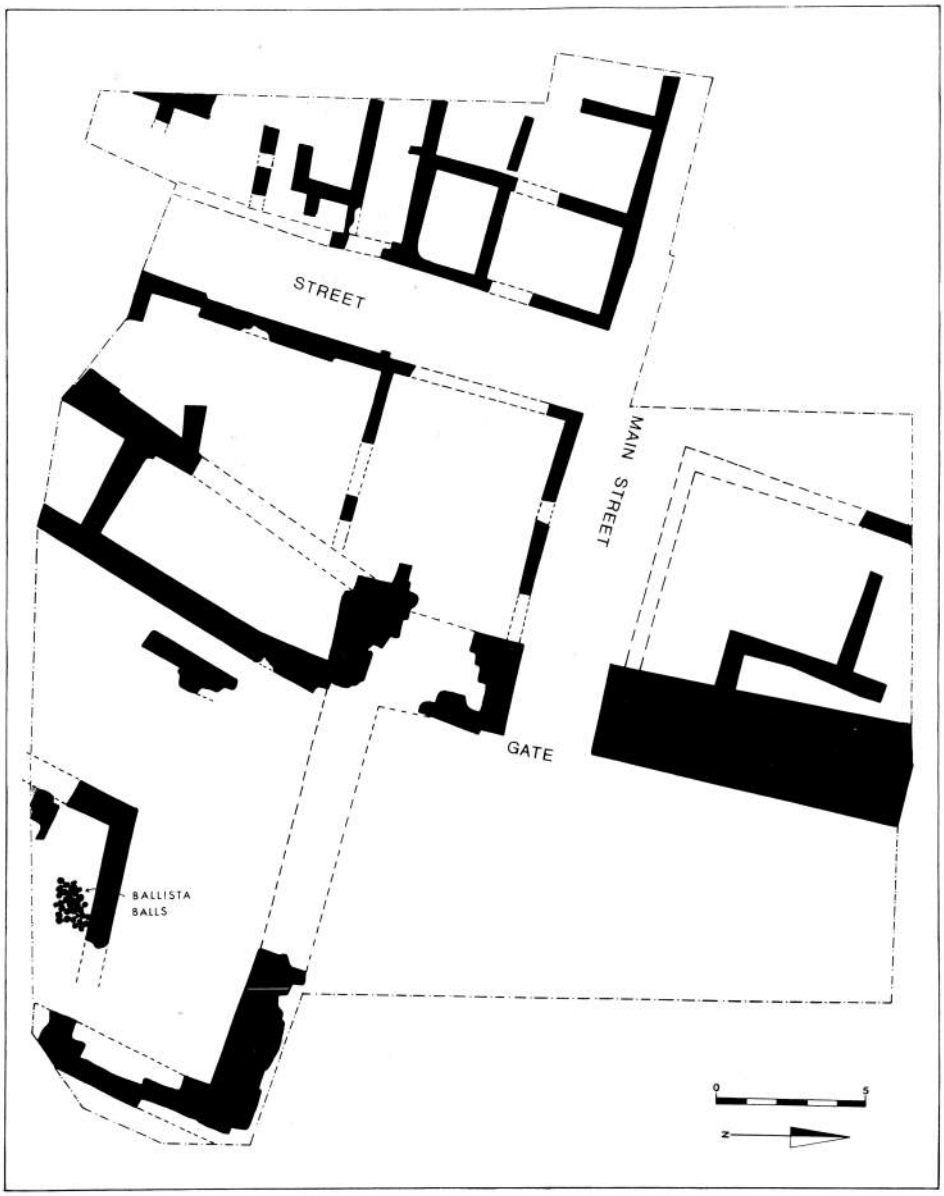

Fig. 3. Tel Dor, Area B2: Wall constructed in 'compartment' building technique.

the gate with enfilading fire. Incidentally, the identification of the structure as a bastion further supports the possibility that the Roman building above it was a military barrack (see above).

In Areas D2, E and F, more walls of ashlar pier and rubble fill construction, common in the residential areas at Dor, were exposed. The *insula* in Area D2, built in the Early

Hellenistic and used until the Early Roman period, has an oil press in one room. The press is of the beam-and-weight type, using large stones with inverted T-type perforations as weights, a type well known in this period.[14] However, the symmetrical arrangement of two presses on elevated platforms at either side of the room is unique. The lower centre of the room was probably used to collect the run-off from the platforms into jars or amphorae. The weights were placed in depressions dug in the platforms, and a quantity of olive seeds was collected from these depressions.

A very large *tabun* or kiln was found in another room in this building. This installation seems industrial in size, though no slag or refuse was found to indicate its use. Other significant finds in the same building are several conical loom-weights with bearded satyr heads stamped on their tops. Conical loom-weights, as well as the practice of stamping them, have parallels in Greece. All of these finds, discovered in close proximity, indicate the continued use of Area D2 as an industrial area into the Persian period (see below).

Although ashlar walls of this period were exposed in Area G as well, they were too fragmentary to enable a coherent plan for this period. However, the south-eastern corner of a large ashlar building was discovered at the western edge of the area. It is hoped that future excavation will uncover better preserved remains of a large public structure and other related features.

THE PERSIAN PERIOD

Exposure of new material from this period was limited to small parts of Areas D2, E and G. In Area D2, a series of field-stone walls was revealed beneath Hellenistic houses. These correspond to a similar set of walls in the previously excavated area to the south. The arrangement that emerges is of two long and narrow buildings, each divided into several longitudinal rooms, flanking a narrow courtyard or a broad street about 5 m. wide. The area seems to have served some kind of commercial/industrial function. Several pits filled with amphorae, as well as slag, crucible fragments and dye industry wastes, dot the area. The relationship between these and the above-mentioned network of walls is as yet unclear. Concentrations of amphorae were previously found in the building in the southern part of the area, leading to its initial identification as a storehouse.[15]

The centre of Area G was an open space in the Persian period, containing many refuse pits. One of these, which has been completely cleared, proved to be over 3 m. deep with a diameter of over 2 m. A large public building stood west of this open space. Only two of its walls have been excavated so far, although one was traced for 15 m. Their construction is exceptional: both are thick ashlar walls, built of headers only. The

14 For example, the oil press at Tirat Yehuda, see Z. Yeivin: Two Ancient Oil Presses, *ʿAtiqot* 3 (1966), pp. 52–63 (Hebrew).

15 Dor 85, pp. 102–103; Dor 80–84, p. 87.

eastern wall, however, is built of piers of massive headers, alternating with regular-sized ashlar headers. This 'ashlar pier and ashlar fill' technique bears an affinity to other types of Phoenician ashlar construction, although we know of no exact parallels. The date of this building is as yet obscure, as only foundation courses of the walls have been found.

Persian structures in Area E were built in the common ashlar pier construction, and seem to be residential in nature.

THE IRON AGE

The excavation of the Iron Age city was the major goal of these seasons. Although Iron Age deposits were dug in Areas D2, E and F, the main Iron Age fields were B1 and the gate area of B2. Areas B1 and B2 were both extended eastwards in the hope of locating the outer gate complexes relating to the Iron Age gates. Massive ashlar walls of these structures were observed, but their further exposures and the removal of later obstructions are required in order to disentangle the several superimposed 'bastions' and to draw up a reliable plan.

In 1988, while trimming the eastern baulk, we noted the line of the cobble pavement of the roadway leading up to the two-chambered gate. (A section of this roadway just outside the gate was exposed as early as 1981.[16]) These new fragments are located north of the gate (in Area B1), thus establishing that the approach to the city gate was from the north. Inside the outer gate one made a right turn to enter the inner, two-chambered gatehouse.

In 1989 we followed up this discovery by opening five new units to the east. In three of these units we hit the perfectly preserved cobble pavement of the ramp leading up to the two-chambered gate. In all, some 100 m.^{2} of this pavement are now cleared. Since the gate was in use well into the Persian era, the pottery on these floors dates from this period. Among these finds are a black-figure bowl and a limestone plaque depicting a human head in low relief.[17]

We have maintained since 1984 that the two-chambered gate, previously called 'the Persian gate', was built in the Iron Age.[18] Prior to the 1988–1989 seasons, however, this assertion was supported only by circumstantial evidence, such as the Assyrian-type door-socket found in it. Removal of later walls and fill exposed the south-western corner of the two-chambered gate's southern chamber. At this point a late Iron Age floor was found reaching the outside wall of the chamber. This is the first undisturbed floor related to its initial construction and use.

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16 Dor 81, p. 116.

17 E. Stern: Phoenician Discoveries at Tel Dor, *Qadmoniot* 22/3–4 (1989), pp. 103–110.

18 For examples of its being termed 'the Persian gate', see Dor 80, p. 212; Dor 82, pp. 117–118. For evidence of its construction in the Iron Age, see Dor 84, p. 62; Dor 85, pp. 102–103.

Between the two-chambered gate and the four-chambered gate preceding it, there was a short transitional phase.[19] A shallow pit under the chamber's southern wall cuts into the brickwork adjacent to the four-chambered gate (see below). This pit is, thus, later than the four-chambered gate, but earlier than the two-chambered one. A late Iron Age assemblage found in it — including several 'Samaria' bowls and an East Greek skyphos — was tentatively dated to the late eighth-early seventh centuries B.C.E.

Excavation also continued inside the south-eastern chamber of the four-chambered gate. This chamber's stratigraphy closely resembles that of the south-western chamber, excavated in 1983.[20] Two distinct floor surfaces relate to the four-chambered gatehouse. The upper one, with a layer of ash and some burnt beams on it, represents the final use of the gatehouse. It had been partially excavated in 1986. In 1989, we found a floor surface south of the gatehouse, probably dating from the same phase. A fragment of a Greek late Geometric bowl dating from the second half of the eighth century B.C.E. was found on this surface.[21] A similar fragment was found in Area E in a more dubious context.

Beneath the floor inside the chamber we found a sand fill, and under it another floor, representing the original surface of the four-chambered gate. A constructional fill under the lower floor contains sherds predating the gate's construction. The latest of these apparently date from the tenth century B.C.E., although earlier pieces are abundant. Other finds in the same fill were an ivory sceptre and a lion-shaped amulet bearing the cartouche of Thutmosis III (apparently of post-Eighteenth Dynasty manufacture).[22] Immediately under the base of the gate's foundation, the entire space of the chamber was filled with mud bricks. It has been postulated that this is the top of the tenth-century B.C.E. brick city wall, which runs under the four-chambered gate (see below). If this is the case, the brick wall runs diagonally under the later fortification systems, and its gate is either a simple opening under the later four-chambered gate, or, more likely, should be sought elsewhere. These hypotheses will be tested in future seasons.

The cleaning of the area south of this chamber revealed a number of large mud bricks similar to those found adjacent to the northern side of the four-chambered gate in 1987.[23] Under these mud bricks, which seemed to constitute a prepared surface of some kind, rather than the top of a wide wall, we found a complex of several stone walls, the relative stratigraphy and the architectural significance of which are not yet clear. In future seasons we intend to extend the exposure south of the gate area to clarify the question of the directions of the various city walls and their connection to the two gatehouses at this point. We also continued excavating in the north-western

19 Dor 86, p. 207.
20 Dor 83, p. 260.
21 We would like to thank Dr. Jane Waldbaum, who confirmed Ayelet Gilboa's identification of this piece.
22 This was orally communicated by Daphna Ben-Tor.
23 Dor 87, p. 36.

chamber of the four-chambered gate, clearing the remains of a large Persian pit found here in 1985.[24] Under the base of the gatehouse structure we found the continuation of the tenth-century street running south from Area B1.

The dismantling of later fortification walls and the removal of a thick baulk separating Areas B1 and B2 have revealed a more complicated relationship than was previously thought between the various walls to the north of the two- and four-chambered gates. Before the 1988 season it was assumed that the complex of boulder walls was related to the two-chambered gate, and that the mud-brick wall below it was associated with the four-chambered gate.[25] It was decided to remove a 1 m. baulk which obscured the point where the walls connected with the gates, in order to observe the actual connections. Part of the wall's stone core was dismantled for the same purpose on the inner side of the fortification.

Upon removal of the baulk and the stone fill, a number of observations could be made. First, the boulder wall indeed connects with the two-chambered gate at this point, as was expected. Second, the mud-brick wall, previously assumed to be associated with the four-chambered gate, runs *under* the gate's foundations and, thus, is probably not connected to it. Third, under the baulk there was a fragment of a stone wall attached to the four-chambered gate. This wall 'floats' above the mud-brick wall, but does not continue north of the baulk line. In previous seasons we discovered, north of this point and at the same elevation, a rough stone fill which was taken to be a foundation of the boulder wall. It is now suspected that this is not the case. It is possible that the wall stub found this season actually continued northwards, and that its face was robbed, leaving the rough fill inside the wall exposed. Fourth, removal of portions of the boulder wall revealed walls of a structure directly attached to the four-chambered gate.[26] Parts of the same house, adjoining the narrow alley which bisects Area B1, had already been excavated. We now undertook the excavation of the parts adjoining the city wall, with the objects of ascertaining its relation to these walls and of obtaining solid dating evidence for them. The history of the house can be reconstructed as follows:

It was first built before the four-chambered gate, between the mud-brick city wall and the alley, which was found to continue under the four-chambered gate (see above). On the floors we found several pottery vessels *in situ*, dating it to the tenth century B.C.E. With the construction of the boulder wall, the house was probably rebuilt, with at least one of its walls being dovetailed into the four-chambered gatehouse. The house probably went out of use with the gate, and part of the two-chambered gatehouse is built immediately above it.

Based on this new information, the following interpretation is proposed (Fig. 4): The mud-brick wall belongs to an earlier phase of the city's fortifications and is

24 Dor 85, p. 103.
25 Dor 86, p. 205; Walls of Dor, p. 8.
26 Dor 87, p. 36.

associated with an as yet unrevealed gate. The boulder offset-inset fortification originated with the four-chambered gate, as indicated by the wall fragment attached to the gate and the structures north of the gate. Finally, the boulder wall remained in use and was modified as necessary when the two-chambered gate was constructed (i.e., as the two-chambered gate was wider, the facing of the wall portion under it was dismantled, and a stone revetment was built where the wall met the gatehouse).

Such a reconstruction simplifies the correlation between the Iron Age fortification systems in Areas A–C and those in Area B. Two Iron Age city walls were found in Area C1 — the upper one a composite stone and mud-brick wall, and the lower one mud-brick — and were dated by a set of glacis surfaces outside them. The fill covering the earlier wall and predating the later one contained material from the early tenth and the eleventh centuries B.C.E. The fill above the plaster glacis reaching the upper fortification contained material from the eighth century B.C.E. Reuse of the same fortification is indicated by a higher set of glacis surfaces, containing late Iron Age material. The latest use of the wall is a revetment or a house wall built against its internal face in the Persian period.

Earlier reports describe the difficulty we encountered in correlating these to the two fortification elements in Area B: the two- and four-chambered gates.[27] Reassigning the mud-brick wall in Area B to the pre-four-chambered gate phase (the tenth century B.C.E.) enables its correlation with the lower mud-brick wall in Area C. The assumption that the stone offset-inset wall in Area B was used first with the four-chambered gate and later with the two-chambered gate gives it the same chronological range as that of the composite offset-inset wall in Areas A–C. This interpretation also strengthens the parallel to the situation in Megiddo, where, regardless of the dispute vis-à-vis the relationships of the six-chambered gates, there is general agreement that both the four- and two-chambered gates are associated with the offset-inset wall.[28]

In Area G, work was continued to uncover more of the area around the oblong room exposed in 1987. The dismantling of later structures and the continued excavation in units adjacent to it revealed some five rooms of a residential building. Several superimposed floor levels, some with pottery *in situ*, appear to span the Iron Age IIA. The building may have survived, with some changes, into the late Iron Age, but its upper floors were much disturbed by late intrusions. One interesting feature is a mud-brick wall with the remains of a layer of reeds laid parallel to one another longitudinally between brick courses. The purpose of the reeds is uncertain: they may have served as a strengthener or as a bonding agent within the wall structure. This

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27 Dor 86, pp. 205–207.

28 A summary of the opinions in this debate may be found in D. Ussishkin: Was the 'Solomonic' City Gate at Megiddo Built by King Solomon? *BASOR* 239 (1980), pp. 1–18. To this should be added Y. Yadin's rejoinder (*ibid.*, pp. 19–23); E. Stern: The Gates of Hazor, Megiddo and Dor in the Time of Ahab and the Assyrian Period, *EI* 20 (1989), pp. 233–248 (Hebrew); Walls of Dor, p. 8.

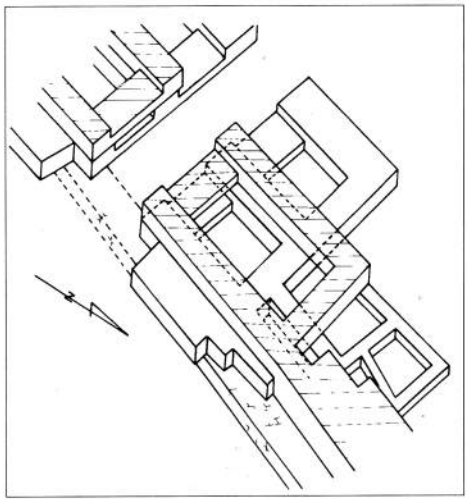

Fig. 4. Tel Dor, Area B1.

practice is known in Mesopotamia, but has not been noted so far in this country.[29] Under this Iron IIA house, remains of a structure of an earlier stratum are beginning to appear.

In Area D2, under the Persian industrial area, we found deposits dating from the end of the Iron Age, consisting of pits and fills. Though they are as yet unrelated to any architecture, they point to a possibility that this part of the city began to be used for open-air industry at this period. In one corner of the area we dug a test probe into earlier strata, and hit a large wall built of massive square-sectioned ashlar headers. This wall is tentatively dated to the Iron Age IIA; it is, thus, the earliest ashlar wall found so far on the site, and must belong to some public building of the Iron Age city. It is too early to tell whether, and how, this wall relates to the huge structure at the southern edge of the area excavated by Raban and by ourselves in earlier seasons.[30]

In Area E two Iron Age II strata were revealed, both containing structures with massive walls. However, neither was excavated sufficiently to enable the reconstruction of a plan.

THE IRON AGE I

Iron Age I remains were found in Areas B1 and E. In Area B1, work continued on the large mud-brick wall first exposed in 1987 in the western part of the area.[31] The wall consists of a mud-brick superstructure laid over a lower portion made of field stones and large boulders (Fig. 5). Of the approximately 4 m. preserved, the upper one-third is of mud brick and the lower two-thirds of stones of truly cyclopean dimensions. The wall's thickness varies from 2 m. at the mud-brick portion to 3 m. at the stone part.

The western side of this wall displays evidence of an intense conflagration, resulting in a massive destruction of the adjacent area. The bricks themselves have been burnt through approximately half of the wall's thickness, but the extent of the

29 O. Aurenche: *La maison orientale*, Paris, 1981, p. 82. We would like to thank Dr. P. de Miroschedji for bringing this point to our attention.

30 Dor 84, p. 64; A. Raban: The Harbor of the Sea Peoples at Dor, *BA* 50 (1987), p. 123.

31 Dor 87, p. 35.

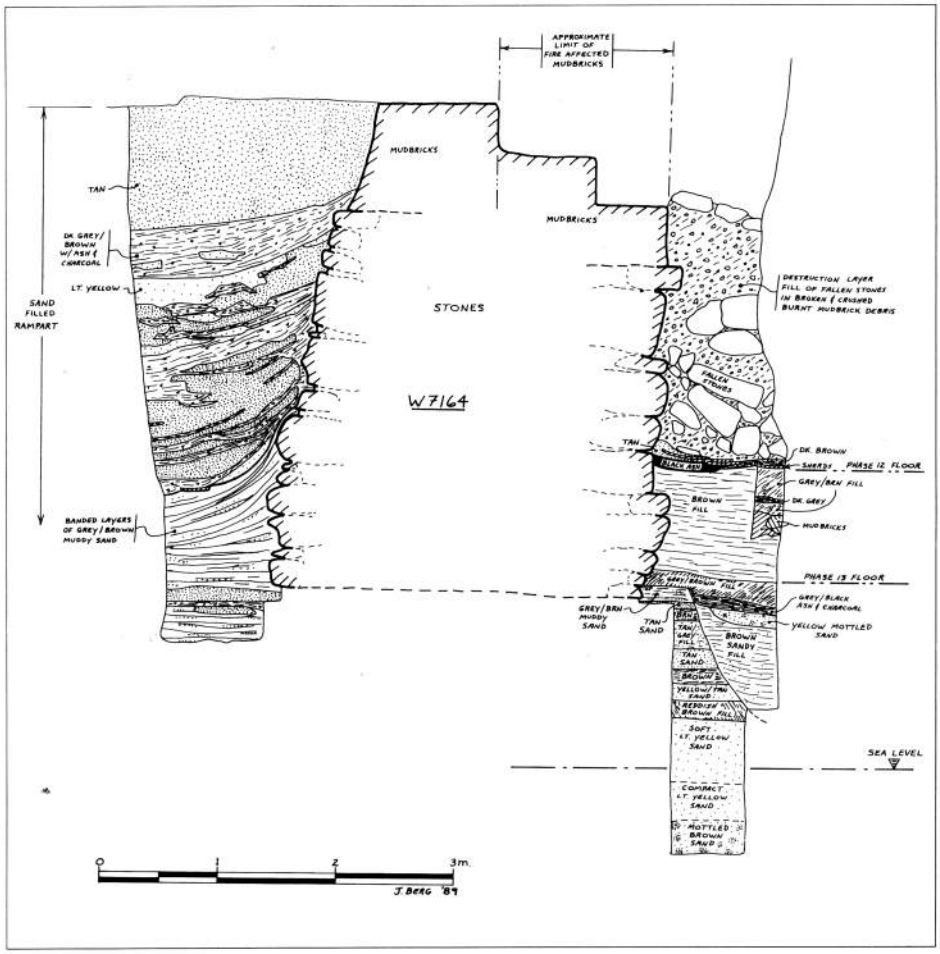

Fig. 5. Tel Dor, Area B1: Section through Wall 7164 (view to the south).

destruction cannot be determined because of the limited exposure at this level. Excavation through approximately 3 m. of the debris in this area has revealed two rooms with floors reaching the wall. A number of vessels were found within the destruction debris and on the floors, including a large flask decorated with red concentric circles, a large 'Sidonian'-type pithos decorated with the wavy relief bands typical of Cyprus, the Galilee and Phoenicia in the thirteenth-twelfth centuries B.C.E. Several storage jars, including a late Canaanite-type one, several 'Afula'-type jars with stump bases and high ridged necks, and fragments of bowls with flattened rims, often decorated with a red band, were also found.

To the east of the wall there lies the thick plaster-capped rampart previously ascribed to the Middle Bronze Age.[32] A section cut through the capping and down

32 For example, Dor 85, p. 104; Dor 84, p. 63.

inside the rampart revealed that it was constructed of sand laid against the wall, which served as a massive retaining wall supporting the rampart on its western side. While the pottery from inside the sand fill was mainly of the Middle Bronze Age, there was also a significant quantity dating from the Iron Age I. Obviously, either the wall and rampart are contemporary, or the wall predates the sand fill. Neither the rampart, as revealed so far, nor the 'cyclopean' wall can be assigned to the Middle Bronze Age.

Continued excavation beneath the burnt layer revealed an even earlier Iron Age stratum. The floors of this phase reach the bottom course of the wall, and must represent the first stage of its existence.

In the southern part of Area E, the Roman foundations cut right into Iron I strata. A room revealed here was paved with irregular slabs of stone, with several installations — *tabuns* and a stone-lined basin. The floor was covered with ashes and burnt brick material. It is tempting to identify these ashes (as well as evidence of fire found in 1986 in Area F) with the conflagration encountered in Area B1; however, such an identification is still premature. Two remarkable finds in Iron Age I contexts in Area E are several large fragments of a very large bucchero ware jug (it is not yet known whether this particular jug is an Iron Age type or a Late Bronze Age redeposition) and the lower part of a painted lion-shaped rhyton, of the type found at Megiddo, Tel Zeror, Tell Qasile, Tell Jerishe and Tell eṣ-Ṣafi.[33]

THE EARLIEST REMAINS

The dissimilarity of massive Iron Age I rampart fortifications to anything so far known in this country led us to continue digging beneath the huge wall in Area B1 until one day after the 1989 season officially ended. Underneath the wall, on both sides of it, there was a homogeneous sand fill, containing several ephemeral surfaces, one with a small clay installation. This fill contained only small, and mostly weathered, sherds, all dating from the Bronze Age. None of these pieces is demonstratably Late Bronze, although some (e.g., bichrome) are certainly no earlier than the end of the Middle Bronze Age.

This fill was about 1 m. thick. Below it, at an absolute level of 0.5 m. above present-day sea-level, we hit virgin sand. To ensure that this is indeed the base of the mound and not merely a sterile fill, we dug a probe into the dune to a depth of 1.5 m. (i.e. to 1 m. below sea-level). We stopped at this point and refilled the probe, fearing seepage of sea water, and because, to the best of our knowledge, the sea has not reached a lower level within the last four millennia.[34]

The discovery that this was the base of the mound bears several implications. First, it raises questions regarding the extent of the Bronze Age city and the existence of Middle Bronze Age ramparts. We have already established that the massive ramparts

33 A. Mazar: *Excavations at Tell Qasile, Part One* (*Qedem*, 12), Jerusalem, 1980, pp. 101–103.

34 Yael Sne and M. Klein: Holocene Sea Level Changes at the Coast of Dor, Southeast Mediterranean, *Science* 226, pp. 831–832.

determining the mound's shape are of the Iron Age I, rather than the Middle Bronze Age. There are three possibilities regarding the question of Middle Bronze Age ramparts: 1) the 1 m. thick fill through which we dug represents the entire thickness of the Middle Bronze Age deposits, and the city at this period had no ramparts; 2) the ramparts of the Middle Bronze Age city were entirely demolished, and the material was used to construct the Iron Age ramparts; 3) Area B is completely outside the boundaries of the Bronze Age city.

Of all these possibilities, we favour the third. The general paucity of Middle Bronze Age remains at this point is consistent with some sort of transient activity beyond the city limits. This leaves open the question of the Bronze Age city's dimensions. A maximalist interpretation would be that Area B just misses the line of the Middle Bronze Age fortifications, while a minimalist view might argue that the original settlement was confined to the *kurkar* ridge in the western part of the site.

The above-mentioned discovery also raises the question of the sea-level during the first occupation of this part of the site. Raban has attempted to trace the sea-level and coastline in various periods of the site's history.[35] The significance of this last find is as follows:

1. The sea-level was considerably lower than today at the end of the Middle Bronze Age, when people first settled on the sand dune, and certainly at the beginning of the Iron Age, when they started massive construction projects there. Had it been at the same level or higher, the combination of high tides and storms would have inundated this part of the site periodically — and there is no evidence of this phenomenon.

2. Raban proposed that the sand fill east of the *kurkar* ridge is relatively recent, and that there was a lagoon east of the site in the Bronze Age. According to our findings, at least part of this hypothetical lagoon was already sand-filled by the end of the Middle Bronze Age. This, coupled with the inference that sea-level was lower than its present level, does not support Raban's supposition, though, of course, the ground level could have differed significantly some distance to the east.

35 Raban, (above, n. 30).