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Tel Zefi – 1991

Gill Covo

A second season of excavations at Tel Zefi (*ESI* 10:106–107) was conducted in June 1991 on behalf of the Institute of Archaeology of Tel Aviv University and the Alona Regional Council. The work was directed by G. Covo and supervised by J. Yakar, with the participation of young people from the nearby settlements and high school students from the Pardess Hanna Agricultural School, led by A. Birman. S. Unger, Y. Penso and council employees provided assistance.

This season, work focused on the section cut along the west slope of the tell (Area B), between two terraces and lines of walls visible on the surface, identified by Aharoni in 1958 as Iron Age city walls. The excavations showed that these were agricultural terrace walls of large rough boulders one to three courses high and that they were not earlier than the Roman period.

The excavations exposed the continuation of the city wall uncovered in Area A last season. The sparse remains (width 3.50 m; height 0.60 m) were discovered on bedrock foundations along five meters. Rough cuttings in the soft limestone rock,

visible close to the upper (east) terrace, attest to the leveling of the surface prior to laying the foundation course of the wall. An embankment of crushed rock and gravel built against the outer (west) face of the wall contained many potsherds. The embankment slopes steeply—rather like a glacis—fourteen meters from the outer line of the city wall. Halfway down the embankment slope, a flimsy retaining wall (width 0.90 m) was exposed, of which three to four courses have been preserved. The pottery finds indicate that the city wall and the embankment should be attributed to the end of Iron II, Phase 3A.

Tel Dor – 1991

Ephraim Stern and Ayelet Gilboa

The eleventh season of excavations at Tel Dor (*ESI* 9:114–117) was carried out in July–August 1991 on behalf of the Hebrew University and the Israel Exploration Society. The work was directed by E. Stern, with the participation of groups from the University of California at Berkeley, directed by A. Stewart; the California State University at Sacramento, directed by H. Goldfried, and the University of Saskatchewan, directed by C. Folley. The expedition staff included R. Rosenthal-Heginbottom, I. Sharon (assistant to the director), B. Zilberstein (registrar), A. Gilboa, J. Zorn, P. Cason and the late E. Ben-Ari (area supervisors), G. Ben-Adiva and I. Schraauwers (draftswomen), V. Rosen (restoration and drawing), Y. Hirshberg (photographer), I. Aviram and E. Stern (administrators), as well as students of the Hebrew University and other participating institutions. The expedition was assisted by the staff of the Center for Nautical and Regional Archaeology at Kibbutz Nahsholim.

This season, work focused on three areas—B1 and B2 on the east side of the tell and Area G in its center. N. Karmon of the University of Haifa carried out probes in the purple-dye-manufacturing installation uncovered in Area D1 (*ESI* 6:51–52).

AREA B1

A series of new squares was opened in the east of the area in order to test the hypothesis that Iron Age outer gate structures had existed northeast of the four-chambered and two-chambered gates ex-

cavated in previous seasons (Area B2; Fig. 37). Four new squares were also opened in the north of the area on the conjectural line of the Iron Age and Hellenistic fortifications.

Roman Period. A round installation excavated in the north of the area seems to cut through earlier Roman remains, but its bottom has not yet been reached. Another round installation, one ashlar course deep, was attached to it. Both installations were full of pottery fragments of the late 2nd–early 3rd centuries CE and were attributed to the later

phase of the Roman period. The dumping of pottery in the installations, indicating that they were no longer in use, is consistent with the hypothesis that the end of the urban occupation of Dor should be dated to the first third of the 3rd century CE.

The remains of a large building, exposed in the east of the area, on the outskirts of the tell, represent the earlier Roman stratum. Parts of this building were revealed in previous seasons, together with other evidence for the existence of an extensive lower city in the Roman period. The house was built of ashlar (mainly headers) on concrete foundations. So far, three rooms (each 4.00 x 5.00 m) have been excavated, bordering a courtyard which probably extended south of them. The date of the house, which had at least two building phases, is suggested by the fact that the sewer which drained the piazza at the entrance to the Roman city (*ESI* 7-8:48) was associated with its foundations. A closer dating will be possible after an analysis of the ceramic material found in its foundation trenches.

Hellenistic Period. An additional part (width 2.50 m) of the Hellenistic city wall extending north of the gate was uncovered in the four new squares opened in the north of the area. This stretch of wall is narrower by one meter than that previously exposed, which adjoins the Hellenistic gate on the north. A twelve-meter long gap exists between the two city wall segments, which were both built by the same method of ashlar header 'compartments' filled with rubble. The missing stretch of wall may have been dismantled when the large Roman building was erected.

Intermediate Persian-Hellenistic Phase. Additional walls were found, which like most of the walls in this phase, were constructed in the Phoenician technique (ashlar piers alternating with rubble fills). Two architectural phases could be discerned. The constructional fills associated with the walls unearthed in the east squares contained a large assemblage of 4th century BCE Attic pottery, including a wide range of types, mostly of plain black-glazed ware. Some of these, such as the 'salt

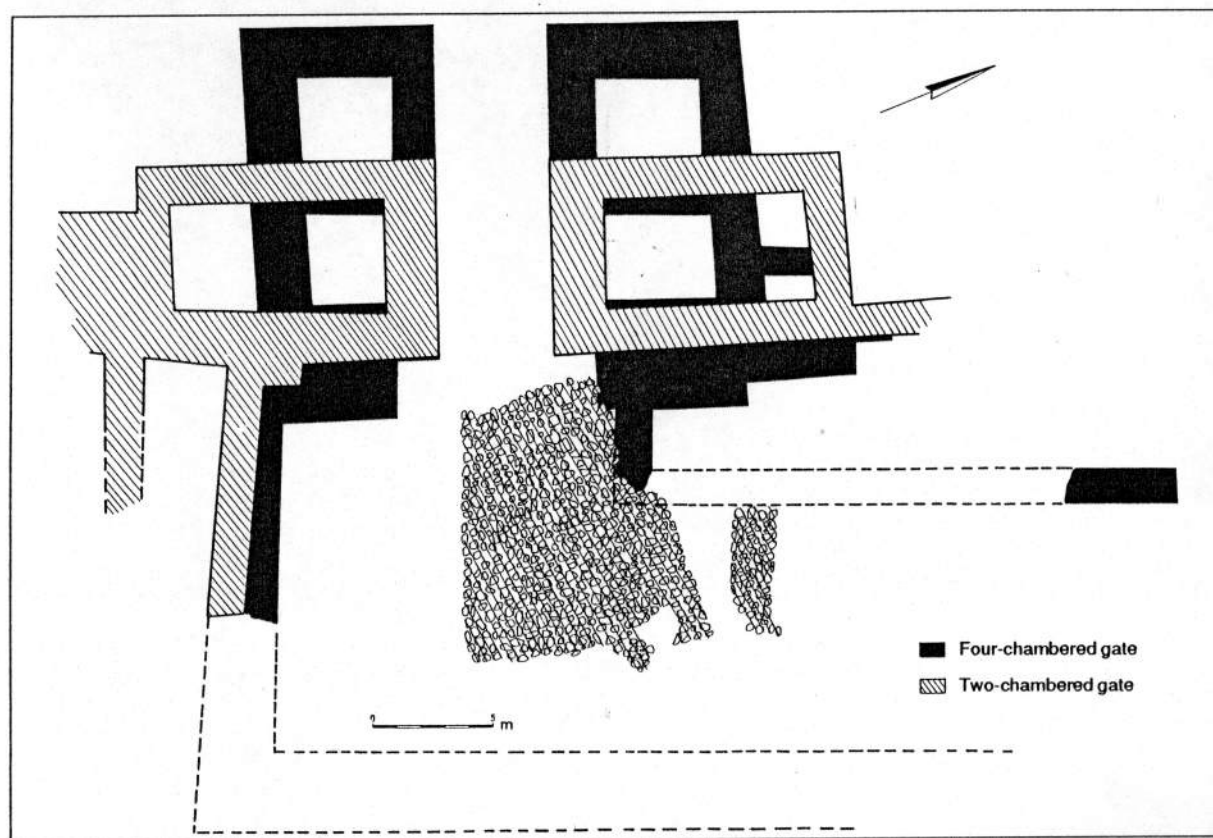


Fig. 37. Tel Dor. Area B1, plan of Iron Age city gates.

cellar', are previously unknown in the Dor repertoire.

Persian Period. A concentration of figurine fragments, mainly of horse-and-rider figurines, discovered in the east of the area, is attributed to this period. This may indicate the existence of a *favissa* (the third known in this area), though no pit was located. In addition, part of a glass stamp was recovered which bears an oriental-style representation of a king or hero fighting two horned and winged animals.

Iron Age. The east face of what is probably the solid offset-inset Iron Age city wall was exposed under the walls of the Intermediate Phase, although no assemblages which could corroborate this supposition have been found so far. A stretch of a massive wall running parallel to the offset-inset city wall (Figs. 37, 38), about eight meters to the east and almost two meters below it, was uncovered under the fills of the intermediate phase in the north of the area. The wall is built of large boulders (c. $0.50 \times 1.00 \times 1.00$ m) and is similar in construction to the four-chambered gate located approximately fifteen meters to the southwest. This wall may be associated with an outer gatehouse which has not been located, but it could not be determined to which of the two interior gate systems it would belong.

In the southeast part of the area, constructional fills were located under the paved access road leading to the two-chambered gate. These fills showed the same sequence (sand over chocolate-brown mudbrick debris) existing in the four-chambered gate. These fills were probably associated



Fig. 38. Tel Dor. Area B1, east face of outer gate wall (W12840).

with the construction of the access road to the four-chambered gate and with the complex connecting it to the outer gatehouse. The finds of this period include an out-of-context black stone cylinder seal carved with representations of a man, a scorpion, a bull and a dagger. The seal belongs to a type common in Cyprus in the Late Bronze Age and continuing into the beginning of the Iron Age.

AREA B2

Work in this area concentrated on the continued excavation of the large Roman courtyard building east of the street leading southward from the entrance piazza (*ESI* 9:117), on determining the stratigraphic provenance of the heap of catapult balls found in previous seasons and on excavating Iron Age architectural units which could lead to a better understanding of the four-chambered and two-chambered gate systems.

Roman Period. The excavations showed that the courtyard of the large building was surrounded by a portico on at least three sides (the east side has not yet been excavated). The bases of the columns which had supported the colonnade roof were uncovered at the edge of the stone-paved courtyard center, while the colonnade passage remained unpaved. The large quantity of potsherds of the late 2nd–early 3rd centuries CE from the courtyard provided a date for the end of the building's use.

Hellenistic Period. The excavation of the pile of more than 150 catapult balls (*ESI* 7–8:45–46) was completed. Additional catapult balls were reused as building stones in nearby walls. The balls seem to have been thrown into a pit which cut the Persian and Iron Age strata. The pit was sealed by one of the floors of the Roman courtyard building, but the exact horizon from which the pit was dug down could not be determined. A dog burial was found at the bottom of the pit, together with some potsherds (mostly body sherds of store jars) tentatively dated to the Hellenistic period. Although the stratigraphic evidence is not conclusive, the most reasonable possibility, suggested before, is that the pile of catapult balls is associated with the Hellenistic fortification system.

Iron Age. Two floors were exposed under the two walls perpendicular to the south chamber of the two-chambered gate (Fig. 37; *ESI* 6:51). The upper

floor continues under the corner of the two-chambered gate until it reaches a mudbrick wall, which may be part of the city wall associated with the four-chambered gate. Five store jars inserted upside down into this floor date from the second half of the 8th century BCE. The jars stand at regular intervals, with their bases removed, probably intentionally. These two floors indicate that some building activity connected with the four-chambered gate existed outside that gate.

A brick wall, still standing two meters high and whose full width has not yet been cleared, was exposed under the upper floor. This stretch of wall runs parallel to the fortification lines in this area about five meters east of them. Under these two floors was a deep, mainly sandy, fill which had been laid against the brick wall. This fill resembles the constructional fills in the four-chambered gate and those under the access road to the two-chambered gate (see above, Area B1). The latest of the small sherds recovered in the fill date from the 10th century BCE.

The face of a battered wall built of huge boulders, which preceded the other walls in this area, and which was diagonal to them, was uncovered under these fills. If this wall formed part of the 10th century BCE fortification system, the brick wall above it should be attributed to the fortification system associated with the four-chambered gate. However, the battered wall may be earlier.

AREA G

Iron Age. Excavations continued in the residential quarter, where an additional wing was discovered east of the rooms excavated previously. This wing, like the other buildings in this quarter, was constructed of mudbricks and stone. Its occupation continued, with some raised floors and small changes in interior planning, throughout Iron IIA and perhaps even later. Two floors were exposed in the main room excavated this season; a *tabun* and a rich assemblage of pottery vessels crushed *in situ* were found on the lower floor. The assemblage consists mainly of simple, plain wares, with a few

bichrome vessels, but red-slipped or burnished vessels are almost completely absent. The assemblage was provisionally dated to the second half of the 11th–early 10th centuries BCE.

The excavations under the residential quarter revealed several occupation horizons. Although they have no architectural context, they contained a large quantity of organic material and bones, including the complete skeleton of a fish, as well as Iron I pottery. A probe under these surfaces revealed evidence of a conflagration.

The stratigraphy and the ceramic assemblages uncovered this season in Area G correspond to those identified in Area B1. The earliest Iron Age stratum in Area B1 (local phases 13–12) was destroyed in a conflagration which corresponds to the burnt stratum beginning to be exposed in Area G and perhaps also to that found in the trial pit in Area F (*ESI* 7–8:48) and dated tentatively to Iron IA–B. The ceramic assemblage recovered on the floors of the following phases (11–10) in Area B1 is similar to that found on the occupation levels under the residential quarter in Area G. The ceramic assemblage from the following phase (9) in Area B1 is similar to that retrieved this season in the main room in Area G. However, the assemblage in Area B1 contained numerous Cypro-Geometric vessels, while such vessels were absent from the assemblage in Area G, with the exception of one vessel of this family, which represents a new type at Dor, but whose stratigraphic correlation with the main assemblage is so far tenuous. It should be noted that stone construction, which is prevalent in Area G, is completely absent in Area B1.

AREA D1

The northern of the two pits in the purple-dye-manufacturing installation discovered in 1988 was cleared to a depth of 1.40 m, without reaching its bottom. Large quantities of murex shells and calcareous deposits were removed. The only other finds were a faience pendant and some coarse ware fragments of unknown purpose.

Dor Coast

Kurt Raveh and Sean Kingsley

An underwater survey was carried out from June to October 1991 in the harbor at Dor (from the shore to longitude 14200 and between latitudes 22300 and 22547) on behalf of the Center for Maritime and Regional Archaeology. The work was directed by K. Raveh and S. Kingsley, with the participation of D. Avni (draftsman and administrator), and S. Reuven, M. Lufan and S. Rontal (divers).

The survey was conducted following severe erosion in the area of the south entrance to the ancient harbor at Dor. The remains of nine ships were discovered in the investigated area (diam. 85 m); of these four were dated to the mid-17th century CE and at least four of the other five were attributed to the Byzantine and Early Islamic periods (6th–early 8th centuries CE). The ships, which were identified at a depth of up to 2.20 m, probably sank when they encountered sandbanks while seeking refuge behind the chain of islands south of Dor.

The early remains are characterized by ballast stones, mixed with potsherds and wood fragments. The largest concentration of finds was located in a long mound (8.90 × 22.30 m) of ballast stones oriented north–south. Among the roughly hewn stones of different sizes (length up to 0.50 m) were several smoothed blocks (0.25 × 0.80 m), which were concentrated on the northeast side of the mound. Boulders of magmatic rock scattered over an area of c. 4.00 × 7.00 m south of the mound may have formed part of the cargo of another ship.

Fragments of local amphoras of the Byzantine period were collected on the mound and south of it. A tiny bag-shaped amphora and a bent sword found on the mound indicate a date between the Persian invasion (614 CE) and the mid-7th century CE. The finds also included a lead ingot and a copper pitcher and lid, both of which were composed of several parts with serrated joints. A wooden board with a mortise and tenon joint at its end is the only part of the ship which was preserved.

Another concentration of finds (4.50 × 6.00 m) contained well-preserved cypress (*Cupressus sempervirens*) boards which had formed part of the ship's body. The boards were joined at the ends by mortises and tenons at intervals of up to 31.8 cm, indicating a date earlier than the 6th century CE. However, unlike the Roman method, the tenon placed in the mortise was not of wood but was a T-shaped metal element. A few fragments of bag-

shaped amphoras and three stone anchors with a single perforation were also recovered in this pile.

A third concentration of finds (4.80 × 5.90 m; depth 1.80) included two kinds of ballast stones: fieldstones (0.15–0.26 × 0.16–0.45 m) of white rock and decomposed limestone ashlar (c. 0.25 × 0.58 m), which lay on a northwest–southeast axis. A long stone anchor (length 0.61 m) with a single perforation was found on the same axis. The finds included a fragment of a gray pithos, four types of 7th century CE Byzantine amphoras, a crushed copper pitcher, an iron hammer and dozens of iron nails, as well as a well-preserved wooden rigging block (9.6 × 17.5 cm; thickness 4.1 cm).

The fourth concentration, which is firmly dated to the Byzantine period, was composed of well-



Fig. 39. Dor Coast. Greek bronze helmet.