## Excavation at Azor - 2000 Early Bronze Age, Mamluk and Ottoman Period Remains

Yehuda Govrin with contributions by Anna de Vincenz & Conn Herriott

This excavation was carried out in 2000 by Y.G. Contract Archaeology Ltd. (excavation license B-221/2000). The project was directed by Yehuda Govrin, under the academic auspices of Bar-Ilan University. In post-excavation, the finds were analyzed by the author, as well as Anna de Vincenz (Ottoman-period pipes) and Conn Herriott (Early Bronze Age artifacts). The finds were photographed by Vladimir Naikhin, and illustrated by Noga Ze'evi (Mamluk/ Ottoman vessel), Anna Dodin (ceramics) and Conn Herriott (stone).

## INTRODUCTION

This Tel Azor excavation was preceded by two Israel Antiquities Authority (IAA) archaeological testing projects. The first was conducted by Merrick Molokndov on 27 September 1999, during which ten test sections were dug. The second phase, involving four more test sections, was carried out by Larissa Zack on 27 March 2000. This testing was the first stage in the archaeological investigation of a small portion of the site ⊠ what might be termed a sample investigation. It was carried out in order to expose the archaeological strata of this area down to the virgin soil with the purpose of obtaining 'cover for generations', a long-term IAA-issued permit that would free up the area for construction.

On 18 September 2000 a manual excavation was commenced at the behest of the site owners. The excavation was directed by Ido Ginton and Yossi Bordovic on behalf of the Department of Land of Israel Studies of Bar-Ilan University, in conjunction with the IAA. The area of excavation was determined jointly by the IAA and the excavators. One area was marked for excavation (Area A) and four squares (S1, S2, S3 and S4 were laid out in it (Fig. 2). This area was then excavated, with a preliminary report submitted to the IAA on 27 November 2000.

In the excavation area severe disturbances were encountered in the form of construction material and recent septic tanks, which were partially made of metal barrels that in places penetrated to a depth of 2.0m below the present surface level.



Figure 1. The excavation's location (New Israel Grid: 181718-658578; 27m asl).

The archaeological excavation reached a depth of approximately 5.0m. However, work was then postponed due to safety concerns that arose from a combination of the squares' depth, the instability of the surface and sections, and rain, which further destabilized the ground and caused the collapse of soil into the deep squares.

On 4 December 2000, excavation was renewed after it was decided to graduate square depths by using stepped rather than straight vertical sections. This terracing was carried out by machine, under the direction of safety engineer Zlio Diamandy who coordinated with engineer Jacob Shefer, the director of the IAA's Conservation Department, and other IAA inspectors. In order to further reduce the risk of section collapse, the excavation was confined to a single 5.0 x 5.0m square that would be excavated down to prearchaeological levels (Fig. 3). The square chosen was S5. Excavation reached to a depth of 7.5m, beneath which lay virgin hamra soil. Within the 7.5m of occupation, three broad archaeological phases were identified:

- I. Modern (Ottoman and later): down until approximately 2.0m below the present surface.
- II. Mamluk-Late Islamic: from 2.0m until approximately 5.0m below the surface.



Figure 2. Squares S1-4, Strata I-II.

III. Early Bronze Age (EB): 5.0m until approximately 7.5m below the surface (virgin soil).

## THE EXCAVATION Stratum I: Ottoman Period – recent (16-20<sup>th</sup> centuries)

The main evidence from this stratum consists of the remains of a structure (L3) discovered about 0.2m below the surface in Square S2. From this structure there remained one course of a row of ashlar stones

which belonged to an external wall (W1) measuring 5.5m long and 0.6m wide. Perpendicular to this were two narrower parallel walls (0.3m wide, surviving to one course) which probably indicate the existence of a room that was 1.2m wide and at least 2.0m long. In the three other squares only mixed debris was found. Most worthy of mention from amongst the small finds are the Ottoman pipes (see report below [p. 160] and Fig. 12:1-3) and an unidentifiable coin with an Arabic inscription (since lost). Immediately above this structure was the thin concrete floor of a modern building. In Square S3 this stratum was up to 2.0m deep.



Figure 3. Excavation of Square S5, Stratum III.

In Square S1 the remains of walls indicate the existence of a courtyard or building (L11), oriented north-south (Figs. 2 and 4). It should be noted that we exposed only one of L11's corners; this impeded conclusive interpretation. In the northwest corner of L11, at a depth of 1.1m, was found a near-complete tabun (clay oven, 0.8m diameter), mixed with ash on a leveled surface. It appeared that L11 was a courtyard associated with a building of which we could uncover only a corner (northeast corner of Square S1), but which continued east of the excavation area. The tabun was found adjacent to a wall (W2) built of fieldstones, 4.5m long, 0.4m wide, 0.8m high, and found at a depth of 0.3m. The corner of the structure that extended beyond the excavation limit also included wall W6, the top of which was found at a depth of 0.3m and extended down another 0.8m. Like W2 it was built of fieldstones. W6 appears to have been perpendicular to W2. We have inferred that they intersected but W6's continuation beyond the excavation area was only partly exposed. Along W6 another wall abutted it at right angles by means of a doorpost built of large ashlar blocks. This intersection forms the building/courtyard's corner and possible entrance (perhaps an entrance to the L11 yard containing the tabun, which was in turn perhaps associated with the building continuing east from the excavation area). The W6 building/courtyard's floor was exposed at a depth of 1.4m.

Two 'rubbish pits' found 2.0m below the surface in Square S3 also belong to this stratum. These pits' excavation was not completed. In Square S4 stones that might have been part of a floor are probably also from this stratum (but due to bad preservation it was not possible to be sure).

## Stratum II: Mamluk-Late Islamic (12-16<sup>th</sup> centuries)

No architectural remains from these periods were found. Most of the information came from stratified occupation levels, interposed with ash and sand layers. A finely-decorated Ottoman-period smoking pipe was recovered (Figs. 6 and 12:4; see also the pipes report below, p. 160), clearly an intrusion from more recent times. Present also was the glazed and painted



Figure 4. A recent wall (W2) close to the surface, L11 (facing northeast).



Figure 5. The east-facing section of Square S5. At the top the L20 pit filled with ash, pottery and bones from the Late Islamic period is seen penetrating the thin occupation level of the Mamluk period. Under the scale we can see the natural hamra soil sloping down from south to north.

pottery characteristic of the Late Islamic period (Fig. 12). This horizon was cut by a number of rubbish pits of different sizes.

In the western part of Square S5 a bell-shaped pit was discovered (L20) (Fig. 5). Its width was 2.5m and its preserved height 2.0m. The pit was filled with thin layers of ash and sand mixed with animal bones and



Figure 6. A decorated ceramic pipe from the Ottoman period (see also Fig. 12).



Figure 7. The southern section of Square S5. The upper pit is from the Late Islamic Period and the lower pit is probably of Mamluk date (the latter cuts the EB occupation level). On the left (under the scale) are the remains of the base of the only wall found from the EB (W4).

potsherds (non-diagnostic). At the bottom of the pit was a concentration of stones. It is possible that L20 was used as a rubbish pit or as a sump.

# Stratum III: Early Bronze Age (ca. 3600-2200 BCE)

To this stratum belongs a single wall (W4). This was first discovered in Locus L15, against the southeastern section of Square S1, and it was found to continue in S5. W4 had a total extant length of 3.0m, was 0.6m wide and was discovered at a depth of 5.0m below the surface. From this wall only one course was preserved, constructed of small and medium-sized *kurkar* stones. It is possible that this wall was the foundation of a sun-dried mud brick wall, fragments of which were seen in the square.

Close to this wall were found a number of ledge handles and a diagnostic EB sickle blade (Fig. 14:3; finds report below, p. 165). Above the wall, in S5's southern section, we revealed a 2.0m-thick, black layer sparsely mixed with potsherds. Some of the ceramics date to the Mamluk period, most likely penetrating to this stratum by means of rodents and man-made pits, such as L21 and L22. Evidence of these layers was also found in the rest of the square's sides and in the sections of the other four squares.

Between W4, discovered at a depth of approximately 5.0m and the natural *hamra* soil at 7.5m, it was possible to distinguish between a number of EB occupation levels.

- At ca. 5.7m down (19.9m asl), an archaeological context was exposed, mainly comprising a flattened area measuring approximately 1.0 x 2.0m, which was rich in fired mud-brick fragments, ash and pottery.
- An additional living surface, rich in potsherds and ash, was exposed at ca. 6.3m from the surface in the center of Square S5. In this context we found a large rope-decorated pithos (Figs. 8 and 13; see finds reports below, p. 165). It lay on its side, fragments of the rim scattered nearby. Close to the rim we recovered a near-complete deer antler (Figs. 8 and 10). Among other artifacts discovered at this level were a number of Canaanean-type chipped stone sickle

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Figure 8. Pithos on the left (see also Fig. 13) and a deer antler on the right, on an EB (L31).

blades and a point (Figs. 9 and 14; finds report below, p. 165), as well as a juglet and a large number of characteristic sherds, including holemouth jar fragments and ledge handles (since gone missing). This occupation level also contained concentrations of *kurkar* stone mixed with soil and potsherds which created compact layers probably reflecting floor surfaces.

• The lowest archaeological context was discovered at a depth of 6.9-7.5m. This directly overlay the natural *hamra* soil discovered throughout the entire square, sloping from south to north in keeping with the area's topography. A number of pits of varying sizes were dug into the *hamra* (Fig. 9). In these pits were found sherds, ash, bones and several EB flint tools (Fig. 15:2-3; finds report below, p. 165).

### **THE FINDS**

## Ottoman/Mamluk Clay Tobacco Pipes

Anna de Vincenz

## Introduction

In travel journals of the late 19<sup>th</sup> century we read that pipe smoking was practiced in the Levant as early as 1599 (Bent 1893: 49, note 1). After its introduction into Egypt between 1601 and 1603, pipe smoking became common in Turkey by 1605. Subsequently it spread rapidly throughout the Ottoman Empire.



Figure 9. The level of natural hamra soil (7m below present-day surface, facing east), into which were cut pits we found filled with ash and EB potsherds.



Figure 10. The deer antler discovered on an Early Bronze Age occupational surface (L31).

Many Ottoman pipe production centers were opened; for example, the town of Lüleburgaz was named for the numerous pipe workshops situated there. Other workshops were established in Istanbul, Sivas, Konya, Kayseri, Diyarbakır, Kütahya and Iznik (Bakla 2007: 363). By the middle of the 18<sup>th</sup> century, pipe smoking was a fashion for both men and women, regardless of age or social position.

The pipes in use across Africa and the Eastern Mediterranean, the so-called *chibouks*, are small, attractive items with miniature decorations, comprising a bowl with a separate stem. They are found at archaeological sites with Ottoman occupation layers, and until not long ago very few originated from clearly-dated contexts. These pipes have also been recovered from as far away as Russia, in tombs dating to the 19<sup>th</sup> century (Stančeva 1975/76: 129-137).

In recent years the study of Ottoman pipes has attracted scholarly attention. Major studies have been conducted on pipes from Athens and Corinth (Robinson 1983), as well as Istanbul and Sarachane (Hayes 1980; 1992: 391\295). An important study of the pipes from Tophane, Istanbul was published by Erdinç Bakla (2007). This work deals not only with pipes, but with the entire pipe-smoking and coffee-drinking culture of the Ottoman period. Elsewhere, Kocabaş (1963) analyzed pipes and the Tophane workshops. In Israel, Ottoman pipes were traditionally included in excavation reports but only as isolated finds. Examples of this approach are that of Avissar (1996), who published a number of pipes from Yoqne'am, and also a publication of archaeological finds from Akko (Edelstein and Avissar 1997). Nowadays pipes are more holistically studied and researched, such as the work of Baram (1996; 1999 [the later in connection with coffee cups]). Smoking pipes from Jerusalem have been studied by Simpson (2008), who also examined the pipes from Tell Jezreel (2002). Research of assemblages from Banias in northern Israel has indicated that this town was a production center for pipes during the Ottoman period (Dekkel 2008: 117-118). Pipes have been found in shipwrecks such as that from Sharm el-Sheikh, dated to the 18th century (Raban 1971), and from the shipwreck off Sadana Island, also in the Red Sea (Ward 2000).

## The Pipes

Four fragmentary clay pipes were found at Azor. They came from a Stratum I structure (L3, Square S2) dating to the Ottoman period. Three of the pipes (Fig. 11:2-4) date to the 18<sup>th</sup> century, while Fig. 11:1 dates to the 19<sup>th</sup> century.

Fig. 11:1  $\boxtimes$  The shank of this pipe is 4.8cm long, with an opening 1.4cm in diameter. The shank itself is undecorated but has a swollen end which is decorated with 2-3 irregularly rouletted bands. The clay is pinkish gray, is slipped deep brown and is highly burnished. This sort of shank was used for different pipe types during the latter part of the 19<sup>th</sup> century (Jaffa Type J-19J and J-19K). Parallels for this shank have been found at Belmont Castle (Simpson 2000: Figs. 13.5:115-117,119,129; 13.6:124) and also from Zir'in (Simpson 2002: Figs. 1:8; 2:9).

Fig. 11:2  $\boxtimes$  Fragmentary pipe; bowl broken but shank preserved. The bowl would have been round with a straight upper part. The shank is short with an upturned ending, forming a thickened wreath with a ring. Below the wreath there is an incised line around the shank. The shank is 3cm long and the opening is 1cm in diameter. The pipe is made of light pinkish clay, burnished on the exterior and bearing splashes of dark yellow glaze.

Glazed pipes are not very common in pipe assemblages, but have been found in rather large quantities among the Jaffa assemblages (Jaffa Type J-18J-A). All seem to have been made of the same pinkish clay and all bear the same splashes of dark yellow glaze which raises questions as to their provenance<sup>1</sup>. Yellow glazed pipes have also been reported from Ramla (Vincenz 2011: Fig. 3:29). The peculiar way of glazing which does not cover the entire pipe but rather results only in splashes has been explained by Robinson as the result

<sup>1</sup> Petrographic analysis has been performed on pipes of this type from Jaffa and preliminary results indicate that they were not locally produced. Their exact provenance has not yet been clarified.



Figure 11. Ottoman-period pipes from Stratum I.



2cm

| Figure | 11. |  |
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|        |     |  |

| No. | Artifact type | Reg. no. | Square | Locus | Description   |
|-----|---------------|----------|--------|-------|---|
| 1   | Tobacco pipe  | 26       | S2     | 9     | Pinkish gray clay; deep brown slip; highly burnished                |
| 2   | Tobacco pipe  | 25       | S2     | 6     | Light pinkish clay; exterior burnish; splashes of dark yellow glaze |
| 3   | Tobacco pipe  | 24       | S2     | 10    | Pink clay, exterior burnish; splashes of dark yellow glaze          |
| 4   | Tobacco pipe  | 28       | S2     | 13    | Light brownish clay; purplish red slip; burnished                   |