Revising Tell Abu Hawam*

JACQUELINE BALENSI
École Biblique et Archéologique Française
P. O. Box 19053
Jerusalem 91019, Israel

New interpretations of data from Tell Abu-Hawam—the original harbor of Haifa—are based largely on the original reports of R. W. Hamilton. Concentrating on Hamilton's 1932–33 campaigns, much hitherto unpublished material is being analyzed. Because they had been labelled in the field, these items can prove valuable not only for typological studies but for a stratigraphically-based revision of the chronology as well. Traces of occupation as early as MB II have been attested by a few finds, although most evidence is from somewhat later, and Greek imports as late as the 6th and 5th centuries B.C. *have been found.*

INTRODUCTION

Geographical Context

Tell Abu Hawam is known to scholars acquainted with international relations—commercial, chronological, and cultural—in the eastern Mediterranean during the 2nd and 1st millennia B.C. The site was the original harbor of Haifa, a natural shelter for seafarers, midway along the Levantine coast, where the road begins that leads inland to the Jordan valley, via Megiddo and Beth-shan. Bordering the mouth of river Kishon, it was automatically protected from the dominant west and southwest winds by the heights of Mt. Carmel.

Such a favorable environment, however, is not sufficient to explain the exceptional connections with Cyprus and, above all, with the Aegean world, as attested by the excavations of R. W. Hamilton in 1932–1933.

Field work and Publications

Less well known is the fact that Hamilton's were not the first archaeological excavations conducted on the mound. In 1928 the Public Works Department of Haifa, under the British Mandatory Authority, needed inexpensive building materials. As a result, an agreement was signed with the Department of Antiquities, which was to supervise the removal of material from the site and make a complete record of the finds.

In 1929, L. A. Mayer and N. Makhouly discovered six levels of occupation in their 5.25 m-deep test pit. Strata A–C ranged from the Roman to the Hellenistic period, through 2.70 m of debris; Stratum D was 0.6 m thick, with remains of the early Hellenistic or Persian period, destroyed by fire; Stratum E was Iron Age, ca. 1000 B.C., then abandoned. No architecture was found in Stratum F, although for 1.25 m the material was Late Bronze, apparently not earlier than 1400 B.C.

A large-scale investigation started in 1930, reaching Hellenistic and Persian strata under D. C. Baramki. Despite all efforts, the archaeologists could not restrain the Public Works contractor, who succeeded in destroying more than half of the mound before Hamilton's intervention. By 1935 the digging had been so extensive that Tell Abu Hawam was no longer classified as an antiquity site.

Of these previous excavations, nothing was published except one hoard of Tyrian coins (Lambert 1932), which helped in dating Stratum II (later revised by Stern, 1968). On the other hand, Hamilton's reports are still exemplary in their prompt (1934, 1935) and well-structured presentation of his five proposed strata (I–V), dated mainly between the Late Bronze and Roman periods, with a mention of a few medieval Arabic sherds.

Nonetheless, inadequacies in the interpretation came to light when other major sites became better known and their stratigraphical sequences could be used as parallels. Should not the Stratum V settlement have begun earlier than 1400 B.C., since some of its material is characteristic of Ugarit *Récent* 1? And what about the Phoenician bi-

chrome ceramics in a Late Bronze context (Schaeffer 1948: 96)? Is the lack of Philistine ware the sign of an occupational gap between Strata V and IV, since the latter is equivalent to Tell Qasile X, the destruction of which is attributed to David? (Maisler 1951: 22s); that Tell Abu Hawam Stratum IVb could be somewhat later than Megiddo VIb, perhaps the end of the 11th century, had already been suggested by Albright (1943; 6 n. 2). Are the Geometric periods in Greece and Cyprus to be chronologically pegged to Solomonic times, since the stratified objects from Hamilton's Stratum III have counterparts in Megiddo Va–IVb (Van Beek 1955)? Using finds from Hazor VIII, however, Aharoni and Amiran (1958: 178), suggested that the end of Stratum III should be dated ca. 840 B.C., and not 918, as Van Beek, or 815, as Maisler (1951: 24) suggested. Finally, how long was the gap in occupation before the Persian period? Then, what happened on the site afterward?

Further salvage work was done on the site in 1963 by E. Anati: electrical pillars were to be erected to the northwest, but this sector seems to have been sterile. The soundings opened southwest of the pillars, however, helped to demonstrate that the sea reached the foot of the tell in the 2nd millennium B.C. The accumulation of sand, which puts the site more than 1 km inland today, may thus be at the origin of the progressive decline of the ancient harbor. From an archaeological point of view, the results were never fully analyzed, and brief contradictory communications led to still more confusion about the early history of the site. Were there fortifications in the 15th century (Anati 1963a, b), or only in the 13th century B.C. (Maisler 1951: 22; Anati 1975)? Was the latter century Egyptian (Anati 1975), Canaanite (Weinstein 1980), or even Mycenaean (Harif 1974)?

Historical Questions

Behind the technical aspects lie historical problems, such as the nature of the Egyptian presence at the strategic Canaanite points (coast and roads), and, more precisely, the respective importance of Acco and Tell Abu Hawam from the second Intermediate Period until the end of the New Kingdom. Might Abu Hawam have been a Mycenaean trading colony in the Levant prior to the main destruction in Greece at the end of the 13th century B.C.? What was the fate of the site, if it was inhabited, at the time of the Israelite "conquest" and the invasions of the "sea peoples" known from texts associated with the reigns of Merneptah and Ramses III? Whether or not it was settled, what were the relationships between the sea peoples who had settled in the Plain of Acco and the Tribe of Asher during the "dark ages" of the 12th and 11th centuries B.C. (Judg 5:17)? What might have been the impact of the Aramaean pressure to the north of the future Israelite Kingdom, or of the commercial gift of land around Cabul by Solomon to Hiram, king of Phoenician Tyre (1 Kgs 9:13)? Was the site abandoned sometime during the Divided Monarchy or the Assyrian period? Was the site's renewal brought by Babylonian or Persian rule? What were the repercussions of the Hellenistic conquest led by Alexander the Great, and of the final blow struck by the Roman Empire, wiping the site from memory? Finally, what was the historical name of Tell Abu Hawam; it has not yet been found (Maisler 1951: 25; Aharoni 1967: 238)?

TELL ABU HAWAM REVISED

The general interest of these topics, *inter alia*, has made necessary a thorough revision of all the available data. This was undertaken jointly by several different programs, in agreement with the excavators and the Department of Antiquities and Museums in Israel.[1]

Owing to the large scope of the study, concentration has for now been limited to the 1932–33 campaigns. The sources of information are unequal,[2] comprising basically a collection of 2000 items, three-quarters of which are unpublished; and more objects are still coming to light.[3] This material was usually labelled in the field[4] and thus it can be used not only for typological studies, but also for a stratigraphically-based revision of the chronology. The results already obtained will certainly stimulate further international research in the Eastern Mediterranean world.

GENERAL RESULTS

1. Traces of occupation going back to the Middle Bronze II period are attested by a few finds, not properly stratified in Hamilton's Stratum V.[5] None of this material is stylistically later than Megiddo X or Beth-shan X–XA; if it is all from a single period, a date around 1600 B.C. should be considered (fig. 1).

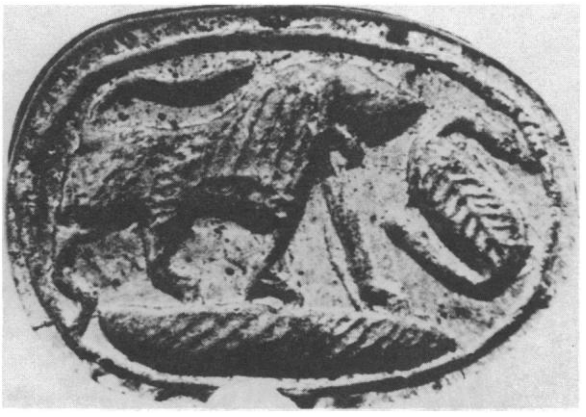

Fig. 1. Hyksos scarab, from R. W. Hamilton's 1932 excavations at Tell Abu Hawam, Stratum V.

Since no structure is necessarily to be assigned to MB, it is premature to speak yet of the foundation of the site. It would seem logical, however, keeping in mind the increasing density of strategic settlements in the "Hyksos" period, as at Tel Mor (Dothan 1973), to assign the base level to MB IIB–C.

2. Five horizons can be isolated within the Late Bronze period, separated by violent destructions. They all belong to Stratum V (the last horizon is the first stage of Hamilton's Phase Vb). They reflect, successively, Megiddo IX (believed to have been destroyed by Thutmosis III);[6] Megiddo VIII (2 periods: Amenophis III[7] and El Amarna[8]); and Megiddo VIIb (2 periods, contemporary with the Egyptian 19th Dynasty).[9]

Clearly, Cypriot and Canaanite finds coexist prior to any identified Aegean remains. The Cypriot corpus comprises about 200 items, of which about 90 percent are unpublished; they range from the end of the Late Cypriot IA to IIC periods, and include not only small finds such as figurines, a cylinder seal, and statuettes (fig. 2), but also a wide repertoire of ceramic wares and shapes[10] that indicate the relations with the coast south and east of the island.

Even compared to large cities like Enkomi and Ugarit with rich cemeteries, Tell Abu Hawam is an outstanding site with its collection of over 700 Aegean imports. Although still unconfirmed, the presence of material earlier than Late Minoan and Mycenaean IIIA2e (contemporary with Amenophis III) and later than IIIB (i.e., the 19th Dynasty) cannot be ruled out. The bulk of the collection consists of Mycenaean IIIA2b (El Amarna period and, possibly, the end of the 18th Dynasty) and Mycenaean IIIB; by then, statistics show that imports more than doubled. In the earlier period, the available repertoire is roughly similar to that of El Amarna and Mycenae; in the latter, it has become larger than at Mycenae itself, owing to the Levanto-Mycenaean production. However, the quantity of figure patterns remained constant during the 14th and 13th centuries, accompanied by a growing tendency toward linear decoration.[11] In Cyprus and the Near East, it is normal to find more closed shapes than open ones; at Tell Abu Hawam, the proportion is well balanced during the Mycenaean IIIB and possibly also the IIIA2b periods. As elsewhere, the stirrup jar dominates the market, but it is still not as common at the site as drinking vessels on the whole, i.e., cups plus kylikes and chalices. The relative frequency of shapes is quite different from that of Cyprus, but very close to what has been found in the Aegean.[12] Neutron activation analysis has attested to specific trade connections between Tell Abu Hawam and the Argolid (Perlman 1973: 215).

Three arguments, possibly convergent, may contribute to a better understanding of these unusual features. One was well formulated already by Hankey (1967: 146): "Cypriote importers took the cream of the supply since it reached them first (and they had copper to trade back), and the Middle East in general got the left-overs." But most of the available repertoire from the site fits local needs perfectly, with similar shapes in much finer quality, thus giving root to the idea of complementarity. The only exception would be the shallow cup: fragments of more than 100 such items were scattered all over the site. They may be a sign, although not a decisive one, of some Mycenaean presence.

The history of the LB fortifications is not altogether clear. The long wall with inner salients, undated previously (Gershuni 1981: 37), is now known to have been out of use from the El Amarna period onward (at least in its eastern section). Thus the settlement was provided with a city wall possibly at the time of Amenophis III at the latest, or, more likely, during the maritime policy of Thutmosis III and IV in the 15th century B.C.—if not even earlier (below).

As far as the cyclopean fortifications are concerned, they may antedate the 19th Dynasty and be simply reused in the 14–13th centuries. Complex 66, which rests partly on and encompasses

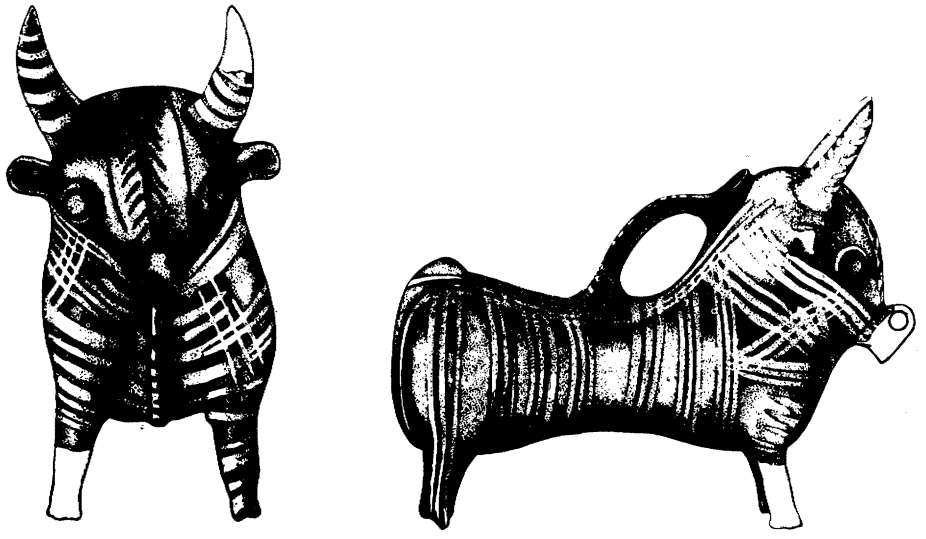

Fig. 2. Bull vase, Late Cypriot II C, from the Temple, ca., 13th century B.C. from R. W. Hamilton's 1932 excavations at Tell Abu Hawam, Stratum V.

the eastern half of the citadel, has a system of latrines known also in the Ashlar Building, along with a megaron, at Enkomi IIIa (Dikaios 1969, I: 178; III: 273–75; French 1980: 268). Thus this complex is able in itself to offer some kind of Aegean architectural context for the amazing frequency of Mycenaean III imports discovered in this sector.[13] Furthermore, there are striking similarities between the citadel of Tell Abu Hawam and the West Building at Ta^{c}anach, redated to MB IIC by Lapp (1964: 15).[14] Whatever the period of construction may have been, the fortifications may have been a Canaanite tradition; and the possibility of Egyptian influence in the background cannot be excluded (contra Weinstein, 1980).[15] Analysis of Anati's soundings, now in progress, should contribute to the solution of this problem.

3. Attention should be paid to the question of the transition between the Late Bronze and Iron Age periods. No material attributed to Stratum V in the field is later than ca. 1200 B.C.,[16] although Stratum V in Hamilton's report includes 11th century B.C. ceramics and small finds.[17] That is, the gap in occupation, proposed by Mazar—if any at all—[18] is to be looked for within Phase Vb of the preliminary reports, not between Strata V and IV (Maisler 1951: 25; Anati 1975: 12), or between Phases IVa and IVb (Van Beek 1955: 38, n. 15; Wright 1961: 97; Gershuni 1981: 44).

4. Iron I comprises five distinct periods of construction divided between Phases Vb[19] and IVa–b of the preliminary reports. They include an attempted fortification wall at 61–63 and temple 30.[20] The domestic structures reflect clearly the arrival of a new population, coming probably from northern Syria[21] at the time or soon after the appearance of the Phoenician bichrome ware. The proper historical context for such a movement, around 1100 B.C., is the war of Tiglath Pileser I of Assyria against the Arameans. A violent fire put to an end the period of isolated T-partitioned square houses sometime in the mid-11th century.[22]

Following the same plan, organized rebuilding took place in the southwest quarter of the mound; it shows the same tradition of wall construction, with a row of small stones alternating with two larger ones. This technique still appears in the next stage of construction, in what is probably the "manor house" of a small village.[23]

Thereafter the structures are normally characterized by the Phoenician pillared technique (Elayi 1980: 165), as first attested in the so-called store galleries of Phase IVb. This occupation illustrates the appearance, as yet unpublished, of the black on red style (Room 31), in connection with the usual bichrome ware (continuously represented since Phase Vb). By then the material culture is similar to that of Qasile X; both destructions, ca. 1000 B.C., may have had the same—possibly Davidic—origin.

5. Iron IIA is represented essentially by Stratum III. But 10th century finds (i.e., later than the horizon at the southwest quarter and at the burnt galleries of Phase IVb) are already part of field

Stratum IV; the latter included remains of occupation earlier than Stratum III fortifications and Hamilton's "Period III" (that is Rooms 13–21). The key is Building 27, described as a connecting link between Strata IV and III. This building had been planned in direct relation with its predecessor to the south, Mansion 3–32 of Phase IVb, i.e., prior to Period III.

Since it was somehow neglected in previous studies, the lack of stratigraphical homogeneity within Stratum III must be underlined here.[24] This basic feature is of utmost importance, because for nearly half a century the chronology of the early Geometric period in Greece has rested on two published Aegean imports found at Tell Abu Hawam (Coldstream 1968: 302–10).

6. Iron II is characterized by a complex sequence, still under careful study by D. Herrera. It should be enough to say that occupation is attested until at least the 8th century B.C. What can be deduced from the existence of late Samaria ware (as described by Hamilton for Rooms 13–14)[25] is confirmed by unpublished data, e.g., an Aegean import that stylistically is not earlier than the Dipylon in Athens, ca. 750 B.C. (fig. 3).

Through the wide repertoire of local and foreign finds, it has become clear that the city was quite active, not only in the latter part of the reign of Solomon, but also during the whole of the Divided Monarchy. However, the absence of a casemate rampart or of any four-roomed houses makes it likely that Tell Abu Hawam was Phoenician rather than Israelite.

7. What happened during Iron Age IIC, i.e., in the Neo-Assyrian and the Neo-Babylonian periods? Possibly there was a gap in occupation, but it was certainly shorter than was previously thought. Further work is still required before any valid conclusions can be drawn.[26]

8. As regard the Persian period, none of the poor architectural remains of Phase IIa can be properly dated. But Greek imports ranging from the 6th to the 5th centuries B.C. have been found below the rebuilt and fortified city of Phase IIb. Stern (1968) has also stressed the lack of Alexandrian coins in the hoard linked to Phase IIb, suggesting a destruction at the eve of the Hellenistic period. Since unpublished data, including more Greek imports, are available from Hamilton's and Baramki's excavations,[27] a systematic check must be made to give an overall view of these periods (fig. 4) and those later still.

Fig. 3. Greek Middle II Geometric/Late Geometric skyphos (?), mid-8th century B.C., from R. W. Hamilton's 1933 excavations at Tell Abu Hawam; Intrusive Stratum IV.

Fig. 4. Bronze figurine from D. C. Baramki's 1930 excavations at Tell Abu Hawam, Hamilton's Stratum II horizon.

CONCLUSION

No serious historical conclusions on Abu Hawam can be drawn without first establishing solid ground in terms of stratigraphy and chronology. Still in process, the systematic revision of all available data from Tell Abu Hawam may yet provide that desideration. That the important modifications in the interpretation of the site rest on tangible facts and not on mere speculations is due to R. W. Hamilton. His synthetic reports, together with the material for future study, show that his original field observations were substantially correct.

All archaeological storerooms are stuffed with rich but unstudied material that might provide long-awaited answers and raise fruitful new questions. Our efforts should now be directed to these museum basements to process some 50 years of unpublished discoveries in the Holy Land.

NOTES

* This article, written in May 1981, is an abstract of the author's doctoral dissertation. Since October 1982, J. Balensi has been *chargé de recherche* at the French *Centre National de la Recherche Scientifique* (C.N.R.S.). She directs the Tell Abu Hawam Project of Research and Publication, which aims at a comprehensive reassessment of the history of the site, its environment, and its international implications. Final results are due in 1986; they will include the study of P. L. O. Guy's and E. Anati's excavations on the tell and at the nearby cemeteries, plus—as far as the much-destroyed site permits—field verifications. Final publication will be a monograph dealing with the revised stratigraphy, completed by topical articles in various journals.

[1]The joint-publication project on Tell Abu Hawam was initiated by Vronwy Hankey (British School of Archaeology, Athens) and Eliezer Oren (Beersheva University, Israel); in 1971 they received authorization from R. W. Hamilton and E. Anati to undertake the work that started in 1972. Owing to her previous study of the published data (M. A. under the late R. de Vaux), the author was kindly invited to participate in the project; the results concerning Hamilton's Strata IV and V were submitted as her doctoral dissertation in 1980 (Strasbourg University, France).

Stratum III is presently in the care of Maria Dolores Herrera, annual scholar (1981) at the Ecole Biblique et Archéologique Française de Jérusalem, who specializes in the Phoenician period (Universidad Autonoma de Madrid, Spain). The team will be augmented to deal with the different excavations and periods involved in the overall revision for publication.

Appreciation is due to A. Biran and A. Eitan, successive Directors of the Israel Department of Antiquities and Museum, for kindly granting access to the archives and material, and for permission to publish.

[2]No field notes have yet been found, but a systematic inventory of the Department of Antiquities archives is still underway. At present, there is available a large set of photographic records and a post-publication copy of the original field registration books of objects.

[3]The largest number belong to the Rockefeller Museum (PAM) in Jerusalem, where they are exhibited or stored, except for a few items on loan to various places in Israel. On several occasions since the 1930s the Department of Antiquities has offered study collections (complete vessels and sherds) to local and foreign institutions, but only three could be traced until now: at the British School of Archaeology in Athens and the Albright Institute in Jerusalem—where the material could be checked by courtesy of their respective directors, H. W. Catling and S. Gitin; and the Australian Institute of Archaeology, Melbourne, only recently known of owing to R. S. Merrillees. Additional information on this would be most welcome.

[4]During the excavations, the field code for structures and stratigraphy was composed of Greek and Latin alphabets; these are completed by simple mathematical relation signs and brief descriptions in English, as can be read (sometimes with difficulty) on the material. In spite of the lack of field notes, most of the problems related to the concordance between this code and the system of Arabic and Roman figures used in Hamilton's final report can be solved (for the published objects, by comparing their labels to the corresponding information given in *QDAP* IV; for the unpublished items, by deduction). The stratigraphic results that can be drawn from the field code are quite coherent chronologically, both according to independently-established stratigraphical sequences and to our present knowledge of stylistic evolution in local and foreign products.

[5]Generally scattered over the area or somewhat concentrated near Well 56 were MB fragments from a piriform juglet with button base, a red burnished dipper juglet, a red-on-black Cypriot bowl, and—possibly—the scarab (Hamilton 1935: no. 402) illustrated in fig. 1.

[6]Fragmentary chocolate-on-white bowls, Cypriot base ring I trefoil juglets, bichrome kraters, etc., were spread mainly along an east–west axis, from Temple 50 to the Citadel via the square E5 Well at Locus 56, and at low levels in Locus 67 to the north.

[7]The same pattern of occupation is attested through unrestorable Late Minoan and Mycenaean IIIA:2e vessels, most of which are burnt. Also damaged by fire are the published group no. 263 *et al.*, found west of Locus 56; they may belong to the previous Thutmosis III horizon, or to the reign of Amenophis III at the latest. Not earlier than the second half of the 15th century B.C. is the Cypriot flat-based, large Milk Bowl, no. 3IOd; it was discovered (with unpublished local painted fragments of domestic jars and biconical vessels) by the *ṭabûn* in square D5, under the interior of Building 52 (which is incorrectly interpreted by Gershuni 1981).

[8]The early house in Locus 59 and the architectural remains immediately east of it show the highest concentration of Mycenaean IIIA:2b imports, plus signs of the transition into Late Minoan IIIB and Mycenaean IIIB:1. Similar features appear in Temple 50 (before the destruction by fire of its west porch), where quantities of Mycenaean IIIA:2b are smaller than those, in diminishing order, at Locus 67–66 to the northwest, in Square E3 and EF3 (Citadel sector) and around Well 56 (i.e.,

north of Complex 59).

[9]These horizons are characterized by an overwhelming quantity of Mycenaean IIIB, generally fragmentary and stratigraphically contemporary with Cypriot and Egyptian imports. A violent destruction by fire happened after the appearance of Mycenaean IIIB:2 and the Cypriot Rude Style. All sectors of the tell were touched, including those of the Citadel and Temple 50 (now provided with the four column bases and a central stone-lined pit). In both places, as well as to the south (Complex 59–60), reoccupation is attested by unburnt, stylistically later imports, comprising the Gray "Minyan" ware (Troy VI/VII: its earlier occurrence cannot be proven); they were still in use at the time of sporadic fires like those in Loci 51 and upper 58. The construction of the latter shows that Well 56 in Square E5 was no longer in use; it seems to have been replaced by the well south of Locus 52 in Square D5 (9.65–6.75), which yielded only burnt fragments, all of them Mycenaean IIIB but for one local LB IIB painted krater.

[10]Apart from the red-on-black ware already mentioned (n. 5), the following Cypriot wares have been identified: black slip, bichrome (wheelmade), monochrome, pseudo-monochrome (ladles), base ring I (thin ware and thick ware), base ring II (hand and wheelmade), white slip I, IIA, II and "III," white shaved (including jug no. 229), coarse (wall brackets, cooking pot no. 238), plain white wheelmade I, pithos ware, white painted V, white painted wheelmade II, and, more recently, handmade bucchero. Eight zoomorphic pots and statuettes (no. 286 [fig. 2], 302–305, plus three unpublished) and the fragments of three female figurines (no. 319–321) illustrate the typical Late Cypriot II repertoire (Catling 1976; V. Karageorghis 1978; J. Karageorghis 1977: 75, 83); all of them are related to base ring ware. The study of the large Cypriot corpus has benefited from the advice of R. S. Merillees, E. Oren, and M. Yon-Calvet, to whom the author wishes to express thanks.

[11]Without the comprehensive experience of V. Hankey, assisted by E. French, the analysis of the Aegean corpus would have never reached its present stage; the author is much indebted to both of them for their most generous contributions. In the more than 700 items from Hamilton's excavations at Tell Abu Hawam, over 500 can be classified typologically, and 160 are decorated with identifiable patterns, following Furumark's principles (1941) and E. French's up-to-date contributions for the Argolid. On the horizon of Mycenaean IIIA:2b, Tell Abu Hawam offers a range of 21–25 shapes (FS) and 22 motifs (FM); 25 FS and 30 FM were identified by French at Mycenae, while 22 FS and 18–23 FM were noted by Hankey at El Amarna (1973: 129). On the Mycenaean IIIB horizon, French has registered 22 FS and ca. 30 FM, while the presently available TAH corpus offers 25–35 FS and 22–23 FM.

[13]Nearly half of the large Mycenaean IIIB collection was found in the western third of the tell, extending over Loci 63 to 68. But in no way are the Citadel and Complex 66 specifically identified in the field code. The objects are simply labelled as having been found below the houses of Phase IVa; even Mycenaean IIIA:2b is represented at the foundation and floor levels of Houses 44 and 45, that is to say, much too high above the remains of the Citadel, compared to the rather good state of preservation of the later latrine complex at Locus 66 (see the sole published stratigraphical section in Hamilton 1934, 1935).

[14]Noted similarities are: orientation, *mezzi* building stone from Mt. Carmel, thickness of walls, type of plan, proportions of layout (3/3 for Ta^{c}anach and 4/3 for Tell Abu Hawam).

[15]Compared to Megiddo and Beth-shan, the lack of impressive remains at Tell Abu Hawam is particularly striking—if it was really an Egyptian naval base as suggested by Mazar (1951), a hypothesis contradicted by Weinstein 1980. But in any case, some kind of Egyptian presence in the vicinity has to be presumed: (a). From an architectural point of view, Temple 50 is evocative of some Egyptian chapels like that at El Kab (Vandier 1955: 840, fig. 405), although this is not decisive. More interesting are the similarities between the early house in Locus 59 and contemporary domestic units in the worker's village at El Amarna. They are

[12]Comparative data for the Mycenaean ceramic forms are tabulated below (cf. Åström 1973: 125).

	Tell Abu Hawam	*Aegean World*	*Cyprus*
1	Stirrup jar	Stirrup jar	Stirrup jar
2	Cup	Cup and jugs	Pithoid jar
3	Kylix and chalice		Small deep bowl
4	Amphoroid krater	Kylix	Cup
5	Pithoid jar	Pithoid jar	Bell-shaped krater
6	Pyxic/Alabastron	Alabastron	Amphoroid krater
7	Shallow bowl	Small deep bowl	Jugs
8	Bell-shaped krater	Globular bottle	Alabastron
9	Deep krater	Deep krater	Flask
10	Globular bottle	Amphoroid krater	Kylix
11	Conical rhyton	Shallow bowl	Shallow bowl
12	Small deep bowl; jugs		Deep krater

both built on a rectangular base (5 × 10 m, with 0.6 m thick walls), i.e., a tripartite plan with two backrooms (Peet and Woolley 1923: 55, pl. 16).

(b). More 18th and 19th Dynasty finds have been identified during the revision process, including ceramics (hemispherical red bowls, date-shaped jars, etc.); possibly two of them belong to the earliest field phase of occupation.

(c). One must keep in mind the state of destruction of the site (including the sector of the Citadel) prior to Hamilton's excavations, as well as the fact that objects were known to be already on the antiquities market in Haifa.

(d). Obviously the economic factor must not be dissociated from the strategic location of the mound. The logical assumption is that it was in Egyptian interests to support the security of the place through some kind of military presence in the immediate vicinity. Akko may have been the major naval base, with Tell Abu Hawam as the commercial harbor.

(e). The presumed occupational gap in the 12th century is odd (n. 18). Should not Ramses III have settled a group of the "Sea Peoples" to ensure lasting Egyptian control?

[16]This includes Late Minoan IIIB matte-surfaced "oatmeal" ware and a cup in zigzag heavy style with monochrome inside; Mycenean IIIB:2 small deep bowls (FS 284B); Cypriot rude style kraters; and gray Trojan ware, often known as "Minyan."

[17]Phoenician bichrome jugs, no. 249 and 250 from the room north of Locus 56, *et al.*, published group no. 244 from below and on the pavement in Building 55 (with a T-shaped partition wall); jug no. 251 from above the pavement level in Building 53; Aegean glass spiral pinheads no. 394c from Temple 30 (L. Åström 1972: 597, n. 6 = Late Cypriot IIIB).

[18]A 12th century gap in occupation seems to be reflected by the apparent lack of imported Mycenean IIIC (including the early linear style), Cypriot bucchero wheelmade and proto white painted wares, and local Mycenaean IIIC and Philistine productions. However, no definite answer can be given as long as the whole available corpus from Tell Abu Hawam has not been checked (see n. 3).

[19]The first known period unites Building 55 (the remains at Locus 54–55 W. could well be 12th century), the room north of Locus 56, the upper remains in Locus 52, the walls northeast of 3–Vb (belonging to field Stratum IV), and Temple 30. Iron Age ceramics were found already below the above-mentioned Loci 55 and 56 N (which were also part of field Stratum IV). The second period witnesses the appearance of the long wall south of Locus 52, leaning against the inner west wall of Temple 30 and Houses 61, 62, and Locus 53.

[20]The material associated with the so-called "floor of Temple 30" is late LB IIB, including imports. It comes from a layer of hard earth and ashes, mixed with sand, identified by the excavator as a filling by the foot of the standing pillar (Hamilton 1934: 76/77). Such a layer can be traced through the published section and field photographs, below the walls of Temple 30; thus these objects are necessarily earlier than this structure and correspond to the last reoccupation in Temple 50.

On the other hand, the plan and orientation of Temple 30 are similar to those of the Northern Temple (dedicated to ʿAnat) at Beth-shan in Stratum V Lower (i.e., 10th century B.C.). This level has produced a Syro-Palestinian statuette of the same type as Hamilton's no. 370 (Negbi 1976: 46, no. 1447, 1448). A movement of cultic influence southward sometime during the transitional period between that Late Bronze and the Iron Age can be presumed from the fact that this type of idol, not known in ancient Syria after the 12th century B.C., does appear around this time and afterward in coastal and central Palestine (Negbi 1976).

Whether the gold leaf-coated bronze statuette from Tell Abu Hawam belongs to Temple 50 or 30 cannot be stratigraphically determined. In the former case, it would tend to link the site to the north Canaanite culture as at Ugarit in the 14th–13th centuries; in the latter case, it would underline the lack of Israelite orthodoxy at the site (cf. 2 Kgs 3:2; 10:26; Ex 23:24; 34:13).

[21]The origin of this type of structure lies in the Fertile Crescent, as can be seen in architecture characteristic of Meskene-Emar in the Euphrates Valley, during the 14th–13th centuries B.C., a Hittite foundation with parallels from Anatolia at Boghaz Köy (Margueron 1980: 285); but the real prototype is as early as the third millennium, as seen at Tell Asmar-Eshnunna in southern Mesopotamia (Delougaz *et al.* 1967: pl. 27:30).

Though rare, the square house with a T-shaped partition wall is not totally unknown in Palestine. The MB II "Patrician House" at Tell Beit Mirsim (Stratum D) shows affinities with Chagar Bazar in the Ḫabur region, according to Albright (1938: 36, 37, nn. 19–20). The domestic quarter, facing the Syro-Hittite Stelae Temple in the lower city at Hazor, presents the same features in LB II (T. Dothan in Yadin *et al.* 1960: 98, pl. 208: 6061). A much later occurrence is known at the oasis of ʿEn-gedi during the Neo-Babylonian Period. The four-room "Israelite" house (Shiloh 1970) may be derived partly from the north Syrian tradition.

[22]The third period of Iron Age I constructions is represented in the northwest by Houses 44 and 45, sealed by a layer of ashes that is shown on the published section to reach the foundation level of House 36 in the southwest quarter. Thus Phase IVa is not homogeneous; Hamilton's description fails to distinguish the upper and lower ash layers covering House 44 (see n. 24).

[23]The fourth period is composed of Houses 36, 37, 40–43. The main ceramic features from there are similar and sometimes identical to those of the later Galleries

33–35, suggesting a similar or identical date. The fifth period of construction is that of Building 3–32, against the south wall of which lay the storerooms. No material associated with Structures 38–39 has yet been identified.

[24]The upper layer of ash covering Stratum IV Houses 44 and 36 (see n. 21) belongs to Stratum III and divides it in two distinct phases of occupation. In each of these, several discontinuous periods of construction can be traced.

[25]The preserved sherds illustrate Types 6 and 7 of Bikai's "Fine Ware Plates" (1978: 28–29); the former is not earlier than Stratum V at Tyre, dated to the second quarter of the 8th century B.C.

[26]Since some of the available repertoire from Tell Abu Hawam has parallels in the stratified sequence at Tell Keisan (*niveaux* 5–4), the Stratum III occupation under investigation may have lasted until around 650 B.C. Keisan presents, then, a gap of about a century (i.e., the Neo-Babylonian period), followed by a renewal sometime during the Persian period (Humbert 1981: 382–85). Since the two sites are only 15 km apart, they may have undergone similar evolution.

[27]There are 138 items on the 1930 excavation registration book. This material is stored at the Rockefeller Museum in Jerusalem.

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