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A CRITICAL EVALUATION OF K.M. KENYON'S

TYPOLOGY OF LATE BRONZE AGE POTTERY

ON THE BASIS OF THE MEGIDDO EXCAVATIONS

Ву

BARBARA RACHEL DART

B.A. Wilfrid Laurier University, 1974

THESIS

Submitted in partial fulfillment of the requirement for the Master of Arts degree Wilfrid Laurier University 1978 UMI Number: EC56326

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List of Abbreviations Used in the Text

A.P.H.L. Amiran, R., Ancient Pottery of the Holy Land,

Jerusalem, Masada Press, 1969

C. Cistern

C.A.H. Cambridge Ancient History

L. Locus

L.II Tufnell, O., Lachish II: The Fosse Temple, London,

Oxford U. Press, 1940

L.IV. Tufnell, O., Lachish IV: The Bronze Age, London,

Oxford U. Press, 1958

LB Late Bronze

MB Middle Bronze

M.II or Loud, G., Megiddo II: Seasons of 1935-1939, Chicago,

Megiddo II O.I.P. 62, U. of Chicago Press, 1948

M.T. Guy, P.L.O., Megiddo Tombs, Chicago, O.I.P. 33,

U. of Chicago Press, 1938

NOTES Notes on the Megiddo Pottery of Strata VI - XX,

Chicago, U. of Chicago Press, 1939

Pl. Plate

P.B.W. Epstein, C.M., Palestinian Bichrome Ware, Leiden,

E.J. Brill, 1966

S. Stratum or Strata

T. Tomb

Acknowledgements

I would like to thank Professor Lawrence E. Toombs for the benefit of his patience and wisdom and for the right word at the right time.

Without the unfailing support of my husband, William L.M. McEwen, I would not have had the time or will to complete this paper.

Many thanks are due to my family for numerous $% \left(1\right) =\left(1\right) +\left(1$

"So here I am, in the middle way, having had twenty years--Twenty years largely wasted, the years of l'entre deux cuerres--Trying to learn to use words, and every attempt Is a wholly new start, and a different kind of failure Because one has only learnt to get the better of words For the thing one no longer has to say, or the way in which One is no longer disposed to say it. And so each venture Is a new beginning, a raid on the inarticulate With shabby equipment always deteriorating In the general mess of imprecision of feeling, Undisciplined squads of emotion. And what there is to conquer By strength and submission, has already been discovered Once or twice, or several times, by men whom one cannot hope To emulate--but there is no competition--There is only the fight to recover what has been lost And found and lost again and again: and now, under conditions That seem unpropitious. But perhaps neither gain nor loss. For us, there is only the trying. The rest is not our business."

T.S. Eliot

"East Coker V" from Four Quartets

Introduction

Dame Kathleen Kenyon, the late eminent Palestinian archaeologist, has contributed a controversial article on the Late Bronze Age in Palestine to the revised <u>Cambridge Ancient History</u>. Published as a fascicle in 1973 and entitled "Palestine in the Time of the Eighteenth Dynasty", it is a work of archaeology rather than a general historical survey.

Kenyon believed archaeology to be an auxiliary discipline of history. In this context she has stated that it is possible to refine the chronology of the Late Bronze Age in Palestine by correlating events known from historical sources to archaeological evidence.

Her article is a review of the archaeology of Late Bronze sites in Palestine based on her considerable knowledge of the field.

Legitimate archaeological evidence consists of architecture, pottery, and objects excavated stratigraphically and understood in the context of ceramic typology. Beginning with the assumption that relative chronology for Palestinian history must be founded on pottery typology, Kenyon has refined the typology of Late Bronze pottery into six groups of forms which commonly occur together and whose development is documented.

After examining the stratigraphy and pottery of the Late Bronze occupation levels at major sites, Kenyon has isolated one stratum at the north Palestinian town of Megiddo that can be correlated to the historically known campaign at Megiddo in 1482 B.C. by Pharaoh Tuthmosis III. Some of the pottery attributed to this stratum shows

a sufficient repertoire of forms to be used by Kenyon for one of the six pottery type groups. Thus one type group is linked to an absolute date, and dates for the remaining five groups hinge on the certainty of the correlation of history to an occupational level at Megiddo.

The major Palestinian sites are analyzed in light of the six dated pottery groups. Based on her study, Kenyon has indicated revisions in dating for occupational levels at some sites. The general historical picture given in her conclusion is broken into two sections, both of which relate events known from Egyptian historical sources to archaeological evidence in Palestine. Her site analyses led Kenyon to conclude that Egyptian raids into Palestine in the early part of the Late Bronze Age were severe and that destruction and abandonment of towns was more extensive than previously believed.

Kenyon states that the campaigns of Tuthmosis III were reflected in destruction and abandonment at Megiddo and Taanach but subsequently Egyptian rule brought peace and material prosperity. She believed Palestinian towns were flourishing by the end of the Eighteenth Dynasty and that Egyptian maritime power rather than resident military control was responsible for the commercial and political stability in Palestine.

The thesis of this paper is that Kenyon's Late Bronze typology is not supported from the Megiddo pottery or stratigraphy. Megiddo pottery is given as representative of four of her six type groups and the dating system for the groups centres on the identification of one Late Bronze destruction layer at Megiddo as the town known from the campaign stories of Tuthmosis III. After studying the excavation publications,

I have concluded that the Megiddo pottery comes from unstratified and inadequately described tombs or domestic loci, that evidence for abandonment of the town after its destruction by Tuthmosis III is inconclusive, and that there is no hard evidence to link Tuthmosis III's destruction of Megiddo to a particular layer of rubble there.

While Kenyon's attempt to supply a chronological framework to the Late Bronze period is laudable, her theory relies too heavily on the pottery from Megiddo. With the loss of an absolute date at Megiddo, the ceramic theory becomes an exercise in relative chronology, based on a re-arrangement of Late Bronze pottery typology. Considered as a clarification of the typology, Kenyon's theory still relies on Megiddo pottery which cannot be dated absolutely and most of which had been disturbed. Since so much of Kenyon's ceramic evidence is dated by reference to similar deposits at other sites, and since in her theory Megiddo is the main reference point, the only conclusion available is that typology as a method of dating is inescapably circular, and that Kenyon's theory has failed to break the circularity.

Such a conclusion is not new in the field of Palestinian archaeology. A number of scholars have criticized Kenyon's use of archaeological evidence. Thus far none have published any serious rebuttals of her chronological divisions of the Late Bronze Age or of her six ceramic type groups. Several scholars have faulted her interpretation of the occupational levels at particular sites, but no substantial review of her theory has been done. This thesis illustrates the pottery Kenyon has given for each type group, and no detailed study of her type groups can be carried out without the

plates. My analysis of the Late Bronze Age pottery loci at Megiddo is also illustrated with each reliable and significant locus represented on a pottery plate. The conclusions I have reached after testing Kenyon's ceramic theory are similar to those of other scholars, but are documented in detail.

Chapter I contains a summary of Kenyon's theory of six dated ceramic stages of the Late Bronze Age in Palestine. Also included is a set of plates illustrating the forms belonging to each pottery group. The drawings are taken from the excavation publications Kenyon cites as representing each group. Every effort has been made to identify precisely the vessels intended by Kenyon. Each plate is labelled as to provenience and included on the plate lists are descriptions and exact locations for each pot. Included in this chapter is a general critique of the theory, and the rationale for my choice of Megiddo as a suitable test site for Kenyon's pottery groups.

Chapter II introduces the site of Megiddo, describing its geographical and strategic importance, as well as the history of its archaeological excavations. Mention is made of the resulting publications, as a preamble to a detailed critique of the material treating the Late Bronze Age strata at Megiddo.

Part I is a discussion of the ceramic evidence excavated from tombs dug into the east slope of the tell outside the town walls.

The tombs have been illustrated where possible, and discussed in detail, with a view to clarifying whether the pottery of individual Late Bronze tombs has been mixed with later or earlier pottery, whether it can be cited as a reliable representative group for a part

of the Late Bronze Age, and on what basis and to what degree of certainty it can be used. In this section of the second chapter the lack of information prevented me from making clearcut decisions on the reliability of the tomb pottery as evidence. In most cases, absolute certainty was impossible, and typology had to be used to determine whether there was intrusive pottery in a particular spot in a tomb. In most cases the original stratigraphy and placement of burials no longer existed at the time of excavation. The pottery from the east slope tombs was generally of dubious value chronologically.

Part II of Chapter II contains an analysis of the pottery found on the tell, in domestic occupation levels of the northeastern corner of the mound. Called Area AA by the excavators, it consisted of a gate and a large building, both of which were modified several times during the Late Bronze Age. Area AA produced pottery from tombs cut through the occupational levels, and from rooms of the large building near the north city gate. Very little pottery is recorded from Area AA, and the reliable deposits are so few in quantity and variety of form that no generalization can be made from the evidence of this excavated area at Megiddo.

Part III of Chapter II deals with the southeast side of the tell, comprised of a housing complex and a sacred area. The excavations in this section of the tell, called Area BB, were most productive in terms of the discovery of stratified deposits of pottery, but the amount and variety of pottery from any single locus was often very small.

I concluded after my analysis of the Late Bronze pottery loci that a significant amount of the pottery given by Kenyon as part of the six type groups did not come from sealed loci attributable to a specific period within the Late Bronze Age. It was also clear from my analysis, especially relative to the tomb pottery on the east slope, that the absolute criteria I had hoped to use to judge ceramic evidence as reliable were not always applicable. My judgements about dates of loci were sometimes based on typology rather than on any established chronology.

The third and final chapter of this thesis compares Kenyon's six ceramic type groups to the pottery from Megiddo. The reliable loci are divided into Late Bronze I or II, as defined in Amiran's classic work on Palestinian pottery, and tested with the appropriate pottery type group. The scarcity of local pottery to test was matched by the lack of datable imported wares.

Since in Chapter Two I had concluded that much of the Megiddo pottery used by Kenyon to construct her type groups was unstratified Megiddo pottery, the validity of the type groups was also in question. Although there were sealed loci with a good quantity and range of forms at Megiddo, these were limited to the Late Bronze I period, and could not be dated more specifically. Kenyon's single absolute historical date cannot be tied securely to one stratum at Megiddo as there is no definite destruction layer according to the information in the published excavation reports. Chapter Three concludes that Kenyon's type groups cannot be demonstrated at Megiddo, and that both as a refinement of Late Bronze ceramic typology and as a chronological framework for Palestinian history, Kenyon's theory is untenable.

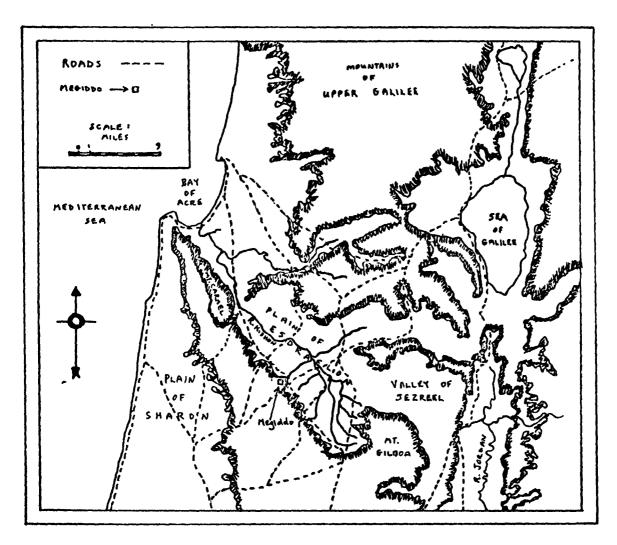


FIG. 1. MAP OF THE PLAIN OF ESDRAELON AND ITS SURROUNDINGS SHOWING MEGISDO, ROAD SYSTEMS AND KISHON RIVER SYSTEMS $^{\,1}$

•

Chapter One: Kathleen M. Kenyon's Ceramic Theory of the Late Bronze Age in Palestine

Dame Kathleen M. Kenyon, in her <u>Cambridge Ancient History</u> essay entitled "Palestine in the Time of the Eighteenth Dynasty," has evaluated the Late Bronze Age archaeological evidence in Palestine² in light of contemporary documents from Egypt.

She has undertaken this study because the chronology of the Late Bronze Age in Palestine is as yet incomplete. In her view, a new analysis of Palestinian sites during this period, combined with a study of the literary evidence from Egypt, provides fresh insight into the chronological framework of Palestinian history.

Correlating documentary and archaeological data for the Late Bronze in Palestine is difficult for several reasons.

Palestine is not an isolated geographical unit, and its history has been interwoven with that of its neighbours to the north and south. The major powers of the Near East during the Late Bronze Age were the Egyptians, the Hittites and the Hurrians. Palestine was a network of roads, the control of which was necessary to safe and reliable merchant and military transport. Its prosperity depended on foreign powers and its history is best known from the documents of the nations which considered Palestine within their spheres of influence. 6

Although literary evidence for Late Bronze Age Palestine has been found, it is not plentiful. Major political upheavals during the Middle Bronze Age have left significant gaps in documentary sources between the Middle and Late Bronze ages, and in the case of Hittite inscriptions, into the Late Bronze period as well. The scarcity of historical material may be due to political chaos or to the fact that many Near Eastern sites lie undiscovered or are only partially excavated. The main source of literary evidence for Palestine in the Late Bronze Age remains the documents of Egypt in the New Kingdom.

The soil of Palestine has proved fertile ground for the archaeologist. Since the land has been inhabited for many centuries, and since town sites were often used for long periods of time, occupational debris has furnished us with information about many different cultures. Unfortunately, the large collection of excavation reports available are not always easily interpreted. Excavation techniques, recording methods, and terminology were often idiosyncratic or unexplained in the excavations of the rineteenth and early twentieth centuries. Some of the Palestinian towns which are known to have had significant Late Bronze settlements are also problematic.

While realizing the difficulties in interpreting the excavation reports of several major sites, Kenyon asserts that Late Bronze chronology must be based on pottery, and that it is "necessary to build up a corpus of pottery groups that form recognizable assemblages, to which a chronological framework can be given by

historical evidence or external contacts." With this in mind she has selected twenty-two Late Bronze towns representing the geographical regions of Palestine and Transjordan. 14

From the northern part of Palestine, Nahariyah was chosen. 15
In the area of Esdraelon 16 Kenyon has examined reports from Tell Abu
Hawam, Megiddo, Taanach, Beth-shan and Hazor. In the Western Highlands 17
Tell el-Farah N., Shechem, Shiloh, Gibeon, Jerusalem, and Bethel are included. In southern Palestine, along the edge of the Shephaleh 18
Tell Beit Mirsim, Beth-shemesh, and Lachish are considered, as well as Gezer in the Shephaleh. Furthest to the south are the sites Tell el-Farah S., probably to be identified as Sharuhen, 19 and Tell Ajjul, fourteen miles to the west of Tell el-Farah on the Mediterranean coast.
Comments are also made on the Late Bronze remains near Amman, those at Madeba, and at Deir Alla on the east side of the Jordan Valley.

The archaeological sites chosen, Kenyon begins research with a survey of the documents of the Eighteenth Dynasty 20 of Egypt. The New Kingdom was characterized by mercantile and military expansion in the eastern Mediterranean. 21 The resurgence of Egyptian power included campaigns into Palestine. While the extent of Egyptian control in Palestine remains disputed, 22 the records of military exploits by the Pharaohs in Palestine and Syria suggest the possibility of relating dated Egyptian events 23 to archaeological evidence.

The first event Kenyon considers significant for Palestine is the accession of Amosis I, ca. 1570-1546 B.C. After approximately three years of campaigning he drove the Hyksos out of their capital of Avaris and pushed them north into Palestine and Syria as refugees.

Historians are unsure whether Amosis tried to consolidate power by moving immediately into southern Palestine and besieging Sharuhen or whether this campaign took place later in his reign. Since domestic and military reorganization was important, Egyptian influence may not have been felt directly until the latter years of Amosis. She concludes that "if an inference may be drawn from the considerable number of site destructions that, as will be seen, are to be ascribed to the end of the Middle Bronze Age, it is likely that they were due to attacks by the groups of Asiatics displaced from Egypt." 27

Although links between Egypt and Palestine existed throughout the Late Bronze Age, ²⁸ Kenyon sees the campaign by Tuthmosis III in 1482 B.C. as the one fixed Egyptian date which is clearly reflected in an archaeological context in Palestine. She concludes "the major events affecting Palestine were undoubtedly the campaigns of Tuthmosis III (1504-1450 B.C.) ... and for his campaign of 1482 B.C. there are detailed records in an inscription at Karnak, in which the capture and destruction of Megiddo figure prominently." ²⁹

To isolate pottery characteristic to the Palestinian Late Bronze, Kenyon examines site reports to find breaks in occupation which could represent the end of the Middle Bronze Age. She has found the most obvious examples of such breaks in occupation to occur at Jericho and Tell Beit Mirsim. Based on the literary evidence from the time of Amosis I, she interprets the occupational break as the result of an influx of hostile Hyksos after their expulsion from Egypt, or an early campaign in Palestine by Amosis I.

The early Late Bronze Age in Palestine is distinguished by pottery types which were not found at sites such as Jericho and Tell Beit Mirsim. The new pottery forms the first of Kenyon's six ceramic groups, listed below, and illustrated in Plates I to VI of this chapter.

Group A: Dates: ca. 1570/1567 - ? B.C.

Type groups: Megiddo Tomb 1100

elaborately decorated Bichrome ware

Cypriot Black Lustrous Wheelmade

Monochrome ware

truncated dipper juglets

continuation of Middle Bronze forms, e.g., cylindrical juglets

Group B: Dates: ca. ? - 1482 B.C.

Type groups: Megiddo Tombs 77, 1145, 3015, 3018, 3005

Hazor Cisterns 7021, 9023 (Stratum 3)

most of the same forms found

Linear Bichrome continues

marked decrease in elaborately decorated Bichrome

marked decrease in cylindrical juglets

Cypriot Basering I ware common

White Slip I ware appears

Group C: Dates: ca. 1475/1450 - 1400 B.C.

Type groups: Lachish Temple I

many of the same forms

no elaborately decorated Bichrome bowls

White Slip II milk bowls appear

Late Bronze dipper juglets with pointed base appear

Group D: Dates: ca. 1350 - 1320 B.C.

Type groups: Hazor Tomb 8144-5

Lachish Tomb 216

Basering II ware

Basering I ware common

White Slip II

most of Groups A to C forms absent

Late Bronze dipper juglets, some with a more rounded base

imitation Basering jugs

pilgrim flasks appear

Mycenaean IIIa vessels, mainly IIIa2 appear

Group E: <u>Dates:</u> ca. 1325 - 1275 B.C.

Type Groups: Megiddo Tomb 911

Lachish Tomb 1003

"the latest material associated with Lachish Temple II" $\,$

Group F: Dates: ca. 1275 - 1230 B.C.

Type Groups: Megiddo Tombs 912, 877, 989

Hazor Cistern 9023, Stratum I

Tell el-Farah S. Tombs 902, 936, 905, 914, 949, 939

Mycenaean IIIb vessels

Plate 1

No.	Designation	Field No.	Plate No.	Description
14.)	Lamp	P4287, 3 surface"	P1.47:1,	"Intact, brown ocher
15.)	Carinated Bowl	minute grit brown ocher	ts, well mad	"Fine ware, few de, well fired, aples yellow 3 slip,
16.)	Carinated Bowl	P4459, except for	Pl.48:12, naples yell	"Same as No. 11, low 2 core"
17.)	Jar	traces of l	Pl.48:12, burnishing, reconstruct	"Brown ocher 2, indian red 1 decor- ted"

Amiran, R., $\frac{A.P.H.L.}{this jug}$, pg. 153. Amiran says this jug is typical of the forms of Bichrome ware.

Guy, P.L.O., M.T., pg. 154. The author states that "the form and two-colour application of its pattern strongly suggest a relationship to the 'Hurrian' class, but its ware is different from others of the period. A jug comparable to it in form and elements of decoration is illustrated by Gjerstad, who recognized it as foreign to Cyprus. His tentative designation of Syria as the country of origin may well prove to be correct".

Epstein, C.M., P.B.W. I have included this jug in Kenyon's Group A Sample because Epstein has shown the extent of Syrian influence in the development of Bichrome pottery. Kenyon cites Epstein as an authority of the origin of Bichrome ware.

Guy, P.L.O., M.T., pg, 151. Although the narrower neck and shorter, wider body is characteristic of Late Bronze dipper juglets, Guy states that "a pellet on the handle of such jugs seems, however, to be peculiar to LB 1".

NOTE:

Several points should be kept in mind concerning the plates for Kenyon's six type groups.

1.) The interior profile of vessels is shown on the right or left side of the drawings depending on the excavation publication.

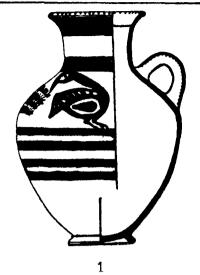
2.) Names of particular forms vary among publications. I have retained the names and spellings peculiar to each publication.

Plate 1 : Pottery Type Group A

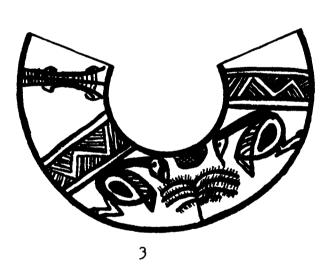
No.	Designation	Field No. Plate No. Description
1.)	Jug	P4393 P1.46:15, "Many predominantly light grits, well made, brown ocher 2, roman sepia 1 and indian red 1 decoration"
2.)	Jug*	P4358, P1.48:3, "Complete, fine ware, few minute mixed grits, well made, well fired, permanent yellow 3 slip, close vertical burnishing, blue-black 2 and indian red 1 decoration"
3.)	Design on a J	ug Fig. 111, pg. 93
4.)	Jug	P4369, P1.48:14, "Well made, brown ocher 3, spaced vertical burnishing, roman sepia 1 and indian red 2 decoration"
5.)	Jug	P4396, P1.45:20, "Few minute mixed grits, black lead 3, spaced vertical burnishing"
6.)	Jug	P4381, P1.45:21, "Same as #5"
7.)	Monochrome Bowl	P4347, P1.48:8, "Intact, fine ware, few minute mixed grits, burnt umber 3 surface, chiefly indian red 1 wash, hand-made; Cypriote"
8.)	Monochrome Bowl	P4434, P1.47:9 "Fine ware, few minute dark grits, well fired, burnt umber 1 core, indian red 1 wash, handmade; Cypriote"
9.)	Jug**	P4299, P1.45:32, "Intactpellet on handle"
10.)	Jug	P4271, P1.45:33, "Intact, many minute light grits, cheifly brown ocher 2 surface, spaced vertical burnishing"
11.)	Jug	P4357, P1.47:11, "Intact, few mixed grits, warm sepia 2 surface, close vertical burnishing, pellet on double handle"
12.)	Jug	P4417, P1.46:6, "Many light grits, well made, brown ocher 3"
13.)	Jug 	P4282, P1.45:19, "Intact, fine ware, few minute dark grits, well fired, permanent yellow 3 surface, black and white decoration handmade; Cypriote"

PLATE I:A

Elaborate Bichrome Ware:





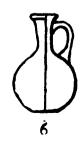


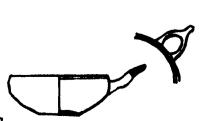


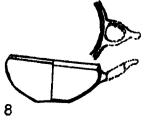
Monochrome Ware:

Cypriot Black Lustrous Wheelmade Ware:









Pottery Type Group A: Megiddo Tomb IIOO

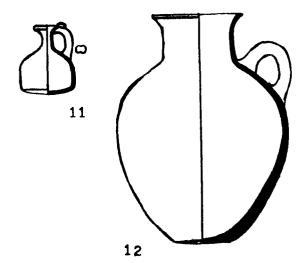
Scale 1: 5

Truncated Dipper Juglets:





Continued Middle Bronze forms:













SCALE: 1:5

PLATE II cont'd.

No. Designation Source Field No. Plate No. Description

- 62. MonochroneBowl Hegiddo, T.77, "F229, Plate 42:12, "Intact, fine ware, some light grits, well fired, burnt unber 1, light red 1 wash, handmade; Cypriote".
- 63.) MonochameBowl Legiddo, T.77, #P230, Plate 42:13, "Sane as No. 12 except for brown other 1 core and surface".
- 64.) Monodrom Bowl Megiddo, T. 77, #1228, Plate 42:14 "Intact, fine ware, few light grits, well fired, brown other 1, indian red2 wash, burrished, handmade; Cypriote".
- 65.) Jar 103 Megiddo, T. 3005, /b36, Plate 60:2, "Creambuff, numerous minute black and white guits, well made, wet-smoothed, red decoration".
- 66.) Bowl 261 Megiddo, T.3015, #b103, Plate 61:20, "Intact, fine, pink-buff, well fired, poorly handmade, roughly applied red-brown wash inside and out; Cypriote".
- 67.) Jug 307 Megiddo, T.3015, #b101, Plate 57:8, "Complete, pink-buff, some white grits, well fired, well made, wet-smoothed".
- 68.) Jug 392 Megiddo, T.3015, #b34, Plate 59:10 "Intact, fine, cream-buff, well fired, well handmade, knife-shaved, burnish outside, black decoration; Cypriote".
- 69.) Jug 341 Megiddo, T.3018F, #5521, Plate 50:19 "Complete, fine green-buff, minute white grits, heavily fired, well made, horizontal and vertical burnish outside".
- 70.) Jug 349 Megiddo, T.3018C, #b180, Plate 51:4, "Fragmentary, fine gray, numerous minute grits, irregular burnish".
- 71.) Lamp 21 Megiddo, T.3018C, #b184, Plate 55:10, "Intact, pink-buff, white grits, well fired, well made, wet-smoothed".
- * No.s 9, 10,11, are Basering Ware but in form are Monochrome, a variant of Basering ware
- *** No cylindrical juglets were found in Hazor cisterns 7021 or 9024/3.

BLATE II cont'd.

No. Designation Source Field No. Plate No. Description

- 50.) Cypriot. Justazor, Cistern 7021, #E#28#, Flate CXXXV:28, Juglet "Light grey levigated clay. Decorated".
- 51.) Cypriot Hazor, Cistern 7021, #E4281, Plate CXXXV:29, Juglet "Levigated light orange clay, white slip."
- 52.) Lamp Hazor, Cistern 7021, #E4906, Plate CXLII:1, "Grey-buff clay, grey grit(L)".
- 53.) Lamp Hazor, Cistern 7021, #E4707, Flate CXLII:7, "Grey-buff clay, grey grit (L)".
- Megiddo, T.1145A, #P4219, Plate 49:22, "Many large mixed grits, blue-black 3 and brown ocher 3 core, brown ocher 2 to naples yellow 3 surface, handmade".
- 55.) Jar-stand Megiddo, T.1145A, #P4222, Plate 50:1, "Complete, many predominantly light grits, blueblack 3 core, permanent brown 3 to brown ocher 3 surface; 2 holes in sides, traces of burning inside".
- Megiddo, T. 1145B, #F4187, Plate 52:1 "Some light grits, blue-black 2 core, burnt umber 2 to permanent brown 3 surface".
- Megiddo, T.1145B, #F4159, Plate 52:2, "Well made, many large light grits, naples yellow 3 core, permanent yellow 3 to burnt umber 3 surface, incised decoration".
- Megiddo, T.1145B, #P4181, Plate50:16, "Intact, fine ware, few minute mixed grits, well made, naples yellow 2 surface, spaced vertical burnishing".
- Megiddo, T.77, #P241, Plate 41:32, "Some light grits, well fired, burnt umber 3 core, brown madder 3 surface".
- Megiddo, T.77, "F233, Plate 41:28, "Intact, some light grits, well fired, naples yellow 2 surface, sepia 1 decoration, handmade; Cypriote".
- Megiddo, T.77, #P232, Plate 41:27, "Intact, fine ware, well made, well fired, naples yellow 3 slip, indian red 1 and sepia 2 decoration, handmade; Cypriote".

PLATE II cont'd.

No. Designation Source Field No. Flate No. Description 36.) Hazor, Cistern 7021, #E3167, Plate CXXX-Carinated VI:8, "Light grey well-fired clay, few Bowl white grit(L)". 37.) Quatrefoil Hazor, Cistern 7021, #E3456, Plate CXXX-VI:15, "Brown-grey well-fired caly, white Carinated and brown grit(L)". Bow 1 38.) Hazor, Cistern 7021, #E3329, Plate CXXX-Krater VII:3, "Light grey well-fired clay, grey core, grey grit (L)". 39.) Cook Fot Hazor, Cistern 7021, #E2882, Plate CXXX IX:1 "Pinkish clay, dark grey core, white grit (L&S)". Hazor, Cistern 7021, #E4110, Plate CAXX-40.) Cook Pot IX:7, "Pibkish well-fired clay, yellowish core, white (L) and quartz (S) grit". 41.) Cook Pot Hazor, Cistern 7021, #E4069, Plate CXXX-IX:15. "Pinkish clay, much white grit". 42.) Cook Pot Hazor, Cistern 7021, #E3533, Plate CXXX-IX:19, "Brick-red well-fired caly, grey core, quartz grit". 43.) Cook Pot Hazor, Cistern 7021, #E3237, Plate CXXX-VIII:12, "Pinkish clay, greenish core, white (L), black and white and quartz grit(S)". 44.) Hazor, Cistern 7021, #E3004, Plate CXLI:1, Store Jar "Brown clay, grey core, black and white grit (L). Decorated (incised)". Hazor, Cistern 7021, #E5118, Plate CXL:12, "Grey-pink well-fired clay, white (L) 45.) Jug and black (S) grit, traces of white slip. Decorated (brown)". 46.) Hazor, Cistern 7021, #E5771, Plate CXL:4, Juglet "Grey clay, white grit (L)". 47.) Hazor, Cistern 7021, #E4273, Plate CXL.8, Juglet "White levigated well-fired clay". 48.) Baking Tray Hazor, Cistern 7021, E4426, Plate CXL11:9,

"Brown clay, dark grey core, quartz grit".

Baking Tray Hazor, Cistern 7021, "E3869, Plate CXLII; 11, "Light brown clay, black core, quartz grit";

49.)

PLATE II cont'd

		PLATE II cont. a
No.	Designation	Source Paeld Lo. Plate Ko. Description
23.)	Carinated Bowl	Hazor, Cistern 9024/3, %D13554, Plate CXX-III:I, "Yellowish green clay, white(L) much black (S) grit".
24.)	Carinated Bowl	#D13209 Hazor, Cistern 9024/3, Plate CXXXIII:5, "Brown-pink clay, grey core, black grit (L), white int. and ext. slip, traces of interior concentrical burnishing".
25.)	Carinated Bowl	Hazor, Cistern 9024/3, #D12081, Flate CXX-III:6, "Reddish well-fired clay, black grit(S), smoothed".
26)	Krater	Hazor, Cistern 9024/3, #D13462, Flate CXXIV:12, "Light brown well-fired clay, grey(L), black (S) grit".
27.)	Jar	Hazor, Cistern 9024/3, "D13983, Flate CXX-IV:11, "Pink well-fired clay, grey core, white and grey grit(L). Decorated(incised)".
28.)	Jar	Hazor, Cistern 9024/3, #D14069, Plate CX-XIV:12, "Pinkish clay, grey core, black grit(L&S). Decorated (incised)".
29.)	Juglet	Hazor, Cistern 9024/3, #D14091, Plate CXX-III:17, "Light grey clay, white (L) and dark grit(S)".
30.)	Lamp	Hazor, Cistern 9024/3, #D 13770, Plate CXX-II:22, "Pinkish gritty clay, white grit(L)".
31.)	Lamp	Hazor, Cistern 9024/3, #D13775, Plate CX-II:23, "Light brown well-fired clay, white and brown grit(L)".
32.)	Bow1	Hazor, Cistern 7021, #E2901, Plate CXXXV:1, "Light grey clay, dark grey core, black grit (S). Decorated".

- 33.) Bowl Hazor, Cistern 7021, fE3808, Plate CXXXV.2, "Grey-buff clay, yellowish core, black grit(S), whitish slip. Decorated".
- 34.) Bowl Hazor, Cistern 7021, #E3050, Plate CXXXV:4, "Greenish clay, whitish slip. Decorated".
- 35.) Carinated Hazor, Cistern 7021, ,E3802, Plate CXXXVI:6, Bowl "grey clay, black and white grit (S)."

No. Designation Source Field No. Plate No. Description

- 12.) Jug 347 Megidd0, T.3005, #b35, Flate58:19, "Fine orange-buff, heavily fired, well handmade, brown slip, irregular burnish outside, raised decoration; Cypriote".
- 13.)**Jug Megiddo, T. 1145B, #F4195, Plate 52:10, "Few minute light grits, well made, blue-black 2, close vertical burnishing, pellet on double handle".
- 14.) Store Jar Hazor, Cistern 9024/3, #D13792, Plate CXX IV:8, "Grey-buff clay, white (L), black and white(S) grits, white slip. Decorated".
- 15.) Jar Megiddo, T. 1145A, #T4235, Plate 50:2, "many light grits, blue-black 3 and permanent brown 3 core, chiefly naples yellow 2 surface, roman sepia 1 and light red 1 decoration".
- Megiddo, T.1145B, #P4171, Plate 51:7, "Intact, some light grits, well fired, naples yellow 2 to 3 surface, close burnishing on neck and shoulder, vandyke brown 1 and light red 2 decoration; warped".
- 17.) Jug Megiddo, T. 1145B, #P4184, Plate 51:1, "Intact, well made, brown ocher 2 surface, spaced vertical burnishing, indian red 2 and roman sepai 1 decoration".
- 18.) Jug 301 Megiddo, T.3018C, #b179, Plate 48:5, "Pink-buff, white grits, well made, irregular burn-ish outside, red and black decoration".
- 19.) Bowl Hazor, Cistern 9024/3, #D13447, Plate CXXII:2, "Light grey clay, black grit(S). Decorated (Brick-red)".
- 20.) Bowl Hazor, Cistern 9024/3, #D13057, Plate CXXII:11, "Grey-buff well-fired clay, grye grit (L&S), Decorated (brick-red)".
- 21.) Bowl Hazor, Cistern 9024/3, #D13595, Plate CXXII:14, "Brown-pink well -fired clay, much grit(L&S), Decorated (brick-red)."
- 22.) Bowl Hazor, Cistern 9024/3, #D11658, Plate CXXII:16, "Light brown clay, grey grit(L), red concentrically burnished int. slip extending over rim and below".

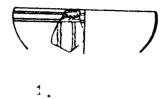
Plate II Pottery Type Group B

No. Designation Source Field No. Plate No. Description

- 1.) Milk Bowl Hazor Cistern 7021, #1/1705, Plate CXXXV:22, "Light brown levigated clay, white slip. Decorated".
- 2.) Milk Bowl Megiddo, TI45, #F4225, Flata 49:23, "Few minute light grits, well fired, burnt umber 2 core, davy's gray 2 slip, irregular burnishing, vandyke brown 3 decoration, handmade; Cypriote".
- 3.) Bilbil Hazor, Cintern 7021, #E5654, Plate CXXXV:26, "Dark grey well-fired clay".
- 4.) Milk Bowl Megiddo, T.1145, F4220, Plate 49:24, "Fine ware, few minute light grits, well made, blue-black 3 core, light red 1 wash partially burnt to blue-black 3, poliched, hand-made; Cypriote"
- Megiddo, T.1145B, #F4169, Plate 50:11,
 "Fine ware, some minute light grits, well
 made, well fired, blue-black 2 to brown ocher
 3 slip, polished, raised decoration on body
 and neck, incised decoration on handle,
 handmade; Cypriote".
- Megiddo, T.1145B, :417B, Flate 50:12, "Fine ware, some minute light grits, blue-black 3 core, blue-black 2 to burnt umber 1 slip, polished, raised decoration, handmade; Cypriote".
- 7.) Bowl Hazor, Cistern 7021, #E4285, Flate CXXXV:19, "Grey-buff levigated well fired clay, red burnished int. and ext. slip".
- 8.) Bowl Hazor, Cistern 7021, #E4272, Flate CXXXV:20 "Light brown levigated clay, isolated yellowish grits (L), red-brown irregularly-burnished ext. slip".
- 9.) * Bowl Hazor, Cistern 7021, #E3676, Plate CXXXV:21, Brown levigated well fired clay".
- 10.) Bowl Hazor, Cistern 7021, Plate #F#3#2, Plate CXXXV:24, "Grey-brown levigated clay, brown irregularly burnished slip".
- 11.) Bowl Hazor, Cistern 7021, #E5362, Flate CXXXV:25, "Pink levigated clay, red burnished slip".

PLATE II:A

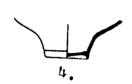
white Slip I:

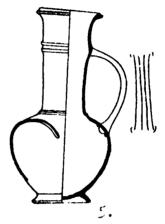


2.

Cypriot Basering I:



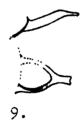






7.





10.



11.

12.



Pottery Type Group B: Megiddo Tombs 77,1145,3005,3015, 3018 and Hazor Cisterns 7021,9024/3****

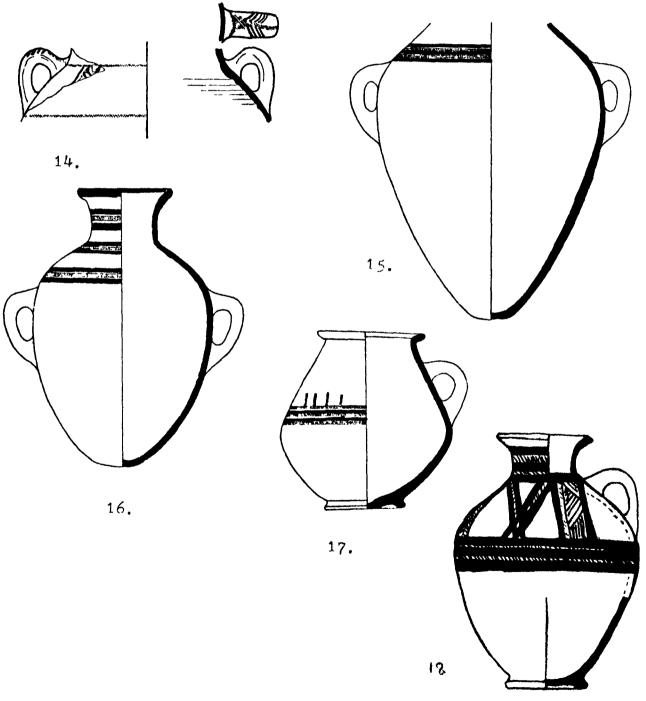
PLATE II:B

Decrease in Cylindrical Juglets:



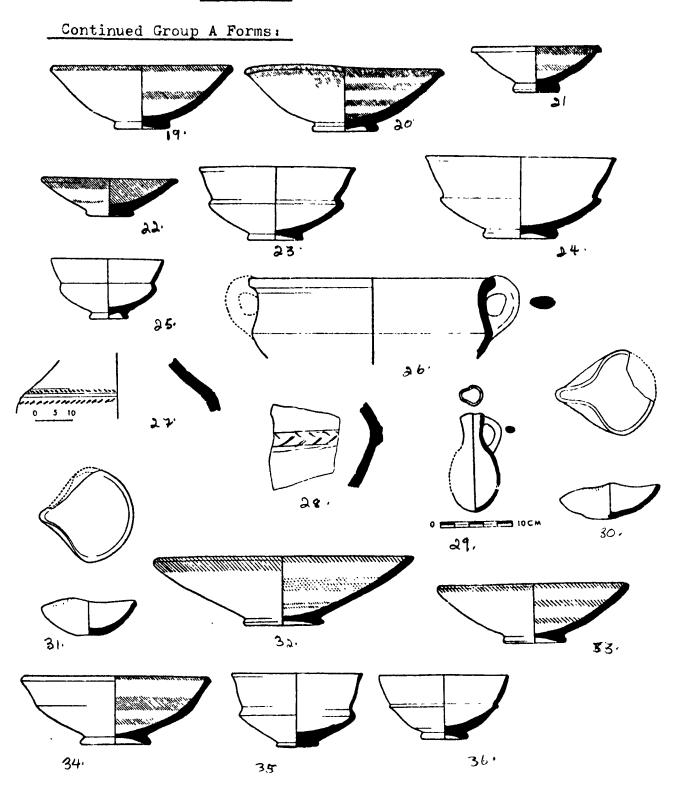
13.

Decrease in Elaborate Bichrome:

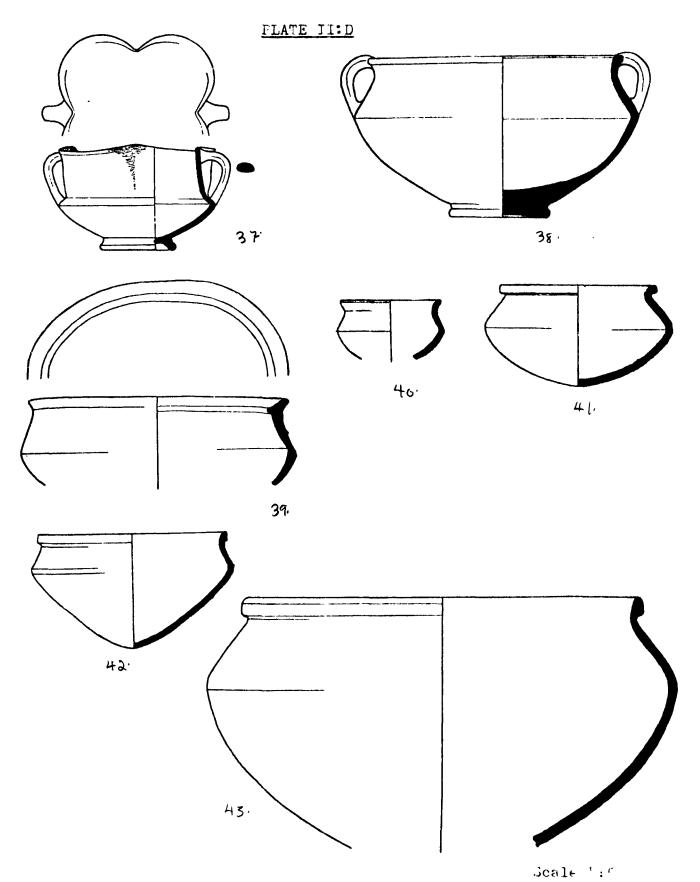


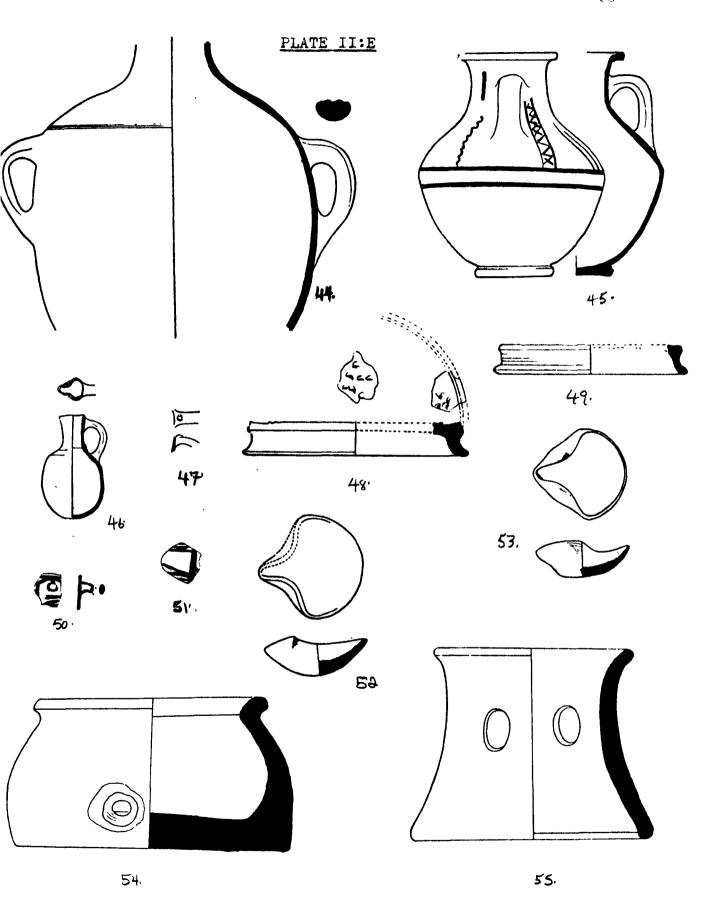
Scale 1:5

PLATE II:C



Scale 1:5





Scale 1.5

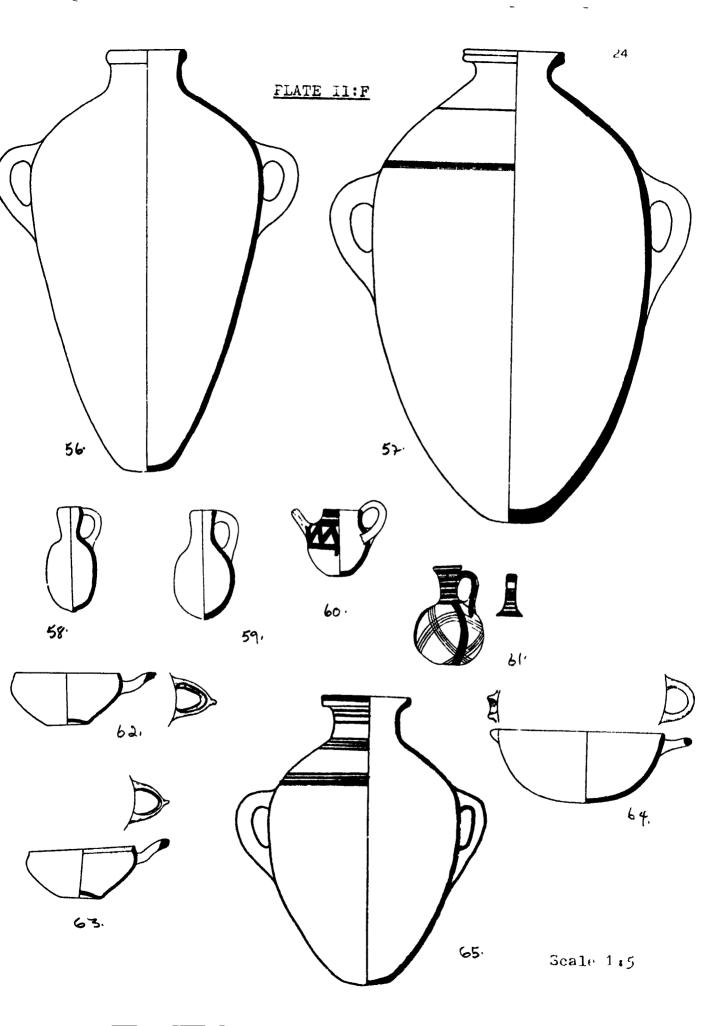
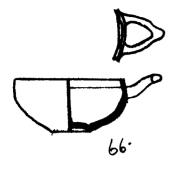
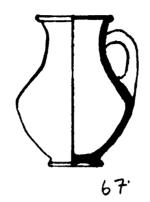


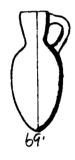
PLATE II:G







98.







70.

Plate 111

specimen available from the Temple, no photograph is shown". Since, on pg. 83, Tufnell lists only these two vessels in the milk bowl collection as White Slip 11, dating 1400-1200 B.C., I have assumed that these are the vessels Kenyon has in mind for Group C.

NOTE: Kenyon specifies as part of Group C the pottery clearly associated with Temple 1, and the pits definitely under Temple 11. The samples chosen for Group C reflect her criteria.

Plate 111

No.	Designation	Source Field No. Plate No. Description
15.)	Lamp	?, ?, Pl.XLVB:188, "Pink ware and pink wash. Other examples come from Pit 211 and Locus 247"
16.)	Lamp	L.247, 6447, Pl.XLVB:189, "Scraped bottom". Another example comes from the D.I. altar.
17.)	Bowl	Pit 258, 7295, Pl.XXXIXB:60, "Burnished outside, with red and black lines, a bowl without flare"
18.)	Milk Bowl	D.I.?,?, Pl.XLIIIB:156, "White Slip II milk bowl, white slip with brown decoration, handmade?"
19.)	Milk Bowl	D.I.?, ?, Pl.XLIIIB:165, "White Slip 11 type, cream slip with brown decoration"
20.)	Dipper Flask	D.I., 7317, Pl.LIIB:294, "Scraped"
21.)	Dipper Flask	D.I., altar, 5311, Pl.LIIB:297
22.)	Dipper Flask	D.I., altar, 2564, Pl.LIIB:298, "Rough surface"
Tufn	ell, 0.,	The "D. L., altar" and other proveniences listed in Plate Ill are from Temple 1 at Lachish.
**	as LB 1-11, 209, is nei Temple 1 lo	The Fosse Temple, pg. 83. Bowl 3167 is dated ca. 1600-1200 B.C. Its provenience, Locus ther one of the pits under Temple 11, nor a cus. Other examples of this vessel are cited A. however, from the D.I. altar, and Pit 207.

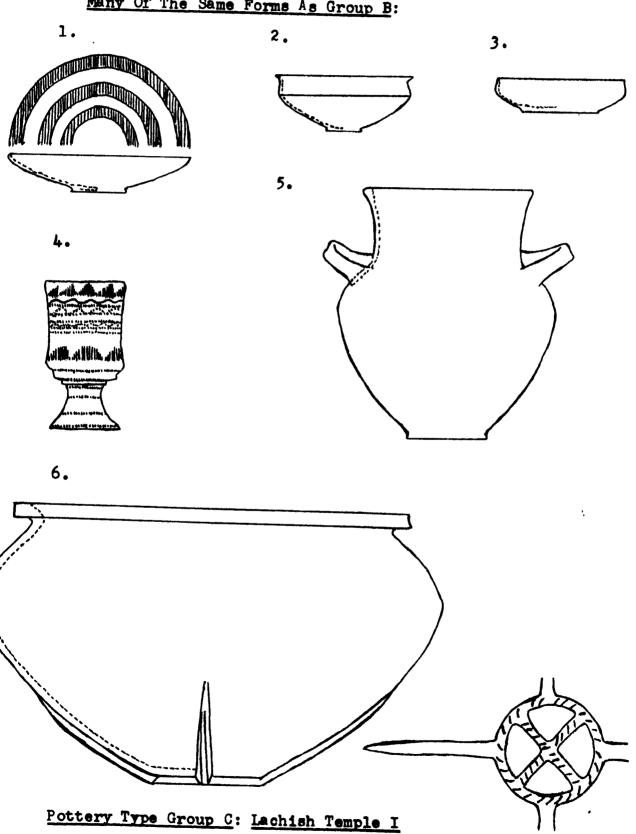
- No elaborate Bichrome bowls were found in the sanctuary of Temple 1, and very few examples of Linear Bichrome were found there.
- Bowls #18 and #19, are listed as found within the sanctuary of Temple 1(pg. 83 of <u>L. 11</u>), but in the corresponding pottery plates no locus or field numbers are given. On pg. 77, <u>L. 11</u>, the lack of a photograph for Bowl #18 is explained 水本水水 "In cases where a pot has been typed to a form from a locus other than the Temple or its pits, and there is no complete

on Pl. XLIVA, however, from the D.I. altar, and Pit 207.

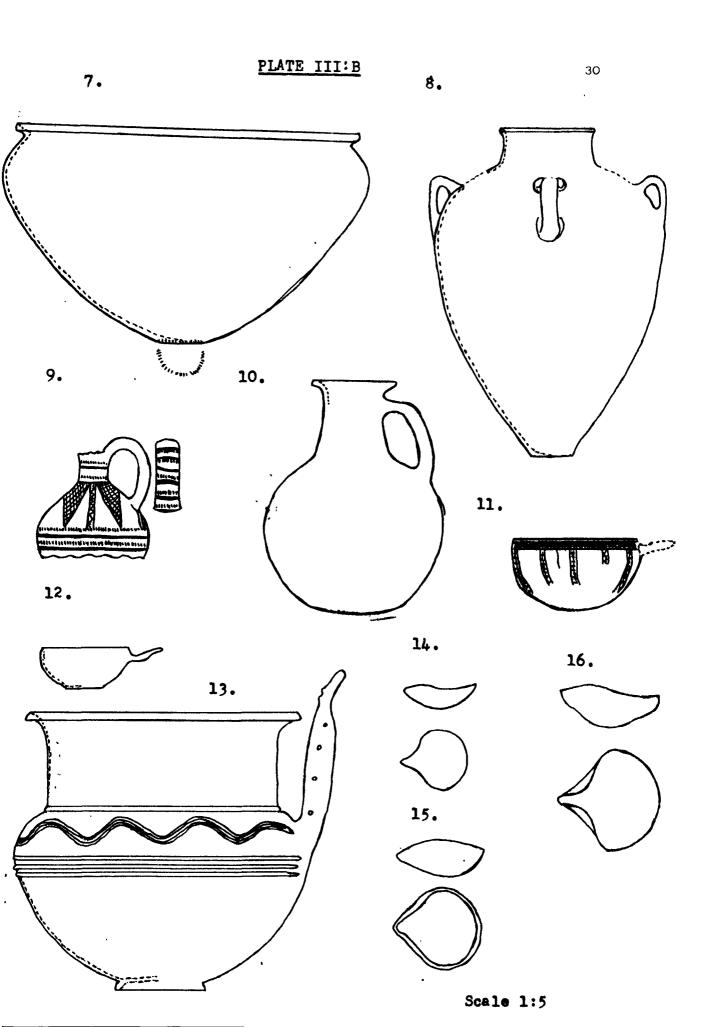
Plate 111 : Pottery Type Group C

No.	Designation	n Source Field No. Plate No. Description
1.)	Bowl	D.I. altar, 7 7311, Pl.XXXVII:I, "Bowl without flare, burnished inside, with red lines"
2.)	Bowl	D.1., 6470, P1.XLIB:105, "Flared Bowl"
3.)	Bowl	Pit 207, 7330, Pl.XLIIB:133, "In-curving bowl"
4.)	Goblet	D.I. altar, 5300, Pl.XLVIIB:223, "Bowl and stand made separately"
5.)	Krater	D.I. altar, 5296, Pl.XLIXB:258
6.)	Cooking Pot	Pit 253, 7017, Pl.LVB:352 "Raised ribs and applied rope decoration on base coil made? Wheel finish"
7.)	Cooking Pot	Pit 207, 7327, Pl.LVB:357, "Incised strokes on base"
8.)	Water Jar	D.I.,L.241, 7331, Pl.LVllB:384, "Pink pocked surface4 handles set in floor"
9.)	Jug	Pit 207, 7031, Pl.LIB:272, "traces burnishing, red and black"
10.)	Jug	Pit 211, 5285, Pl.LIB:274, "Fine buff grits2 washes, 1st coat brown, 2nd coat grey"
11.)	Milk Bowl	D.I. altar, 7306, Pl.XLIIIB:155, White Slip 1 type, with grey ware, white slip and brown painted decoration.
12.)	Bowl**	L. 209, 4290, Pl.XLIVB:167, Brown ware, brown slip, handmade.
13.)	Bowl	Pit 207, 7314, Pl.XLIVB:170, Ware is thin, grey, brown in parts, grey slip inside with red and brown outside, handmade, ring base added separately, handle applied. This is Basering 1 ware, in a krater-shaped bowl form.
14.)	Lamp	?, ?, Pl.XLVB:184, Brown ware and brown wash. Other examples come from Pit 207.

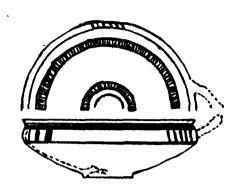
PLATE III: A Many Of The Same Forms As Group B:



Scale 1:5



17.



18.



20.



21.



19.



22.

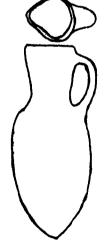


Plate IV

No. Designation Source Field No. Plate No. Description 32.) Milk Bowl L. IV, T.216, 4560, Pl.79:832 Description same as above 33.) Milk Bowl L. IV, T.216, 4512, Pl.79:834 Description same as above

- No typical Late Bronze dippers were found in T.216.
 Only Class D dippers were found, of which Tufnell suggests, in L. IV, pg. 194, that they "represent the dregs of the series; they are found in much the same groups as the dippers of Class C, beginning before the end of Structure 11 and continuing to the last tombs"
- ** No pilgrim flasks were found in T.216, Amiran lists the Hazor flasks as LBIIA, pg. 166, A.P.H.L.
- *** This bottle resembles in form, a Syrian flask.
- **** Yadin states in <u>Hazor 11</u>,pg. 152, that although the handles are inserted through the wall of the vessels, some of the pottery drawings do not show this feature.
- ***** The Hazor imitation Basering jugs fit Tufnell's Class B jugs. T.216 also has only Class B jugs.
- ***** Milk Bowl Tupe 831 is common to all three Fosse temples at Lachish. Types 832 and 834 are found only in T.216.

Plate IV

No.	Designation	on Source Field No. Plate No. Description
17.)	Bilbil	Hazor 11, T.8144, F1076/40, Pl.CXXXVI:10 "Grey-black levigated well-fired clay"
18.)	Bilbil	Hazor 11, T.8144, F1076/79, P1.CXXXVI:11, "Brown levigated well-fired clay"
19.)	Bilbil	Hazor 11, T.8144, F1076/183, Pl.CXXXVI:12, "Black well-fired clay, few black grits(S). Decorated (white)"
20.)	Juglet	L. IV, T.216, 4575, Pl.80:854
21.)	Juglet	L. IV, T.216, 4570, Pl.80:864
22.)	Jug	L. IV, T.216, 4552, Pl.80:846
23.)	Jug	L. IV, T.216, 4461, Pl.80:836
24.)	Bilbil ****	Hazor 11, T.8144, F1076/26a, P1.CXXXVI:3, "Dark grey levigated well-fired clay. Decorated"
25.)	Bilbil	Hazor 11, T.8144, F1076/44, P1.CXXXVI:5, "Black/red levigated well-fired clay. Decorated"
26.)	Mug	Hazor 11, T.8144, F1076/208, Pl.CXXXVI:13, "Red-brown levigated well-fired clay"
27.)	Juglet	Hazor 11, T. 8144, F1076/353, Pl.CXXXVIII:5, "Grey clay, brown and white grit (L&S)"
28.)	Jug	Hazor 11, T.8144, F1076/199, Pl.CXXXIV:1, "Grey-yellow clay, white grit (L&S)"
29.)	Jug	L. IV, T.216, 4495, Pl.81:886, "Pink, M., pink slip, vertical burnish on neck, horizontal on body, zigzags black paint between vertical lines red paint on body. Ridge at base of neck, handle below rim to shoulder, concave foot base"
30.)	Milk Bowl	Hazorll, T.8144, F1076/18, Pl.CXXXVI:I, "Light grey levigated clay, whitish slip. Decorated"
31.)	Milk Bowl	L. IV, T.216, 4561, Pl.79:831, "White Slip II milk bowl. Pink, grey core, H., white slip all over, dec. dark-brown paint out., hand-made. Wishbone handle, round base"

Plate IV : Pottery Type Group D

No.	Designation	on Source F	ield No. Pl	late No.	Description
1.)	Juglet	Hazor 11, T. "Yellow-white	8144, Flor levigated of	76/171, clay, kni	Pl.CXXXI:I, feshaved"
2.)	Juglet	Hazor 11, T. "Brown clay,	8144, Flower and w	76/410, white gri	Pl.CXXXI:4, t (L&S)"
3.)	Juglet	Hazor 11, T. "Grey-brown and quartz(S	clay, grey o	76/109, core, whi	Pl.CXXX1:9, te (L&S)
4.)	Juglet	Hazor 11,T. "Light brown	8144, F107 clay, brown	76/41, n and whi	Pl.CXXX1:21, te grit(S)"
5.)	Dipper*	L.IV.T.216, brown slip. base"	4562, Pl.7 Handle, rin	78:798, n to shou	"Brown, M., lder, round
6.)	Dipper	L. IV.T.216, buff slip, re	4544, Pl.7 ound base"	78:799,	"Pink, M.,
7.)	Pilgrim Flask **	Hazor 11, T. "Reddish clay white slip"	8144, F107 y, black and	76/178, I white g	Pl.CXXX:8, rit(S),
8.)	Pilgrim Flask	Hazor 11, T.8	144, Ploy y, white gri	76/177, Lt(S), wh	Pl.CXXX:9, aitish slip"
9.)	Pilgrim Flask	Hazor 11, T.8. Black clay, light grey s.	144, F107 brown core, lip. Decore	76/175, , white gated"	Pl.CXXX:10, crit(S),
10.)	Pilgrim Flask	Hazor 11, T.8. "Light grey Decorated"	144, FlO clay, few bi	76/176, Lack grit	Pl.CXXX:13 s(S).
11.)	Pilgrim	Hazor 11, T.8	144, FlO's white grit	76/25, (L&S). I	Pl.CXXX:14, Decorated
12.)	Bowl	L. IV, T.216,	4542,	P1.81:86	8
13.)	Mug	L. IV, T.216,	4608,	P1.80:85	60
14.)	Juglet	L. IV, T.216,	4612,	Pl.80:85	57
15.)	Jug	L. IV, T.216,	4476,	Pl.80:83	8
16.)	Bottle***	L. IV, T.216,	4591,	Pl.80:84	.8

PLATE IV: A Late Bronze juglets: Rounded Base Juglets: Pilgrim Flasks: 8. Basering I Ware: 12.

Pottery Type Group D: Hazor T.8144-5. Lachish T.216

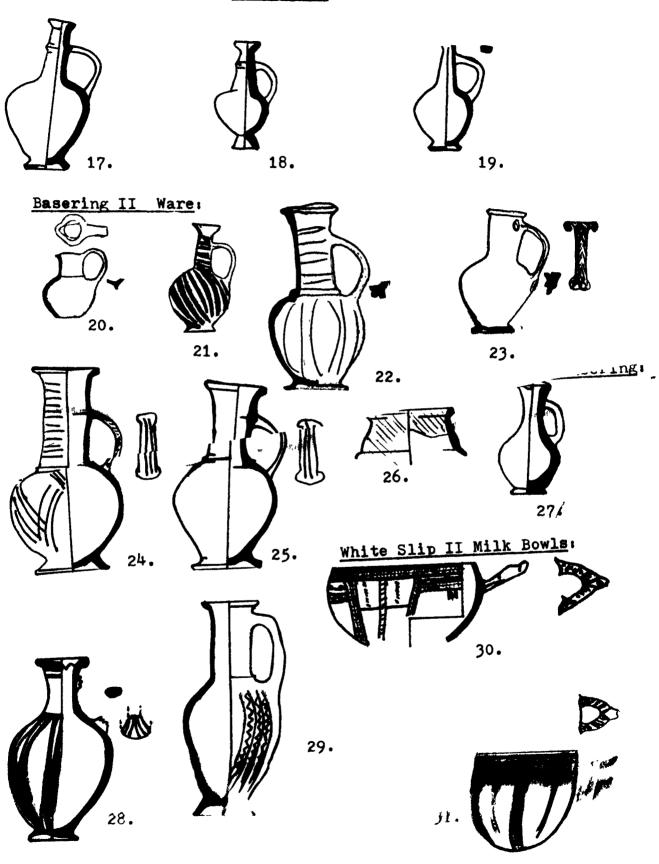
15.

13.

Scale 1:5

16.

PLATE IV:B



Scale 1:5

PLATE IV: C

32.



33.



No. Designation Source Field No. Plate No. Description

- 46.) Spouted L.IV,T.1003, 3924, Pl.82:938, "Coarse brown, H., Inserted spout, loop handle, round base".
- 47.) Lamp L.IV, T.1003, 3930, P1.73:659(C)
- 48.) Lamp <u>L.IV</u>, T.1003, 1347, Pl.73:L.II:193(D)
- 49.) Lamp <u>L.IV</u>, T.1003, 3252, Pl.73:L.II:195(E)
- 50.) Lamp L.II, 3265, Pl.XLVB:194
- * The deposits of Tomb 911 A 1, B, and C have been used to compile these plates.
- ** The sharply cut rim of these chalices is characteristic of the LBIIB period, according to Amiran, A.P.H.L., pg. 129 ff.
- *** The small letters in brackets at the end of the plate numbers for the lamps from L.IV, indicate Tufnell's classes of lamps for the period.
- **** Milk Bowl #38 and Juglet #41 are not shown on Plate V & because they appear elsewhere in this type series.

No.	Designation	Source Field No. Plate No. Description
33.)	Milk Bowl	M.T., T.911 A 1, P3056, P1.30:3, "Fine ware, many minute mixed grits, blue-black 2 core, permanent brown 3 to brown ocher 3 surface, irregular burnishing, roman sepia 2 decoration, handmade; Cypriote"
34.)	Juglet	L.IV.T.1003, 3357, Pl.79:820, "White-shaved dipper, Pink, S., buff slip, shaved, handmade. Handles inserted, pointed base."
35.)	Teapot	L.IV, T.1003, 3332, P1.79:825, "White painted V 'teapot'. Buff, M., shaved, handmade. Horizontal lines, black paint on neck, vertical on body. Spout and handle inserted, flat base"
36.)	Jug	L.IV, T.1003, 3912, P1.79:830, "Bucchero jug. Brown, grey core, dark-grey slip fired red, fluted shiny surface, hand-made. Ribbon handle, ring base".
37.)	Milk Bowl	L.IV, T.1003, 4561, Pl.79:831, "White slip ll milk bowl. Pink, Grey core, H., white slip all over, dec. dark-brown paint out., hand-made. Wishbone handle, round base"
38.)	Milk Bowl	L.11, 3311, Pl.XLIIIB:161, "red black core, cream slip, brown decoration"
39.)	Milk Bowl	L.11, 4512, Pl.XLIIIB:166
40.)	Jug	L.IV, T.1033, 4567, Pl.80:844 "Basering ll"
41.)	Juglet	L.IV, T.1003, 4612, Pl.80:857 "Basering 1"
42.)	Juglet	<u>L.IV</u> , T.1003, 3922, Pl.80:866 "Basering 11"
43.)	Bowl	<u>L.IV</u> , T.0003, 3942, Pl.81:869 "Basering 1"
44.)	Lentoid Flask	L.IV, T.1003, 3338, Pl.81:873 "Baseringll"
45.)	Bowl .	L.IV, T.1003, 3964, Pl.82:910, "Coarse, pink, M., cream slip out. Concentric circles dark red paint on round base. Clumsy imitation wishbone handleimitation white slip"

No.	Designatio	n Source Field No. Plate No. Description
16.)	Pithos	L.IV, T.1003, 3966, Pl.85:974 "Coarse brown, M., buff slip. Lines red paint on neck and body. 2 handles below shoulder, round base"
17.)	Jug	M.T., T.911 A 1, P3066, P1.30:6
18.)	Jug	M.T., T.911 A 1, P3077, P1.30:10
19.)	Jug	M.T., T.911 A 1, P3051, P1.30:11 "Intact, brown ocher 2 surface, light red 2 decoration"
20.)	Jug	<u>L.IV</u> , T.1003, 3967, Pl.74:684
21.)	Jug	L.IV, T.1003, 3906, Pl.74:685
22.)	Jug	TIV, T.1003, 3957, Pl.74:687
23.)	Jug	L.IV, T.1003, 3971, Pl.75:692, "Brown, S., buff slip, handle below rim to shoulder, button base"
24.)	Jug	L.IV, T.1003, 3945, Pl.75:703, "Coarse brown, M., buff slip. Traces red and white paint on body and ribbon handle, neck to shoulder, flattened base"
25.)	Jug	L.IV, T. 1003, 3430, Pl.76:715
26.)	Jug	<u>L.II</u> , 7305, Pl.LIB:281
27.)	Jug	<u>L.11</u> , 3323, Pl.LIB:279
28.)	Juglet	M.T., T.911 A 1, P3092, Pl.30:7, "Intact, many minute dark grits, poorly made, naples yellow 2 surface, vertically shaved"
29.)	Juglet	M.T., T.911 A 1, P3149, P1.30:9
30.)	Juglet	<u>L.IV</u> ,T.1003, 3695, Pl.78:797
31.)	Juglet	<u>L.II</u> , 4254, Pl.LIIB:307
32.)	Pilgrim Flask	M.T., T.911 A 1, P3070, P1.30:5, "Many minute mixed grits, well fired, blue-black 3 core, burnt umber 3 surface, spaced irregular burnishing, light red 2 decoration, handmade"

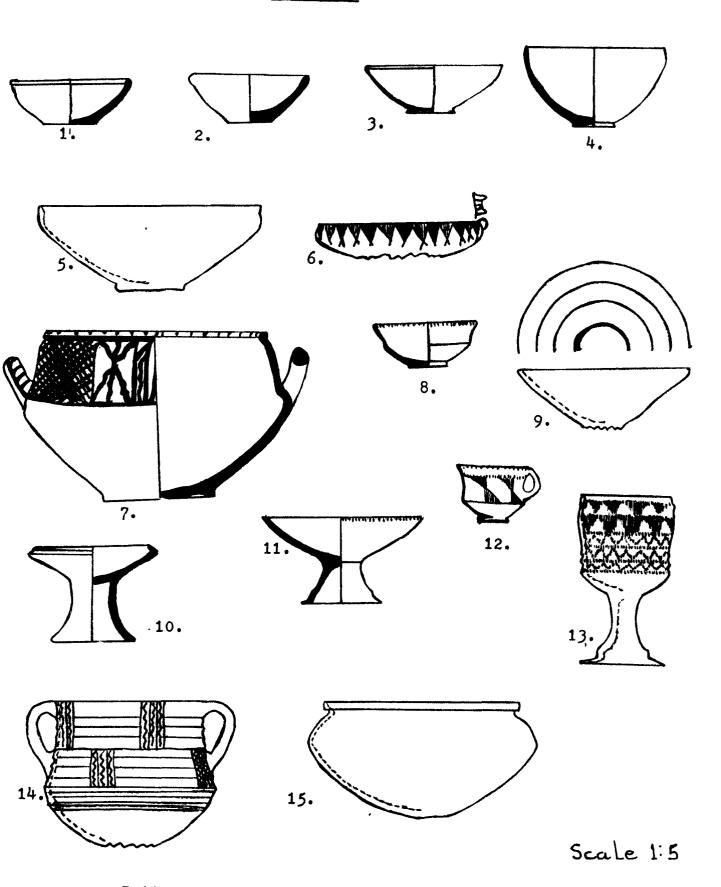
Plate V: Pottery Type Group E

No. Designation Source Field No. Plate No. Description

- 1.) Bowl*

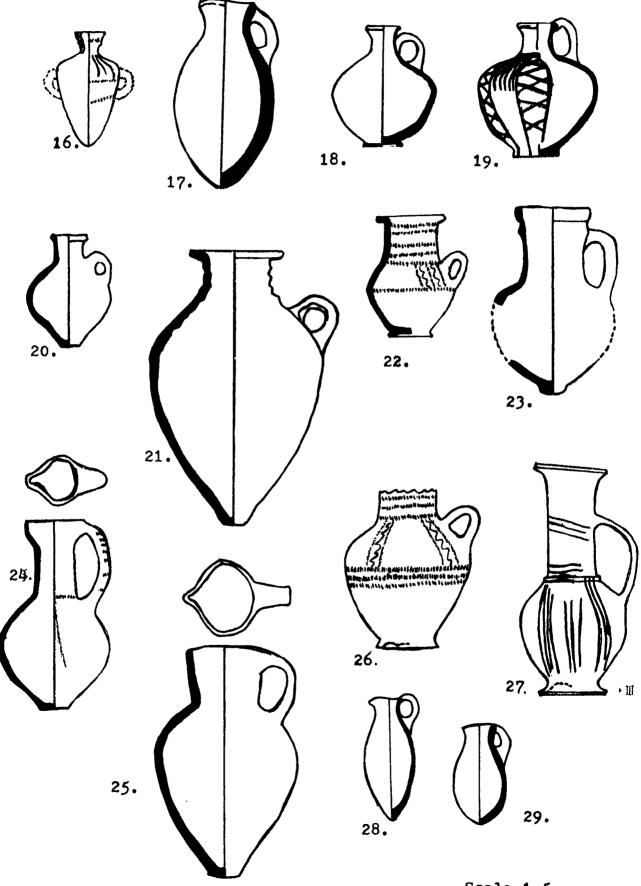
 M.T.,T.911 A 1, P3052, P1.30:1, "Complete, many large light grits, poorly made, naples yellow 2 to burnt umber 3 surface, base discoloured by oxidation from 'bronze' offering-stand"
- 2.) Bowl M.T., T. 911 A 1, P3 076, P1.30:2
- 3.) Bowl L.IV, T.1003, 2461, Pl.70:583 "Pink, S., concave disk base"
- 4.) Bowl L.IV, T.1003, 3960, Pl.70:606
- 5.) Bowl L.11, 4155, Pl.XLIB:110
- 6.) Bowl <u>L.11</u>, 7301, Pl.XLIIIB:160
- 7.) Carinated M.T., T.911 B, P3084, P1.31:4, "Complete, Bowl some large mixed grits, burnt umber 1 core, brown ocher 2 surface, spaced horizontal burnishing, indian red 2 decoration"
- 8.) Carinated L.IV, T.1003, 3903, Pl.69:570, "Pink, M., Bowl dark-red paint on rim, burnt. Ring base"
- 9.) Bowl on L.ll, 3270, Pl.XLVIB:209, "red circles... Stand bowl and stand made separately"
- 10.) Chalice** M.T., T.911 C, P3116, P1.31:7, "Some large mixed grits, brown ocher 3"
- 11.) Chalice L.IV, T.1003, 3959, Pl.72:637 "Brown, grey core, M., pink slip in, and burnish. Red line round rim. Hollow foot attached"
- 12.) Goblet L.IV, T.1003, 3958, Pl.84:960, "Coarse brown, M., buff slip. Lines dark-red paint on and below rim, triangles to carination, loop handle, ring base"
- 13.) Goblet L.ll, 4336, Pl.XLVIIB:226, "burnish, red decoration"
- 14.) Krater L.11, 3043, Pl.XLVIIIB:241, "burnished, red and black decoration"
- 15.) Cook Pot L.ll, 2558, Pl.LVIB:370, "Coarse brown, black core, shell and grits"

PLATE V:A



Pottery Type Group E: Megiddo T.911, Lachish T.1003, & the latest pottery of Temple II

PLATE V:B



Scale 1:5

PLATE V:C

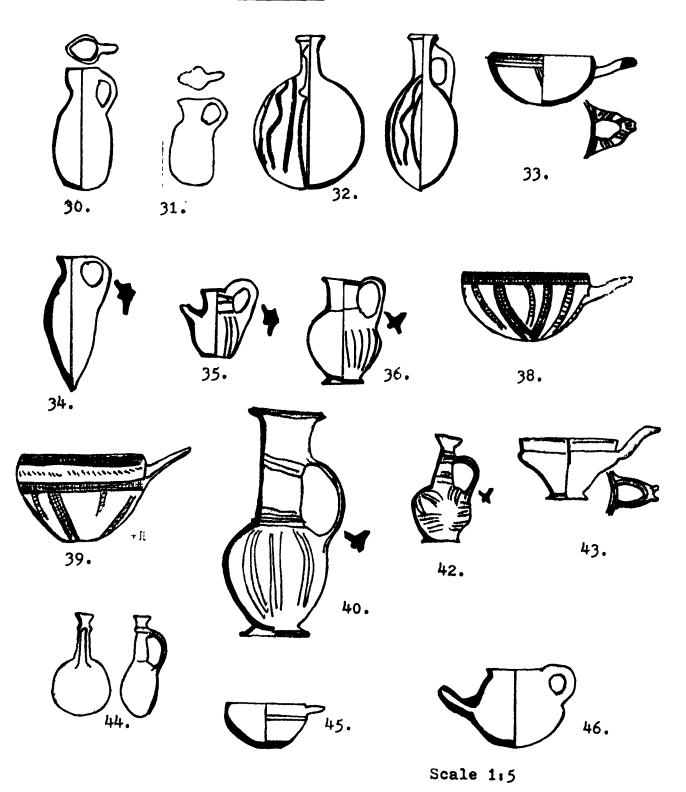


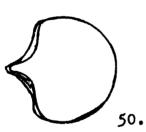
PLATE V:D











- No. Designation Source Field No. Plate No. Description
- 71.) Miniature Hazor 1,C.9024/1, D13487, Pl.CXXVII:14, Bowl "Grey-buff clay, grey grit(S)"
- * The number "9024/1" refers to Stratum 1 of Cistern 9024.
- ** This large jar is typical of the Late Bronze 11 period. See. M.T., pg. 157.
- *** Guy states that this jug follows the pattern of deterioration of the 'tree of life' motif common in the early Late Bronze Age, M.T., pg. 156-157.
- NOTE: The pottery of the Tell el-Farah S. excavation reports was not available for inclusion in this ceramic group. Furthermore, not all of this pottery suggested by Kenyon for Group F is published, and some is schematically rendered.

No.	Designation	on Source	Field No.	Plate No.	Description
59.)	Bowl	Hazor 1, V. "Light bro much white	wn well-fir	ls599, Pl.C ed clay, gr	XXV:19, ey core,
60.)	Chalice	Hazor 1,C. "Pinkish c int. and e	9024/1, D] lay, black xt. slip"	13499, Pl.0 grit,(S), r	XXV:21, ed burnished
61.)	Krater	Hazor 1,C. "Light bro brown grit	9024/1, DI wn clay, gr (L&S), smoo	13510, Pl.O rey core, whothed"	XXVII:11, aite and
62.)	Bow 1	Hazor 1,C. "Light bro core, blac	9024/1, DI wn well-fir k grit(L)"	13588, Pl.0 red cl ay, th	XXVII:12, ain grey
63.)	Store Jar	Hazor 1,C. "Light brogrit(S), s	9024/1, Di wn clay gre moothed"	14100, Pl.0 ey core, bla	EXXVIII:10, ack and white
64.)	Store Jar	"Brown-pin	9024/1, DI k, well-fir rated (dark	L4103, Pl.C red clay, br c brown)"	XXIX:1, rown grit,
65.)	Store Jar	"Pinkish w white grit	ell-fired o	L4105, Pl.0 clay, thick red burnish white)"	grey core.
66.)	Stand	Hazor 1,C. Finkish control White grit	lay, dark g	13503, Pl.d grey core, b	XXX:13, black and
67.)	Jug	brown grit	(S), brown-	14019, Pl.0 rey core, wh -pink vertic nding over r	ally burn-
68.)	Jug	Hazor 1,C. WYellowish	9024/1, Di clay, blac	13505, Pl.C ck and white	CXXVIII:5, e grit(L)"
69.)	Juglet	Hazor 1,C. Pink-brow	9024/1, Din clay, much ely finishe	l3593, Pl.C ch white(L), ed"	CXXVIII:6, black
70.}	Jar (Strainer	Hazor 1,0 Haight brand grey	.9024/1, leown well-figrit(L&S)"	D13611, Pl. ired clay, n	CXXVII:13, nuch white

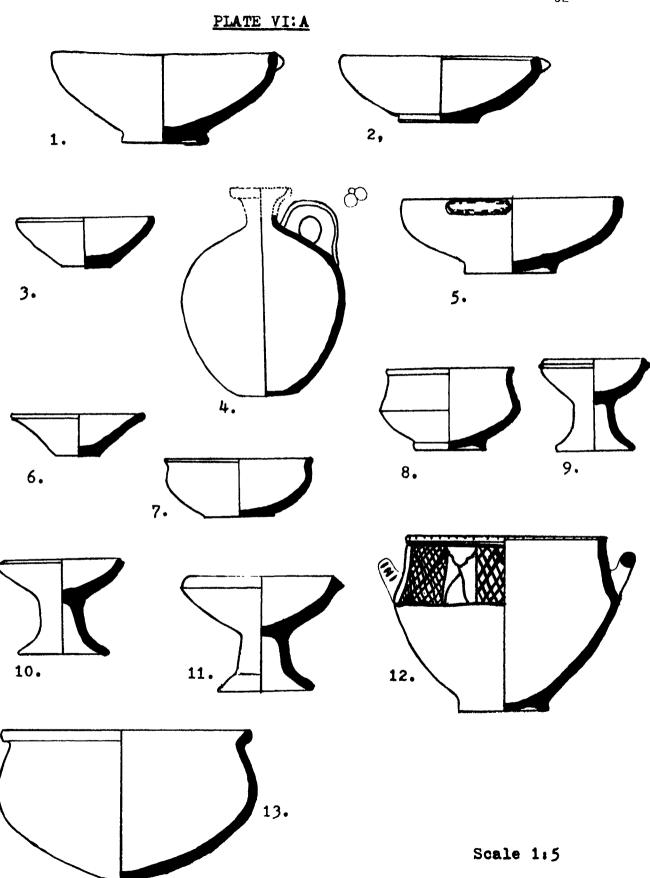
No.	Designation	Source Field No. Plate No. Description
45.)	Jug	M.T., T.989 B 1, P3306, P1.19:8, "Spaced horizontal burnishing"
46.)	Bowl	M.T., T. 912 B, P3513, P1.34:7
47.)	Bowl	M.T., T.912 B, P3516, P1.34:9, "Intact many light grits, brown other 3 surface, blue-black 3 decoration superimposed on indian red 2; Mycenaean"
48.)	Bowl	M.T., T. 912 B, P3514, P1.34:8
49.)	'Cup & Saucer'	M.T., T.912 D, P3559, P1.35:24, "Many mixed grits, poorly made, blue-black 3 core, brown ocher 1 surface"
50.)	'Cup & Saucer'	M.T., T. 989 C 1, P3175, P1.19:16
51.)	Chalice	<pre>Hazor 1.C.9024/1, D13529, P1.CXXV:22, "Whitish clay, white(L) and grey(S) grits"</pre>
52.)	Bowl	<pre>Hazor l.c.9024/l, D13528, Pl.CXXVI:31, "Grey-buff clay, grey core, white(L), dark(S) grit"</pre>
53.)	Bowl	Hazor 1.C.9024/1, D13541, P1.CXXV:20, "Yellowish clay, light grey core, white and grey grit(S), red int. slip"
54.)	Bowl	Hazor 1,C.9024/1, D13536, P1.CXXV:3 "Orange clay, white grit(L)"
55.)	Bowl	Hazor 1.C.9024/1, D13469, P1.CXXV:9, "Greenish, well-fired clay, much black and white grit(L)"
56.)	Bowl	Hazor 1,C.9024/1, D13495, P1.CXXVI:2, "Grey-buff clay, white(L), black and white(S) grit"
57.)	Bowl.	Hazor 1,C.9024/1, D13604, P1.CXXVI:15, "Grey-white clay, white(L), grey(S), grit, credely finished"
58.)	Bowl ·	Hazor 1,C.9024/1, D13497, P1.CXXVI:23, "Pink-greyish clay, white and dark grit(L)"

No.	Designati	on Source Field No. Plate No. Description
31.)	Jug	M.T., T.877 C 1, P3007, P1.14:21, "Fine ware, some minute light grits, well fired, blue-black 3 core, brown ocher 1 surface, traces of darker wash, vertically ribbed decoration, handmade, Cypriote bucchero ware"
32.)	Jug	M.T., T. 989 A 1, P3150, P1.16:17, "Cypriote bucchero ware"
33•)	Milk Bowl	M.T., T.989 C 1, P3310, P1.19:15 "Some minute light grits, burnt umber 1 core, brown ocher 3 slip, close horizontal burnishing, roman sepia 2 decoration, handmade; Cypriote"
34.)	Jug	M.T., T.989 C 1, P3195, P1.19:25, "Some minute mixed grits, blue-black 3 core, chiefly burnt umber 1 surface, naples yellow 3 decoration, handmade; Cypriote bucchero ware"
35.)	Milk Bowl	M.T., T.912 D, P3498, P1.35:25, "Fine ware, few minute light grits, well made, well fired, warm sepia 3 core, brown ocher 2 surface, hand-made; Cypriote"
36.)	Stirrup Cup	M.T., T.912 B, P3520, P1.34:21, "Fine ware, well made, brown ocher 2, traces of horizontal burnishing, indian red 2 decoration; Mycenaean"
37.)	Stirrup Cup	M.T., T. 912 B, P3456, P1.34:22, "Mycenaean"
38.)	Stirrup Cup	M.T., T.877 B 1, P3005, Pl.14:7, "Mycenaean"
39.)	Jar	M.T., T.877 B 1, P2952, P1.14:5, "Intact many light grits, well made, well fired, brown ocher 3 surface, indian red 3 decoration"
¿O.)	Jar	M.T., J.977 A 1, P2985, P1.12:22
1.)	Jar	M.T., T. 912 B, P3517, P1.34:23
,2.)	Jar	M.T., T.912 D, P3467, P1.35:21
3.)	Jug	M.T., T.877 A 1, P2911, P1.12:21, "Brown ocher 2, indian red 3 decoration"
		M.T., T.877 B 1, P2980, Pl.14:1 "Traces of close vertical burnishing"

No.	Designati	on Source	Field No.	Plate No.	Description
17.)	Jar**	M.T., T.989 grits, chi 2 surface	A l, P33 efly blue-	38, Pl.18:3 black 3 core	, "Many mixed , brown ocher
18.)	Jar	M.T., T. 989 ocher 1, i	A 1, P33 ndian red	00, Pl.18:1 decoration	"Brown
19.)	Stand	M.T., T.912 3 core, na	D, P3487 ples yello	, Pl.35;20, w 2 surface	"Blue-black
20.)	Jug	M.T., T. 989 ocher 2"	A 1, P33	68, Pl.16:2	O, "Brown
21.)	Jug	M.T., T. 989	A 1, P32	06, Pl.16:2	1
22.)	Jug	M.T., T.989	A 1, P33	73, Pl.17:4	
23.)	Jug	M.T., T.989	C 1, P33	11, Pl.19:1	.9
24.)	Jug	many mixed	grits, we	80, Pl.19:2 ell fired, br 2 decoration	1, "Intact, own ocher 2
25.)	Bowl	many light	grits, br	53, Pl.32:2 cown ocher 3 cion, contain	surface, faded
26.)	Jug	M.T., T.989	A 1, P.3	323, Pl.16:	19 "Badly
27.)	Pilgrim Flask	grits, poo	rlv made.	well fired.	, "Many light blue-black 2 ian red 3 decor-
28.)	Pilgrim Flask	M.T., T.912	B, P3509	P1.34:14	
29.)	Pilgrim Flask	M.T., T.912 many light traces of spiral dec	close burn	., Pl.34:15 rown ocher 2 rishing, indi	"Intact, surface, an red 3
30.)	Pilgrim Flask	M.T., T.912	B, P3566	5, P1.34:16	

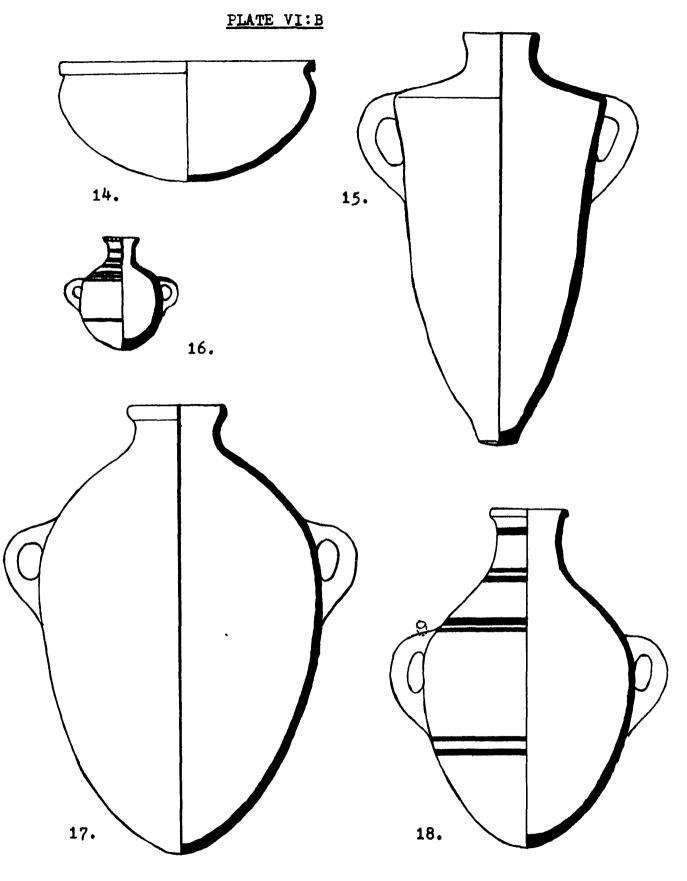
Plate VI : Pottery Type Group F

No.	Designation	on Source Field No. Plate No. Description
1.)	Bowl	M.T., T.989 A 1, P3205, P1.15:14, "Many light grits, blue-black 3 core, brown ocher 2 surface, thumb handle"
2.)	Bowl	M.T., T.989 A 1, P3301, P1.15:15, "Many large light grits, blue-black 3 core, burnt umber 3 surface, thumb handle"
3.)	Bowl	M.T., T.912 A 1, P3446, P1.32:17, "Many large, light grits, blue-black 2 core, burnt umber 3 surface"
4.)	Bowl	M.T., T.912 A 1, P3427, P1.31:20
5.)	Bowl	M.T., T.912 A 1, P3423, P1.32:21
6.)	Bowl	M.T., T.912 D, P3463, Pl.36:2 "Well fired"
7.)	Bowl	M.T., T.912 D, P3468, P1.36:6
8.)	Carinated Bowl	M.T., T. 989 A 1, P3200, Pl.16:5, "Brown ocher 2"
9.)	Chalice	M.T., T.989 A 1, P3376, P1.16:9 "Few minute mixed grits, roman sepia 3 core, brown ocher 2 surface"
10.)	Chalice	M.T., T. 989 A 1, P3296, P1.16:10
11.)	Chalice	M.T., T. 912 B, P3521, P1.34:12
12.)	Krater	M.T., T.877 B 1, P2956, P1.13:24 "Complete, many lightgrits, well made, well fired, brown ocher 3 surface, indian red 3 decorated"
13.)	Cook Pot	M.T., T.989 A 1, P3374, P1.16:7, "Some minute mixed grits, roman sepic 2 core, burnt umber 1 surface"
14.)	Cook Pot	M.T., T.912 D, P3554, P1.36:8
15.)	Store Jar	M.T., T. 989 A 1, P3160, P1.17:14 "Well fired, burnt umber 2 core, naples yellow 3 surface"
16.)	Jar	M.T., T.877 A 1, P2904, Pl.12:23, "Intact, well fired, naples yellow 2 surface, decoration faded to vandyke brown 3"

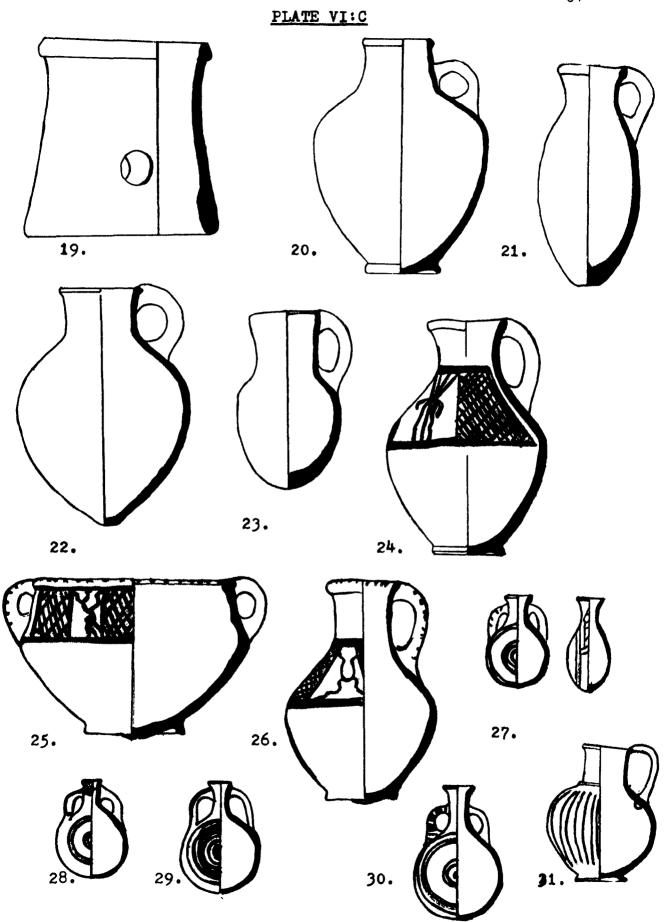


Hazor Cistern 9024/I *

Pottery Type Group F: Megiddo Tombs 877, 912, 989



Scale 1:5



Scale 1:5

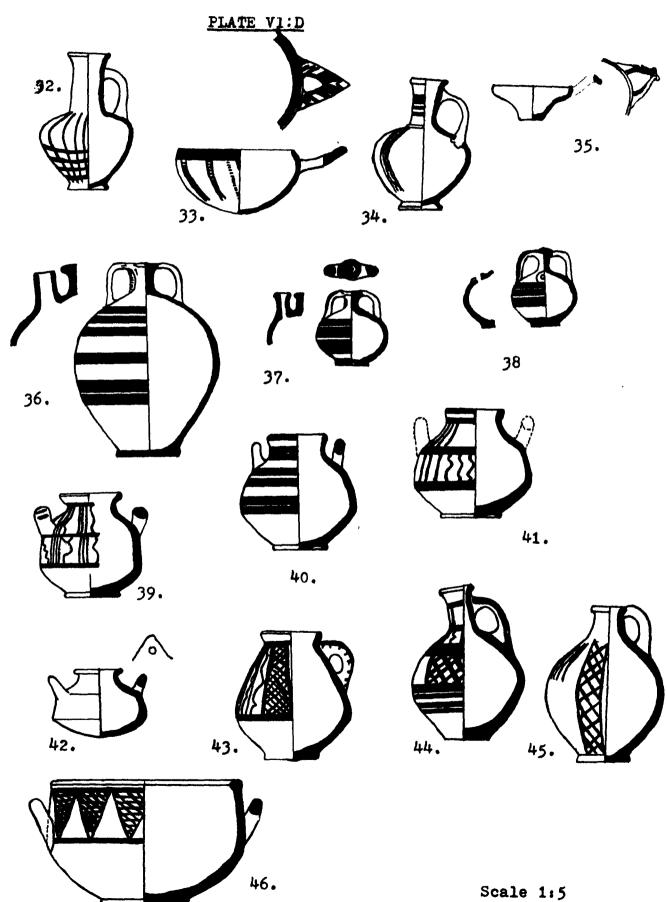
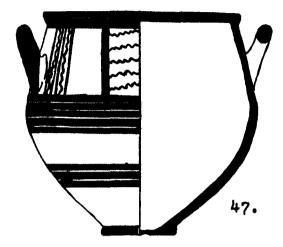
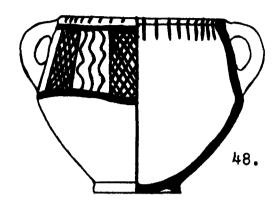
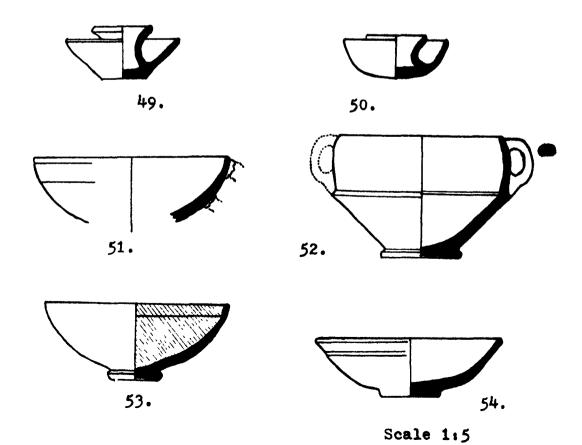
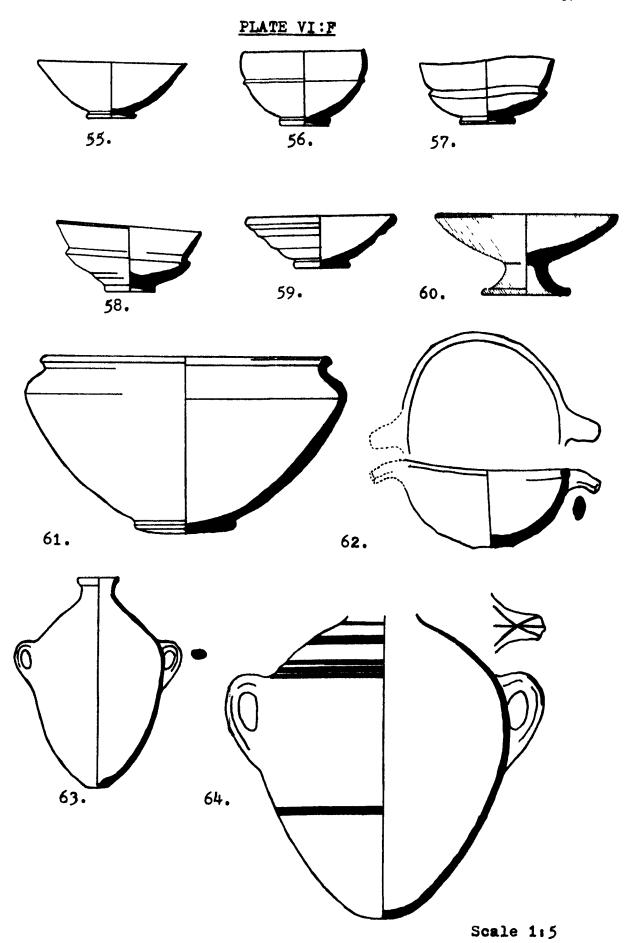


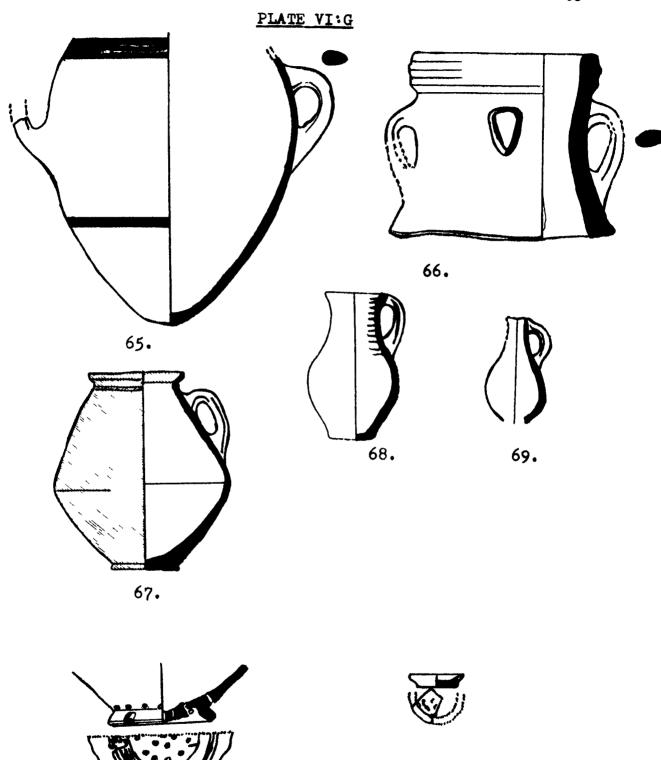
PLATE VI:E











71.

70.

Scale 1:5

Group A represents the earliest part of the Late Bronze Age. The pottery includes continuing Middle Bronze forms but is distinguished by a number of new forms. A date separating Group A from Group B is not given, although Kenyon supplies the ceramic criteria for dividing the two groups.

The second date is 1482 B.C., the terminal date for Group B. This date is based on evidence from one of the major sites of the Late Bronze Age. Kenyon believes that "the importance of the Megiddo tombs is that there can be shown to be a break at Megiddo following the period of these tombs, covering most of the fifteenth century B.C. The long siege and destruction of Megiddo by Tuthmosis III in 1482 is one of the best documented links of a Palestinian site with fixed chronology ... the break can be fixed at this date. A most valuable point in the dating of pottery groups can thus be suggested." 32

Kenyon considers 1482 B.C. the pivotal date for the ceramic evidence.

Between the dates of Group C and Group D is a fifty-year gap.

She suggests that another ceramic phase exists for this time period but is not presently represented at any excavated site.

Groups E and F cover the Nineteenth Dynasty of Egypt. Kenyon states concerning these groups, "brief mention only is made of subsequent groups to cover the rest of the Late Bronze Age, to indicate the grounds for assigning phases in the history of sites to a later period, and to justify the dates suggested for the groups already described." She has concentrated specifically on the period of the Egyptian Eighteenth Dynasty in her pottery groups site analyses.

Based on the six pottery groups, Kenyon has reviewed Late Bronze occupation levels 34 and their associated pottery at a number of Palestinian sites. Her research has resulted in changes in dating of archaeological phases 35 at some sites. Since such changes have an effect on the chronology of Palestinian history, her criteria for revising dates of archaeological phases are especially important. Any change in the dating of occupational levels is "possible only if a reasonable number of vessels are assigned to phases in the history of a site and are adequately illustrated." 36

Kenyon's examination of Late Bronze sites has yielded a number of conclusions.

Site destructions have convinced her that "events associated with the establishment of the Eighteenth Dynasty in Egypt and the expulsion of the Hyksos ... must have had a tremendous effect on town life in that country."

Her site analyses demonstrate that following the Middle Bronze Age, Lachish, Beth-shemesh, Gezer and Tell el-Farah N. were abandoned. Evidence for Gibeon, Bethel, and Shiloh is slight but she thinks they may have been unoccupied in the early Late Bronze Age. In the south, Tell el-Farah S. probably survived. In the north, Hazor's wealth and prestige diminished but it is likely that it remained inhabited, as were other key towns in the Plain of Esdraelon. However, Kenyon grants "there may have been intervening destructions. This is reasonably certain for Megiddo and Taanach and probably for Beth-shan." 38

Archaeology cannot adequately answer the historical 'why' for the extensive destruction found at the end of the Middle Bronze Age. Several explanations are plausible. If Tell el-Farah S. is actually Sharuhen, the destruction and abandonment of the site may be attributed to an early Palestinian campaign by Amosis I. The occupational breaks observed at towns further north were likely the result of hostilities with the Hyksos displaced from Egypt, or due to a campaign to northern Palestine late in the reign of Amosis I.

Archaeological and literary evidence together suggest conclusions for the important period of Tuthmosis III. ³⁹ Literary sources for his northern campaigns indicate that towns were razed and inhabitants killed, driven away, or taken prisoner. Based on her ceramic groups, levels at Megiddo and Taanach corresponding to the destruction wrought by Tuthmosis III were located. Following his conquest of Palestine and part of Syria, Tuthmosis III apparently established peace, and archaeological evidence generally indicates a new prosperity for the region.

Although the Amarna letters detail the troublesome activities of the Habiru⁴⁰ on the fringes of settled Palestine, Kenyon has not distinguished specific destruction layers which could be tied to this period of the Eighteenth Dynasty.

She concludes finally that most of the known Middle Bronze Age towns prospered once again, by the end of the Eighteenth Dynasty, and that Egyptian influence in Palestine was indirect and commercial rather than political.

The implications of a six-stage theory for the Palestinian Late

Bronze warrants a closer study. Kenyon rephases Late Bronze sites in

accordance with six pottery type groups, and at some sites the dating

of occupational levels has been altered. While her theory is developed through detailed analyses of pottery, stratigraphy, and architecture at some of the sites discussed, her work requires a considerable amount of clarification and amplification.

Chronological changes at key sites like Megiddo, Hazor, Beth-shan, Shechem, Lachish, and Tell el-Ajjul are justified in greater detail than changes at less important or less well known sites. A sense of uneveness in the site analyses is the result. Many of the twenty-two sites named by Kenyon in her essay are not thoroughly discussed, and some sites are simply mentioned as having some bearing on her theory. More investigation of the minor sites is needed to flesh out the six stages of the Late Bronze Age.

The bulk of her analysis is devoted to the Eighteenth Dynasty of Egypt, ca. 1570 -1320 B.C. Kenyon has suggested the direction her theory might follow in her type groups E and F, but both of these groups, as well as the whole period of the Nineteenth Dynasty, need further development.

As previously noted, any chronological changes for Palestinian sites are contingent upon pottery. 41 Kenyon's theory is difficult to evaluate fairly because she has published neither the pottery plates illustrating Groups A to F, nor the plates illustrating and confirming her revision of dates for Late Bronze levels at various sites. Unfortunately, we are not told in the description of the type groups whether the reference is to complete vessels or diagnostic sherds, what comprises a reasonable number of vessels at a given site, and how many vessels were found at the site. Without the pottery plates it is

almost impossible to know whether the tomb caches which make up a major part of the type groups actually provide a full range of forms for a given pottery group.

Kenyon's main methodological point is that "the dating of the stages of occupation ... is almost entirely dependent on pottery". 42 She warns against the use of datable objects, such as royal scarabs, noting that at best these supply a 'terminus post quem.' Since she uses a plaque of Amenophis III in her dating of Group 43 , however, a more detailed statement regarding valid criteria for dating is required.

The actual dates of the six ceramic groups need further explanation as well. As previously mentioned, the conquest of Megiddo in 1482 B.C. is the only fixed date for Eighteenth Dynasty Palestine. At the same time, we are reminded that the dating of the pottery groups remains tentative. This situation raises the questions of flexibility and meaningfulness of dates. The date 1482 B.C. may reflect an historical event but may not precipitate any immediate change in population density, lifestyle, or pottery. Following this reasoning, Kenyon cites 1475-1450 B.C. 44 as the beginning of Group C. One might ask what the dates given indicate, and what the differences among the type groups are, especially since she does not assign a terminal date to Group A and a beginning date to Group B.

A more detailed examination of the six pottery type groups will provide examples of some of the problems in her theory.

Looking first at Group A, one notices the continuation of Middle Bronze Age forms, such as cylindrical juglets. Forms like the 'elaborate' Bichrome are usually taken as distinguishing features of the early Late Bronze, and include many variations on line decoration as well as bird, tree, fish, spoked wheel and diagonal cross motifs. 46 Epstein believes Bichrome ware to be a type of pottery indigenous to Palestine, spreading from the Esdraelon region south. It was apparently inspired by a combination of local Hurrian influence, the local wares of Ras Shamra, and Cypriot pottery. 47 The Group A assemblage comes from Megiddo Tomb 1100, which may be unstratified. 48 Although this tomb context has been questioned it has been used by some scholars because it provides the earliest, best and most complete collection of Palestinian Bichrome ware with other wares in the Late Bronze Age.

Group B has many of the same forms as Group A, which may account for the lack of a specific date beginning the second pottery group. White Slip I ware appears for the first time in Group B and Basering I ware is said to be 'common.' Cypriot cultural and commercial influence must have accelerated rapidly in a short period of time since this particular ware does not appear in Group A. It is possible that Cypriot pottery was made for export. This situation would be difficult to prove but could change the use of the wares for chronological purposes.

Apart from the White Slip I and Cypriot Basering I wares, there appears to be overlapping between the two groups. The distinction between them is mainly a matter of relative numbers of vessels. One would hope for particular forms and styles exclusive to each group as criteria for the groups' dates, but given the variety of foreign

influences in the Late Bronze Age such a hope may be unrealistic. 52

The marked decrease in elaborately decorated Bichrome vessels, with the continuation of linear patterns throughout Group B, indicates a deterioration of the forms which has been noted by Epstein 53 and which may be the main stylistic distinction between Group A and Group B.

Kenyon also sees a marked decrease in the number of remaining Middle Bronze Age cylindrical juglets, which, she states, have disappeared by Group D. It is questionable whether 1482 B.C. arbitrarily ends this form. 54

The Group B collection comes from two Hazor cisterns called Late Bronze I by the excavators. One (#7021) was apparently only used in the Late Bronze Age, or cleaned out thoroughly after earlier use, although built in the Middle Bronze Age. The other cistern (#9024, Stratum III) had one level thought to be clearly Late Bronze I, this period covers both Group A and Group B as well as part of Group C. Further study of the Hazor pottery is needed to ascertain specifically which pottery type group the cistern deposits should belong to. Five tombs from Megiddo form part of this pottery group as well. Several tombs were not completely described in the excavation reports and need clarification, and one of the tombs, (#77), may not have been a sealed locus. Se

Kenyon begins Group C soon after 1482 B.C., ca. 1475-1450 B.C.

In conclusion, ⁵⁹ she has said Megiddo and Taanach were the only

Palestinian towns to experience both destruction and abandonment as
a result of Tuthmosis III's successful military campaigns. Hazor

experienced some deprivation for a short time. Most Palestinian towns

affected by the Egyptian conquest prospered under the foreign rulers. The continuity of pottery forms between Groups B and C thus testifies to the resiliency of the Palestinian towns and the essential continuity of their culture and commerce under Egyptian rule. Kenyon gives as a new characteristic of Group C the "complete absence of bowls with elaborate Bichrome decoration." This characteristic again emphasizes continuity among the first three of her pottery type groups. However, Group C introduces White Slip II milk bowls and the Late Bronze Age dipper juglets with pointed bases. This group of forms is taken from Temple I at Lachish.

The terminus for Group C is suggested as ca. 1400 B.C. This date is based on a plaque of Amenophis III (1417-1379 B.C.). Kenyon stated earlier that this type of datable object could only be used to supply a 'terminus post quem', while she seems to have here suggested the middle of the reign of Amenophis III as a suitable date. Her reasons for this precise date are not given. Using her criteria for dating, the plaque supplies a terminus post for Lachish Temple II of 1417 B.C.

The problem of a final date for Group C stems from the pottery. Megiddo was unoccupied for part of the period of Group C, while the town of Hazor was less prosperous than previously. In southern Palestine Lachish flourished at this time, as is evident from the artifacts found in the vicinity of Temple I, known as the Fosse Temple. Unfortunately, the interpretation of the stratigraphy of the earliest levels of the Fosse Temple is difficult. Taking this problem into account, Kenyon cautions that "only the deposits

undoubtedly associated with the earliest temple have been used, the deposit found on the earliest altar and the pits definitely beneath Temple II and therefore belonging to the lifetime of Temple I."⁶¹ We are not told which loci are referred to here. Further study is necessary to determine which loci are safe, and which pottery is included as part of the Group C collection from Lachish.

Group D begins ca. 1350 B.C, following a period of approximately fifty years which Kenyon sees as distinct from both Groups C and D, but which has no representative pottery. This break probably accounts for the noteworthy differences between the pottery of Group C and Group D. Group D is based on tomb evidence from Hazor and Lachish. She suggests that Lachish Tomb 216 may be somewhat earlier than Hazor Tomb 8144-5, since Basering I ware is still well represented at Lachish. While the Hazor pottery may be more clearly identified with the period of Group D, ca. 1350-1320 B.C., the Lachish collection could have closer affinities to the periods of Group B and Group C. The differences and similarities between the Hazor and Lachish pottery need to be clarified.

Hazor Tomb 8144-5 is especially important for Group D. The excavators indicated no stratigraphic problems and reported a collection of some five hundred vessels in a wide range of forms. 62 This discovery enabled them to "fix firmly its duration from the Amarna period down to the end of the fourteenth century." 63 Most of the pottery excavated belonged to the Mycenaean IIIa period, and of these vessels most were Mycenaean IIIa2. Prof. Furumark examined the collection and agreed with the excavators on a date of ca. 1300

for the end of Stratum Ib. Kenyon and Amiran⁶⁴ also rely heavily on imported wares for their dating of Group D and Late Bronze II, respectively.

Group D, as previously noted, represents a departure from Group C.

Kenyon says most forms shown in Groups A to C do not appear in the

D type group. One of the most remarkable new finds was the Hazor

pilgrim flask, and Basering II vessels were quite common, as well as

imitation Basering jugs.

Continuity between Groups C and D is not limited to the Basering ware. The earlier Lage Bronze dipper juglets with pointed bases were still common, although the style had begun to change to rounded bases in Group D. White Slip II milk bowls, introduced in Group C, were found commonly, and an odd late Bichrome jug appeared in the Hazor tomb group. Given such continuity, one wonders on what basis Kenyon isolated a fifty-year gap ca. 1400-1350 B.C., between Groups C and D? Using Yadin's dating, Hazor Tomb 8144-5 ought to cover the missing pottery type group as well as Group D.

Kenyon accepts Yadin's suggestion that the destruction of Hazor Stratum Ib may have been perpetrated by Sethos I during his campaign to reconquer Palestine. This apparently took place at the beginning of his reign, ca. 1318-1304 B.C. The final date given for Group D is ca. 1320 B.C. Group D could end ca. 1300 B.C. as suggested by Yadin previously.

Group D and the Eighteenth Dynasty of Egypt end at approximately the same time. Kenyon emphasizes the tentative nature of the dates for Groups E and F, which correspond to the Nineteenth Dynasty.

Group E consists of two tombs, one each from Megiddo and Lachish, and the "latest material associated with Lachish Temple II." The chronology and stratigraphy of Temple II is problematic. Kenyon suggests dates ca. 1325-1275 B.C. for Group E but the excavators of Lachish expressed some uncertainty about the date of the second temple in their reports and felt its last period of use could be ca. 1325 B.C. It is similarly unclear what the latest remains associated with Temple II are. The Megiddo tomb chosen (#911), has several rooms. We are not told specifically which chambers Kenyon has in mind, and since she does not mention pottery at all in connection with Group E, this type group requires much more study.

Similar points may be made about Group F. Hazor Cistern #9024, Stratum I, is suggested as one part of the type group, but it may not be useful evidence for illustrating divisions of the Late Bronze Age since Stratum I "contained many L.B. II - III fragments of pottery."

With such a mixture of pottery and a wide chronological range, the use of the Hazor cistern without specifying pottery may tend to weaken Kenyon's six stages.

Three Megiddo tombs are listed as part of Group F, two of which feature Mycenaean IIIb vessels. The Kenyon also selected the deposits of six tombs at Tell el-Farah S., containing scarabs of Ramses II and Merenptah. Again, no explanation of the pottery evidence from these tombs is given. Since the combined reigns of Ramses II and Merenptah date ca. 1290-1214 B.C. and her proposed dates for Group F are ca. 1275-1230 B.C., one wonders if the royal scarabs are part of the basis for this pottery group's chronology. She has

suggested that Lachish Temple III may fall within the period of Group F as well, but evidence for this is not reported. Group F, as with Group E, is as yet incomplete.

A number of methodological concerns have been raised in the discussion of Kenyon's type groups. These concerns are summarized below:

- 1.) the absence of pottery plates to illustrate the six stages of the Late Bronze Age
- 2.) the problematic stratigraphy of the Late Bronze levels at some of the sites Kenyon uses
- 3.) the problem of isolating forms which are distinct to and characteristic of each type group
- 4.) the question of whether tomb groups provide an adequate range of forms for a given type group
- 5.) the specific criteria advanced to justify specific dates for each type group

The general methodological problems noted above can be illustrated more clearly be referring to a basic concept of modern Palestinian archaeology. Related both to stratigraphic excavation techniques and ceramic typology, this concept is called 'context.' Context refers to the surroundings in which archaeological remains are found. In Palestinian archaeology context is usually the soil layer in which an artifact or structure is embedded, as well as the layers above and below it and any living surfaces, wall systems or other structures related to the artifact. Historical interpretation and chronological conclusions cannot be based on archaeological remains or objects if their place of origin at a site is not known exactly.

For the purposes of this paper, one finds generally three types of contexts at Palestinian sites, each with its own characteristics. The domestic context refers to town settlement, including living compounds, industrial installations, and public buildings. The military context is the defence system, with its arsenal, weaponry, walls, towers and gates, bridges or moats, and perhaps garrison buildings and stablery. The third type is the cemetary, or burial, context, which may be a group of tombs in an area away from the town site, or single or multiple burials within living compounds.

Each type of context suggests certain kinds of information and certain kinds of problems. The military context may not provide a good sample of pottery, while the domestic and burial contexts usually do. Kenyon's pottery groups are constructed from burial contexts at Megiddo and Lachish, and from the domestic contexts of cisterns at Hazor and temples of Lachish.

Several points about context should be kept in mind in a study of Kenyon's theory. The first concerns the lack of reported information on the context of archaeological remains. A number of sites examined in her article, such as Beth-shan, were excavated when stratigraphic techniques and principles for systematic recording of data were undeveloped. Another point for consideration is the reliability of archaeological contexts. A recorded collection of data about the remains and their contexts is presumed in this case. The reliability of a context, for phasing of the site or chronological purposes, is based on whether the context is intact or has been disturbed at any time since the original period of use of the artifact or structure

associated with it. A context usually provides the most specific information about archaeological findings when it has had a short period of use and an isolated one. 73

To ensure the maximum quantity and quality of information while destroying one's evidence by excavation, archaeologists use a system of digging by locus. Kenyon has followed this method in her own excavations and in her site analyses. A locus is the primary and smallest unit of excavation. It may distinguish a soil layer or any outstanding feature within the layer, an area in which an artifact or structure is found, or any notable stages of use or modification of structural remains. It is not sufficient evidence for a six-stage division of the Late Bronze Age to suggest "the deposit found on the earliest altar and the pits definitely beneath Temple II" as characteristic of type group C. The specific loci should be cited so we know precisely what vessels are included by Kenyon in this pottery collection.

Since the question of the reliability of certain loci is still debated by critics and excavators of some of the sites Kenyon uses for her type groups, ⁷⁵ her own evaluation of the reliability of the loci is required. The six pottery groups should not be used to change the dates of occupational levels at Late Bronze sites if she does not establish precisely the stratigraphic location and locus number of each vessel, and its associated soil layers and structures. The importance of the sealed locus for chronology must be emphasized, especially in the construction of pottery groups. It is upon the integrity of these basic units of excavation that Kenyon's theory will

rest.

An examination of the theory is worthwhile despite its problems because she attempts in her article to clarify some of the chronological problems of the period of the Eighteenth Dynasty in Palestine.

Several approaches are possible. One would be a new analysis of the plans, pottery, and stratigraphy of one of the sites Kenyon has evaluated, on the basis of the pottery type groups. A second method would be to study one or all of the type groups themselves. In this effort Group B would be appropriate since she considered its end date absolute. A third approach to the type groups would be an examination of one site which contributes a large amount of pottery evidence to the entire type series.

The first method suggested tends to concentrate on the Late Bronze period at a particular site without touching Kenyon's theory in any essential way. Thus, the faults in her analysis of one site could be discussed without clarifying or weakening the theory as a whole.

The second and third approaches suggested deal specifically with Kenyon's ceramic theory, and studies founded on this basis would better check her criteria for the validity of the type groups and conclusions. 77

While it is preferable to evaluate the theory in terms of the methodology Kenyon herself espouses, this cannot be done without the pottery plates to illustrate the type series. Any thorough study of her thesis must begin with the pottery representing six distinct

stages of the Late Bronze Age. A locus-by-locus study of the pottery of each type group is necessary. Such a study is a highly technical and exhaustive undertaking, and is beyond the scope of a master's thesis.

On a smaller scale, the third approach suggested is suitable as a master's topic in that it deals with both theory and evidence directly, questioning the basis of her work. It is also a manageable size. The following critique of Kenyon's six-stage theory of the Late Bronze Age is a study of pottery typology and Late Bronze occupation levels at one type site.

Several principles were followed in the choice of a test site. The primary consideration is that pottery from the test site appear in as many of the type groups as possible, thus ensuring the broadest possible critique. A corollary is that the test site have Late Bronze occupation through every phase of the period. An ideal choice would be an important town of the Late Bronze period, one mentioned in contemporary literary sources, and contributing pottery to Kenyon's type groups. Tell el-Farah S. is least useful for this purpose since it forms only one part of a tentatively suggested Group F, and consequently represents only a short period of the Late Bronze Age. Hazor, and to a lesser degreee, Lachish, were commercial and cultural centres in the Late Bronze ⁷⁸ but neither site shows archaeological continuity for the entire Late Bronze Age and its transitional phases.

The town of Megiddo has been chosen as the test site for Kenyon's ceramic theory on the basis of the reasoning given above. Pottery from this site appears in four of the six type groups, and forms a

significant part of each of the four groups. Published reports from the Megiddo excavations show occupational levels throughout the Late Bronze Age and its transitional phases. Especially important is the extensive occupation at the beginning of the period, since the early Late Bronze is not as completely excavated, or not substantially represented, at Hazor and Lachish. Megiddo also suggests continuity between the end of the Late Bronze Age and the early Iron Age. 81

Thus the Late Bronze strata at Megiddo have provided the only complete sequence of pottery for that period in Palestine.

The long occupation of the site gives a broad picture of the development, decline, and violent interruptions of town life at Megiddo. Given this situation, the ceramic typologist can illustrate more clearly the history of individual forms through each of the archaeological periods represented at Megiddo. 82

To stress the continuity of archaeological sequence while retaining Kenyon's six Late Bronze stages, however, means greater difficulty in isolating exclusive and typical forms. In the case of Megiddo and its environs, ceramic evidence for occupation exists from the Chalcolithic through the Hellenistic periods. 83 Flint evidence of Stone Age settlement has been found on the east side of the mound as well. 84

The problem of distinguishing one archaeological period or occupational level from another at Megiddo is further complicated by the fact that the Megiddo mound covers only thirteen acres, but is fifty-five feet deep at its centre. 85 Compared to a site of similar importance, such as Hazor which had a lower and upper town during the

Late Bronze Age, the population at Megiddo lived in a relatively small area.

The length of occupation and size of site combined with several other factors have made Megiddo a difficult site for archaeological analysis. Between 1903 - 1905 German scholars of the Schumacher Expedition excavated at Megiddo, but their results are not useful to archaeologists now, due to technical and recording problems. 86 Expeditions by American archaeologists took place between 1925 and 1939. Their publications provide the archaeological profile now used for Megiddo, but some of their reports also present stratigraphic and interpretive problems for modern scholars. The excavation techniques and recording systems used today were applied where possible by the excavators of Megiddo, but the stratification of many tombs and structures is still confused. Despite these difficulties, Megiddo shows a complete sequence of Late Bronze pottery. As a result, much of Amiran's Late Bronze I period is based on Megiddo wares, as are many descriptions of pottery from the early Late Bronze Age.

Kenyon is cognizant of stratigraphic and interpretive problems with the Late Bronze Megiddo evidence.

On the top of the tell, Late Bronze occupation levels corresponding to the period of the Eighteenth Dynasty have been found on the north edge, called Area AA, and in Area BB on the southeast edge. Kenyon points out some of the difficulties of a new analysis of the Megiddo material in her essay. The phasing of the Area BB temple, its contents, and much of the rest of Area BB, as well

as the problematic gateway of Area AA are examples of the problems she deals with in her analysis. As a further example of the complex stratigraphy of Megiddo, Kenyon notes that "graves or tombs are marked on the plans at the level to which they penetrated. They therefore belong at the earliest to the overlying level." The difficulty of sorting out Late Bronze tomb deposits on the tell is matched by the problematic tombs on the east slope of the tell.

The focus of attention for the American excavators of Megiddo was the Israelite settlement on top of the mound. 89 The eastern slope was chosen as a dumping ground for the refuse from the tell. In this rocky and irregular slope a long trench was cut and many rock-cut tombs were found. The several excavators' conclusions about the stratification of the east slope tombs were similar during the period of their excavation, 1925–1932. Guy states that "the chief feature of the slopes below the tell is, of course, that, owing to the washing-down of debris from higher up, the stratification is rarely reliable. Intrusion and disturbance are the rule, even in tombs and caves, though some good dateable groups were discovered. These showed that the occupation of the site went back well into the third millenium B.C. at the least." None of the excavators could establish a clear relationship between the stratification of the tell and those east slope tombs, they thought were stratified.

Since Kenyon's theory is based partially on tomb pottery, and since all the Megiddo type group pottery suggested comes from tomb deposits, a detailed study of the tombs is necessary. This entails a careful look at the plans of the tombs, the possibility of related

structures on top of the mound, and those plans available for the eastern slope tombs used by Kenyon. Her own new analysis of the Late Bronze remains from Megiddo must be kept in mind as well. It is the purpose of this paper to test Kenyon's ceramic typology of six stages of the Late Bronze Age, at Megiddo.

Chapter One: Footnotes

- 1) Guy, P.L.O. New Light from Armageddon, U. of Chicago Press, O.I.P. #9, Chicago, 1931
- 2) The name "Palestine" is derived from "Philistia", the Greek name for the southern Coastal Plain inhabited by the Philistines in the Iron Age. May, H.G., Oxford Bible Atlas, Oxford U. Press, London, 1974, pg.9
- 3) The beginning of the Late Bronze Age roughly corresponds with the 18th Dynasty of Egypt and its New Kingdom period.

 Amiran, R., Ancient Pottery of the Holy Land, Masada Press,

 Jerusalem, 1969, pg. 124.

 Yadin, Y., Hazor. See the "Table of Strata and Chronology."

 Bright, J., History of Israel. See the "Chronological Chart #3."

 Kenyon begins her essay with Amosis I, ca. 1570-1546B.C., the first important ruler of the New Kingdom. See Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", C.A.H., Chapt. XI, Vol. II, Part I, Cambridge U. Press, Cambridge, 1973
- 4) For Dame K. Kenyon, a new analysis of Late Bronze archaeological evidence includes the study of architectural remains, soil stratigraphy, and pottery typology. Kenyon, K., Archaeology in the Holy Land, Ernest Benn Ltd., London, 1970, pgs. 28-32
- 5) For the purposes of this paper the Near East includes Egypt, Palestine, Syria, Asia Minor and the territory of the Mitannian Kingdom. It does not include Mesopotamia or the territory of the Assyrians and Babylonians. See May, H.G, Ibid, pgs. 52-53, 55
- 6) May, H.G., <u>Ibid.</u>, pg. 54-55, and Albright, W.F., <u>From the Stone Age to Christianity</u>, Johns Hopkins Press, Baltimore, <u>1957</u>, pgs. 204-208. See also Moscati, S., <u>Ancient Semitic Civilizations</u>, G.P. Putnam's Sons, New York, <u>1957</u>, pgs. 50-54
- 7) Albright, W.F., <u>Ibid</u>., pg. 201
- 8) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 526
 Aharoni, Y., The Land of the Bible: A Historical Geography, Westminster Press, Phila., 1967, pg. 84
- 9) See Kenyon's "Introduction", to Archaeology in the Holy Land
- 10) May, H.G., Ibid., pg. 101
- 11) Kenyon, K., Ibid., pg. 31
- 12) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pgs. 538-539

- 13) Kenyon, K., Ibid, pg. 528
- 14) May, H.G., <u>Ibid</u>, pg.48. Palestine, Transjordan and Syria are one unit geographically. They are comprised of five major north-south regions. From the Mediterranean Sea and moving east, these regions are the Coastal Plain, the Western or Central Highlands, the Rift Valley, and the Eastern Hills of Transjordan, and the desert. The focus of attention, however, is northern Palestine.
- 15) "Nahariyah" is located on the Coastal Plain, north of Acco.
- 16) "Esdraelon" is the Greek form of the word "Jezreel." In this context, Esdraelon refers to the large plain running northwest-southeast across northern Palestine. Its northern border is the range of hills known as Lower Galillee. On the east, it dips down into the Plain of Beth-shan.
- 17) The "Western" or "Central Highlands" are a ridge of hills running north-south through the centre of Palestine, and are composed of the Ephraim Uplands in the north and the Judaean Hills in the south.
- 18) The "Shephaleh" is a north-south region of foothills between the Coastal Plain and the Western Highlands. This area has a number of chalky valleys which provide communication links between the Plain and the Highlands.
- 19) Kenyon, K., Ibid., pg. 526
- 20) Aharoni, Y., <u>Ibid.</u>, pgs. 84-87
 Listed below are the main Egyptian New Kingdom sources for the history of Palestine. Although Aharoni's purpose here has been the illumination of Palestinian geography, Kenyon's literary sources would be

Under the heading of "Expedition Journals":

- 1) the tomb inscription of an Egyptian officer named Ahmose, ca. 1550 B.C.
- 2) Tuthmosis III's campaign and conquest at Megiddo

selected from this collection.

- 3) the campaigns of Amenhotep II, ca. 1445-1430 B.C.
- 4) Ramses II's campaign against Kadesh, ca. 1250 B.C.
- 5) Merenptah's hymn of victory, ca. 1220 B.C.
- 6) Egyptian stelae (2) from Sethos I, found near Beth-shan and commemorating battles fought in the area

Under the category of "Bas-Reliefs":

- 1) reliefs of Sethos I concerning Palestinian fortresses and wells
- 2) reliefs of Ramses II regarding conquered Palestinian towns, 13th century B.C.

Under "Topographical Lists":

- 1) the earliest of these comes from Tuthmosis III's campaign at Megiddo, and lists 119 names of towns subsequently conquered
- 2) Sethos I's list
- 3) Ramses II's list

Aharoni's class called "Literary Papyri" is not relevant except in a peripheral way.

Classified as "Administrative Papyri":

1) "a list of emissaries from various Canaanite towns dating to the fifteenth century B.C."

Under "Correspondence Archives":

- 1) the royal archives of El Amarna contain letters from Canaanite rulers and date from 1400-1350 B.C.
- 21) Kenyon, K., Ibid., pg. 526
- 22) See Aldred, C., "Egypt: The Amarna Period and the End of the Eighteenth Dynasty", Cambridge Ancient History, Rev. Ed., Vol II, Chapter XIX, Cambridge, 1971, pg. 39
 Several, M., "Reconsidering the Egyptian Empire in Palestine During the Amarna Period", P.E.Q., 1972, pg. 133
 Kenyon states that "this probably did not amount to more than punitive campaigns and did not ... imply a close political control", in Archaeology of the Holy Land, pg. 195
 Aharoni, Y., Ibid., pg. 139
- 23) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pgs. 526-530
- 24) Kenyon, K., Archaeology of the Holy Land, pg. 194. Kenyon cites 1580 B.C. as a "convenient date to end the Middle Bronze Age, corresponding with the rise of the Eighteenth Dynasty." Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty," pg. 526
 Gardiner, Sir A., Egypt of the Pharaohs, pg. 443. Gardiner suggests 1575 B.C. for Amosis I.
- 25) Gardiner, Sir A., <u>Ibid.</u>, pg. 169
 Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty",
 pg. 526. She states that "these events may have taken place in the
 first seven years of (Amosis) reign."
- 26) Kenyon, K., Archaeology of the Holy Land, pgs. 195-196
- 27) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty," pg. 526
- 28) Kenyon, K., Ibid., pgs. 526-527
- 29) Kenyon, K., Ibid., pg. 527
- 30) Kenyon, K., Ibid., pg. 528
- 31) Kenyon, K., <u>Ibid</u>., pg. 528

- 32) Kenyon, K., Ibid., pg. 528
- 33) Kenyon, K., <u>Ibid.</u>, pg. 529
- 34) Wright, G.E., Biblical Archaeology, Westminster Press, Philadelphia, 1962, pg. 26
 Occupation level is a term of modern archaeological methodology. "The typical mound is composed of several layers or occupational levels of these buildings, one below the other down to virgin soil or bedrock, and it is of vital importance that they be distinguished."
- 35) An archaeological phase may refer to one period of the history of rebuildings or alterations on a house or other structure, or of a town site. Kenyon, K., Archaeology of the Holy Land, pgs. 28-35
- 36) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 530
- 37) Kenyon, K., Ibid., pg. 555
- 38) Kenyon, K., Ibid., pg. 556
- 39) This discussion, based on alternate readings of a calendrical text, has entered a new phase since Redford's publication "New Light on the Asiatic Campaigns of Horemheb", in <u>BASOR</u> 211, 1973. The accession date for Tuthmosis III of 1504 B.C. seems to be more probably exact than 1490 B.C. For a further examination, see Wente, E., in "Tuthmosis III's Accession and the Beginning of the New Kingdom", <u>J.N.E.S.</u>, Vol. 34, #4, 1975
- 40) Albright, W.F., Ibid., pgs. 240-241
- 41) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 528
- 42) Kenyon, K., Ibid., pg. 527
- 43) Kenyon, K., Ibid., pg. 531
- 44) Epstein, C.M., Palestinian Bichrome Ware, E.J. Brill, Leiden, 1966, pgs. 141, 173
- 45) Kenyon does not define 'elaborate' Bichrome. Epstein divides Bichrome into a peak phase and a later phase. Epstein, C.M., Ibid., pg. 141
- 46) For a full discussion of decoration on Bichrome, see Epstein, C.M., Ibid., chapters II and III
- 47) Epstein, C.M., Ibid., pgs. 170, 186

- 48) Dever, W., private communication
- 49) Amiran, R., <u>Ibid.</u>, pg. 144, Pl. 44:1
 Amiran uses a jar from Megiddo Tomb 1100 C to represent domestic or decorated jars of the early part of the Late Bronze Age
- 50) Kenyon, K., Ibid., pg. 528
- 51) Kenyon, K., Archaeology of the Holy Land, pg. 200
- 52) Kenyon, K., <u>Ibid</u>., pgs. 200-201. In connection with the spread of Bichrome pottery and the period of her groups A and B, Kenyon states in this earlier work on archaeology , that "pottery does in fact provide very useful evidence about culture ... very similar vessels are also found on the east coast of Cyprus and on coastal Syrian sites as far north as Ras Shamra ... the particular style referred to ... is part of a larger complex of painted pottery, which started to reach Palestine in the 16th century B.C. It has certain affinities in style to Hurrian decorated pottery, and may be taken as evidence for renewed northern contacts, and probably the continuance of the infiltration of new groups from that direction. The second point of interest suggested by the pottery is the evidence for the opening up of the Syrian coast to trade with the eastern Mediterranean ... during the Late Bronze Age ... there was also traffic in the reverse direction. It is clear that during the period of the strong rule of the Eighteenth Dynasty in Egypt conditions favoured maritime trade."
- 53) See Epstein, C.M., <u>Ibid.</u>, chapter V, for a discussion of the deterioration of the Bichrome style and forms
- 54) Dever, W.G., Gezer I: Preliminary Report of the 1964-1966 Seasons. The excavations at Gezer have uncovered some cylindrical juglet fragments which may be dated later than 1482 B.C.
- 55) Yadin, Y., Hazor, The Schweich Lectures, 1970, Oxford U. Press, 1972, pgs. 46-47
- 56) Amiran, R., <u>Ibid.</u>, pg. 124. Amiran gives a final date of 1410 B.C. for the Late Bronze I period.

 See also Yadin, Y., Ibid., pg. 40 for his dating
- 57) Yadin, Y., <u>Ibid</u>., pg. 47. Cistern 7021 introduces a new form to Palestine, the carinated bowl with quatrefoil mouth. Yadin states that it is from Anatolia and was common throughout the Hittite Empire. This form does not occur in the Group B assemblage from Megiddo. Perhaps the relationship of the Hazor and Megiddo pottery of Group B could be examined more closely.

- 58) Dever, W.G., "Archaeological Methods and Results: A Review of Two Recent Publications", Orientalia, Vol. 40, 1971, pg. 470
 Dever defines 'loci' as "carefully separated debris levels."
 Wright, G.E., <u>Ibid.</u>, pg. 26. A safe, or sealed, locus is determined by "watching carefully for floor levels which seal the objects below from those above."
- 59) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 556
- 60) Kenyon, K., Ibid., pg. 529
- 61) Kenyon, K., Ibid., pg. 529
- 62) Yadin, Y., Ibid., pg. 45
- 63) Yadin, Y., Ibid., pg. 45
- 64) Amiran, R., Ibid., pg. 124 ff.
- 65) Kenyon, K., Ibid., pg. 529
- 66) Faulkner, R.O., "Egypt: From the Inception of the Nineteenth Dynasty to the Death of Ramesses III", <u>C.A.H.</u>, Rev. Ed., Vol. II, Chap. XXIII, Cambridge, 1966, pgs. 3-11
 Faulkner states that Sethos I co-reigned with Ramesses I for about two years, ca. 1320-1318, and ascended to the throne in 1318 B.C. Ramesses II became sole ruler upon the death of Sethos I ca. 1304 B.C.
- 67) Kenyon, K., Ibid., pg. 530
- 68) Kenyon, K., Ibid., pgs. 549-552 Of the northeast defence system of Lachish she says "no exact stratigraphical evidence was provided, but these may be successive town walls belonging to the Late Bronze Age. The upper wall is not likely to be earlier than the thirteenth century." She suggests that because there is so little Bichrome ware at Late Bronze Lachish there may have been a gap in occupation at the end of the Middle Bronze Age. The Fosse Temple is the only building pertaining to Kenyon's pottery groups. The earliest building, Temple I, was used ca. 1500-1400 B.C. according to Kenyon, and is typical of pottery Group C. Of Temple II, Kenyon states that it followed immediately on Temple I and that its "pottery shows a clear development from that of the first period, and belongs to Group F, but there is no precise dating evidence ... the succeeding Temple III was in use in the thirteenth century, and is to be ascribed to Group F, the associated pottery having parallels with that from sites destroyed c. 1230 B.C. Temple II could come c. 1300 B.C. Temples I and II therefore belong to the time of the Eighteeth Dynasty ... The destruction of

Temple I could possibly belong to the troubles of the Amarna period."

The material specifically suggested by Kenyon for the Group E series is Lachish Tomb 1003 and the latest material from Temple II. Her dating of the Fosse Temple corresponds with the original dates suggested by Tufnell. In the Lachish IV publication, however, Tufnell has accepted a revision of dating for the Fosse Temple by Schaeffer.

Tufnell, O., Lachish IV, The Bronze Age, Text, Oxford U. Press, London, U. Press, London, 1958, pgs. 65-66. Tufnell states, "the date of Structure I ... was adjusted ... to c. 1600 (1550) - 1450 B.C. This is certainly the maximum range for the occupation of the building, and it would be reasonable ... to confine the use of Structure I to 1550-1450 B.C." As for Temple II she says "the maximum range for the building would therefore be 1450-1350 B.C., without an allowance for a possible interval towards the end of the Amarna period." Tomb 1003, in use during the time of Temple II "may date from the end of the fifteenth century." It, and tombs 216 and 501 "together yield scarabs which cover the reigns of Thothmes III, Amenhetep II, Thothmes IV and Amenhetep III. They provide the best material which has so far come to light for a study of the rich period when Egypt was in full control of her newly acquired empire." Tufnell dates Temple III in the Late Bronze III period, ca. 1350-1225 or 1200 B.C.

- 69) Kenyon, K., <u>Ibid.</u>, pg. 551. In her evaluation of Lachish Temple II Kenyon states "there were associated pits for discarded vessels. The pottery shows a clear development ... and belongs to Group F, but there is no precise dating evidence." She does not mention Group E in her analysis of Lachish.
- 70) Yadin, Y., <u>Ibid.</u>, pg. 40. Late Bronze II is the 14th century B.C., while Late Bronze III is the 13th century B.C. in Yadin's system. These archaeological periods are characterized by Mycenaean III a and b pottery at Hazor.
- 71) Amiran, R., <u>Ibid</u>., pg. 124. Amiran correlates Mycenaean IIIb pottery to the Nineteenth Dynasty of Egypt, her Late Bronze IIB period and the dates 1340-1200 B.C.
- 72) Gardiner, Sir A., <u>Ibid.</u>, pg. 445. Gardiner gives dates of 1290-1224 B.C. for Ramesses II and 1224-1214 B.C. for Merenptah.
- 73) Amiran, R., Ibid., pg. 124
- 74) Kenyon, K., Ibid., pgs. 528-529
- 75) Epstein, C.M., <u>Ibid</u>., pg. 21. Referring to W. Heurtley's thesis about the origin of Bichrome ware, Epstein states "such attempts ... to use stratigraphical sequences only lead to confusing results

since these are based largely on 'carefully observed stratification at Megiddo', which at the time of his writing had not yet been finally agreed upon by the excavators and which today cannot be accepted as published in the final report without far-reaching reservations."

- 76) Seger, J., "The Middle Bronze II C Date of the East Gate at Shechem", Levant VI, 1974
 Criticisms of Kenyon's theory have been made by Seger, but they deal specifically with her interpretation of the East Gate at Shechem, and are not fundamental to her ceramic theory.
- 77) Kenyon, K., Ibid., pg. 530
- 78) Amiran, R., <u>Ibid.</u>, pg. 124 ff. Pottery from Hazor, Lachish, and Megiddo form the bulk of her Late Bronze collection.
- 79) Kenyon, K., Archaeology of the Holy Land, pgs. 202-204
- 80) Kenyon, K., Ibid., pgs. 198-200
- 81) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty". pgs. 535, 549
- 82) Kenyon, K., Archaeology of the Holy Land, pg. 215
- 83) Wright, G.E., Ibid., pg. 26
- 84) Amiran, R., <u>Ibid.</u>, pg. 22. Chalcolithic pottery was found in Stratum XIX at Megiddo.

 Guy, P.L.O., New Light from Armageddon, pg. 5
- 85) Guy, P.L.O., Ibid., pgs. 3-5
- 86) Kenyon, K., Archaeology of the Holy Land, pg. 93
- 87) Fisher, C.S., <u>The Excavation of Armageddon</u>, U. of Chicago Press, Chicago, 1929
- 88) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty," pg. 533
- 89) Fisher, C.S., Ibid., pg. 24
- 90) Guy, P.L.O., Ibid., pgs. 10-11

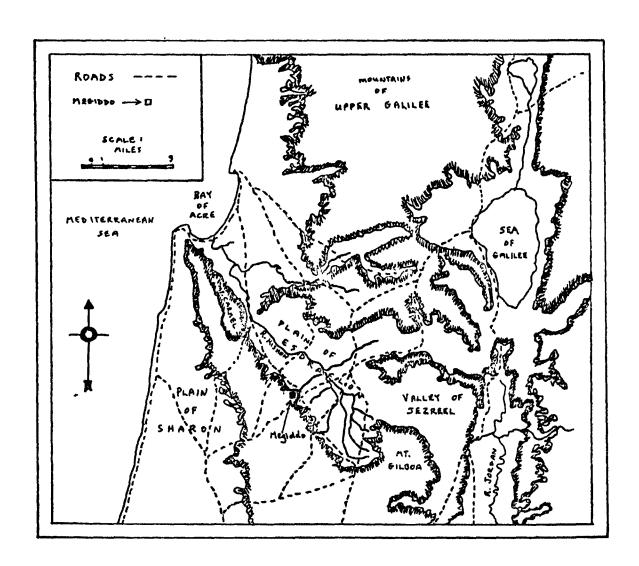


FIG. 1 MAP OF THE PLAIN OF ESDRAELON AND ITS SURROUNDINGS (repeated) SHOWING MEGIDDO, ROAD SYSTEMS AND KISHON RIVER SYSTEM 6

Chapter Two: An Examination of the Late Bronze Age Strata at Megiddo

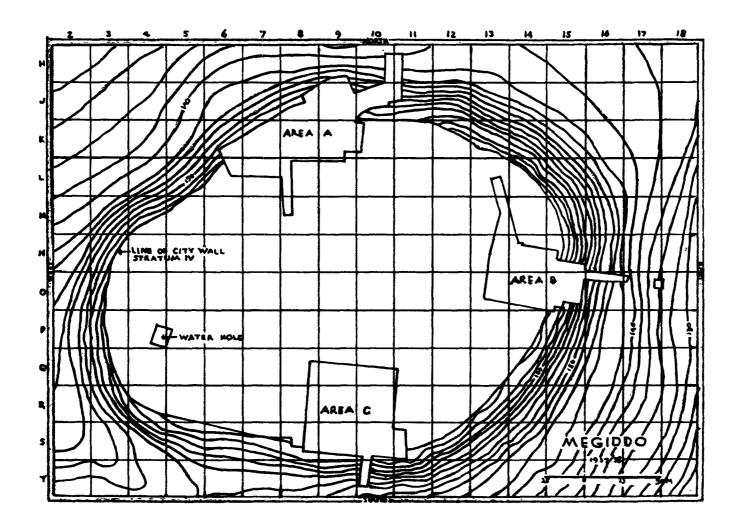
Introduction

The reasons for the continuous occupation and the strategic importance of the Megiddo site throughout the Late Bronze Age are aptly described by its Arabic name, Tell el-Mutesellim, the "mound of the commander." Situated on the northern side of the Carmel Range, this low, flat-topped hill has a commanding view of the Plain of Esdraelon through which passed the main roads linking Egypt and the highlands of southern Palestine to Phoenicia, northern Syria and the Transjordan.

The Carmel Range, with its dense vegetation and steep, jagged sides, renders a significant obstacle to the movement of large groups of people. Thus, access to the plain, whether for commercial or military movement, is largely limited to the passes and their routes across the plain. 4 Megiddo not only commanded the view, but controlled key passages.

Of the passes through the Carmel Range, the two most important were the narrow, chalk-bottomed valleys which enter the Range from either side of the Shephaleh's northern end. Of these, the Pass of Megiddo which, at its northern entrance, was dominated overhead by the town itself, had considerable importance for military transportation.

All of the plain, as well as its entrances, was negotiable in summer, but during the winter, this rain-soaked area was often impassable. Of the two east-west routes, one passed beneath Megiddo.



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The only perennial north-south crossing, part of the Way of the Sea system and thus, a crucial route for transport between Egypt and Syria, was dominated by Megiddo. Another route from Egypt north through the Central Highlands also emerged to join the Great Trunk Road at Megiddo.

Turning from this sketch of Megiddo's importance as a site, let us review the history of its excavation.

The Deutsche Orientgesellschaft excavations (1903-1905) cut a deep north-south trench across the mound, though without stratigraphic references. These excavations confirmed the site of Megiddo as that of Tell el-Mutesellim. In 1925, the University of Chicago's Oriental Institute, financed by the Rockefeller Foundation , began work at this site, using the maps of Megiddo and surveys of the area done by Schumacher and Watzinger in their reports from the earlier German expedition. Ten years later, in 1935, with the first four strata excavated, the hopes of the directors, who had anticipated uncovering each layer of the entire summit, were modified and certain areas of concentrated effort were specified. A trench in Area AA, north end, revealed the city gate and a "palace." A similar trench through Area BB, southeast side, uncovered a corner of what the excavators called a Strata VIII-VIIB temple. Area CC on the south end proved to contain several layers of houses and a Middle Bronze Age section of the city wall.

In 1939, Lamon and Shipton published Megiddo I: Seasons 1925-1934 which treated Strata I - IV and part of V. A supplementary volume by Guy and Engberg dealing with the complex burials, called Megiddo Tombs, was published in 1938. Notes On the Chalcolithic and Early Bronze Age

Pottery of Megiddo by Engberg and Shipton came out in 1934. Works on various special features were also published, such as H.G. May's Material Remains of the Megiddo Cult in 1935 and Lamon's The Megiddo Water System, 1935 and Loud's The Megiddo Ivories, 1939.

Excavations aimed specifically at Late Bronze and earlier remains were directed by Loud between 1935-1939. Area BB was excavated to the bedrock, while Area AA was excavated to Stratum XIII. The results of those last four seasons were published by Loud as Megiddo II: Seasons of 1935-1939. This book includes one volume of plates and one volume of text, and came out in 1948. More pottery from Megiddo, including the Late Bronze material, was presented in an earlier work (1939) by Shipton called Notes On the Megiddo Pottery of Strata VI - XX. Though substantially the same, Loud's volume of plates in 1948 demonstrates some reinterpreting of pottery-dating from Shipton's earlier work. In the volume Megiddo Tombs, Guy attempted to present isolated east slope tomb deposits of pottery and assigned them to archaeological periods.

Having sketched the physical, historical and archaeological background of the Megiddo sites, this chapter proposes to identify pottery remains that can, with certainty be attributed to the Late Bronze Age at Megiddo.

Authorities agree upon the fact that the Late Bronze Age settlement at Megiddo is important to the historical picture of Palestine in that era. They also agree that the stratigraphic, architectural and ceramic horizon is still confusing. After thirty years, scholars still disagree over which texts, tombs, occupational

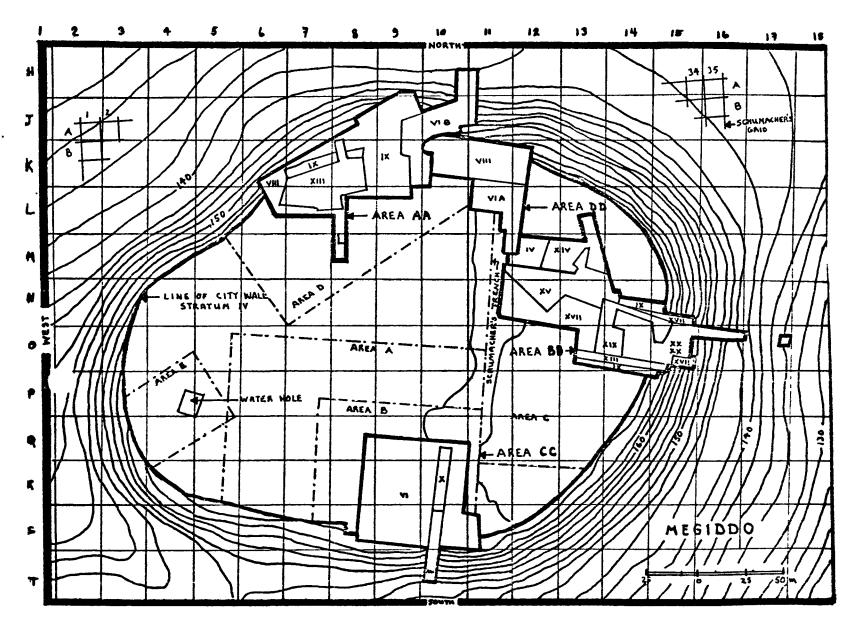


FIG. 3 MAP OF THE SUMMIT OF MEGIDDO MOUND SHOWING ALL EXCAVATED AREAS 10 SCALE 1:2000

levels and pottery plates may be used and how they are to be evaluated. Studies of the reports of Megiddo's excavators have been made by those seeking to use the Megiddo evidence for the purpose of comparative archaeology. A comprehensive attempt to untangle and reinterpret the entire Megiddo stratigraphy and to accurately associate pottery, objects, and structural tombs with floor levels had not been published to date, until Kenyon's efforts.

Kenyon has written several long articles examining the pottery and stratigraphy of Megiddo. In her essay, "Palestine in the Time of the Eighteenth Dynasty", she reevaluates the architecture and stratigraphy of the Late Bronze strata at Megiddo, basing her analysis on Megiddo Tombs and Megiddo II: Seasons of 1935-1939. These two works were also her sources for constructing the Megiddo portions of her six pottery type groups.

The architecture of Late Bronze Age Megiddo is given cursory treatment in her <u>Cambridge Ancient History</u> essay, since a detailed analysis was provided in her 1969 article, "The Middle and Late Bronze Age Strata at Megiddo." Although many scholars have reviewed the excavation reports which treat the Late Bronze Age, their criticisms, in general, have established the reports' shortcomings and have laid down principles of interpretation without fully drawing out the implications of the Megiddo remains. Kenyon is the first to deal with the implications, and her principles of reinterpretation regarding the Late Bronze Age remains at Megiddo bear looking into.

A number of preliminary criticisms of the Megiddo volumes can be made. Kenyon does not refer to Shipton's Notes On the Megiddo Pottery

of Strata VI - \overline{XX} for example, perhaps because it is not a particularly useful work.

Shipton himself stresses it as a preliminary work. Nonetheless, it is the only attempt by the excavators to deal with the earlier pottery and chronology together. The purpose of that volume was to illustrate significant pottery forms of each stratum. Shipton says that the lack of destruction at the site, combined with a gradual development and change of the pottery, and a scarcity of datable inscriptions, makes the task a difficult one. Throughout the work, he notes the continuity of culture through each stratum and professes to find problems in pinning down particular forms to specific strata. Even harder is the task of dating the strata themselves. He says, "absolute dates ... at best ... are indications of the relative length of occupation of each stratum."

The problems resulting in Shipton's imprecise commentary on the pottery and chronology of the strata can be further explained. According to Shipton, temples tend to last over a long time period and are modified or re-built. Area BB had, in its centre, a sacred area which was probably in use throughout the whole Bronze Age. The excavators concentrated more on following the walls of buildings than on distinguishing living surfaces and the pottery belonging to them. Such re-use of the Area BB temple and the Area AA city gate and so-called "palace" tended to give a picture of cultural continuity to the excavators. Thus, paradoxically, concentrating on the wall outlines obscures the history of buildings because the re-use, the

destruction or the re-building of walls cannot be clearly distinguished from each other without corresponding floors.

Floors and walls clearly connected may help deduce the architectural sequence of a building and thereby date it in relation to other structures. The various stages of use of a building can only be dated absolutely by the artifacts found definitely associated with its floors. Thus, the picture of continuity found by the excavators of Late Bronze Age Megiddo was difficult to date. Shipton says:

... (the) majority of the evidence for dating is based on the pottery, but a considerable mass of evidence from other types of small finds, though not adduced here, has been taken into consideration.

Shipton's basis for dating the Late Bronze Age strata is rather confused. While professing his evidence as pottery, he does not give the locus or vessel numbers for the pottery he regards as representative of each stratum. This means that without a laborious search through the plate volume of Megiddo II: Seasons of 1935-1939 in the hopes of correctly identifying a type pot, it is impossible to judge whether a particular pot is part of a given stratum.

He justifies his strata dating by discussing the history of various pottery forms at Megiddo in his commentaries on each stratum. However, Shipton does not distinguish the phases of development of the Cypriot pottery, notably Basering and White Slip wares. In general, his pottery descriptions lack the detail necessary for a certain identification of phases of the imported wares by the reader. Furthermore, his dating appears related to evidence other than pottery. Much of the Late Bronze Age material is dated by analogy to

similar levels at Tell Beit Mirsim and Beth-shan. 16 Items, all of which could be heirlooms, and therefore misleading for dating purposes, such as "Hyksos" scarabs, jewellery, and alabaster are mentioned.

The confusion in dating priorities is particularly evident in his commentary on Stratum VII. The upper and lower levels of this stratum were distinguished in general terms, but were not articulated and therefore, dating appropriate to one level was not appropriate to the other.

The controversy was not related so much to pottery as to datable objects. Ivories of Ramses III found in the upper level, combined with pottery dated by analogy, indicated the period of the Nineteenth Dynasty. Excavators doubted, however, that the stratum extended to the end of this pharaohonic reign and dated the end of Stratum VII to ca. 1170 B.C. To complicate matters, Wright says that the discovery of a statue base of Ramses VI, ca. 1150, found below some part of Stratum VII, must bring the date down to ca. 1150 B.C. The excavators disagree, attributing the statue base to Stratum VI, which Shipton says follows immediately on Stratum VII, conforming to the overall pattern of continuity. 17

Given Shipton's meagre notes on the Late Bronze Age pottery it would appear that Megiddo was not excavated stratigraphically, and that pottery was not the only, or even the main criterion, for dating the strata.

These criticisms and others can be made even more strongly when examining Megiddo Tombs. This work presents the collection of tombs

excavated under the direction of P.L.O. Guy between 1927-1935.

Incorporated into this work were Fisher's redrawn east slope tombs.

The tombs on the east slope had been excavated and subsequently designated as a dump site for the excavations on the tell. The original dumping space was plotted in 1925-1926, but was expanded by Guy in 1927 and again in 1930. The excavation of the tombs was not completed until 1932.

Of the thirty tombs discovered in 1927, Guy says, "these tombs were not very complicated or difficult to dig and there were few buildings or other remains of high interest in the area, so the work went quickly." In 1930 the southern expansion of the dump brought approximately forty more tombs to light. Among these were "the richest of the shaft tombs." Many houses dating as far back as the fourth millenium were also found. Guy states that the domestic remains "demanded very careful excavation and the last of the tombs here published were not dug until 1932."

The focus of archaeological attention was on the mound of Megiddo itself. The east slope was particularly difficult to excavate because its rocky and pitted surface made planning a problem. Consequently, while there are plans and sections of individual tombs, no overall plan of the excavated area was made. An aerial photograph and partial plan suffice to locate the tombs listed as Late Bronze Age. Guy also notes that only part of the slope was stratified and that its stratification could not be co-ordinated with that of the tell. Furthermore, the slope's stratigraphy was not related to the tombs found there. Thus the Late Bronze Age tombs, as a whole, are unstratified. 21

This fact probably accounts for Guy's belief that the levels taken as a routine part of the excavation process had no value in the instance of the east slope tombs. The question of their dating arises, and scholars have used these tombs with reservations. Clearly the tombs must be dated by their contents alone and not in relation to their surroundings. 22

A date of 1600 - 1200 B.C. has been suggested by Guy for the Late Bronze Age, but he does not give dates for either Late Bronze Age I or II even though his Late Bronze Age tombs are divided into these two periods. He does not offer the guidelines used for excavating methods for the tombs nor does he mention his principles for interpreting and dating the discoveries. He does provide a chapter in which he discusses the development of various forms and the characteristic ceramic repertoire of archaeological periods represented at Megiddo.

As with Shipton's Notes On the Megiddo Pottery of Strata VI to XX, Guy does not specify the phases of development in the Cypriot wares. This omission poses a serious problem since the Cypriot pottery is generally recognized as being reliably dated and therefore crucial to the chronology of Palestinian pottery of the Late Bronze Age.

Guy's commentary on the tomb pottery, while adequate in many respects, is based on the contents of the Megiddo east slope tombs, which were often a mix of several archaeological periods. More specific criticisms can be made of this work, Megiddo Tombs. For example, tombs in antiquity were often broken into and robbed of their goods and while pottery was probably not stolen, it would likely have

been moved or broken and its human remains disturbed. Tombs were often used for burials over a long time period so that the older burials and grave goods would be moved to the corners or edges of the tomb walls and left in an indiscriminate heap. In both the cases of robbery and displacement, the pottery truly associated with a burial could be mixed with other burials or scattered throughout the tomb. This problem is further complicated in the case of tombs having several chambers. 23

The tomb excavators did not distinguish re-use of tombs during their excavations. They did suggest upper and lower strata in many of the tombs, but this was a somewhat artificial and arbitrary distinction. In many cases, due to several periods of use of tombs, the stratification was lost before or at the final burial in the tomb. This robbing or multiple use of tombs in antiquity had the effect of destroying stratigraphic and chronological evidence for the excavator.

A tomb which has been used several times may still be of value as representative of an archaeological period. In certain cases, where a tomb consists of several burials separated by several hundred or more years, if the pottery of each burial has a sufficient range of forms, it would be possible to distinguish between periods by examining the associated wares.²⁴

The most accurate ceramic evidence from the Megiddo tombs would come from single burials which have not been disturbed. Using this criterion, many of the Late Bronze Age deposits found in the east slope tombs would have to be discounted, as they have been by some scholars. The reliability of the archaeological context would in such

cases be indisputable. Unfortunately, very little pottery would remain for dating the Late Bronze strata at Megiddo.

Further to this, insistence on the use of single, intact burials for providing the only sure representation of ceramic periods eliminates some of the most important Late Bronze Age deposits in Palestine. 25 As noted above in the discussion of Kenyon's type groups, Tomb 1100, published in Megiddo Tombs, is recognized as a type deposit for the Late Bronze Age I period by its excavators and by Kenyon. Scholars have criticized the indiscriminate use of Tomb 1100's contents, but Yadin and Tufnell have cited this tomb as the most significant comparative deposit for the Late Bronze Age strata at Hazor and Lachish. We ought to be able to assume, then, that scholars who use the Late Bronze Age pottery from Megiddo have studied the tombs carefully and have been able to isolate the pottery forms belonging to each burial.

Loud states that Megiddo II²⁷ is only a "catalogue of the architecture and artifacts", ²⁸ and he leaves the study and evaluation of this report to other scholars. But part of other scholars' criticism of these volumes is precisely that there is a lack of comprehensive digesting of the information. Considering the enormous amounts of money spent on the Megiddo excavations, and Breasted's hopes that this site might become the model for Palestine excavations, the disappointment and criticism of scholars is understandable since the final publication is merely a collection of lists of architecture and objects.

The poor quality of the final results are attributed to a number of factors by Wright in his 1950 review of Megiddo II. ²⁹ The exigencies of war took their toll in acquiring and training good staff and caused a lack of continuity in staff between seasons. Drastic changes in goals were made to accommodate the Second World War. In addition, Wright says, the material was not adequately described or fully understood by the excavators.

Analysis of the smaller finds, such as the animal remains, bone tools, and flint and limestone implements is not extensive and is not incorporated into any overall history of the cultures represented at Megiddo. Similarly, artifacts may be drawn or photographed, yet no comprehensive study of them has been done. Wright points out that the field diaries are needed in order to do a detailed study of the artifacts. The pottery and chronology is not even dealt with in Megiddo II, but rather in Shipton's Notes, 30 and, since the Late Bronze Age tombs in Megiddo II are not fully described, an evaluation of their usefulness is difficult. Kenyon and Wright concur in seeing a need to study the loci and pottery once again. Wright concludes

... great caution must be used in the dating of the finds. It is dangerous to say very much until every locus is rechecked and the pottery carefully studied; this means that before these volumes can be used extensively one must rework the material from each stratum and even then he cannot always be sure of his results.³¹

Thus the material presented in <u>Megiddo II</u> suffers from a lack of information, a lack of clarity and a lack of interpretation. These problems are related, to a certain extent, to the presuppositions of the sponsors and excavators of the Megiddo excavations.

Two important points should be made here. Loud refers the reader to Megiddo Tombs for general data applicable also to Megiddo II. Among the data are Guy's definitions of archaeological terms, including his description of a stratum, "a more or less horizontal layer of the site belonging to a particular period." The practical result of this definition as pointed out by Kenyon is "a rigid peeling off of successive layers of soil and buildings, with little regard to the actual stratigraphical layers", 33 as was the intention of the excavators and as happened in the first four strata.

Such an understanding of strata results in problems in excavation methods. Terraces may not be recognized as such, especially since the purpose of vertical sections, which might reveal terracing, was specifically to show the maximum number of walls. Tombs and pits in the occupation levels on the tell were cut, necessarily, to varying depths through several strata and sometimes into structures. Loud, apparently, did not recognize these as entities. Consequently, as Kenyon and others have pointed out, tombs on the summit were recorded at their bottom levels and included in those strata, despite the fact that they had been cut from at least one stratum above their recorded levels. Therefore, most of the Megiddo tomb pottery belongs to one or more strata above the assigned stratum. Part of the problematic task of understanding and clarifying the Late Bronze stratigraphy is in determining from which strata many of the tombs were cut.

Loud also found that some strata, already numbered and published, were actually two rather than one stratum. One of these is Stratum VII, now known either as Stratum VIIB, the earlier one, or Stratum VIIA,

the later one . The pottery plates of <u>Megiddo II</u> vessels are assigned to appropriate strata. Often a vessel has a range of pottery types extending over several archaeological strata. For example, in the case of the Late Bronze Age remains, the vessels of Stratum VII are labelled three ways. If the range of type is listed as Stratum VII, the vessel could be either Stratum VIIA or Stratum VIIB if found in only one locus. But if the vessel is found in several loci it could be either Stratum VIIA or Stratum VIIB or span the range of Stratum VIIB to Stratum VIIA. Those vessels specifically having a type range of Stratum VIIB or Stratum VIIA have been differentiated stratigraphically.

The interest of Breasted and his field directors in defining Megiddo architecturally has already been suggested. To corroborate this view, Loud says:

... careful collection and recording of finds with their positions in relation to walls and floors were often of material aid in instances of questionable stratification, but architectural evidence was always considered of primary importance. 34

Given his professed emphasis on architecture rather than pottery, Loud's treatment of the Late Bronze Age architecture is cursory. Wright goes so far as to say that the architecture is dealt with "schematically." Loud states throughout that most walls were made of stone, usually poorly cut rubble. For instance, his description of the foundation walls of the Late Bronze Age temple of Stratum VIII is "small-sized rubble." In other areas of architecture, stone floors were indicated on the plans of the strata, while dotted areas indicated lime-plastered or earth floors. Loud also states

 \dots as most floors seemed to have been made of earth and were indistinguishable from debris, it was determined to show on the plans only those which were positively identified. 37

As previously noted regarding Shipton's work on the pottery, attention to architecture without comparable attention to the associated living surfaces can create confusion when the pottery and chronology of the strata are discussed.

Kenyon suggests that as a result of not clarifying floor levels, "the material consigned to a stratum probably comes from the soil level with the surviving tops of the walls." 38

As a priority, the excavation technique of following walls implies lack of attention to the methods and principles espoused by most modern excavators. Therefore the critique of the excavation reports on the Megiddo remains has been made on two assumptions: that pottery is the best criterion for the dating of Late Bronze Age occupation levels and that the stratigraphic method of excavation enables the excavator to identify the pottery with its true surfaces and structures.

In her article, "Palestine In the Time of the Eighteenth Dynasty", Kenyon has written extensively about Megiddo. She assumes the reader's knowledge of a previous article in her analysis of Late Bronze Age Megiddo. The former article, "The Middle and Late Bronze Age Strata At Megiddo", is a detailed study of that era. In it, Kenyon examines the architecture attributed to the Late Bronze Age, as well as the tombs in the occupational levels with their associated pottery. Having determined the structures belonging to each stratum, she examines the pottery, suggests a number of ceramic phases covering the Middle

Bronze and Late Bronze periods and illustrates the pottery she has assigned to each phase. Kenyon regards some of her pottery groupings as having parallels in Megiddo Tombs. Her ceramic hypothesis for the Late Bronze Age in Palestine is, in part, a refinement of her previous study of Late Bronze Age strata at Megiddo.

The critical and methodological insights gained from the works of Kenyon, Epstein and Wright have been supplemented by more general works on archaeological methodology and interpretation.

Let us now examine the possibilities of determining which tombs and occupational levels offer Late Bronze Age pottery which permit their legitimate use for purposes of dating. The east slope tombs assigned to the period in question were not found in any particular area of the slope, but were dotted throughout the three dumping areas, a space of about 15,000 sq. metres. None of the Late Bronze Age tombs was stratified, a fact which was true for most of their interiors.

In order to isolate tomb pottery which is specifically Late Bronze Age, several principles should be stressed. As mentioned above, a single, intact burial provides a kind of "photograph" of a particular moment in time. If the grave furnishings include a good range of pottery forms and these forms, as a group, are firmly dated, then the period of tomb use can be reliably dated. However, instances of such burials are regrettably rare.

Part One: The East Slope Tombs

Forty-seven tombs are termed Late Bronze Age by P.L.O. Guy in his "Chronological Index of Tombs and Burials." Upon examining the excavator's descriptions of these tombs, it will be found that thirty-nine of them must be discounted for reasons of contamination. Most of the Late Bronze Age burials at Megiddo were in caves, shaft tombs, which Guy attributes to Middle Bronze Age I, rock-cut tombs with one or more chambers, pits and debris.

In several cases, the tombs were in too poor a condition to safely excavate. Burial caves often had collapsed roofs and were irregular in plan, with pits and cavities, rough unfinished floors and walls. Shaft tombs were classified as normal if they conform to a Middle Bronze Age I plan of entrance shaft with blocking stone, central chamber A and side chambers B, C, and D cut to certain proportions. They were classified as abnormal if they were particularly large, small or differently proportioned in comparison to the Middle Bronze Age types or if they were missing one or more side chambers. Holes in the walls or roofs of shaft tombs were not uncommon and permitted debris to fall into a chamber and sometimes spill over into another. These holes were often made by local inhabitants quarrying the stone in pre-excavation times. It was also fairly common for a shaft tomb to be broken into by people cutting a tomb close by. Unlike a robbery, in which there is entry, such accidents could cause debris and vessels from the newer tomb to fall in the older tomb.

Less regular in plan were the rock-cut chambers, some of which had burial niches made in the walls. This tomb type also suffered from roof collapse, again frequently caused by quarrying.

Burials made in pits in the rock or in debris were more exposed generally speaking, and the grave goods and bones easily disturbed. Thus, the thirty-nine tombs discounted varied in type, but most had suffered some kind of structural damage and disturbance of contents. Such tombs should be considered contaminated and their contents eliminated from being considered representative of the Late Bronze Age, for the following reasons.

When the roof or a significant section of it was found collapsed, it should be eliminated if the contents were observed to have been disturbed as a result. Where no comments were made by the excavators, other factors would be decisive. When holes in the walls were noted but not fully described in terms of their meaning for the condition of the tomb deposit, the tomb has been eliminated, since it is impossible to judge whether or not a hole has been used to enter by robbers. Other tombs are eliminated on the basis of a lack of descriptive data, illustrated pottery, plans and sections, or photographs, for it appears in such cases that the excavator was unable to gain much information. In fact, many tombs which are described were listed as "date uncertain" for the period of their building and first use. Still other tombs were eliminated because the excavator noted disturbance and specified that the tomb was robbed in antiquity. Guy used the term, "disturbed", of the Late Bronze Age tombs. As he does not define this term technically, by reference to the context in

question, we may assume it to mean several things.

Disturbance indicates scattered or smashed pottery, disarticulated bones and intrusion caused by one tomb being cut into an earlier one. The problems arising from multiple burials have been noted earlier, as have those from the use of a tomb over a long time period. Late Bronze Age tombs at Megiddo had very few graves of a single period, and those that were found did not prove useful because of the dearth of pottery or because of disturbance. We must deal, therefore, with tombs of multiple burials, often covering several time periods.

In eliminating thirty-nine of the forty-seven tombs it was not necessary to examine these factors in detail since they were indicated within Guy's use of the term "disturbance." Guy was not able to distinguish re-use, particularly in most of the cave burials. And while he was more certain of re-use in the shaft tombs, he has labelled a number of the skeletal remains as "indeterminable" or as "none attributable to period."

In some tombs, no skeletal remains were found and in a number of others bones were found without skulls, or were missing other parts of the skeleton. Given the absence or meagreness of human remains in many cases, the question of what constitutes a burial must be raised. Furthermore, can a particular group of pots in a tomb, appearing undisturbed, without intrusive pottery, and without debris, be considered intact if they are not closely associated with an articulated skeleton? Thirty-nine tombs have been examined in Megiddo Tombs. These were eliminated from my study for reasons

discussed earlier. The remaining tombs need to be considered in terms of identifiable burials. Disturbed skeletal remains, or lack of such remains, may well indicate a loss of stratigraphy in antiquity and this situation may not have been noticed by the excavators.

Epstein points this out in her interpretation of the tombs published in Megiddo Tombs and uses only those tombs with bichrome pottery which appeared in occupational levels on the summit of Megiddo. The eight remaining Late Bronze Age tombs bear further study for the following reasons.

Most of them have a significant quantity or range of forms in Late Bronze Age pottery. Several tombs could present intact burials, although additional information might clarify them. Most of these tombs are used by certain scholars as either type deposits of Late Bronze Age I or II, or as part of a collection for one stage of the Late Bronze Age. 43

With regard to the re-use of tombs, once tombs with uncontaminated Late Bronze Age pottery deposits are isolated, the subject of stages within the period arises. Late Bronze Age I and II mixed together in a tomb obscures rather than illuminates which forms may be assigned to each period. This particular difficulty will be illustrated in the following discussion of individual tombs.

Guy states that Tomb 877 belonged to Late Bronze Age I. The tomb is a rock-cut chamber with a large hole in the northeast side the size of a door opening. The excavators did not mention any disturbance or robbing, despite this considerable hole. A burial niche in a wall was found empty and below it on the floor were vessels of the Late

Bronze Age I period. According to the tomb's plan 44 two bones lay on the opposite, or northeast, side of the tomb floor. No skulls were found. This tomb lacks skeletal remains, except for two bones not specifically called human by Guy. There is no description or photograph of the bones, and given the fact of a hugh hole in the wall area above where the bones were found, it is possible that the skeleton was removed from the tomb for some reason. 45 The excavator does not show or mention anything concerning the condition of the original tomb entrance.

The pottery appears, in the tomb photograph, to be "in situ" 46 and is labelled as such. The pottery forms shown (Amiran, Plate 41), are generally characteristic of Late Bronze Age I. Amiran classifies a Cypriot White-Painted IV juglet and a Cypriot White-Painted V spouted jug as Late Bronze Age I in her Plate 55. 47 The dipper juglets have the shorter bodies of Late Bronze Age I, but retain the wide necks of the Middle Bronze Age prototype (Amiran, Plate 46). The large, ovoid jar with mid-body handles is similar what Amiran calls the "Canaanite" jar of the early Late Bronze Age I. 48

Although this grouping seems to be Late Bronze Age I, without intruding vessels, the grouping cannot be used as representative of Late Bronze Age I because the tomb was exposed in antiquity and lacks an association to bones. However, it could corroborate firmer evidence.

A good example of confusing and confused stratigraphy is Tomb 877, an abnormal shaft tomb of the Middle Bronze Age I. Abnormal refers to the plan of the tomb. In this case a side chamber of T.877 was cut

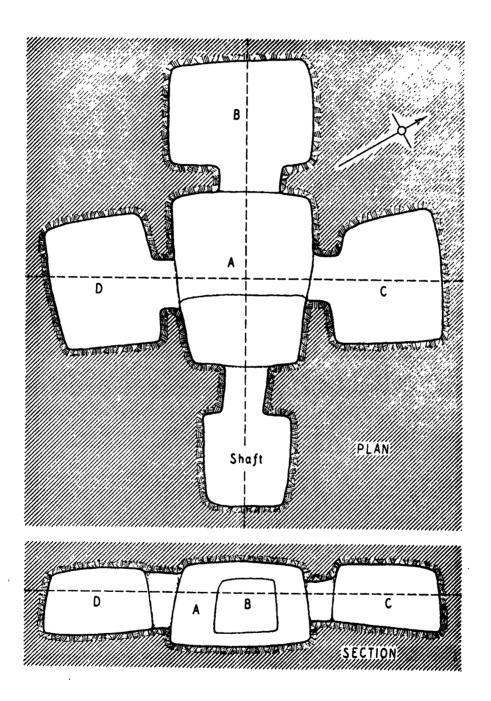


FIG. 4 PLAN AND SECTION OF A NORMAL SHAFT TOMB 49

into a chamber of another shaft tomb, so its builders stopped quarrying in that direction, leaving T.877 with one less room than is usually found in shaft tombs. Chamber C of Tomb 877 was made in the east wall of Chamber B. The tomb was not well-furnished but all three chambers were apparently cut in the Middle Bronze Age I period since pottery groupings from that time are found in them. The east side of the entrance was quarried and the blocking stone was out of place, allowing rock and debris to fall into Chamber A. All three chamber floors also had other debris and rocks from parts of the tomb's roof.

Skeletal remains were "few and fragmentary" and as the published plan and photographs do not show any bones we cannot know whether the burials took place in the three chambers at one time or on different occasions. Guy states the entrances to Chambers B and C were enlarged after the initial cutting but he doesn't say when, so we have no evidence to support his claim. He does not distinguish the debris of this next building phase from the above-mentioned debris. Thus, we have three Middle Bronze Age I burials in Chambers A, B, and C, without associated bones, and one hole into another tomb of the same period, from Chamber A. At some point two of the entrances were widened apparently. 51

In Chamber C Middle Bronze Age I and Late Bronze Age I pottery were mixed, which indicates a burial in the latter period, though there are no associated bones. It is probable that mourners carried a body, with grave goods, through the first two chambers into Chamber C, discovered a Middle Bronze Age I burial there and used the space.

They may have been the people responsible for disturbing all the Middle

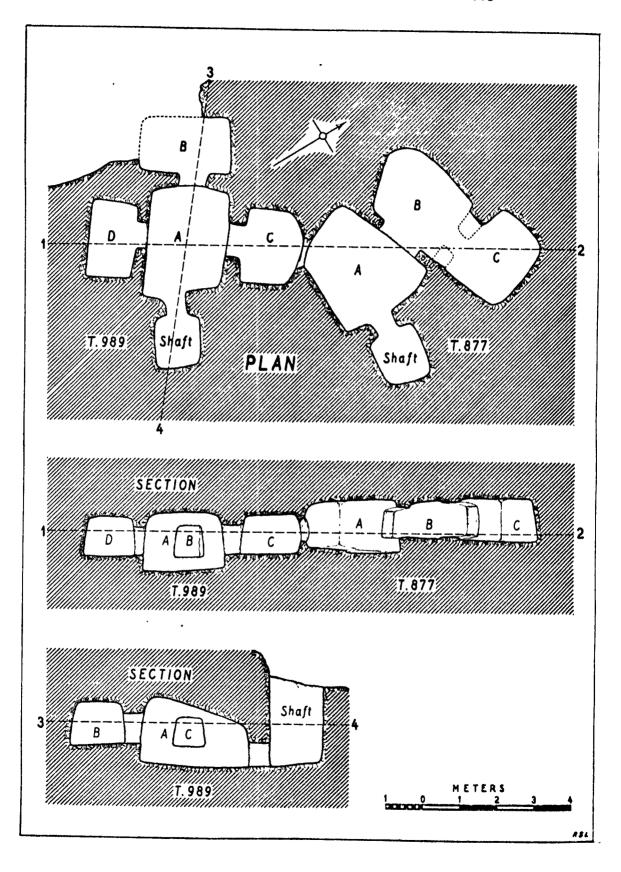


FIG. 5 PLAN AND SECTION OF TOMBS 877 AND 989 51

Bronze Age I burials, since part of a "teapot" from Chamber A was found in Chamber C. Intrusion from Tomb 989 cannot be discounted, however, since it was open to Tomb 877 from the Middle Bronze Age I period onwards.

A curious ledge, 30 cm. of "sterile filling partly waterlaid", is beside the entrance to Chamber B in Chamber A's south-west corner. Late Bronze Age II grave goods were found on it and it appears from the photographs that the top level, not given, of the fill is about the same as the level just inside Chamber B (Tomb 877 BI) on which other Late Bronze Age II vessels are found. No mention is made of full skeletal remains being associated with Late Bronze Age II pottery in either chamber. Guy believes that because no sherds from that period were found in or under the fill in Chamber A, that the disturbance of Middle Bronze Age I burials had already taken place before the fill was laid down. The depth between the remains of both periods was significant in Chamber A, but much less so in Chamber B. Guy indicates considerable confusion of the pottery though without mentioning the exact levels in Chamber B.

The Late Bronze Age II pottery in both chambers may come from two burials made at one time, different times, or could be from only one burial, in which case its pottery has been scattered throughout the entire tomb. Sherds from the Late Bronze Age II period, which Guy says are not from a burial in that room, were found in Chamber C. This means the chamber was entered at the time of a Late Bronze Age II burial, or, more likely, that Tomb 877 was disturbed several times, the last time being some period after the Late Bronze II burial(s).

Since a milk bowl sherd, called Late Bronze Age II by Guy, was found in Tomb 877C but was from Tomb 989C, the disturbance was likely to have happened after the last burial in Tomb 877.53

Unfortunately, the above discussion is speculative and the tomb's history cannot be accurately reconstructed. However, on the basis of the photographs showing Late Bronze Age II pottery in Chamber A on top of the sterile earth, it appears that this group is untouched and that it is not close to the Late Bronze Age I sherds. The major problem lies in the absence of skeletal remains, and furthermore, the pottery of Tomb 877 AI appears to have no clear relation to anything else.

On the basis of the pottery itself, the forms and groupings are clearly compatible with Late Bronze Age II. A funnel (Guy, Plate 13:10) is said by Guy to be found infrequently in that period. The bowls are flat-based, also uncommon in Late Bronze Age II and two of them (Guy, Plate 13:4,5) have thickened inside rims. Amiran notes that this bowl type has a Middle Bronze Age prototype. The same bowl (Guy, Plate 13:9), light red and burnished, has a degenerate Bichrome design. The store jars are typically Late Bronze Age II with high, sharply-defined shoulders, long tapering bodies and thick button bases. One of these is much closer to an earlier form, with an ovoid body, handles on shoulder to mid-body with walls at the base thinnner than the Late Bronze Age II store jars. As this form is not specifically shown by Amiran, nor discussed by Guy, its general date seems problematic.

One vessel, a jug on Guy's Plate 12:22, which is similar in shape and design to a pyxis from Tomb 989 C and called the Iron Age prototype by Amiran, appears to be a Mycenaean pyxis, though not labelled as such by Guy. Kenyon calls it a Mycenaean IIIb vessel, but Stubbings in his book, Mycenaean Pottery from the Levant, does not list any Megiddo pottery remains in Class IIIa and no pyxides in Class IIIb. This may indicate that the Tomb 877 AI pyxis is a local imitation.

There is also a late biconical jug with a lattice and zigzag design in red, common to the period, as well as typical dipper juglets, although these latter cannot be pinned absolutely to Amiran's Late Bronze Age IIA or IIB. 56 The pottery group does not appear to have other periods' pottery mixed with it.

On the basis of this rather limited collection of forms and on the basis of present knowledge of pottery typology, Tomb 877 AI can be seen as representative of the Late Bronze Age II.

Tomb 989 is a normal shaft tomb built in the Middle Bronze Age. Much of its roof had caved in, covering the entire tomb with debris and disturbing human and animal remains, as well as pottery and other grave goods. According to Guy, the roof's collapse was due to its having been quarried out over Chamber B and part of D. Chamber C was cut into by Tomb 877 and one of the former's milk bowl sherds was found in Tomb 877 C. In each chamber of Tomb 989 there was found ceramic evidence of both Middle Bronze Age I and Late Bronze Age II burials, in considerable quantity and in a good range of forms. For these reasons this tomb could be valuable as representative of the Late Bronze Age II. 57

There is no mistaking the pottery forms of the two above-mentioned periods, but unfortunately the excavators found Late Bronze Age I sherds in each chamber, which they regarded as intrusive. Two of these sherds are of fine bichrome pottery, probably from the early part of the period. Several other sherds from Late Bronze Age I are mentioned, but Guy does not indicate whether these are all the sherds which are considered intrusive and whether all sherds are, in fact, intrusive. Without more information, we cannot make a judgement other than to say that since all of Tomb 989 may be contaminated, none of its pottery should form part of a representative Late Bronze Age II collection.

Tomb 911, as with Tomb 989, has a good quantity and range of forms of Late Bronze Age II. Both these tombs are cited by Kenyon in her type group series. This tomb is a normal shaft tomb and exhibits Middle Bronze Age I and Late Bronze Age II pottery. A wall of large, rough, stones blocking the entrance was broken down at the top so that stones had fallen into Chamber A, followed by dirt which had filtered through the hole. Due to the collapsing roof, Chambers A, C and D had considerable debris and some debris from D, whose roof was broken through, had spilled over to A. Chamber D had a weapons cache, pottery, and objects clearly indicating Middle Bronze Age II burials, according to Guy. Chamber C, which had a robbers' hole through one wall into Tomb 912 D and which was badly disturbed, had human remains attributed to the Late Bronze Age II. However, there was little pottery in this chamber and it was not close to the two adult skeletons, which were missing skulls. In the place where the skull

would have been was a bowl into which had been swept, presumably some time after the burial, debris from the roof, bone fragments and small objects. Therefore this chamber appears to have lost its sequence in antiquity. 58

Chamber B sustained little roof damage and contained no intrusive debris, but there must have been disturbance, Guy says, since the two adult skeletons had no skulls. Lower jaw bones were found together just inside the chamber's entrance. There is no plan or photo of this burial. Objects in the chamber were placed in separate piles around the tomb edges. This could have been done later, in preparation for re-use since human teeth were found scattered in one corner, and a small animal's bones were heaped together in one spot with spindle whorls. It is not possible to know if this burial was disturbed to any significant extent.

The excavators note that the objects and single pot found were Late Bronze Age II. The krater (Plate XX, Chapter III), has two horizontal handles and a degenerate bichrome lattice design in light red. The shape and decoration fit Epstein's late bichrome phase, though she does not show any of this type with such a handle. Amiran has a similar krater in her Late Bronze Age II period, noting that while the shape is local, the handle is not. While one krater does not constitute a collection, and while this krater is not clearly associated with a skeleton, the otherwise relatively intact provenience and its unusual form merit inclusion in the Late Bronze Age II pottery group.

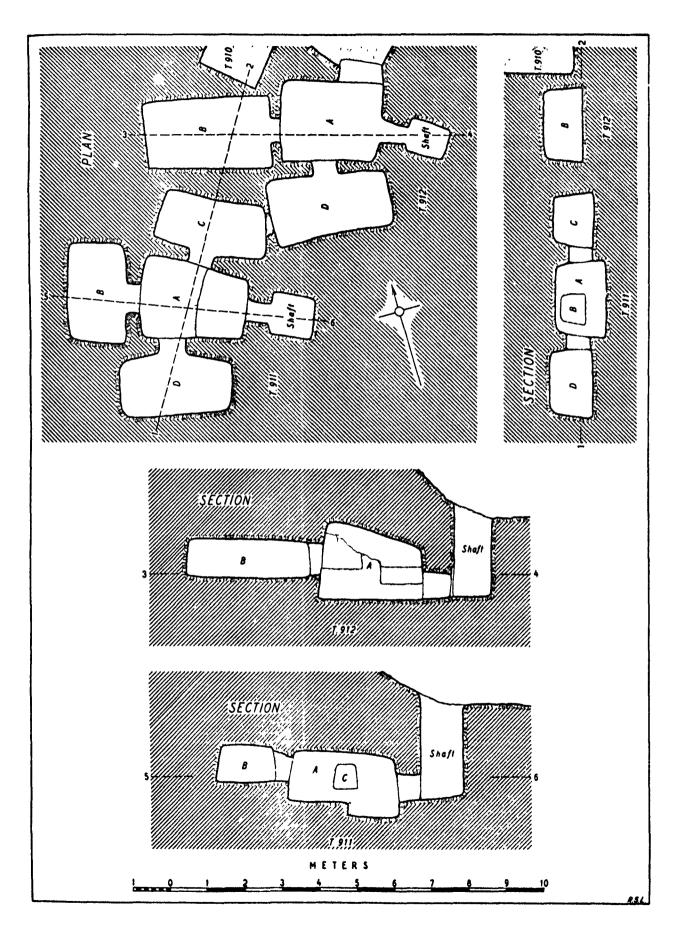


FIG. 6 PLAN AND SECTION OF TOMBS 911 AND 912 60

Chamber A has a large number of vessels separated into two groups by the excavators: the Middle Bronze Age I remains called 911 A2 and the Middle Bronze Age II and Late Bronze Age II together called 911 AI. Skeletal remains were fragmentary and scattered. Based on one skeleton in position with several clearly associated pots, the bones were dated to Middle Bronze Age II, with the exception of a few long bones found with Middle Bronze Age I *teapots*. No Late Bronze Age II human remains appear to be in this chamber. Grave furnishings of 911 AI were in disarray.

A sherd from Tomb 878 A was found just inside the entrance of Chamber A, but whether it is related to Late Bronze Age II remains is not stated. Guy suggests that certain of the Middle Bronze Age II and Late Bronze Age II pottery was stratified. In this case stratification means that there were two layers of debris in the chamber, in the top of which were Late Bronze Age II vessels, some in situ. The bottom layer was Middle Bronze Age II. The layers were defined by where the pottery was found rather than by any apparent soil differences.

The floors of the chamber are not mentioned and there seems little justification for claiming stratification within debris. The photographs show random vessels and various debris levels and as no plan illustrates the so-called stratigraphy, it seemsimplausible.

Vessels which were disturbed were distinguished from those in situ. According to Guy's illustration the latter jars stood against a wall. We do not know whether this was their position at the time of burial, especially as there is no known Late Bronze Age II skeleton, whether they were simply pushed to the side of the chamber at a later

date, or even whether these vessels were placed in the tomb together.

Vessels labelled disturbed were illustrated by a Cypriot milk bowl,

pieces of which were found at the south wall and north wall. Chamber A

cannot be considered a reliable context representing Late Bronze

Age II, with the exception of one vessel of Chamber B.

Tomb 912, also used by Kenyon for her type group series, had Middle Bronze Age II and Late Bronze Age II remains. It is an abnormal shaft tomb with Chambers A and B somewhat larger than the Middle Bronze Age I prototype, and lacks a third chamber due to the fact that during construction the workers broke through a wall into Tomb 910 E. Guy implies that on structural grounds Tomb 912 is definitely later than Tomb 910.

The entrance blocking stone was in place and at the shaft's bottom were a few Late Bronze II pots which Guy says are contemporary with pots in Chamber A. The entire tomb had been disturbed either through a hole from Tomb 911 C or a break in Chamber A's roof where it met Tomb 910 E. On top of dirt from Tomb 910 E, on the chamber's floor, below the break, was a group of Late Bronze Age II pots which Guy believes fell in with the dirt. A Late Bronze Age II burial with pots in situ was positioned about one half metre above the rock floor. The photograph shows pots propped up in a corner of the chamber, near the entrance, on top of and in the dirt which slopes from the entrance to Chamber D down to the shaft entrance. We must assume that these pots are one of several mixed piles in the corners of Chamber A since no skeletal remains were present in the chamber. The pottery of Chamber A cannot be diagnostic for the Late Bronze Age II.

Chamber B, a carefully finished room with whitewashed walls, had very little dirt or debris and offered a good quantity of Late Bronze Age II pottery, some of which was considered by Guy to be similar to the Middle Bronze Age II pottery of Tomb 911. One spearhead was thought the same type as found in the Middle Bronze Age II burial in Tomb 911 D, which had a good range of pottery forms, weaponry, and objects. Guy separated the suspected Middle Bronze Age II collection and suggested the possibility of an earlier Middle Bronze Age II burial. However, no skeletal remains are mentioned in connection with either the Middle Bronze Age II or Late Bronze Age II pottery of Chamber B.

The excavators do not indicate any disturbance in Chamber B.

This is partly corroborated by the published description and photograph of the tomb, which shows that the larger Late Bronze Age II forms are just inside the shaft entrance. Smaller forms, including Middle Bronze Age II, Late Bronze Age II and some Mycenaean ware, are set further back in the room. Though some of the pots could have been piled in the corner after a burial, the furnishings were spaced out on the floor in such a fashion that little disturbance is apparent. It is reasonably safe to conclude that the Late Bronze Age II collection here can be cited as representative for one stage of the Late Bronze Age.

Chamber D was so greatly disturbed that it cannot be considered a reliable context. The Middle Bronze Age II and Late Bronze Age II pottery, though similar to Chamber B, was mostly smashed and scattered and the bones were fragmentary. Inside, near the entrance, was found

the "Megiddo Vase" which Guy calls Late Bronze II. It is actually a jug with intricate and varied designs in red. Amiran notes the rarity of the crab under the handle, but she does not include it in any of her stages for the Late Bronze Age, saying that while the design is typical of that age, its development has not been studied. Therefore, while clearly of that age, we cannot use it to date a particular phase of the period.

For Tomb 912, the most reliable context which may be used as part of the Late Bronze Age II collection must be Chamber B.

Tomb 1100 is a very important tomb with a great quantity of Late Bronze Age I pottery. It has been cited by a number of scholars as the type group for that period. Guy claims to have found no pottery from other periods in this tomb. Given this fact, it is surprising that so little information is related about T.1100 in Megiddo Tombs.

The tomb is apparently a Middle Bronze Age I shaft tomb of normal design but with significantly wider entrances to its three side chambers. The excavators could not determine if such widths were original with the tomb or widened at a later date. As no trace of Middle Bronze Age I pottery, bones or objects remain, the tomb was presumably cleaned out before the Late Bronze Age I burials. Though there were many small holes in the chamber walls, only one hole in the southwest wall of Chamber D had anything in it: two daggers with attached pommels; these were bent double as in the Middle Bronze Age tradition and dated to the Late Bronze Age. We are not told the basis for Guy's dating, nor are the daggers described.

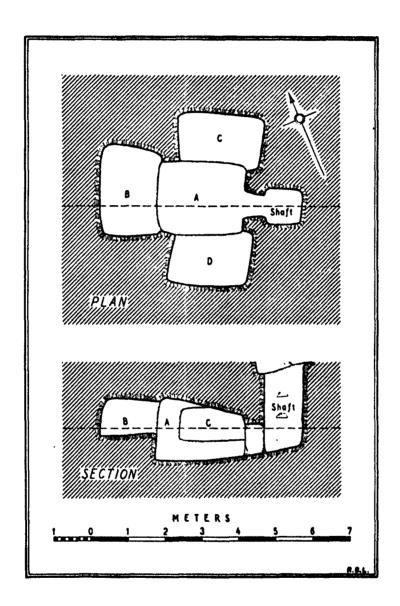


FIG. 7 PLAN AND SECTION OF TOMB 1100 63

There was no blocking stone to the shaft entrance and it was full of debris. Rock from the roof had fallen in several places, and debris came into Chamber D from a hole in an upper corner of that room. The excavators felt this tomb had discernable layers, even though they noted disturbance and looting in antiquity. Epstein cautions against the practice of imposing stratigraphy on tomb deposits which have lost their sequence in antiquity. To illustrate her point, she cites Tomb 1100 A, in which she implies the skeletal remains and pots are completely dissociated. It is likely that the original stratigraphy of T.1100 was lost in the process of looting.

On a beaten earth floor 2 metres above the rock three adult burials were found at the far end of Chamber A. Presumably these were the above-mentioned skeletal remains, but as few details are given, we do not know if any bones were disarticulated or missing. We know nothing about the beaten earth floor. Was it made as a kind of bed or was it simply fallen debris levelled off for later use? The issue of stratigraphy within T.1100 must be raised once again.

We are uncertain how the skeletons are related to the beaten earth nor do we have information regarding the pottery in Chamber A. Chamber B presented a few human bones in a fragmentary and disordered condition with a small pile of animal bones in one corner. In Chamber D was the upper half of a skeleton in the same orientation as those described in A except that the legs were missing. The excavators felt that the body had been draped over the edge of the entrance to the chamber or had been contracted. A few long bones and two skulls were also found.

As for the pottery of Chamber D, Guy noted no particular order to it, but found some vessels he believed to be in their original positions. For instance, small jugs were found within larger ones, in jars and in bowls and were probably used as serving vessels.

The disturbance evident to the excavators could have come through the shaft entrance of A or through the hole broken into Chamber D, although Guy does not describe its dimensions or its use, so this is speculative. Despite the disturbance, no intrusive pottery was found. The tomb may have been in use only a short time or throughout the Late Bronze Age I period.

Looting is probably responsible for the poor condition and scattering of the skeletal remains. We cannot correlate the bones to the pottery, nor determine over what time period the tomb was used, nor the burial sequence.

Chambers B and C cannot represent Late Bronze Age I bones legitimately because the bones were badly disarticulated and information on the pottery of those chambers is lacking. Based on the position and condition of their skeletal remains, Chambers A and D could be relatively reliable. However, if this tomb is the type deposit to which we compare other Late Bronze I groups, it should be an intact tomb, with undisturbed burials, and contents from only the one period. Arguments either for or against Tomb 1100 as representing an accurate picture of the range of Late Bronze Age I pottery are somewhat circular.

Without datable skeletal remains and closely associated pottery we must use the typological method to judge whether T.1100 was

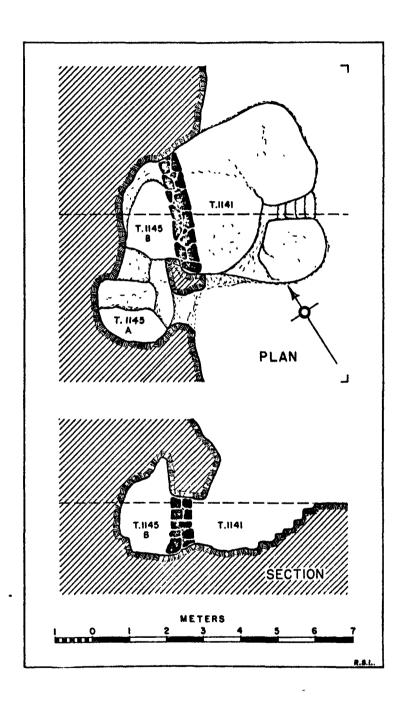


FIG. 8 PLAN AND SECTION OF TOMBS 1145 AND 1141 65

contaminated by foreign pottery or objects, since we do know it had been disturbed and very likely looted. Based on typology, the pottery range present seems to show consistently the Late Bronze Age I pottery found in similar groupings at other sites. However, Late Bronze I pottery at other sites has been called Late Bronze I after comparison to T.1100 at Megiddo. Chambers A and D, while not useful for absolute dating, do show the range of pottery forms commonly recognized as Late Bronze Age I. In conclusion, Toomb 1100 cannot be acclaimed as an absolute or accurate type deposit for the Late Bronze I period.

Tomb 1145 is a rock-cut tomb with two chambers and is dated to the Early Bronze Age by Guy. 64 Chamber B shares a stone blocking wall with another tomb of that period, Tomb 1141, and several Early Bronze Age pottery sherds were found below the Late Bronze Age I burials in Tomb 1145 B, and associated with that wall. The two chambers are separated by a "rock partition and stone blocking resting on it." 66 This blocking was intact and similar to that which was found between Tomb 1145 B and Tomb 1141. Thus Chamber B, as Guy indicates, offers a good grouping of Late Bronze Age I pottery.

Chamber A may have been disturbed, but the tomb's description, including contents, is minimal. Thus it is impossible to know whether Chamber A should be included as representative of Late Bronze Age I.

Guy surmizes that Chamber A was reserved for offerings since no skeletal remains were found. It is likely that the use of the chamber extended over a considerable period of time and is not datable.

Taking into consideration the chamber's photograph, with the lack of

intrusive pottery, lack of description, and the apparently intact walls as well, Chamber A should not be relied on as representative of Late Bronze I.

Chamber B had nine skeletons which had been put, apparently, in the tomb at one time. These remains were at a low level with a few pots at the same level and most piled on top. Photographs reveal a good number of whole vessels in an orderly fashion with the skeletons underneath. Similar pottery forms appear between or very closely connected to the remains. No levels are given, but the depth of piled-up pottery seems significant.

On the basis of the associated burials and pottery, the brevity in time of use and the pottery itself, Tomb 1145 B provides a very clear and precise range of Late Bronze Age I pottery.

Of the forty-seven tombs called Late Bronze Age by the excavators, only the following four tombs represent an accurate picture of the range of pottery forms of the Late Bronze Age: Tomb 877 A1, Tomb 911 B, Tomb 912 B and Tomb 1145 B. 67

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Part Two: Area AA

Megiddo Two suggests the following chronology for the Late Bronze

Age. There are two phases: Late Bronze Age I, 1500 - 1350 B.C. and

Late Bronze Age II, 1350 - 1200 B.C.

Stratum IX (1550-1479): transitional Middle Bronze Age - Late

Bronze Age

Stratum VIII (1479-1350): Late Bronze Age I

Stratum VII (1350-1150): Late Bronze Age II

This dating system has been somewhat revised from that given by Guy in 1938, but it is not substantially different. While Stratum IX is called Middle Bronze Age by Loud, it has been included in the Late Bronze Age period as a transitional phase which is well known in Area BB for is bichrome pottery. This phase coincides with the generally accepted date for the Late Bronze Age, ca. 1567 B.C., beginning with the expulsion of the Hyksos from Egypt. 68

Thus the strata to be considered as Late Bronze Age in Area AA are IX, VII, VIIA and VIIB. Area AA had two main features in the Late Bronze Age levels: the so-called "Palace" and the city gate, along the summit's northern edge. The area's stratigraphy is confused for reasons explained above, in the introduction to the Megiddo Two volumes. Examples of the period's pottery come from tombs and houses. The principles used for isolating reliable contexts vary in each case.

Megiddo Two has brief descriptions of each stratum's architecture.

Pottery is not mentioned in connection with architecture. There is no discussion of the tombs on the summit, and we must rely on diagrams or

photographs and the few levels marked on the plans.

The tomb contents are located on the pottery plates in the stratum at the lowest depth to which they were originally dug and in which the burials were recognized. Normally, burials recorded on the summit were placed there by the inhabitants of one or more strata above. On typological grounds the correct assignation of a tomb deposit can be made, given that the contents are intact, but typology has been used thus far as evidence only when other means of determining a context's reliability have proven uncertain.

To locate the stratum from which a tomb was cut, the plans of each stratum have been studied. Tombs have been plotted on the strata plans above where they are recorded. In cases where the tombs are seen to be underneath an intact floor of the above stratum, they have been considered part of that stratum. Where they have not been sealed by the first stratum above, the next has been consulted. In most cases tombs which are not sealed by the stratum above their recorded location do not appear to belong to any other stratum either. This principle varies in use, however, because levels in several areas of the strata indicate that all structures assigned to a stratum do not necessarily belong to it. The principle may be further modified since certain floor levels marked on the Late Bronze Age strata plans have the same locus number over a period of several plans, while the area the floors cover may vary in each stratum. Thus, where there are floor levels apparently sealing a tomb beneath them, the floors themselves may not be stratigraphically certain.

Tombs which Loud labels as structural may or may not be associated with the structures they refer to. These are burials in specially built tombs, some of which are within rooms of a house or are outside but directly associated with the structure. Special care must be taken in examining these tombs' floor levels and the structures' floors and walls since the former may have been cut into a structure at a later period than the structure's use. In the case of structural tombs, the confused stratigraphy of the Late Bronze Age levels has caused some tombs to be attributed to the wrong period.

Pottery found in Area AA, other than tomb pottery, is scarce for several possible reasons. Loud believes that the Late Bronze Age strata reveal a generally peaceful series of modifications and rebuilding to some structures and re-use of older structures between the plans of Stratum XI and VIIA. Loud does not discuss in any detail how he came to decide that Stratum IX was destroyed by Tuthmosis III, but he does see the Late Bronze Age in Palestine as beginning with Stratum VIII. The absence of severe destruction layers means that objects and pottery were removed and replaced. Where floor levels were not distinguished by Loud, it may have been the case that floors were re-used or were removed and replaced.

The architecture on this section of the summit may have been mainly public. The city gate certainly existed throughout the Late Bronze Age. Its approach and passage through the piers was used over a long period, was likely cleaned occasionally and would not be a typical context in which to find pottery. The Palace, so-called by Loud, may also have had public use. He was not able to determine its

actual function because of the dearth of pottery.

Much of the listed pottery is dubiously stratified. Some forms had to be eliminated immediately because they came from near or over or under a locus, but were assigned to a stratum on the basis of proximity to a locus or on the basis of typology.

The small number of pots from Area AA found in reliable contexts, associated with floor levels of a particular period, do not provide a wide repertoire of forms. In addition, the labelling of Stratum VIII as Late Bronze Age I and Stratum VII as Late Bronze Age II seems arbitrary given the apparent mixing of structures and levels throughout the Late Bronze Age strata. The documentation of the Megiddo material is inadequate for Area AA, as is Loud's analysis. Therefore, isolating the uncontaminated Late Bronze Age pottery in Area AA may precipitate a change in dating of the strata or may reveal, through typological problems, further confusion in the strata.

Although not considered to be Late Bronze Age, Stratum X must be consulted first to determine which of the tombs shown on its plan belong, in fact, to Stratum IX. Stratum X had several intact floors but no associated pottery. Kenyon dates this stratum using the structural tomb #4043, found in the soutwest corner of the area. This tomb "accommodates itself to the X walls" and provides an intact deposit since it is covered by a stone floor of IX. Nine tombs shown on the Stratum X plan may have been cut from Stratum IX. Two of these tombs may prove to be reliable contexts. Tomb 4022 is located in a west side chamber of the "Palace" at its north wall. As shown,

intact floor throughout this chamber and most of the building.

Tomb 4054 is a structural tomb appearing in the middle of the inside north wall of the central court of the "Palace." This tomb is not associated with any floor level of that structure. No levels in its vicinity are given on Plans X or IX, and while Plan X indicates an intact surface on top of the tomb it may not be part of Stratum X.

Plotted on Plan IX, the tomb is in approximately the same position as in Plan X, but it is under a large section of intact floor, Locus 2134. Thus, Tomb 4022 alone can be attributed to Stratum IX from Plan X.

Stratum IX has several main features. In the northeast corner is a three-pronged gate with possible walls emerging from the northernmost, outside piers. There is no reliable connection between this gate and the "Palace" building slightly southeast of it, although Loud infers a connection. 72

The "Palace" shows more clearly on Stratum IX than on Stratum X, with its north and east walls defined, and thicker, and the chambers around the central court clarified.

West of the "Palace" most architecture disappears, and this area is particularly confusing stratigraphically. In trying to explain the area (squares K6, K7, and L7) we assume a continuity of structures between Stratum X and IX without having any evidence. Loud states that the ground level rose to such a height in the western section of Plan IX that its buildings were completely destroyed by the Palace of Stratum VIII. Kenyon suggests that the western buildings were earlier in date and that the later IX structures were removed. There is no evidence that the tombs found in the western area (Tombs 3169 and 3173),

were connected to the Stratum IX structures. It is even hypothetical that the tombs' levels were part of Stratum IX. According to the levels in the tombs' vicinity, there is approximately 10 cm. between Stratum IX and VIII. Thus, several strata could be missing. Clearly these tombs cannot represent the Late Bronze Age of IX.

There are intact floors in several rooms of the "Palace", called Locus 2134, but no associated pottery. However, Locus 4116, a floor associated with the structure's west side, contained a jug and bowl. Since this is the only pottery certainly attributed to Stratum IX, it should be shown if only to provide some tentative connection to the Late Bronze Age strata in Area BB at Megiddo. 74

Stratum VIII substantially clarifies the city gate and reveals an impressive, enlarged "Palace" building. The gate is described structurally, but neither the rubble-paved approach nor the lime-plastered passage through the gate nor the inside area sloping up to a set of basalt steps are areas in which stratified pottery would be likely found, even if these three surfaces are clearly related. The basalt stairs, Locus 2105, are said to be related to the east wall of the "Palace" by Loud, thus stratigraphically connecting the gate and the Palace in Stratum VIII. Despite the probable connection between the stairs and east wall neither Locus 2105 or Locus 3176 can be considered reliable loci since the connection can not be proved ceramically.

The "Palace" is a different building than that of Stratum IX.

Kenyon points out that the only coincidence is the northeast corner angle which is the same as in Stratum IX.

The main walls are 2 m.

thick in VIII and the central court has been moved significantly to the west and its orientation altered. The court and several chambers directly connected with it are called Locus 2041. Again, the number appears to refer to a floor level which is described as lime-paved and seems intact on Plan VIII. No pottery was found closely associated with this locus.

Locus 3091 is a room opening from the central court south wall and giving entrance to a large, unlabelled room to the west. The room is small, with a pavement of seashells set in lime-plaster. A shallow basin cut into a basalt slab, draining into a sump beneath, was found in the room's centre. While it has four doorways, only the one into Locus 2041 was paved with seashells over the threshold. Loud thought the room served as an ablutions chamber. A pottery form of dubious function called a "cup and saucer" was found on the floor. This vessel could belong to either Stratum VIII or VIIB as they shared the same floor at Locus 3091. 76

Along the north side of the "Palace" the rooms had no pottery though several floors were intact. This may have been due to their re-use over a long period or to the closeness of one period's use to the next.

Kenyon suggests that Stratum IX was violently destroyed and a hiatus between IX and VIII occupations existed. Her analysis is based on the rebuilding of many "Palace" walls, the buildings' new orientation, the tomb contents (Tombs 3169, 3173) and Mycenaean sherds found in Locus 3178 and in a wall of Locus 4005. The quantity of pottery she assembles for this argument is very small; Tombs 3169 and 3173 are accepted on typological grounds since their stratigraphic

reference remains unclear, and the provenience of Mycenaean sherds of Locus 3178 is not reliable. Her argument offers a comprehensive reworking of the architectural phases of Area AA. Since her aim is somewhat different than the purpose of this paper, her criteria for the use of pottery may be appropriately different. However, the lack of pottery is noteworthy, and Area AA Stratum VIII does not provide substantial evidence for Kenyon's conclusions. In this instance Loud's analysis of Area AA may be correct.

Locus 3102 is a room opening off the northwest corner of the central court, which appears to have an intact floor. In its west wall is a doorway into a small room, Locus 4005, also with intact flooring. The function of Locus 3102 has not been determined by its pottery and with its wide doorway onto the court, it appears to be an ante-room. Five vessels were found associated with the paved floor and are acceptable as partially representative of the Late Bronze Age.

Locus 4005, opening from the above room and into another long narrow chamber on its west side, had an intact floor but contained no pottery. As noted above, a Mycenaean sherd was found in the west wall. This sherd should be considered with the vessels of Locus 3102, though its relationship to the floor of Locus 4005 is not established. The floor level is 154.50 m. and the sherd was likely found somewhat above that level. On Plan VIIB the west wall of Locus 4005 appears under the northwest extension of the central court's wall. The floor level near the VIIB wall is 154.65 m. Thus the find spot of the Mycenaean sherd ought to have been less than the 15 cm. above the floor of Locus 4005 and should be sealed by the thick wall on Plan VIII. While

the Mycenaean sherd probably dates the wall it was found in, it cannot reliably date the floor below its find spot.

Locus 3099 is a room in the southwest corner of the stratum in a fragmentary building appearing in Plans X and IX. There is an intact stone floor but no pottery.

No tombs were recorded on Plan VIII. Kenyon suggests that VIII follows IX and is characterized as a period when burials were not made within the city walls.

The plan of Stratum VIIB shows one tomb, structural, in the southwest corner. Tomb 3094 is located 1.20 m. above Stratum VIII and .25 m. below Stratum VIIA. Since it is in an area of fragmentary, disconnected walls and is not itself related to any structure, its contents cannot be properly assigned to any stratum.

The city gate is not reliably connected to the "Palace" building of VIIB. A significant rise in the pavement outside the gate is not matched by a rise in the pavement level where the inner piers enter the city and the basalt steps, which Loud suggests may be the joining place of the city street pavement and the gateway pavement, do not appear on Plan VIIB. 78

The eastern "Palace" walls have disappeared and most of the central court's rooms have thinner walls. The room divisions appear more complex in the "Palace", sub-divided and oriented to the western part of Plan VIIB. Both the central court, Locus 2041, and Locus 3091 are unchanged. They cannot be used despite their intact floors because the floor levels are exactly the same as those of Stratum VIII.

On the court's north side, Locus 3102 of Stratum VIII opens from near the northwest corner. The room's north half has a large patch of floor about 30 cm. above the floor of Stratum VII. Two vessels were found on this floor level.

Opening from the west wall of the above room is Locus 3103, a room about 15 cm. higher than the floor of Locus 4005 and covered by a an intact floor on which one vessel was found.

Very little pottery can be attributed with certainty to Stratum VIIB in Area AA, and those vessels are restricted to Loci 3102 and 3103.

Loud says that there were more changes in the Stratum VIIA city than are shown on the plan. The city gate remained much the same as in VIIB, sharing with the latter the same pavement level. Loud assumes an outer approach to the gate though none was found, especially since the northwest buttress of the gate was moved to the west to join the "west wing." The gate's pavement level is not shown on the VIIA plan, but it appears similar to that of VIIB. There is no known connection between the city gate and the buildings in Area AA.

The lack of relationship between gate and "Palace" may be due to the absence of the "Palace"'s eastern walls on Plan VIIA. Loud believed this plan was similar to VIIB, although it is in discussion of the "Palace" that the changes he mentions become clearer. The north wall was unchanged, as were chamber Loci 3091 and 3102 and the central court, Locus 2041. Floor levels for these rooms are not shown on Plan VIIA and only the western half of Locus 2041 is defined. Other rooms off the court's north wall have been modified as have the rooms on the exterior side of the court's west wall.

In the north section of rooms, Locus 3103, which is suggested as a shrine room, is divided into two long and narrow rooms. The westernmost of the two rooms, Locus 3098, has a complete floor described by Loud as "solid cement." BO This room was directly above the raised platform in Locus 3103 and the floor level of Locus 3098 is given as 155.40 m., the same as the platform level of Locus 3103. Approximately 75 cm. of some kind of fill existed between the floor levels of Loci 3103 and 3098. Although the significantly higher floor level of Locus 3098 is of interest, a fact of importance is that Locus 3098 has a recognizable floor, unlike most rooms of VIIA.

Floors of Locus 2041 and Locus 3091 of Stratum VIIA are said to be 1.5 m. higher than in VIIB. Loud thought the builders of VIIA levelled the debris of fallen or broken stone which littered the rooms of VIIB, and built over it. To explain this he suggested that VIIB was violently destroyed since it was common in the Late Bronze Age strata to find very little debris separating occupational levels. No Stratum VIIA floor exists in Loci 2041 or 3091, as noted above. Loud says that a new flooring was placed over the debris, belonging to VIIA. His justification for this statement is in the plaster he found on the upper walls of the two above-mentioned loci. When the bottom level of the plaster was measured around the rooms, it was 155.40 m. in the court's northwest corner, not far from the VIIA cement floor of the same level in Locus 3098, and 155.65 m. in the southwest corner of the court. A mean floor level would thus be 155.50 m. This height is about 1.65 m. above the underlying floor level in Locus 2041, attributed by Loud to Strata VIII-VIIB. This level is confirmed by charred,

horizontal lines around the walls of other rooms and by the floor levels of Locus 3098 and Locus 3185. Thus Loud felt that a general floor level for Stratum VIIA was established. When debris had been removed, traces of a design were seen on plaster in the northwest corner of Locus 2041. On top of the debris was found quantities of painted fragments of a type of mud brick plaster which Loud says was common to Stratum VIA. 81 Loud does not justify the connection between Stratum VIA and Stratum VIIA. No pottery was found in Stratum VIIA, Locus 2041. Loud's diagnosis of violent destruction hinges mainly on the depth of debris in the central court and ablutions room of the "Palace." Both of these chambers had existed in the general plan for Area AA since Stratum VIII. Loud states that the Strata VIII and VIIB floor in these chambers was used throughout both periods. Because these strata shared floors the very small number of pots found there had to be discounted as unstratified. We have no ceramic evidence then to date either the Stratum VIII or VIIB floors.

It should be noted that if VIIB was violently destroyed, its inhabitants still had time to remove all the pottery as they had in earlier Late Bronze Age strata. It is possible that the Stratum VIIB floor in Loci 2041 and 3091 was not observed by the excavators, especially if it had as few pottery vessels as other floors in Area AA, In this case, it could be that the 1.5 m. of debris cleared from these rooms included the VIIB floor, and the floor level Loud says is similar to Stratum VIA belongs in fact to Stratum VIA. The debris level would not in this case be exceptional.

The floor levels west of the central court cannot easily be coordinated with those of the "Palace" in any Late Bronze Age stratum other than VIII. In VIIA, Locus 3185, for example, does not appear to have a floor in the plan although Loud mentions it. B2 The only reliable floor in the "Palace" complex of VIIA is in Locus 3098 and it has only two vessels. While Locus 3043 in the southwest corner of Plan VIIA is a patch of stone flooring, it is small and not clearly related to the Palace complex or any other building, and it appears in an area where stratigraphy has been rather loosely associated with the buildings of the Late Bronze Age strata in Area AA.

Part Three: Area BB

The excavation of Area BB proceeded on the same assumptions and with the same techniques as Area AA, and while no attempt was made to relate parts or the whole of the former to the latter area, Loud believed that the Late Bronze Age strata of AA matched those of BB, although this was not stated explicitly in Megiddo Tombs. 83

Initially, a trench from northwest to southeast, through squares L13 to L14, was sunk and a corner of the subsequent temple of Area BB discovered. At that point, a work force was deployed to laterally excavate the building and its environs. The excavation area was carried to the east, toward the edge of the tell, and was dug down to Stratum VIII. At the same time, a second east-west trench was begun through squares N14 to N15 along the north edge of Area BB. The sounding revealed the brick city walls of strata earlier than the Late Bronze Age. Eventually, most of Area BB was uncovered to bedrock, at which time the excavators began digging westward to the north-south cut of Schumacher's trench.

Area BB does have a number of similarities to AA. Obviously architecture was the primary focus for the excavators, and several specific zones of excavation developed as the architectural pattern of BB became clearer. In the southeast sector was a complex of houses and several streets. On its eastern boundary the houses curved slightly with the shape of the mound's eastern edge. Several corners of structures unrelated to the houses appear on the southwest and northwest extremities of this part of Area BB. To the west of the

houses is an empty area, shown on Plan X, which was the sacred area of earlier Middle Bronze Age towns. To the northwest of that sacred area was another complex of houses whose orientation, though in Stratum X they are in poor condition, seems to be to the empty sacred area. On the latter's north side was part of a building with rather thick walls.

The plan of Stratum x^{84} shows a space in the centre which looks as if it were at one time the focal point of the buildings around it. In the Late Bronze Age strata, Area BB has a central temple with the housing complex on the eastern side, while the northern and western structures gradually disappear.

As in Area AA, the general picture throughout the Late Bronze Age is one of peaceful transition from one phase of building to another. Changes in architectural plans from one phase to the next were not radical and most structures appear to have been changed and rebuilt from the interior. Pottery in Area BB was found in the domestic, religious and burial contexts. Upon examination of the published plans of Area BB, it is clear that on architectural grounds alone one cannot isolate a stratum of debris attributable to Tuthmosis III.

Most of the pottery came from the eastern houses, where the majority of burials were made until Stratum VIIA. Reliable pottery contexts with a significant range of types were scare, as was the case in Area AA. Some areas with intact flooring were not numbered. It is assumed that pottery found in these areas was labelled near, under or over a locus in the vicinity and since these vessels have been eliminated in most cases, the pottery is not useful for the study of chronology of the Late Bronze Age.

In Area BB, certain walls seem architecturally or stratigraphically important so the pottery found beside them has been taken into consideration although it cannot be used as part of the representative Late Bronze Age range of types.

Loud's discussion of BB centres on the temple area for the most part and no information is given on pottery nor is there discussion of tombs or their contents, except in the case of Tomb 3070, a peculiar structural tomb. All information must be gleaned from photographs, of which there are few, and from the several schematic plans of featured tombs. Levels on the plans are in less quantity than in Area AA and seem to be put in places unrelated to tombs or important walls. The text does not offer discussion of the origins of particular structures, although contemporary building practices are talked about.

Area BB is particularly important for the understanding of the Late Bronze Age at Megiddo. Unfortunately, there is not enough published information for BB to gain an understanding of its various strata, and just enough information to see the probable stratigraphical problems of this area. We do have access to a little more published review, critique and reworking of the Megiddo materials for Area BB than we have for Area AA.

Area BB provides Epstein with a greater quantity of pottery and more reliable contexts of bichrome pottery than does Area AA. For Kenyon, Area AA must be understood in light of its connection to the stratigraphy of the BB temple, and her analysis of Area AA is coordinated to that of BB. The latter has similar kinds of interpretive problems as AA, but the focus of these is the temple and its building phases.

The plan of Stratum X reflects the description of Area BB given above. Bichrome pottery, an indication of the early part of the Late Bronze Age, was found in Stratum X tombs, but not in domestic contexts. Of the twenty-six tombs shown on Plan X, most were in the eastern housing complex. Six of these tombs proved to be sealed by floors or walls in Stratum IX. Since Tomb 3060 had no pottery, the five remaining ones attributable to IX on the basis of reliable contexts were 3035, 3059, 3046, 3042 and 3047.

Unfortunately, these five tombs did not provide more than a few vessels each. Together they do not necessarily imply a grouping of similar tombs chronologically. They were sealed against contamination by structures said to be of Stratum IX. Whether, in fact, the latter is correct and whether Loud's dating of the stratum is correct are different issues. It should be noted here that the major stratigraphic problems seem to be in the area of the BB temple, while the eastern buildings appear more certain.

Structural tomb 3070, shown on Plan X, is not given levels on that plan or on Plan IX, although on the latter it appears to have been built against an interior house wall. This tomb is especially important because it has a large quantity of Late Bronze Age pottery, including bichrome wares.

Set in the centre of a room of Stratum X, Tomb 3070 is, according to Loud, different from structural tombs of Stratum IX. There is a stone square supporting large, flat roof stones in the tomb's centre. A long, narrow passageway from the northwest leads into the tomb and a circular stone set against the wall to the right of the entrance

probably sealed the tomb's doorway. It is not clear whether this tomb belongs to Stratum X or IX on the basis of its description and its place on Plan X. Both Kenyon and Epstein have made a closer examination of this tomb. 86

Tomb 3070 contained mutiple burials, the earliest of which was pushed to the back. The pottery definitely belonging to the earliest burial was not found close to any of the bichrome ware. The latest burial, placed near the tomb entrance, was identified by Epstein, with its grave furnishings, from the tomb photographs. She says that on the basis of typology the bichrome ware of the last burial is associated with other pots typical of the fully developed collection of Late Bronze Age I pottery found in Stratum IX intact, in Loci 2114 and 2115. This last burial took place near the end of Late Bronze Age I. The tomb was apparently built and first used in X, but had its latest period of use near the end of IX. Epstein says that the pottery interpretation is confirmed by the tomb architecture.

Kenyon suggests two distinct pottery groups were found in Tomb 3070, one representing the end of the Middle Bronze Age and the other from the early part of the Late Bronze Age. While it is not clear whether the tomb had been entered since the last burial, as the door covering was dislodged, it did not appear to have been disturbed. For these reasons, the last burial of Tomb 3070 is acceptable as representative of the Late Bronze Age I.

Thus, the tomb pottery representing Stratum IX is that of Tombs 3070, 3035, 3059, 3046, 3042, and 3047.

Stratum IX's domestic pottery sources produced several loci with good quantities and ranges of pottery forms. In the area of the

eastern houses one house, curved along the tell's eastern edge, gave two rooms with a good number of pots. Locus 2114 had an almost intact floor and the room next to it, Locus 2115, had a complete floor. The pottery from these two loci is similar and includes elaborate bichrome, some Middle Bronze Age forms, such as carinated bowls and stone jars with rope decoration around the neck, jugs with red-line decoration and juglets with rounded bodies and slightly swollen necks. 88

Locus 5012 is a large section of intact floor in the most clearly defined zone west of the sacred area. Its west and south walls were heavily built and the west one buttressed, though it is the east wall which is thinner. Loud says this west wall was part of Stratum X and that the south and east walls are new, although they are quite different in thickness. Two elaborate bichrome chalices were found on this floor.

Further to the north of Locus 5012 was Locus 5039, another patch of flooring with no connected walls. Two elaborate bichrome pieces fit well with those found in Locus 5012, and the two areas were connected architecturally in Stratum X.

Locus 5029, north of the sacred area, and Locus 5014, are part of the building west of that area, and are walls. Pottery listed as directly from these loci has been understood as being found in or on the walls and therefore should be uncontaminated. Locus 5014 is a new wall in Stratum IX and had with it a collection of bowls and two stands. Locus 5029, which appears to be a rebuilding of a Stratum X wall, at a higher level, produced a small, elaborate bichrome jug, small, straight-sided and gently carinated bowls and a lamp with a

rounded bottom and pinched lip without out-turned rim. The lamp is most similar to one shown by Amiran as part of Middle Bronze Age II C, so this grouping would appear to be transitional Middle Bronze Age to Late Bronze Age although lamps can not be used diagnostically without stronger supporting evidence. Thus, the loci of the occupational levels which represent Stratum IX, and thus the first part of the Late Bronze Age, are Loci 2114, 2115, 5014, 5012, 5039, and 5029.

In Stratum VIII the buildings west of the sacred area disappeared. In the eastern zone, houses had the same alignment although the interior walls had changed. The north-south street still exists but the east-west street only ran east. In the lower southeast corner of Plan VIII a short stretch of the easternmost north-south street is shown. The building in which Locus 2114 and Locus 2115 were found in Stratum IX is not shown. The good quantity of pottery from that house probably belonged to its last occupation.

In the centre of Plan VIII is a structure, Locus 2048, believed to be a temple. 90 It is a rectangular structure, 21.50 m. by 16.50 m. with a space for a doorway at its north end and a niche in the south wall. Its one room measured 11.50 m. by 9.60 m. The north end of the temple was built in this phase, asymmetrically, with the two wings at each side of different widths. One column base stood between the wings, but Loud believed it belonged to the temple of Stratum VIIB. The masonry in the temple is described as small-sized rubble except in the east wing, which was built of large, square stones. The temple walls were thought to be foundational only by Loud, since there was

neither floor nor doorway associated with the walls. In the space centred in the north wall, the excavators found an earth and loose stone fill which could have been the doorway area.

The discussion of the Late Bronze Age temple's stratigraphy in Area BB is germaine to any attempt to isolate uncontaminated Late Bronze Age pottery in each Late Bronze Age stratum. However, this discussion includes consideration of the sacred area and its pottery throughout the entire Late Bronze Age. It is possible to discuss Stratum VIII loci which are not directly involved in the problematic Temple 2048.

Partially due to the fact that there are very few levels on the Stratum VIII plan and very few intact floors, the occupational levels provided no usable loci. However, tombs recorded on Plan IX and sealed by floors or walls of Stratum VIII exist.

Tomb 3006 is shown as completely underneath a stone floor and therefore belonging to VIII. 92 No description is available and no dimensions or levels in VIII or IX are given. Included in this tomb was a red-line, decorated jug, a later bichrome jar with two shoulder handles and two small, gently carinated bowls.

Tomb 2123 was sealed under a house wall in the north-east block of eastern houses. Its two lamps appear to span the period of Middle Bronze Age II and Late Bronze Age I, but we cannot make any more accurate judgement on the basis of two lamps.

Tomb 3027 was sealed by the north wall of a house in the southeast block of houses. This deposit included a red-line decorated jug which appears to be a degenerated Cross-Line style pattern identified by

Epstein. Also found were a bichrome jug with open metopes, a somewhat more elaborate bichrome jug, a dipper juglet similar to the Late Bronze Age II shaved dippers and a Basering I bilbil. The last juglet may mean this tomb should be dated ca. 1500 - 1475 B.C., especially in combination with the red-line jug.

Tomb 2117 was covered by an interior house wall in the northeast block of eastern houses. No description or levels are available so that here too an assumption about the attribution of the tomb to Stratum VIII must be made. Although Tomb 2117 has no bichrome pottery and does have a crisscrossed red-decorated jug, which usually signals the declining phase of bichrome ware, the other pottery indicates a transitional Middle Bronze Age — Late Bronze Age grouping. As Epstein in her discussion of bichrome pottery uses this tomb without mentioning any possible contamination, it should be safe. 93

Tomb 3017, located under a wall of a fragmentary building in the northwest block of the eastern area, has only one vessel but is noted here because it is one of the few Cypriote vessels encountered in the tomb context of Stratum VIII, which is restricted to the eastern houses area. This vessel is a Cypriote juglet which resembles the Whitel Painted V juglets shown by Amiran, but its decoration is in red, not black. These juglets are dated to the Late Bronze Age I period.

Tomb 2097, in the same area as Tomb 3017, also had only one vessel, a dipper juglet with pinched lip, elliptical body and slightly widened mouth. It is typical of the transitional Middle Bronze to Late Bronze period.

Tomb 3018 is a more complex tomb and one which has been noted by Amiran, Epstein and Kenyon. Appearing on both Plans IX and VIII, this tomb had been divided, with A and B assigned by Loud to Stratum VIII and C, D, E, and F to IX. It is located in the southwest block of the eastern houses, in square O14. Although Loud subdivided the tomb into six sections, since there is no discussion of the tomb. the stratigraphic or other reason for this division is unknown. It is clear that there were multiple burials in this tomb, but the photographs do not show the various burials clearly. Although Epstein says that it is difficult to distinguish the relations among the burials, she finds Chamber A reliable and assigns it to Stratum IX. Chamber C is badly disturbed and cannot be used. Kenyon cites C and D both, however, as part of Stratum IX. She mentions no problem of disturbance in the tomb and further states that C and D were under a wall of Stratum VIII. My results from plotting the IX tomb on Plan VIII were not so clear. It appeared that the tomb was just at the edge of a wall, in a room without an associated floor. Given the uncertainty of the location and the obvious disturbance of the C burial, C should be eliminated and, by association, D, E and F. 95

Chambers A and B may be reliable loci, but this can only be decided in the end by typology. On this basis Tomb 3018 A, which had a red-line decorated jug, a bichrome jug with open metopes and a Monochrome bowl, must be discounted due to a large Basering II jug. Tomb 3018 B had most of the same forms as Tomb 3018 A but all its forms were Late Bronze I. It is difficult to tell whether the B burial is early or late in the Late Bronze I period. A flask in the

collection may be either a Late Bronze I Syrian flask, or a Basering juglet made in imitation of the Syrian flask. Tomb 3018 B nevertheless qualifies as an intact Late Bronze I grouping, and should belong to Stratum VIII.

The pottery of the Stratum VIII temple, Locus 2048, should be discussed here, since the temple recognized in Stratum VIIB and VIIA begins in VIII. As previously noted, Loud believed the temple to have been only foundational in Stratum VIII since it had no floor and no doorway. A large number of objects and pottery were found associated with Temple 2048. As in the case of Court 2041 in Area AA, the lack of floor levels in Temple 2048 meant that pottery of all the Late Bronze strata were mixed together in the temple. 96

Loud assigned three bowls to the VIII temple, but we do not know on what basis, or where they were found. ⁹⁷ Stratum VII is not separated into phases A and B in the temple, so we cannot tell which pottery belongs to each stage. Most of the pottery and objects are listed as near Locus 2048, which is not a specific enough locale in a temple. Discoveries which are clearly located were usually in the altar area at the south end of the room, and referred to jewellery or objects. On the basis of Loud's information, no pottery can safely be ascribed to the various phases of the temple, especially for the purpose of dating.

Part of the confusion regarding Temple 2048 is due to the fact that there was only one floor in the building. This floor was apparently built during the time of Stratum VIIB and was used until the destruction of the temple at the end of Stratum VIIA.

Kenyon, Epstein, and Wright agree that the sacred centre of Area BB was used throughout the Middle and Late Bronze Ages. While Epstein's assessment stresses the continuity of the architecture and culture in Area BB, it is difficult to believe that a temple area in use from the late Middle Bronze Age to the end of the Late Bronze Age would have only one floor, and that put down many years after the construction of the temple.

Kenyon stresses the violent destruction of Stratum VIIB, which may not be sufficiently demonstrated, but her explanation of the short period of time over which the temple was built and used accounts for the single floor level. 99

Neither scholar has been able to use the pottery of the temple to any extent, either to date the temple or the structures around it, although Kenyon sees the abandonment of the tell ca. 1475-1400 B.C. in the absence of typical pottery of the period. On Epstein's case, the study of the development of bichrome pottery aids her in suggesting a range of dates for the temple use. On Both scholars have reworked the architectural phases of the BB sacred area, and both date the structures from typological study. Given these analyses and their results, it seems inadvisable to use the pottery of the temple to show a range of forms throughout the Late Bronze Age.

Loud's discussion of Stratum VIIB is for the most part a description of the last phase of the development of the temple. This material has already been dealt with above, in two alternative interpretations of the sacred area found as an appendix to the thesis. Stratum VIIB is difficult to date, especially since the pottery is a

mixture of several periods. Unfortunately no loci in the eastern sector were found with both intact floors and pottery. While the wall loci did have pottery, it was not reliably associated with the walls. No burials were recorded on the VIIB plan. Of the eleven tombs marked on Plan VIII, three were sealed by walls or intact floors of Stratum VIIB.

Tomb 3004 was located under a wall of a house in the northwest block of the eastern complex. It contained one of the grey juglets, known by Kenyon as Black Lustrous Wheelmade juglets, and dated to the Late Bronze I period by Amiran. In Tomb 3004 excavators found a bichrome cylindrical juglet, dated to Late Bronze II A by Amiran. 103 With this combination of pottery, one would suspect intrusion or reuse of the tomb, but we have no description of it. Epstein dates it to early Stratum IX, based on the grey juglet. This form is normally in a transitional Middle Bronze - Late Bronze context when found in the Late Bronze levels, and Epstein does not mention it as part of Tomb 3004. She further notes that in the field diaries the excavators had originally called Tomb 3004 part of IX, as she dates it. Astrom attributed Tomb 3004 to Middle Cypriot III or Late Cypriot I, (1575-1550), on the grounds of the grey juglet and a zoomorphic vessel occurring together in the tomb. The lack of comment by Astrom or Epstein on the cylindrical juglet called Late Bronze II A could only mean that they had previously accepted it as an earlier form. Given the sealed context and the apparent acceptance of the cylindrical juglet by Epstein, Tomb 3004 may be included in the Late Bronze I collection of pottery forms.

Tomb 3014 was found under a relatively thick house wall in the southeast block of eastern houses. It contained a lamp common in the Late Bronze I period, but since lamps developed slowly and changed litle, they are not reliable as diagnostic tools. A buff jug with vertical burnishing is shown, with a red decoration of lines, triangles and zigzags. The other jug, similar in design, with a shoulder handle still common in Late Bronze IIA apparently, has a black painted design. On the basis of Amiran's date of the red-painted jug, 106 this tomb, if intact, ought to represent the early part of Late Bronze I.

Kenyon discusses Tomb 3015, found very close to Tomb 3014 under the same wall, and Tomb 3014 together, stating that they both have sixteenth century pottery, and bichrome in particular. Tomb 3015 had ten vessels when excavated, providing an ample range of forms. Several jugs in this tomb are typical of the Late Bronze IIA period, especially those painted pots which seem to have similar but simpler decorative designs that the bichrome wares. A Monochrome bowl was found in Tomb 3015, as well as a Late Bronze IIA lamp, a Basering I juglet, and a White Painted V teapot. The date which typologically covers the group would be transitional Middle Bronze – Late Bronze or early Late Bronze I. The collection gives a varied selection of imports along with the local wares.

Stratum VIIA is smaller, with its architectural remains less connected than the plans of previous Late Bronze strata. The western zone does not exist. Neither does the northern sector, and the eastern houses, although showing similar orientation to earlier plans, are

fragmentary for the most part. There are several intact floors in the northeast areas of squares N.14, N.15, but no pottery was found in either locus. Since no burials appear on this plan either, there is no datable pottery in Stratum VIIA.

Below is a list of the loci of the Late Bronze levels at Megiddo. These loci are uncontaminated and provide suitable samples for testing Kenyon's six stages of the Late Bronze, by comparing the Megiddo loci to her type groups. The list is divided into the Late Bronze I and II periods, according to the dating of Loud.

1. 1. D	Lata Dasana II
Late Bronze I	Late Bronze II
T. 1145 B	T. 877 A 1
	T. 911 B
	T. 912 B
T. 4022/IX	L. 3102/VIIB
L. 4116/IX	L. 3103/VIIB
L. 3102/VIII	L. 3098/VIIA
L. 4005/VIII	
T. 3035/IX	T. 3014/VIIB
T. 3059/IX	T. 3004/VIIB
T. 3046/IX	T. 3015/VIIB
T. 3042/IX	
T. 3047/IX	
T. 3070/IX	
L. 2114/IX	
L. 2115/IX	
L. 5012/IX	
L. 5039/IX	
L. 5029/IX	
T. 3006/VIII	

T. 2123/VIII

Late Bronze I

Late Bronze II

- T. 3027/VIII
- T. 2117/VIII
- T. 3017/VIII
- T. 2097/VIII
- T. 3018 B/VIII

Chapter Two: Footnotes

- 1) See Loud, G., Megiddo II: Seasons of 1935-1939, O.I.P. #62, Chicago, 1948
- 2) The Carmel Range is a series of low hills running from the Bay of Acco southeast into the Central Highlands of Palestine. This range forms the southern border of the Plain of Esdraelon, and is an obstacle to north-south traffic through Palestine.
- 3) Esdraelon is the Greek form of the word Jerreel. The plain stretches from the southwestern extremity of Lower Galillee to the watershed east of Megiddo, near Shunem. From that point it dips east toward Beth-shan, where it is called the Valley of Jerreel.
- 4) Of the passes through the Carmel Range, only those at Megiddo and Jokneam were chalk-bottomed passes which remained open in winter. Several other roads merged at the northern end of the Pass of Megiddo and the direct crossing of the Plain of Esdraelon from Megiddo was also the only route to the north in winter. The passes at Jokneam and Taanach were less central than Megiddo's pass as well.
- 5) The Shephaleh is a north-south stretch of foothills in southern Palestine, between the Coastal Plain and the Central Highlands.
- 6) Guy, P.L.O, New Light from Armageddon .
- 77) The Way of the Sea began at the Egyptian fortress of Silu, running north through the plains of Philistia and Sharon, and crossed to the east and emerged in the Plain of Esdraelon at the mouth of the Megiddo Pass. This route went north through Galillee to Damascus.
- 8) This is the term used by Loud, G., in $\underline{M.II}$, pg. 16, to describe a building in Area AA near the north city gate.
- 9) Loud, G., M.II, pg. vii
- 10) See Loud, G., M.II.
- 11) Kenyon, K., "The Middle and Late Bronze Age Strata at Megiddo:, Levant I, 1969
- 12) Shipton, G.M., Notes on the Megiddo Pottery of Strata VI XX, Chicago, U. of Chicago Press, 1939
- 13) Shipton, G.M., Ibid., pg. 3
- 14) The excavators, as well as later scholars, believed the Area BB sacred centre had not gone out of use, but the interpretation of the area has been problematic.

- 15) Shipton, G.M., Notes on the Megiddo Pottery of Strata VI XX, pg. 3
- 16) An example is the date for S. VII based on a comparison to Beth-pelet and Tell Beit Misrim, in the jug form typically used with red-painted wet-smoothed pottery. See Shipton, G.M., Notes, pg. 7
- 17) Shipton, G.M., Notes, pg. 50
- 18) Guy, P.L.O., Megiddo Tombs, pg. 2
- 19) Guy, P.L.O., M.T., pg. 2
- 20) Guy, P.L.O., M.T., pg. 2
- 21) W.G. Dever believes no use can be made of the tombs of the east slopes. Private communication.
- 22) This means that the east slope tombs must be dated typologically.
- 23) Most of the tombs with Late Bronze burials had several chambers, as they were the shaft tombs of Middle Bronze I. See Guy, P.L.O.., M.T., pg. 89, Fig. 104, for a plan of a normal shaft tomb, or Fig. 4 of Chapter Two
- 24) This dating system is again, based on typology.
- 25) The most complete type deposit for LB I was that of Megiddo Tomb 1100. Another important LB town with confusing stratigraphy and pottery is Beth-shan.
- 26) Tufnell, O., <u>Lachish II: The Fosse Temple</u>, London, Oxford U. Press, 1940
 Yadin, Y., Hazor I, Jerusalem, Hebrew University Press, 1958
- 27) This book will be referred to further in the text as Megiddo II, and as M.II in reference matter.
- 28) Loud, G., M.II, pg. vii
- 29) Wright, G.E., "Megiddo II A Review", J.A.O.S.,70, 1950, pg. 56-60
- 30) Shipton's work, Notes on the Megiddo Pottery of Strata VI XX, will be further referred to as Notes.
- 31) Wright, G.E., "Megiddo II A Review", J.A.O.S. 70, 1950, pg. 56
- 32) Guy, P.L.O., M.T., pg. 5
- 33) Kenyon K., "The Middle and Late Bronze Age Strata at Megiddo", pg. 25
- 34) Loud, G., M.II, pg. 1

- 35) Wright, G.E., "Megiddo II A Review", pg. 56
- 36) Loud, G., M.II, pg. 1
- 37) Loud, G., M.II, pg. 1
- 38) Kenyon, K., Ibid., pg. 25
- 39) See Kenyon, K., Ibid.
- 40) Guy, P.L.O., M.T., pg. 215
- 41) Guy, P.L.O., M.T., Table I, pgs. 139-142
- 42) Epstein, C.M., Palestinian Bichrome Ware, Leiden, E.J. Brill, 1966, pg. 88
- 43) Yadin and Tufnell cite Tomb 1100. Yadin also cites Tomb 1145.
- 44) Guy, P.L.O., M.T., Fig. 88
- 45) The hole is not marked on the tomb plan, and although it could be a hole to store grave furnishings, it is considerabley larger than others of the same period and use.
- 46) An artifact found in situ has been discovered in its immediate context, before having removed objects and soil surrounding it. Artifacts found in situ can be recorded precisely, and therefore carry greater weight in dating a context.
- 47) Amiran, R., Ancient Pottery of the Holy Land, pg. 178. This book will be referred to as A.P.H.L. in the text and reference matter.
- 48) Amiran, R., A.P.H.L., pgs. 142-143
- 49) Guy, P.L.O., M.T., Fig. #45
- 50) Guy, P.L.O., M.T., pgs. 33-36
- 51) Guy, P.L.O., M.T., Fig. #32
- 52) The "teapot" is a Middle Bronze I form sometimes referred to as a spouted jug. In the Late Bronze Age, the term sometimes refers to While Painted V decorated spouted jugs.
- 53) Guy, P.L.O., M.T., pg. 36
- 54) Amiran, R., A.P.H.L., pg. 125
- 55) Amiran, R., A.P.H.L., pg. 186, Plate 57:7
 Stubbings, F., Mycenaean Pottery of the Levant, Cambridge,
 Cambridge U. Press, 1951

- 56) Amiran, R., A.P.H.L., Plate 46, pg. 149
- 57) Guy, P.L.O., M.T., pg. 40
- 58) Guy, P.L.O., M.T., pgs. 64-68
- 59) Amiran, R., A.P.H.L., Plate 41:11, pg. 133. This krater, although similar in form, has a slightly different rim, and a debased palm tree and ibex motif.
- 60) Guy, P.L.O., M.T., Fig. #75
- 61) Guy, P.L.O., M.T., Plate 35:10. A juglet listed by Guy as M.B.II and part of the M.B.II burial, is called Early Bronze on this plate list.
- 62) Epstein, C.M., P.B.W., pgs. 88-89
- 63) Guy, P.L.O., M.T., Fig. 104
- 64) Guy, P.L.O., M.T., pgs. 94-99
- 65) Guy, P.L.O., M.T., Fig. 112
- 66) Guy, P.L.O., M.T., pg. 94
- 67) The pottery of these tombs is illustrated in Chapter Three, Plates XVIV, XX, XXI, I-IV
- 68) This date is accepted by the Cambridge Ancient History.
- 69) Loud, G., M.II, pgs. 101-105
- 70) See Kenyon, K., Ibid.
- 71) There is no description or evaluation of this tomb in M.II.
- 72) Loud, G., M.II, pg. 16
- 73) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 533
- 74) This connection has been asserted, although not explained, by Loud. Kenyon has connected the areas AA and BB in her article "The Middle and Late Bronze Age Strata at Megiddo."
- 75) Her conclusions are summarized in "Palestine in the Time of the Eighteenth Dynasty", pg. 533 and discussed earlier in "The Middle and Late Bronze Age Strata at Megiddo", pgs. 55-59
- 76) Locus 3091 is shown across squares L7 and L8 on Plans VIIB/AA and VIII/AA of M.II.

- 77) Loud, G., M.II, pgs. 16-25
- 78) The basalt steps appear only on Plan VIII/AA in M.II.
- 79) The west wing was a stone projection connected to the west exterior side of the city gate, running parallel to the gate, with several piers extending east. Its function is not known.
- 80) Loud, G., M.II, pg. 29
- 81) Loud, G., M.II, pg. 31
- 82) Loud, G., M.II, pgs. 29-33
- 83) Loud often used the strata numbers without referring to Areas AA or BB, indicating his correlation of the same numbers in each area of the tell.
- 84) See Plan X, Area BB, squares N13 and N14.
- 85) There is no discussion of these tombs in M.II.
- 86) Kenyon, K., Ibid., pgs. 49-52
- 87) Epstein distinguishes from photographs some of the vessels belonging to the last burial. This is the pottery I have used for T. 3070 as well.
- 88) Epstein, C.M., P.B.W., pgs. 89-95
- 89) Epstein, C.M., P.B.W., pg. 91
- 90) See Plan VIII/BB, squares N13 and N14. The debate about the function of Temple 2048 centred on the projections at the front of the building on either side of the entrance.
- 91) Even when the building phases of the temple are clearer, there is only one floor and the pottery associated with the floor belongs to two or three consecutive periods of use.
- 92) See Plan VIII/BB, square 014
- 93) Epstein states her criteria for use of the tombs at Megiddo. Since they are similar to those used in this paper, I have cited Epstein as an authority. T. 2117 is considered part of early S. IX by Epstein.
- 94) Amiran, R., A.P.H.L., Plate 46. Amiran shows various forms in her Late Bronze Age plates from the Tomb 3018 burials. Epstein places T. 3018 A in the latter part of S. IX and section C is not used at all. See Epstein, P.B.W., pg. 103-104. Kenyon uses pottery from T. 3018 C. See her "The Middle and Late Bronze Age Strata at Megiddo", Fig. 22, pg. 52.

- 95) This judgement was admittedly made on the basis of lack of information as much as on contamination in T. 3018.
- 96) Loud, G., M.II, "Register of Finds", pg. 159
- 97) These bowls were not necessarily associated with the floor of the building, but there was no pottery listed as from the floor. See M.II, pg. 159
- 98) See the Appendix for a discussion of the sacred area, its use and its structural history in the LB Age.
- 99) Kenyon, K., "Palestine in the Time of the Eighteenth Dynasty", pg. 532
- 100) Kenyon, K., "The Middle and Late Bronze Age Strata at Megiddo", pg. 59, square N14.
- 101) Epstein, C.M., "An Interpretation of the Megiddo Sacred Area during M.B. II", pgs. 220-221
- 102) See the Appendix.
- 103) Amiran, R., A.P.H.L., Plate 48:16, pgs. 155-157
- 104) Epstein, C.M., P.B.W., pgs. 100-101
- 1C5) Epstein, C.M., P.B.W., pg. 1O1
- 106) Amiran, R., A.P.H.L., Plate 46:9, pg. 149

Chapter Three: An Evaluation of K.M. Kenyon's Six Stages of Late Bronze Age, from the Megiddo Evidence

Several processes are involved in the testing of K.M. Kenyon's theory of six stages in the Late Bronze Age. To begin, her pottery groups should be correlated with Amiran's dating system, and also with Loud's chronology. Comparing the three systems will clarify the way in which each scholar has used the Megiddo evidence.

Groups A, B and C are equivalent to Amiran's Late Bronze Age I and Loud's Stratum IX and early Stratum VIII. Kenyon suggests a hiatus between groups C and D, and this is reflected in Late Bronze Age I and IIA. Groups D, E and F belong, then, to Amiran's Late Bronze Age IIB and are represented in Loud's Strata VIII, VIIB and the early part of VIIA. (See Figure 9).

For Loud, the Late Bronze Age begins with the campaigns of Tuthmosis III in Palestine, ca. 1482 B.C., while Amiran and Kenyon date it from Amosis I, ca. 1570 B.C.

Of the reliable contexts in Late Bronze strata at Megiddo, the majority ought to belong to the period of Groups A and B. Loci which can be compared to Group A are T. 4022 (Pl. V), L. 4116 (Pl. VI), T. 3035 (Pl. VII), T. 3059 (Pl. VII), T. 3046 (Pl. VIII), T. 3042 (Pl. VIII), T. 3047 (Pl. IX), T. 3070 (Pl. X), L. 2114 (Pl. XI), L. 2115 (Pl. XII), L. 5012 (Pl. XIII), L. 5039 (Pl. XIV), and L. 5029 (Pl. XIV). The validity of testing these loci against the Group A

R. AMIRAN	G. LOUD	K. KENYON
LATE BRONZE AGE I	MIDDLE BRONZE AGE II : S.IX	J570
LATE BRONZE	LATE BRONZE AGE I: 5.YIII	GAP AT MEGIDDO IN GROUP C ————————————————————————————————————
AGE II A	1350	FITES 1350 GROUP D
LATE BRONZE AGE II B	LATE BRONZE AGE II : S.VII	GROUP E
1700		APPROXIMATE END OF LATE BROWZE AGE

FIG. 9 COMPARATIVE CHRONOLOGIES OF THE LATE BRONZE AGE

collection of forms can be questioned since the type deposit, T. 1100, was clearly contaminated. Group B, suggested as T. 1145 by Kenyon, must be tested against part of itself, since only section B of the tomb was intact, (Plates I-IV). Loci which may be compared to the periods of Groups B and C are T. 3006 (Pl. XV), T. 2123 (Pl. XV), T. 3027 (Pl. XVI), T. 2117 (Pl. XVI), T. 3017 (Pl. XVII), T. 2097 (Pl. XVII), and T. 3018B (Pl. XVII).

A particularly important period to consider is the gap which Kenyon sees at Megiddo between ca. 1482 - 1400 B.C. This gap, due to destruction and abandonment of the site ca. 1482, should be reflected in the lack of pottery attributable to the fifteenth century B.C. However, since she also posits a gap in pottery at all sites in Palestine between 1400 - 1350 B.C., it may be difficult to distinguish loci which would fit into Group C or soon thereafter.

Loci which can be compared to Group D are L. 3102/VIIB (P1. XXII), L. 3103 (P1. XXII), T. 3014 (P1. XXII), T. 3004 (P1. XXII), and T. 3015 (P1. XXIII). Since T. 911B had only one vessel there are no loci to compare to Group E. Group F could be tested with L. 3098 (P1. XXII), T. 912B (P1. XX, XXI) and T. 877A1 (P1. XVIII, XIX).

Despite the reliability of the above loci, some cannot be compared profitably with any pottery type group because the range of forms is too small. When a locus contains only a few vessels its date, if based on pottery, must be decided typologically. In this paper, the intention is to avoid using ceramic typology where possible since it establishes dates relative to other groups of pottery, sometimes without regard to the issue of loci disturbance and without absolute dates as reference points. 1

Also, the small number of vessels in a pottery group mitigates against its use as a test case for one of Kenyon's six groups because she relies on such relative things as "increases" or "decreases" in quantities of certain forms or styles and in the "common" appearance of forms in particular periods. These quantities can only be seen in a broad overview of the ceramic repertoire of many sites. Thus, the small number of forms in some of the reliable loci for the Late Bronze Age constitutes a limitation on the testing of Kenyon's theory.

On the basis of the variety of forms shown, the following loci can be compared to Kenyon's pottery type groups. Loci probably spanning Groups A and B are T. 4022, T. 3035, T. 3059, T. 3042, T. 3079, L. 2114, L. 2115, and L. 5029. Group B can be specifically compared to T. 1145B. Groups B to C probably cover the periods of T. 3006, T. 3027, T. 2117 and T. 3018B. According to Loud's analysis T. 3015 should be compared to Group D, although it may prove to be part of Group B as Kenyon has suggested. Group F may be compared to parts of the loci Kenyon has given as type deposits for the period, T. 877A1 and T. 912B.

Assuming that Kenyon's theory is valid, there may be several explanations when Late Bronze Age loci do not fall into the groups they have been compared with. If a locus does not correspond to its comparative pottery group, it may belong to another of Kenyon's groups. In the case where a locus fits a ceramic group other than its matched group, the locus may not belong to the stratum it has been assigned to, or the stratum's date may need revision. Where a locus does not clearly belong to any of Kenyon's group, the locus may have, in fact, been disturbed. The most likely explanation, however, is that the

pottery of the locus does not show sufficient variety and quantity of forms to reliably test Kenyon's group, especially given the fact of chronological overlapping of forms throughout pottery groups.

Kenyon has specified the forms peculiar to her pottery type groups for the period covering the Eighteenth Dynasty of Egypt. Groups E and F represent the Nineteenth Dynasty era and are not explained. Type deposits and dates are suggested for each group, but particular forms and styles are not given. Group F is apparently characterized by Mycenaean IIIb vessels. Given the uncertainty of the Mycenaean evidence, there is a special difficulty in testing these Late Bronze Age pottery groups from the Megiddo loci. The problem is emphasized by the fact that the entire type deposit for Group E from Megiddo, with the exception of one krater, has been eliminated because of contamination. Since one krater cannot be compared to the Lachish pottery making up the remainder of Group E, nothing can be said in this paper about the validity of Group E as a recognizable assemblage of pottery.

Further to the problem posed by Group E is the fact that Kenyon states "groups such as Lachish tombs 1003 and 216 may be cited as examples of assemblages not represented at Megiddo." If this statement is true, one may ask why Lachish Tomb 216 is part of the type deposit of Group D, while T. 1003 belongs to the type deposit for Group E, along with Megiddo T. 911. Tomb 911 is not mentioned by Kenyon in her detailed analysis of the Middle Bronze and Late Bronze strata at Megiddo. Since this earlier analysis provided the background for Kenyon's type group, it is surprising that T. 911 did not appear

in the pottery shown or in her discussion of Late Bronze Megiddo.

Based on Kenyon's 1969 article in Levant, one may wonder on what basis

Tomb 911 was chosen for Group E, and it may be that Group E needs

revision. It certainly cannot be adequately tested with Megiddo

pottery.

Megiddo tombs were part of the type deposit and certain chambers of these tombs may be reliable. While no other good-sized collection of pottery seems to fit Group F, and while testing this group is actually a commentary on the type deposits for the group, it may be possible to discuss the validity of Group F in relation to the Mycenaean vessels. Although the purpose of this paper is not that of defending Kenyon's theory, it might be possible to determine from the Group F type deposits what the ceramic characteristics of the group are. It might also be helpful to compare Amiran's Late Bronze IIB period to Group F to find the forms belonging to Group F, but this again is a typological study.

Tomb 4022 (Plate V), can be compared to Kenyon's Group A. The L.B.

pottery included typical early bowls with concave disc bases. There were no Monochrome bowls, no gray juglets and no bichrome pottery.

Middle Bronze Age forms found were the Middle Bronze Age II burnished piriform juglet and a Late Middle Bronze Age II cylindrical juglet.

These forms are transitional Middle to Late Bronze age generally. The piriform juglet tends to place the group toward the Middle Bronze Age rather than Late Bronze Age, but all the forms together are compatible with an early Late Bronze Age I date. Unfortunately, the lack of

imported wares and bichrome do no more than confirm a Late Bronze I date for T. 4022.

Tomb 3035 (Plate VII), includes truncated dipper juglets typical of Group A and some continued Middle Bronze Age forms. The bowls belong to the early part of Late Bronze I, but are not diagnostic, and the cylindrical juglet has a pellet on its handle which is characteristic of the transitional Middle to Late Bronze period. This tomb also lacks imports and bichrome, and although compatible with Group A, does not distinguish Group A as a particular stage.

Tomb 3059 (Plate VII) shows late Middle Bronze forms and nothing distinctively belonging to Group A. The dipper juglet has a slightly rounded end, but is otherwise like those of the Middle Bronze Age II period. The cylindrical juglet shown has a double-strand handle, typical of the same period, while the tiny burnished juglet, though not closely datable, can be called transitional Middle-Late Bronze Age. This tomb grouping is small and reflects its Middle Bronze Age origins. It could belong to Group A, but since the most distinctive features are missing, we cannot be certain.

Tomb 3042 (Plate VIII) contained typically transitional Middle-Late Bronze Age forms. Included was a Late Bronze Age I jug with the shoulder handle common in Middle Bronze Age II. There was a Late Bronze Age I mug similar to those of Middle Bronze Age II. The piriform juglet had a button base, but no burnishing, the lack of which may place it as Late Bronze Age I rather than Middle Bronze Age II. A bowl found, which was more like a chalice, was wide and shallow with a high foot. This was typical of Middle Bronze Age II, but continued

into the Late Bronze Age. Amiran shows one similar to this example and calls it Late Bronze I. 3 Although this tomb is early Late Bronze I its vessels are of local wares, and it is not diagnostic for Group A.

Tomb 3070 (Plates IX and X) is an important tomb because of the quantity and variety of the pottery found. The bowls share a Middle Bronze Age II tradition. One was carinated, but with a heavy, flat base, which indicates a later period. Several others were wide, shallow and open with ring bases and red wash or burnish. The ring bases were low, as in Late Bronze I, and the Middle Bronze Age II B/C burnished style was carried over into the Late Bronze Age on certain forms.

Amiran shows burnished bowls of that latter period. 4

The store jar found falls in line with the development of Middle Bronze Age II jars, having an ovoid body, shoulder handles and a flat base. This style is generally typical of Late Bronze I, and the progression of store jar development is quite clear in the Bronze Age. However, this example has a plain rim, much like the Middle Bronze Age IIC type. Amiran states that the plain-rimmed store jar is unusual in Late Bronze Age I but she does show one with a similar neck. 5

Several jugs of local manufacture were found. One was burnished, but had a handle from the rim to the shoulder which is a Late Bronze Age characteristic. The trefoil jug, with the same type of handle, was typical of the local, plain jugs of the Late Bronze Age I. The dipper juglet found was truncated, which is characteristic of Kenyon's Group A juglets, and had burnishing as well.

The single lamp in this collection is listed as Middle Bronze

Age IIC by Amiran. According to Amiran's illustrations of lamps, this

particular sample from T. 3070 could just as easily be part of the

Late Bronze Age I period.

The most important feature of Tomb 3070 in relation to Kenyon's type groups is the bichrome pottery. Three jugs were found, and while the metopes on the shoulders were not filled with figured designs, the ware, shape, and the clarity and precision of the geometric designs justify the jugs being described as "elaborate." One of them, with a lattice pattern on the shoulder, had a dip in the base and a handle from rim to shoulder. It is not clear on what basis Amiran assigns this jug to Middle Bronze Age IIC, unless she accepted this from Loud. The rim-to-shoulder handle indicates the jug belongs more properly to the Late Bronze Age, even though the form is common to both bichrome and plain wares in the early Late Bronze Age I period.

In any discussion of bichrome pottery, it is important to point out that Epstein should be the most reliable authority on the Late Bronze I period. She has used the evidence from Megiddo extensively in her book, Palestinian Bichrome Ware. Her analysis is based on an examination of the pottery itself, rather than on Loud's or Guy's reports, and she has made use of the unpublished diaries, field notes and photographs. A significant part of her method for studying the origin, development and diffusion of this pottery is a correlation among bichrome, local and imported pottery. The results of her study are particularly important for Kenyon's groups A and B because the imported wares are so scarce in the reliable contexts of Late Bronze Age Megiddo.

Epstein discusses Tomb 3070 in some detail, and her dating for it has been explained in Chapter Two. It should be mentioned that Epstein dates the jugs of T. 3070 to the end of her first stage of development of bichrome pottery. Thus her date of ca. 1550 - 1500 B.C. would place T. 3070 in the first part of Amiran's Late Bronze Age I and probably in Kenyon's Group A. Since Kenyon does not give an end date for Group A, we must rely on her criteria for it and for Group B. The bichrome is at its stylistic peak, and without reference to its context is clearly part of Group A. The tomb's associated pottery belongs to early Late Bronze I and is part of a continuing series of forms from the Middle Bronze Age. No Monochrome bowls or gray juglets were found. Therefore we cannot say on the basis of T. 3070 that Group A has these imports characteristically, though in all other respects the tomb belongs to Group A.

Loci 2114 and 2115 are rooms of the same house, situated on the eastern edge of the tell and following the curve of the mound. The contents of L. 2114 included wide bowls with ring bases, one of which was burnished and all of which continue in the tradition of Middle Bronze II bowls. A jug found here had a globular shape and was quite plain and typical of Late Bronze Age I, as was a Middle Bronze — Late Bronze store jar. Epstein notes that this jug, with its form and burnishing, resembled one of the bichrome jug classes she has suggested. According to Epstein one red-decorated juglet found is similar to bichrome juglets.

The place of single-colour pottery, especially the red-line vessels of the Late Bronze Age, remains unclear. Epstein considers

this decorative form to occur as a later pottery development whose inspiration comes partly from the bichrome wares. This view may conflict with the krater, decorated with a jointed-wheel motif, found in L. 2114. The krater shows the bichrome form and style in its peak period. Thus the date of the last use of L. 2114 ought to be in the neighbourhood of 1550 - 1500 B.C., or, in Epstein's mid-phase I. In such a collection from a domestic milieu one might expect some imported wares but none were found. Once again Group A, perhaps towards its end, would be the appropriate type group in which to place L. 2114, but Group A would not include imported pottery here.

L. 2115, adjoining L. 2114, contained a variety of pottery, but lacked gray juglets and imported wares. Since the clearest differences between Groups A and B are the types of imports, L. 2115 cannot be securely pinned to either group. The same conclusion applies for L. 2114 as its vessels are similar and the two rooms were last used at the same time period.

The bowls of L. 2115 are typical of the Late Bronze Age I period, but are not closely datable. For instance, a Late Bronze Age I goblet with a white slip was found, but Late Bronze Age goblet typology is not clear enough to exactly place the find. A chalice was identified definitely as Late Bronze Age I. One jug of that same period was found along with a dipper juglet with a pinched rim, and a lamp which covers the transitional Middle-Late Bronze Age period. While all these vessels indicate a date when considered as a group, there is no basis for an absolute date here.

The bichrome collection included a jug with well-executed bands of metopes, and two small jugs. These latter belong to forms peculiar to bichrome and were decorated with black and red bands. Their important feature is the lack of burnishing, a characteristic heralding the decline of the bichrome style.

The forms from L. 2115 generally fit Kenyon's Group A, but, consistent with L. 2114, there is no imported pottery to differentiate Group A from Group B. It may be that L. 2115, and therefore L. 2114, belongs to Group B, based on the unburnished bichrome jugs. A possible date would be ca. 1500 B.C. Here, again, we must rely solely on the bichrome pottery for dating, and this becomes a typological decision.

Locus 5029 clearly belongs to Late Bronze Age I. For the most part L. 5029 contained a cache of bowls, consisting of one small, heavily built bowl and three gently carinated types with thick, heavy bases. Another bowl was somewhat closer to a Middle Bronze IIC type with its wide, shallow bowl set on a low ring base, and plain rim with red lines. The only diagnostic vessel was an unburnished jug with a sloppy application of black and red paint in a typical bichrome pattern. The poor design and two colour paint indicate a degenerate form of bichrome, assuming this jug is in fact a bichrome piece, which is sometimes difficult to decide in the period of stylistic decline. The jug is certainly of linear rather than elaborate design and on this basis alone L. 5029 is likely to belong to Group B toward the period's end. The local forms together with the bichrome jug confirm a date late in L.B. I. If Epstein's dates for the bichrome pottery phases are correct, this locus could be dated ca. 1475 - 1425 B.C.

Such a date places it in Group C. Without imported pottery, we cannot validate entirely any of Kenyon's groups, but L. 5029 generally conforms typologically to Group B or Group C.

Tomb 3006 should be compared to Group B or Group C. In it were two slightly carinated bowls, one of which had a flat base and one a ring base. Both appear to belong to Late Bronze Age IIA. No imported wares and no dipper juglets appeared here, so that on this basis we cannot tell whether T. 3006 should fit Group B or Group C.

However, there were several jugs of note in T. 3006. One was biconical, unburnished, with an inverted triangle design in red and black around its shoulder and an everted rim. Amiran places these commonly found jugs in the Late Bronze Age but their form and decoration are difficult to trace. One calls this particular jug Late Bronze IIA. The other jug in T. 3006 was unburnished and decorated with red lines. It is difficult to tell if this jug is part of the painted pottery tradition or whether it specifically represents a degenerate bichrome jug. Epstein classifies as late bichrome those vessels which were unburnished and of coarse fabric, with haphazardly applied decoration and less intense colour contrast. The bichrome krater of T. 3006 clearly fits this description. The krater was burnished and was one of the forms specifically used with bichrome painting. Its design could be classified as linear, but the pattern was no more than reminiscent of true bichrome designs.

Again, T. 3006 can only be compared to Kenyon's Groups B or C in a limited way. The combination of vessels would suggest that T. 3006 belongs to Group C, towards the end of Late Bronze Age I, but this

cannot be confirmed since we are relying on dates suggested by Amiran and ceramic criteria from Epstein.

Tomb 3027 had a particularly interesting deposit which seems on first view to span several of Kenyon's type groups. It included a bichrome jug with form typical to that style, having its handle drawn from rim to shoulder, a ring base and a long, wide neck. The bichrome pattern and colour around the shoulder is well executed, although the metopes are not filled in. This jug belongs to the main bichrome phase and is called Late Bronze Age I by Amiran. It could well belong to Group A. With this jug was found a dipper juglet with a pointed base, a style belonging to early Late Bronze I. Along with these jugs was a red-decorated jug with a bichrome motif, seen by Epstein as evidence of the late phase of bichrome.

The other diagnostic vessel from T. 3027 was a Basering I juglet which should place the tomb in either Group B or C. Epstein states that this import argues for a late date in relation to bichrome development even when an earlier bichrome vessel is present. ¹⁴ The combination of pointed dipper, late bichrome and Basering I ware indicates that T. 3027 should belong to the end of Group B or the beginning of the Group C period. However, the absence of other imports, such as White Slip II milk bowls, tends to cloud the differences between Groups B and C. We may only tentatively assign T. 3027 to Group B, and that decision is based more on Epstein's criteria than on Kenyon's.

Tomb 2117 has been selected, despite its lack of quantity and variety of forms, to illustrate two problems in testing Kenyon's

type groups at Megiddo. The bowl from this tomb was sharply carinated and belongs to the transitional M.B. - L.B. phase. Two jugs continue the Middle Bronze II tradition into Late Bronze I. None of these forms are diagnostic for T. 2117 and all fall within the ambiguous category of continued Middle Bronze Age forms in Kenyon's Group A.

The T. 2117 collection also includes a jar with shoulder handles and a form similar to those of early L.B. I. Its decoration consisted of crisscrossed red lines around the shoulder and a scarab impression on a handle. This is an example of Palestinian painted pottery which seems to be much more common in reliable loci at Megiddo than the imported pottery. Based on this jar's form, since its design cannot be dated, it belongs to Late Bronze Age I, as do the rest of the tomb's vessels. If the typology of painted pottery was clearer and could become part of the criteria for each of Kenyon's groups, the Megiddo pottery could be used to a greater degree. Although T. 2117 probably fits within the continued Middle Bronze Age forms of Group A, it cannot validate that group. The lack of clarity in the area of ceramic typology, along with the lack of datable imported wares, combines to defeat Kenyon's attempt to refine the chronology of L.B. I using pottery.

Tomb 3018 forms part of Kenyon's Group B, but of its six sections, only 3018 B represents an intact burial. The lamp from this section fits Amiran's sequence, coming toward the end of Late Bronze Age I. The bowl from this deposit probably belongs to that period as well but is not diagnostic. Several juglets were found and one is typical of the period.

A burnished juglet found in T. 3018 B is similar in form to the gray juglets characteristic of Group A, but its ware mitigates against such a classification. Amiran notes that the gray juglets often appear in the same contexts as the Syrian flask, in northern Syria, Cyprus and Egypt. As the flask was common in Cyprus but not in Palestine, it is probably a Cypriot imitation of the Syrian flask and was imported Basering I. Unfortunately, the juglet, or Syrian flask, is not adequately described by Loud and since it is not known whether the handle was inserted through the body, we cannot be completely certain of a Cypriot origin. However, on the basis of other wares and Cypriot imitations, we can be reasonably sure that the flask is Basering I. In this case, were more information available, the juglet resembling a gray juglet might be associated with the Basering I flask.

One other large burnished juglet belonged to T. 3018 B (Pl. XVII:6). It appears to be typologically suited to the end of the Late Bronze I period and is called specifically L.B. IIA by Amiran. 16 It definitely preceeds the Late Bronze II juglets with pointed bases which Kenyon assigns to her Group C and likely belongs to the truncated juglets of Kenyon's Late Bronze I, which would indicate its inclusion in Group B. To correspond with Amiran's dating of ca. 1410 - 1340 B.C., the juglet would have had to belong to Kenyon's Group D.

A comparison of T. 3018 B to Kenyon's type groups must be based on imports and juglets. There is not enough pottery in T. 3018 B for us to state unequivocally that it belongs to Group B. In support of such a claim is the Basering I flask, the small dipper juglet and the large juglet which could well be a form of the truncated juglet continued

from Group A. However, there were no bichrome vessels or imported wares to clarify the assignation of this tomb to Group B, and this burial context cannot be suggested as representing or validating that group's type deposit.

Tomb 3015 presented a varity of forms and is part of Group B's type deposit. It may be appropriate, therefore, to compare this part of B to the general profile for this type group. There was no bichrome pottery, no White Slip I ware, no cylindrical juglets, which may constitute a decrease compared to Group A and no Basering I pottery, and these were the characteristics which distinguished Group A from Group B.

This tomb did, however, show continuation of some of the forms appearing in Group A. One Monochrome bowl was found, along with a White-Painted V "teapot" which, while not mentioned by Kenyon, was one of the imports contemporary with White Slip, Monochrome and Basering wares. These imports are known to have been in use later than Group B and could well belong to Group C under its continued forms from A and B. A case could be made for T. 3015 as part of Group C on the basis that it lacks bichrome pottery.

The jugs and juglets in T. 3015 suggest one direction in seeking a solution to the chronological problem. Two burnished dippers were excavated. One was certainly Late Bronze Age I and the other, unusual, dipper with its thick handle and folded over rim, was also probably of that period. Two plain jugs with shoulder handles indicate a date somewhere in the same period or the first part of Late Bronze Age II.

Two red-line jugs, one of which is shown by Amiran as Late Bronze

Age IIA and is part of a tradition of painted pottery from Late Bronze Age I, were found as well. To One jug's design around the shoulder imitated the bichrome patterns, and this style apparently continued throughout Late Bronze Age II. The other jug was painted carelessly with red lines and was not a conscious imitation of any style. It is likely to belong to Late Bronze Age II, although it is not closely datable.

The evidence of the jugs from T. 3015 suggests a date toward the end of L.B. I or the beginning of L.B. II and belonging to Group C.

The only criterion for Group C which mitigates against that assignation is the Late Bronze Age pointed dipper not found in T. 3015. Clearly,

T. 3015 could belong to either the later part of Group B or to Group C, but this situation proves only that the tomb does not validate Group B.

Tomb 1145 B was unusual as a sealed context in that it had a relatively large collection of imported pottery. These were Basering I wares, in the forms of a juglet, a large jug and a bilbil. There were no White Slip I wares, which Kenyon says are typical of Group B. The bichrome (Plates II:1, III:3) is clearly linear. One large jar had stripes across the neck and upper shoulder, and was probably faded in colour, while the jug's paint was worn off. The only cylindrical juglet found may or may not constitute a decrease in quantity which Kenyon suggests for Group B. Most of the forms in T. 1145 B continue the tradition of the Middle Bronze II period, and of Group A. One jar of Middle Bronze form had a two-colour decoration which is not part of the bichrome pottery, although the design was likely related. Also possibly related to bichrome ware was a burnished jug with red

decoration. The lamps followed the Middle Bronze tradition, and among the transitional forms was a truncated juglet, more characteristic of Group A. Tomb 1145 B fits Group B's description very well even though the linear bichrome pottery is neither extensive nor well-preserved.

Guy believed that T. 877 AI should be dated to Late Bronze II, and it forms part of Kenyon's Group F type deposit. The time span is roughly 45 years, from ca. 1275 - 1230 B.C., and the only criterion for its inclusion in Group F is the presence of Mycenaean IIIb pottery. The bowls were heavily built, with straight or rounded sides and thick, flat bases. Several had a slight carination just below the rim and a thickened interior rim. While they resemble those at the end of Late Bronze Age II, the other bowls are similar to Early Iron Age bowls from northern Palestine. 18

Two red-decorated vessels were also found. One, likely a cookpot, with exterior burnishing and a band of sloppily painted metopes below the rim, is similar in form to a small krater shown as early Iron Age by Amiran. Since it belongs to Stratum VIIA, according to Loud, this pot may be part of the last stages of the Late Bronze Age, as Kenyon believes, rather than the Iron Age. Another krater shown by Amiran apparently comes from Stratum VIA at Megiddo and is somewhat like that of T. 877 AI in its red pattern. At the earliest, the cookpot of T. 877 AI could belong to Late Bronze IIA. Another red-line decorated jug was also found in this tomb. This was an asymmetrical, biconical jug with a lattice and wavy-line pattern covering the entire shoulder. The biconical jugs are difficult to date, and as Amiran does not give criteria for separating Late Bronze

Age I from II jugs, this jug can only be placed in the Late Bronze Age, as opposed to the Iron Age.

There is one important feature of this tomb which is not mentioned by Kenyon in her articles. Several store jars were uncovered in T. 877 AI and of these, one clearly belonged to the last part of Late Bronze Age II, with its high squared shoulder, tapering body and thick button base. The other two jars were different in shape, one ovoid and the other with a typical Late Bronze II shoulder, but similar in their straight, high rims with the collar on the outside. A plain jug with a rim-to-shoulder handle also had this type of neck and rim. The style of the neck and rim is characteristic of the early Iron Age.

Of the other vessels found, the dipper juglets are compatible with a late date in Late Bronze Age II. Although it may not be significant in dating T. 877 AI, the single lamp found appears to be closer to the end of Late Bronze I than Late Bronze II.

As for the main criterion of Group F, which is the Mycenaean IIIb pottery, it is doubtful that T. 877 AI possessed any. One jar, which is a pyxis in fact, was definitely a local imitation of Mycenaean types, with its common red paint on an unburnished surface. The other small jar looked Mycenaean, but had no lustrous finish and could not, therefore, be Mycenaean. Tomb 877 AI can certainly be dated to the transitional period between Late Bronze Age II and the early Iron Age. Kenyon's dates for the tomb, as part of Group F, may be correct, but since the Mycenaean IIIb criterion has not been met, there is no way of knowing whether Group F represents a specific ceramic period, or whether this tomb belongs to it.

Tomb 912 B showed similarities to the above tomb and forms part of the type deposit for Group F as well. The bowls were much like those of T. 877 AI and could belong to the early Iron Age. Two chalices found date to the end of the Bronze Age. Their sharply cut rims are characteristic of Late Bronze IIB.

Two red-decorated kraters with unburnished surfaces had thick, low, ring bases, bands of wavy lines, lattice panels and triangles around the shoulder. One had vertical loop handles, while the other had a horizontal curving edge handle. A small, red, crisscross — decorated biconical jug was similar to one in T. 877 AI. The motifs on all three vessels showed similarities to bichrome, and although they are difficult to date, they probably belong to Late Bronze II.

Two jugs of plain finish had the straight, simple neck and rim seen in T. 877 AI and in the early part of the Iron Age. One jug had a collar or band below the rim, and both jugs had the rim handles common to Late Bronze II. A new pottery form called the pilgrim flask appeared in T. 912 B as well, and Kenyon says it begins in Group D. The four pilgrim flasks from this tomb are similar and distinctive (Pl. XX, XXI). This type, with its long neck, everted rim and prominent handles, is quite different from the earlier flasks. It is common in Late Bronze Age II and continues into the first part of the Iron Age.

Mycenaean IIIb pottery was found in Palestine throughout Amiran's Late Bronze IIB period (ca. 1340 - 1200 B.C.). In T. 912 B several Mycenaean forms were present. The single pyxis in the group was not specifically called Mycenaean, and it had the same colour coding as

most of the local red decorated pottery. However, it is described as burnished, the term used to describe other vessels called Mycenaean. It is unlikely that this pyxis is in fact Mycenaean pottery. Mycenaean wares had a lustrous or glossy finish, but the pottery labelled Mycenaean by Loud is generally described as burnished. Since the term burnish had a specific technical meaning for Loud and Guy, it could not easily be confused with the characteristic Mycenaean gloss, which was part of the paint. Furthermore, there is no reference to a descriptive term incorporating the finish of Mycenaean wares in the list of terms supplied by Guy. 21 It is possible that the large and small horizontally burnished stirrup cups are true Mycenaean ware, but without an examination of the pottery itself, these vessels as well must be assumed to be local imitations. The large bowl in T. 912 B was suggested by Guy and Loud as possibly Mycenaean, but no burnish or special surface finish is mentioned in the description. It is highly unlikely that this vessel is Mycenaean either.

Both tombs 877 AI and 912 B have been compared to the Mycenaean IIIb criterion of Group F. Neither tomb fits into this class and, in fact, neither one defines Group F unless a basis other than that of Mycenaean wares were to be formulated.

Having examined the pottery of the sealed loci from the Late Bronze Age strata at Megiddo, we can make a number of general statements about the usefulness of the evidence.

Most of the loci tested can definitely be labelled as Late

Bronze I. These loci are T. 4022, T. 3035, T. 3042, T. 1145 B,

T. 3059, T. 3070, L. 2114, L. 2115, L. 5029, T. 3006, T. 3027, T. 2117

and T. 3018 B. Such a conclusion does not touch on Kenyon's chronological divisons of the Late Bronze Age. Of the above loci, more specific comments can be made referring to T. 3070, T. 3027, T. 1145 B and loci 2114 and 2115.

Tomb 3070 fits Kenyon's Group A, as do loci 2114 and 2115.

However, since no imported pottery was found in these loci, they cannot validate Group A as described by Kenyon. All three loci are more adequately interpreted and dated in Epstein's study of bichrome pottery.

While Tomb 3027 fits Group B, it is still possible that the tomb could belong to Group C since there is no imported pottery to distinguish one group from the other.

Tomb 1145 B is the only Late Bronze locus containing imported wares: Basering I jugs or juglets and one large Basering bilbil. There are no elaborate bichrome vessels and only two of the linear bichrome style. All other pottery from this tomb also conforms to Kenyon's description of Group B.

Neither of the pottery type groups covering the period of the Egyptian Nineteenth Dynasty can be illustrated at Megiddo. Group E is not represented in any reliable loci, and while Tombs 877 AI and 912 B do belong to the last part of the Bronze Age, they do not fit Group F specifically.

The pottery from the Late Bronze strata at Megiddo provide us with uncontaminated evidence for both the earliest and latest part of the Late Bronze Age. After analyzing the Megiddo pottery and considering it alone, we cannot make any more specific conclusions,

and we cannot assign any absolute dates to the evidence.

Specific judgements can be made about Kenyon's six ceramic type groups, based on testing them with Megiddo pottery. It is clear that Kenyon's groups can be neither validated nor adequately tested at Megiddo.

The main problem with the Megiddo evidence is the lack of reliable loci, and the resultant small number of vessels and range of forms available for study. No hard conclusions can be made about history or stratigraphy at Megiddo with the safe pottery loci isolated in this examination of Late Bronze Megiddo. Most of Kenyon's type deposits from Megiddo have been shown to have been taken from disturbed contexts, and this conclusion weakens Kenyon's theory substantially. Of the safe loci not suggested as type deposits, very few show a large and varied ceramic repertoire. If the six type groups consisted of well-dated assemblages, testing them against Megiddo pottery would still prove unproductive because there are so few imported wares in the reliable contexts.

While the entire system of ceramic chronology as the basis for dating archaeological strata is the best developed thus far, it is far from perfect. The weaknesses of such a method are illustrated in Kenyon's six type groups, and in two related criticisms of her theory.

She relies heavily on the securely dated Cypriot wares as typical for most of her type groups. Thus local Palestinian pottery is dated by its assocication with particular foreign wares. Where foreign pottery is not found, even sealed loci at Megiddo are impossible to date absolutely. Megiddo provides a particularly good example of

a problem which is part of Kenyon's theory. Imported pottery as the main basis of her type groups' chronologies indicates a weakness in the development of Palestinian typology and an imbalance between absolute and relative chronologies. Kenyon's purpose, of course, was to clarify through her type groups the sequential development of Palestinian pottery and to go beyond this relative chronology to establish an absolute chronology for Late Bronze Age Palestine. However, there is not enough imported pottery at Megiddo to support the type groups or her chronological divisions of the Late Bronze Age.

The lack of imported pottery in reliable loci at Megiddo has not only made secure dating of loci difficult, but has meant that Epstein's and Amiran's typlogical approach must be used for dating. We are then dealing with relative chronologies. Kenyon has been unable to demonstrate an absolute chronology for each of her type groups because the local pottery can only support imported wares, which are scarce at Megiddo. She has not escaped the typological basis of ceramic chronology.

The inevitability of typology, and the circularity of the typological argument, cannot be avoided when dealing with archaeological remains. This is especially evident at Megiddo, where pottery of dubious contexts has been cited as the type deposit for a particular period, and evaluations of other sites' pottery has been made by comparison. In this paper, the lack of sealed loci with imported wares and absolute dates means that an interpretation of the loci is based on the general dates given to a combination of forms which occur together and are well known typlogically.

Epstein has accepted the typological argument, and has tried to put it on a firmer chronological footing by substituting bichrome pottery for imported pottery as a chronological aid. However, new methods for pottery analysis may break the typological circle. Petrographic analytic methods have indicated, for instance, that bichrome may not be Palestinian. It is clear that, despite the potential of new disciplines related to archaeology, not enough is known about the typology of local Palestinian forms, and very few forms have known periods of development which could be tied to a dated archaeological stratum. It is not possible at this time to construct dated type groups, such as Kenyon's, using groups of Palestinian forms.

Based on an examination of all the Late Bronze Age pottery and loci at Megiddo, we must conclude that the amount of reliable ceramic evidence does not justify either Kenyon's chronological divisions or the type groups themselves. Other than the scarcity of solid data as a foundation for her theory, Kenyon's main difficulty has been that typology is inherently connected to relative chronology, and without the Cypriot wares to correlate with the local Palestinian sequence, her pottery groups are only an attempt to refine Late Bronze Age typlogy.

To escape this circular logic of the chronological problem for Late Bronze Age history in Palestine, Kenyon has found one absolute date for Group B. If the date 1482 B.C. is certainly identified with a stratum at Megiddo, it might be possible to reconstruct Kenyon's type groups with pottery from better documented sites. However, Kenyon's argument for one absolutely dated stratum is too closely connected to her theory and to the Megiddo pottery to stand alone.

Kenyon posits the capture and destruction of Megiddo in 1482 B.C. by Tuthmosis III, after which the site was abandoned for approximately one hundred years. We cannot determine which stratum represents the town captured by Tuthmosis III. This can only be accomplished by sorting out the stratigraphy of the confused Late Bronze occupation levels, and by deciding on that basis which loci belong to each stratum, and which are sealed. There are so few sealed loci that the Megiddo pottery must be dated by typology even if the stratigraphy is clarified. The lack of well-placed levels, and intact floors, make the task of associating strata with pottery even more difficult. Thus, while Kenyon's date 1482 B.C. is historically absolute, locating that stratum on the Megiddo tell must be done in a less than absolute fashion. All of the above factors, combined with one more observation of significance, point to the unreliability of Kenyon's single fixed point in her Late Bronze chronology. There is no evidence, in any of the Late Bronze Age strata at Megiddo, of any major destruction layer.

Had there been a gap in occupation of the town after the campaigns of Tuthmosis III, as Kenyon suggests, this would have been reflected in the absence of a particular period of pottery. If such an absence were documented, the previous capture and destruction of Megiddo could be reasonably assumed even though the published reports were inadequate. Kenyon suggests a gap in occupation for the period of Group C and another broad fifty year ceramic gap (1400 - 1350 B.C.), which she sees at all Palestinian sites. At Megiddo her evidence for the lack of occupation is the absence of typical fifteenth-century local and imported pottery. Considering the scarcity of reliable pottery

for most parts of the Late Bronze Age at Megiddo, her argument is invalid. One locus (T. 3027) previously discussed shows pottery covering Kenyon's Group B and Group C. No abandonment of Megiddo during the Late Bronze Age can be proved ceramically or stratigraphically.

The final conclusion of this paper must be that the Megiddo pottery cannot be relied on to any extent, and that neither Kenyon's typology nor her Late Bronze chronology can be demonstrated from the Megiddo evidence.

Plate 1: Tomb 1149 f

Designation	Source Field No. Plate Fo. Description
Bowl	H.T., P4165, F1.50:4, "Complete, some light grits, brown other 2 surface, traces of horizontal burnishing inside "
Bowl	M.T., P4201 r1.52:4, "Heny predominantly light grits, brown other 2, traces of ring barnis' ing inclie "
Bowl	N.T., P4162, F1.50:3, "Intact, many light prits, well fired, brown och in 1 and 2 surface".
Bowl	C.T., P4205, P1.50:5, "Some light prits, brown other ?"
Bowl	P1.50:6, "Some light grits, naples yellow 2, traces of horizontal burnishing inside."
Bowl	M.T., P4204, P1.50:8, "Many light grits, blue-black 3 core, brown ocher 2 surface."
Bowl	M.T., P4199, F1.52:3, "Intact, many predominantly light grits, well made, naples yellow 2 surface, spaced ring burnishing "
Bowl	11.T., P4208, P1.50:9, "Same as No. 10 except for naples yellow 2 core and surface "
Bowl	Mare, few minute light grits, well made, well fired, brown other 2 surface, close ring barnishing "
Bowl	M.T., P4206, P1.50:7, "Complete, some light grits, well firel, naples yellow, 2 surface."
Jar	grits, P4187, P1.52:1, "Some light grits, blue-black 2 core, burnt umber 2 to permanent brown 3 surface "
Jar	M.T., P4159, P1.52:2, "Well made, many large light grits, naples yellow 3 core, permanent yellow 3 to burnt umber 3 surface, incised decoration"

Plate I: Tomb 1145 B

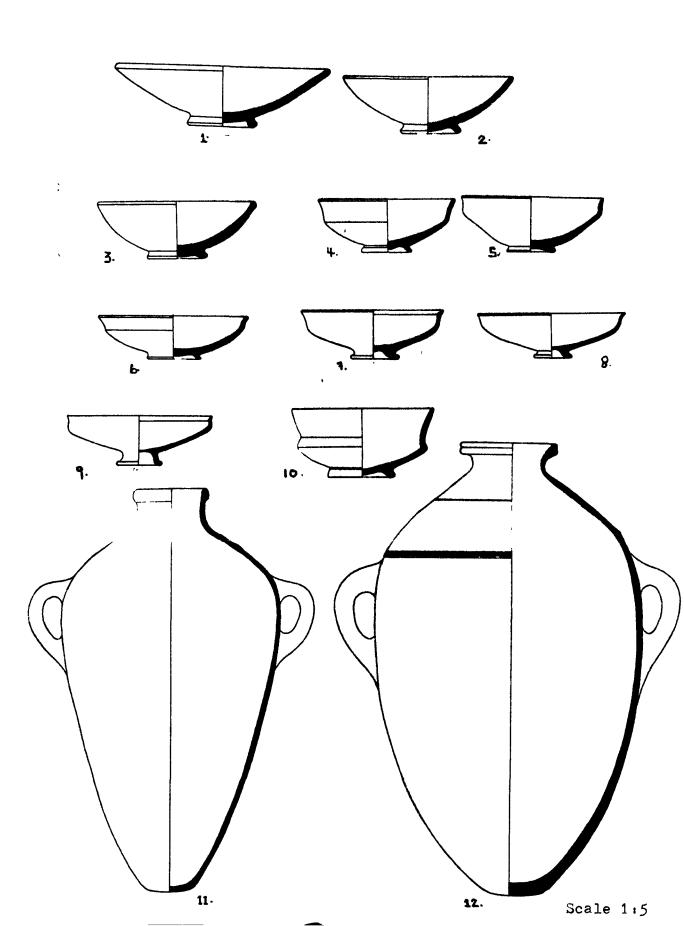


Plate 11: Tomb 1145 B

No.	Designation	Source Field No. Plate No. Description
1.)	Jar	M.T., P4171, P1.51:7 "Intact, some light grits, well fired, naples yellow 2 to 3 surface, close burnishing on neck and shoulder vandyke brown 1 and light red 2 decoration; warped "
2.)	Jar	M.T., P4212, P1.51:8, "Some light grits, well made, brown other 2"
3.)	Jar	M.T., P4214, P1.51:9, "Many light grits, blue-black 3 core, naples yellow 2 surface"
4.)	Jar	M.T., P4196, P1.52:11, "Many predominantly light grits, brown ocher 2"
5.)	Jug	M.T., P4215, P1.51:2, "Some light grits, naples yellow 2 core, permanent yellow 2 surface; warped"
6.)	Jug	M.T., P4161, P1.51:3, "Many light grits, well made, naples yellow 2"
7.)	Jug	M.T., P4186, Pl.51:4, Complete, many predominantly light grits, naples yellow 2 surface "

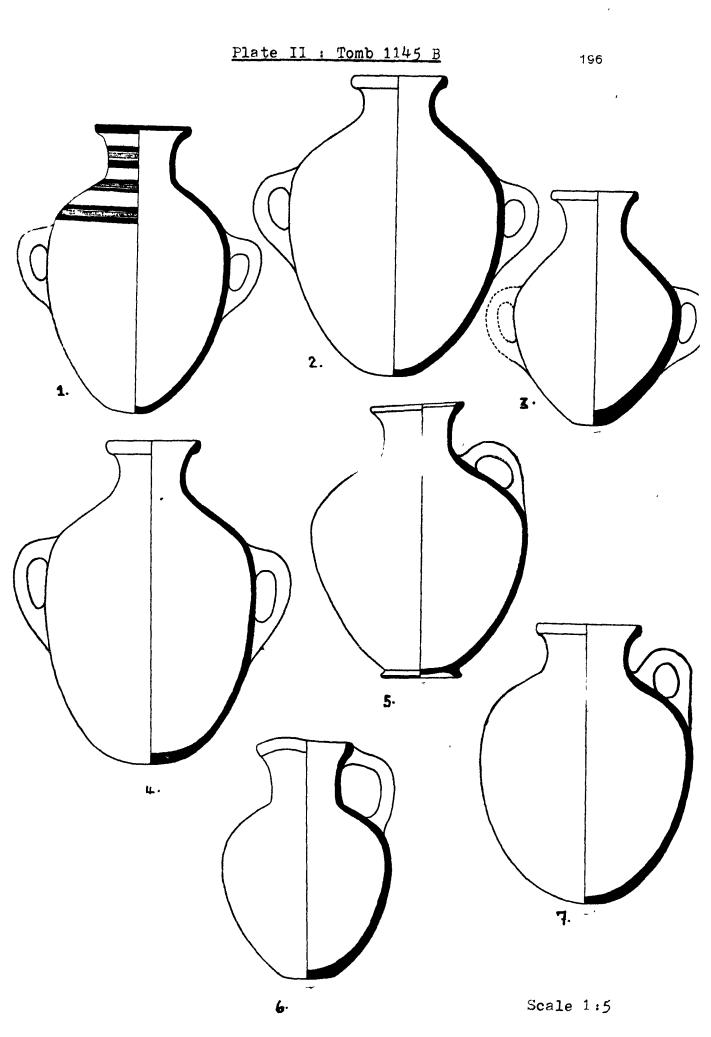
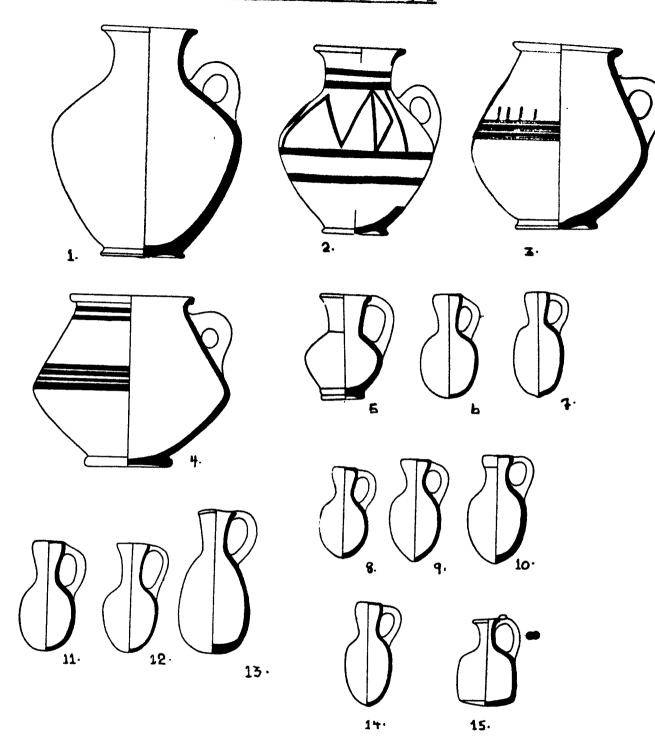


Plate 111 : Tomb 1145 B

No.	Designation	Source Field No. Plate No. Description
12.)	Ju g	M.T., P4191, P1.50:21, "Fine ware, few minute mixed grits, vell made, naples yellow 3, spaced vertical burnishing"
13.)	Jug	M.T., P4190, P1.50:22, "Many minute mixed grits, burnt umber 2, traces of vertical burnishing"
14.)	Jug	M.T., P4193, P1.52:9, "Intact, fine ware, few minute mixed grits, well made, naples yellow 2 surface, spaced vertical burnishing"
15.)	Jug	M.T., P4195, P1.52:10, "Few minute light grits, well made, blue-black 2, close vertical burnishing, pellet on double handle"

Flate 111 : Tomb 1145 B

No.	Designation	Source. Field No. Plate No. Description
1.)	Jug	M.T., P4192, P1.51:5, "Many light grits, brown ocher 2"
2.)	Jug	M.T., P4189, P1.51:6, "Many predominantly light grits, brown other 2,close horizontal burnishing, light red 1 decoration"
3.)	Jug	M.T., P4184, P1.51:1, "Intact, well made, brown ocher 2 surface, spaced vertical burnishing, indian red 2 and roman sepia 1 decoration"
4.)	Jug	Mi.T., P4197, P1.50:23, "Many minute mixed grits, well made, permanent brown 3 core, light red 3 to naples yellow 3 slip or wash, close vertical burnishing, indian red 1 decoration"
5.)	Jug	M.T., P4183, P1.50:14, "Intact, many large light grits, naples yellow 2 surface
6.)	Jug	M.T., P4175, P1.50:15, "Intact, fine ware, few minute mixed grits, well made, naples yellow 1 to burnt umber 3 surface, spaced horizontal burnishing"
7.)	Jug	M.T., P4181, P1.50:16, "Intact, fine ware, few minute mixed grits, well made, naples yellow 2 surface, spaced vertical burnishing"
8.)	Jug	M.T., P4207, P1.50:17, "Fine ware, few minute light grits, well made, brown ocher 2, close vertical burnishing"
9.)	Jug	M.T., P4177, P1.50:18, "Fine ware, few minute grits, well made, naples yellow 2, traces of spaced vertical burnishing"
10.)	Jug	M.T., P4188, P1.50:19, "Intact, many minute mixed grits, brown other 2 surface, traces of vertical burnishing"
11.)	Jug	M.T., P4213, P1.50:20, "Intact, few minute mixed grits, naples yellow 2 surface, traces of vertical burnishing"



Scale 1:5

Plate 1V: Tomb 1145 B

No.	Designation	Source Field No. Plate No. Description
1.)	Bilbil	M.T., P4169, P1.50:11, "Fine ware, some minute light grits, well made, well fired, blue-black 2 to brown ocher 2 slip, polished, raised decoration on body and neck, incised decoration on handle, hand-made; Cypriote"
2.)	Jug	M.T., P4173, P1.50:12, "Fine ware, some minute light grits, blue-black 3 core, blue-black 2 to burnt umber 1 slip, polished raised decoration, handmade; Cypriote"
3.)	Bilbil	M.T., P4174, P1.50:13, "Intact, fine ware, many minute light grits, well made, well fired, blue-black 2 to other brown 2 slip, polished, raised decoration on neck, handmade; Cypriote"
4.)	Lamp	M.T., P4198, P1.52:5, "Many mixed grits, roman sepia 2 core, brown ocher 2 surface"
5.)	Lamp	M.T., P4185, P1.52:6, "Intact, many predominantly light grits, brown ocher 3 surface"
6.)	Lamp	M.T., P4211, P1.52:7, "Some light grits, blue-black 3 core, brown ocher 3 surface"
7.)	Lamp	M.T., P4202, P1.52:8, "Many light grits, naples yellow 2"

Plate IV: Tomb 1145 B

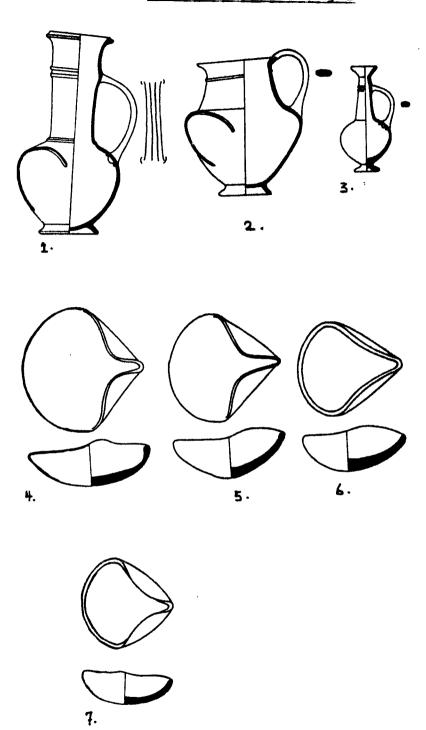


Plate V Tomb 4022

No.	Designation	Source	Field	No.	Plate	No.	Description
1.)	Bowl *	M. 11., numerous	cl23, gray	grite	P1.45:	:1, l wet	"Pink-buff, -amoothed"
2.)	Bowl	core, wh	nite gr othed a	rits, abo ve	well inside	fired and	"Buff, dark, well made, out, spiral
3.)	Jug	M.ll., pink-but heavily	ff, nur	nerous	s minut	te wh:	"Fragmentary, ite grits,
4.)	Jug	M.ll., fine, poburnish			P141:	l, te and	"Fragmentary, d gray grits,
5.)	Jug	M.ll., buff, many vertical	inute v	white	grits	, wet	"Fine, gray- -smoothed,

* All the pottery reproduced from Megiddo 11:Seasons of 1935-1939 has been traced from microfiche xerox copies. Although the scale given in M.ll is 1:5, there may be some distortion in the copies, affecting the size of the drawings. This is not problematic since all pots drawn from the microfiche copies will be similarly distorted. Very small objects were drawn at 1:1, and very large objects at 1:10.

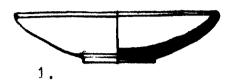








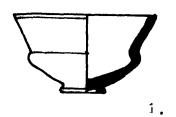


Plate VI

No.	Designation	Source Field No. Plate No. Description
1.)	Bowl	M.11, L.4116, c37, P1.53:19, "Buff, numerous gray grits, wet-smoothed"
2.)	Jug	M.11,L.4116, c36, Pl.50:4, "Intact, buff, numerous red and white grits, well made, wet-smooth"
3.)	Bowl *	M.11,L.3102/V111, c55, Pl.61:12, "Pink-buff, numerous gray and white grits, wet-smoothed"
4.)	Bowl	M.11,L.3102/V111, b1143, Pl.61:23, "Pink-buff, white grits, well fired, wet-smoothed"
5.)	Jug	Mentary, pink-biff, numerous white grits, heavily fired, wet-smoothed "
6.)	Jug	M.11,L.3102/V111, b1141, P1.58:10, "Com- plete, green-buff, numerous minute white prits, heavily fired, wet-smoothed"
7.)	Jug	M.11,L.3102/V111, b1142, Pl.57:10, Coarse. pink-buff, numerous white grits, poorlymade, wet-smoothel, red decoration

* Locis 3102 refers to one room in Area 44 which has one floor associated with Stritin Vili, and one with objectual Vili.

Locus 4116

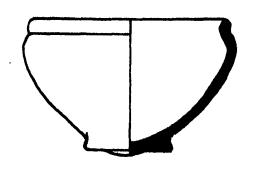




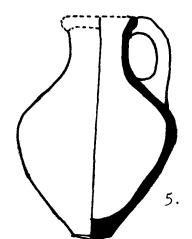
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Locus 3102/VIII





4.





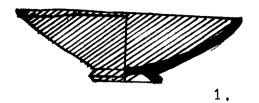


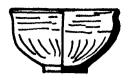
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Plate Vll

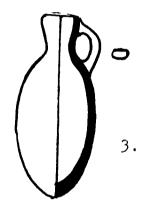
No.	Designation	Source Field Mo. Plate No. Description
1.)	Bow1	M.11, T.3035, b287, P1.45:11 "Buff, black and white grits, red wash inside and out"
2.)	Bowl	M.11, T.3035, b286, Pl.44:11, "Buff, numerous white grits, red wash inside and out"
3.)	Jug	M.11, T.3035, b284, Pl.41:8, "Fine, buff, white grits, well fired, well made, wet-smoothed"
4.)	Jug	M.11, T.3035, b285, Pl.40:9, "Intact, buff, gray and white grits, well made, vertical burnish outside, divided handle"
5.)	Jug	M.11, T.3059, b418, P1.41:8, "Buff, white grits, well fired, red wash and vertical burnish outside"
5.)	Jug	M.11, T.3059, b417, P1.40:12, "Pink-buff, white grits, wet-smoothed"
7.)	Jug	M.11, T.3059, b420, P1.40:16, "Intact, buff numerous white grits, well fired, red wash and burnish outside"

Tomb 3035





2.





4.

Tomb 3059





7.

<u>Plate Vill</u>

No.	Designation	n Source	Field No.	Plate No.	Description
1.)	Jar	M.11,T.30 buff, num wash on s	46, b363, erous white houlder, red	P1.43:2, grits, well d and black	"Fragmentary, l fired, white decoration "
2.)	Jug	M.11,T.30 buff, min smoothed, handle; C	black decor	Pl.41:30, rits, well tration, thr	"rine, Green- handmade, wet- ust-through
3.)	Bowl	M.11,T.30	42, b360, t-smoothed;	Pl.44:30, badly warp	"Buff, white
4.)	Jug	M.11,T.30 numerous d.148, h.	white grits,	Pl.39:1, , well fire	"Pink-buff, d, wet-smoothed,
5.)	Jug	M.11,T.30 buff, dar smoothed	42, b358, k core, occ:	Pl.41:31, Asional whi	"Fragmentary, te grits, wet-
5.)	Jug	M.11,T.30 buff, num cmoothed	42, b359, erous gray a	P1.41:1, and white g	"Fragmentary, rits, wet-

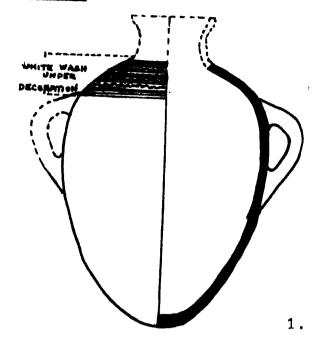
Plate VIII

209

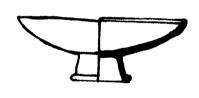
Tomb 3046



2.



Tomb 3042



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6

Flate 1X

1.0.	Jesignatio	on Source Field No. Plate lo. Description
1.)	Jug	M.11, T.3047, b364, Pl.39:17, "Complete, buff, white grits, well fired, wet-smoothed"
2.)	Bowl	M.11, T.3070, b513, P1.45:6, "Buff, dark core, numerous white rits, well fired, poorly made, burnish inside and out; vorped"
3.)	Bowl	M.11,T.3070, b502, Pl.45:11, "Intact, buff, numerous white grits, red vash inside and out, burnish inside"
4.)	Bowl	11.11,7.3070, b509, Pl. 45:13, "buff,minute black prits, red wash inside and out, traces of soiral burnish inside"
5.)	bowl	1.11,T.3070, b482, Pl.44:14, "Complete, green-buff, white grits, lightly fired, wet-smoothed"
6.)	Jar	1.11,T.3070, b479, Pl.42:3, "Intact, pink-buff, white grits, well fired, well made, wet-smoothed"
7.)	Jug	M.11, T.3070, b474, Pl.41:27, "Intact but chipped, buff, minute white grits, well fired, orange wash and vertical burnish outside"
۹.)	Jug	1.11,T.3070, b498, P1.41:28, "Intact, buff, white grits, well fired, wet-smoothed"

Tomb 3047

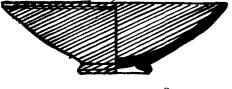


1.

Tomb 3070



2.



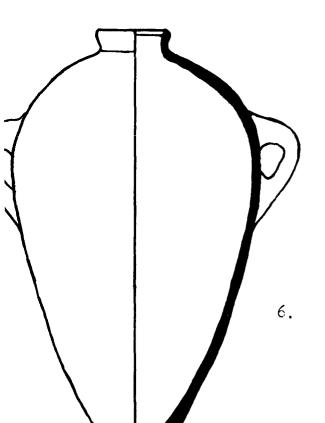
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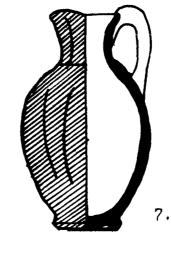


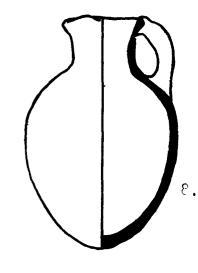
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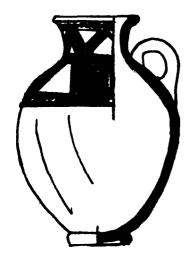




Scale 1:5

Plate X: Tomb 3070

No.	Designation	Source Field No. Plate No. Description
1.)	Jug	M.11, b473, Pl.39:10 "Intact, pinkbuff, numerous minute white grits, well fired, well made, traces of burnish attaile, red and black decoration"
2.)	Jug	M.11, b475, Pl.39:7, "Intact,buff, white grits, well fired, well made, wetsmoothed, red and black decoration; badly worn and encrusted with lime"
3.)	Jug	M.11, b476, P1.39:5, "Fink-buff, white grits, well fired, well made, well burnished outside, red and black decoration"
4.)	Jug	M.11, b467, Pl.41:16, "Intact, fine green-buff, white grits, well fired, well made, vertical burnish outside"
5.)	Lamp	M.11, b487, Pl.47:1, "Buff, white grits, well fired, wet-smoothed, burning on lip"



1.



3.



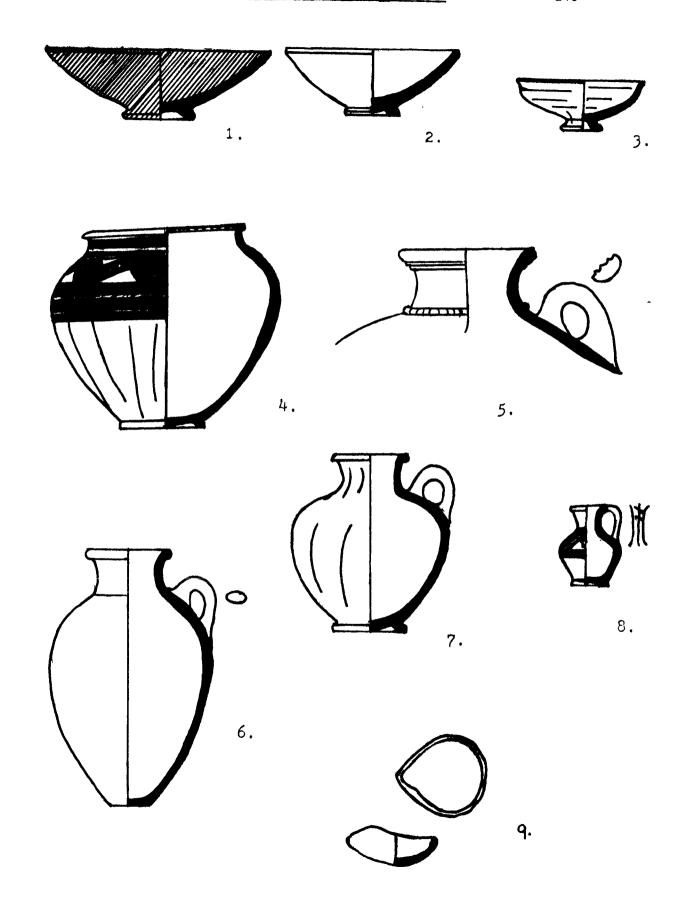
4.



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Plate XI : Locus 2114

No.	Designation	Source Field No. Plate No. Description
1.)	Bowl	M.11, a985 Pl.54:13 "Pink-buff, numerous minute red and white grits, red wash inside and out "
2.)	Bow1	numerous white grits, wet-smooth, d.302, h.76mm "
3.)	Bow1	M.11, al016, P1.53:16, "Fragmentary, Tine, white, well fired, well made, well burnished, d.190, h.ca.70mm"
4.)	Jar	M.11, a984, Pl.53:2, "Fragmentary, Tine, buff, well made, green-buff, well made, green-buff slip inside and out, spaced vertical burnish outside, red and black decoration"
5.)	Jug	M.11, al017, Pl.48:7, "Fragmentary, green-buff, numerous black grits, well-fired, wet-smoothed, rope decoration"
6.)	Jug	M.11, a988, Pl.48:8, "Complete, pink buff, white grits, well fired, well made, roughly applied white wash outside"
7.)	Jug	M.11, a987, Pl.48:3, "Buff, numerous red and white grits, well fired, well made, vertical burnish outside"
	Jug	M.11, a867, P1.49:3, "Pink-buff, lightly fired, wet-smoothed, red decoration"
9.)	Lamp	M.11, a989, P1.55:9, "Pink-buff, numerous gray and white grits, wet-smoothed, burning on lip, d.127 X 117, h.47mm"



Scale 1:5

Plate X11 : Locus 2115

No.	Designation	Source	Field No.	Plate No.	Description
1.)	Bowl	M.11, gray co smoothe	re, numerous	Pl.54:8, s white gri	"Pink-buff, ts, wet-
2.)	Bow1	M.11, numerou h.90mm	al002, s white g r ¶ "	P1.53:18, ts, wet-smoo	"Pink-buff, othed, d.200,
3.)	Bowl	M.11, numerou	al001, s white g ri	Pl.53:10, ts, wet-smoo	"Pink-buff, othed "
4.)	Bowl	M.11, white s	al903, lip outside	Pl.55:14, , red and b	"Pink-buff, lack decora tion "
5.)	Bowl	pink-bu	a998, ff, dark con d, burnish l	re, numerous	"Fragmentary, s grits, wet- le "
6.)	Stand	M.11, pink-bu	alOll, ff, dark co	Pl.55:19, re, well fin	"Fragmentary, red, wet-smooth"
7.)	Jar	fine, b well fi	uff to pink.	-buff, minutade, well bu	"Fragmentary, te white grits, arnished outside, n "
8.)	Jar	<u>M.11</u> ,	a1000,	P1.56:6, No	description.
9.)	Jug	M.11, burnish	al007, outside, re	Pl.49:7, ed and black	"Pink-buff, k decoration "
10.)	Jug	M.11,	al007,	P1.56:10, N	lo description.

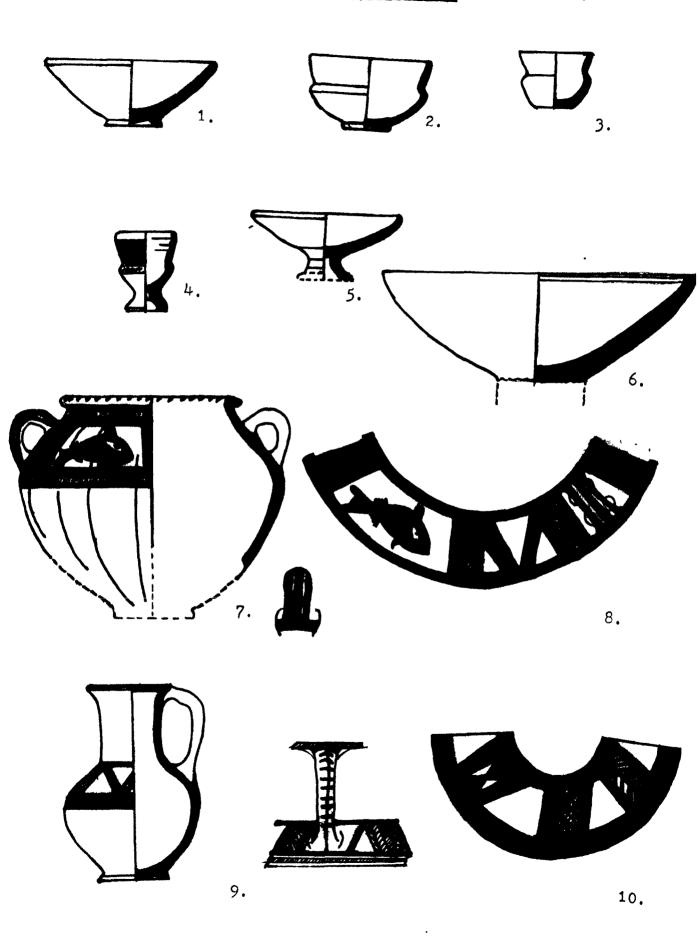


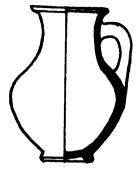
Plate Xlll

No.	Designati	on Source	Field	No.	Plate	No.	Description
1.)	Jug		erous w				"Buff to pink- fired, wet-
2.)	Jug	M.11,L.211 well fired decoration	, wet-s	05, mooth	P1.49	:15, d and	"Pink-buff, black
3.)	Jug	M.11,L.211 pink-buff, black deco	5, alo white ration	06, grits	P1.49 , wet-	:16, smootl	"Fragmentary, and ned, red and
4.)	Jug	M.11, L.211 buff, nume h.142mm "	5, alorous wh	09, ite g:	Pl.50 rits,	: 22, ": wet-sr	Intact pink- mooth, d.71,
5.)	Lamp	M.11,L.211 buff, well of burning	5, alo fired, on bac	10, well k edge	P1.55 made, e, d.1	:8, wet-: 38 X	"Intact, pink- smoothed, traces 122, h.56mm"
6.)	Chalice	pink-buff,	gray c horizo	ore, a	some mand ver	inute rtica:	"Fragmentary white grit, l burnish out-
7.)	Chalice	M.11,L.501 white grit black deco	2, d 39 s, roug	h buri	Pl.55 nish o	:13, utside	"Buff, few e, red and

Plate XIII

219









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Locus 5012

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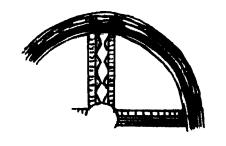
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Scale 1:5

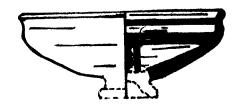
Plate XIV

No.	Designati	on Source Field No. Plate No. Description
1.)	Bowl	M.11,L.5039, d206, Pl.54:18 "Fragmentary, fine, buff, blue core, minute grits, well fired, well made, white slip and burnish inside and out, red and black decoration"
2.)		M.11,L.5039, d207, Pl.56:5, "Sherd, fine, cream-buff, few grits, well fired, well made, white slip and burnish inside and out, decoration in two shades of red"
3.)	Bowl	M.11,L.5029, dll8, Pl.54:16, "Pink-buff numerous white grits, wet-smoothed, red wash on rim"
4.)	Bowl	M.11,L.5029, dll7, Pl.53:5, "Intact, buff, white grits, well fired, well made, wet-smoothed"
5.)	Bowl	M.11,L.5029, dl16, Pl.53:9, "Buff, grey and white grits, well fired, wet-smoothed, d.ca.147, h.82mm"
6.)	Bowl	M.11,L.5029, d124, P1.53:11, "Buff, white grits, wet-smoothed"
7.)	Bowl	M.11, L.5029, dll5, Pl.53:14, "Pink-buff, some white grits, wet-smoothed"
۶.)	Jug	M.11,L.5029, d114, P1.49:12, "Buff, gray and white grits, well fired, wet-smoothed, red and black decoration"
9.)	Lamp	M.11,L.5029, dll9, Pl.55:5, "Pink-buff, numerous white grits, well fired, wet-smoothed".

Locus 5039

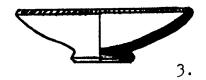






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Locus 5029









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Plate XV

No.	Designation	on Source Field No. Plate No. Description
1.)	Bowl	M.11,T.3006, blll, Pl.61:4, "Buff, dark gray core, mumerous white grits, poorly made, wet-smoothed."
2.)	Bowl	M.11, T.3006, b48, Pl.61:8, "Orango-buff, numerous black and white grits, wet-smoothed"
3.)	Jar	M.11, T.3006, b80, P1.60:5, "Orange-buff, numerous white grits, burnish outside, red and black decoration; warped"
4.)	Jug	M.11, T.3006, b47, Pl.57:12, "Orange-buff, numerous large white grits, wet-smoothed, red decoration"
5.)	Jug	M.11, T.3006, b46, Pl.58:3, "Pink-buff, numerous gray and white grits, well made, wet-smoothed, red and black decoration"
5.)	Lamp	M.11, T.2123, al071, Pl.55:6, "Fragmentary, pink-buff, numerous white grits, well fired, wet-smoothed, burning on lip"
7.)	Lamp	M.11,T.2123, al070, Pl.55:7, "Fragmentary pink-buff, numerous black and white grits, traces of burning on lip"

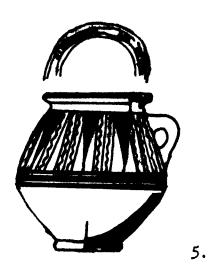
Tomb 3006



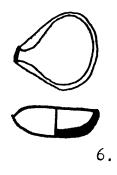








Tomb 2123





Scale 1:5

Plate AVI

No.	Designati	on Source	Field lo.	Plate No.	Description
1.)	វិជន	M.11,T.302 numerous w	hite rits.	P1.48:15, well fired	"Tink-buff, wet-smoothed,
2.)	Jug	M.11,1.302 fine, buff vell made,	7, b268, , black and irresular	Pl.5013, white grits vertical bu	"Complete, s, well fired, rnish outside "
3.)	Jug	H.11,T.302 grits, well red and bl	7, b194, 1 fired, ver ack decorate	P1.49:5, t-smoothed, ion "	"Buff, white roughly applied
4.)	Jug	numerous w	7, b192, hite grits, ack decorate	well made.	"Pink-buff, wet-smoothed,
5.)	Jug	M.11, T.302 fine, pink handmade,	7, b195, -buff, dark brown lustre	Pl.51:1, core, well ous paint or	"Fragmentary, fired, well atside "
6.)	Bowl	M.11, T.211 well fired	7, a1018, , well made	P1.53:17, wet-smoot	"Fine, cream, ned "
7.)	Jug	M.11, T.211 crits, wel	7, al021, l fired, pod	F1.50:25, orly made, t	"Buff, numerous ret-smoothel"
8.)	Jug	M.11.T.211 buff, well	7, al022, made, wet-s	P1.50:29, smoothed, d	"Complete, pink , 248, h.377mm"
9.)	Jar	vertical b	7, b219, hite grite, urnish outsi on handle	ide, red de	"Complete, biff, red, spaced coration, scarab

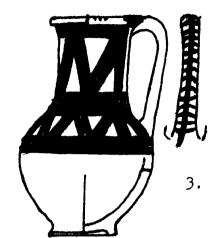


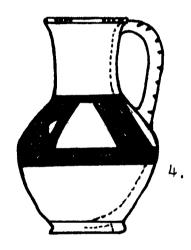
Tomb 3027

Plate XVI

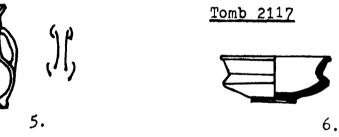


2.











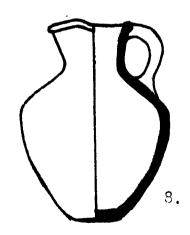




Plate XV11

No.	Designati	on Source Field No. Plate No. Description
1.)	Jug	M.11,T.3017, b133, P1.51:5, "Fine, creambuff, minute grits, well fired, handmade, wet-smoothed, red decoration; Cypriote"
2.)	Jug	M.11,T.2097, a791, P1.50:22, "Buff, manerous white grits, heavily fired, well made, wetsmoothed, d.71, h.124mm"
3.)	.3owl	M.11, T.3018 B, b166, Pl.61:25, "Intact,pink-buff, numerous gray and white grits, well made wet-smoothed"
4.)	Jug	M.11, T.3018 B, b161, Pl.58:17, "Fine, pink-buff, occasional grits, well made, traces of burnish outside; very worn "
5.)	Jug _	M.11, T.3018 B, b164, P1.58:5, "Intact, buff, occasional large white grits, heavily fired, wet-smoothed"
6.)	Jug	M.11,T.3018 B, b163, P1.58:12, "Intact, pink-buff, large white grits, irregular vertical burnish outside"
7.)	Jug	M.11,T.3018 B, b162, P1.58:18, "Fine, buff, dark core, well fired, well handmade, brown lustrous slip; Cypriote"
8.)	Lamp	M.11,T.3018 B, b165, P1.62:5, "Course, buff, numerous white grits, well fired, well made, wet-smoothed, traces of burning on rim"

~cmb 3017



Tomb 2097



Tomb 3018 B



3.



h



5.



6



7.



8.

Plate XVIII : Tomb 777 A 1

No.	Designation	Source F	Field No.	Plate No.	Description
1.)	Bowl	M.T., For other 2 s	2907, slip	P1.13:1,	"Intact, brown
2.)	Bowl	M.T., Focher 2 s	P2912, surface "	P1.13:2,	"Intact, brown
3.)	Bowl	M.T., Except for	P2981, or lar _e e gr	Pl.13:3, rits and blu	"Same as No.2, ue-black 3 core"
4.)	Bowl	M.T., Is as No. 2	P2913,	Pl.13:4,	"Intact; same
5.)	Bowl	H.T.,	P2983,	P1.13:5,	"Brown echer 3"
6.)	Bowl	M.T., I mixed gribrown mad	P2926, its, noorly dder 2 suri	Pl.13:6, y made, blue face "	"Some large e-black 3 core,
7.)	Bowl	M.T., I large mix surface, and on re	spaced hor	Pl.13:7, well made, rizontal bu	"Intact, many brown ocher 2 rnishing outside
8.)	Bowl	M.T., Ismall mix	P2917, xed grits,	Pl.13:8, brown oche:	"Intact, many r 2 surface "
9.)	Bowl	mixed gri 3 surface	its, burnt e, spa c ed h	umber 3 co:	"Some large re, brown ocher burnishing out
0.)	Jar	M.T., grits, br	P2921, rown o c her	P1.13:12,	"Many mixed
T	Jar	M.T., la core, na	P2922, ples yellov	P1.13:13, w 2 surface	"Blue-black 3, potterymark"
2.)	Jar	M.T., I	P2920, 2 "	P1.13:14,	"Intact; same
B.)	Jar Jug Jug	M.T., I	P2925, surface "	Pl.12:24,	"Intact, brown
.)	Jug	M.T., I	P2911, ed decorati	Pl.12:21,	"Brown ocher,

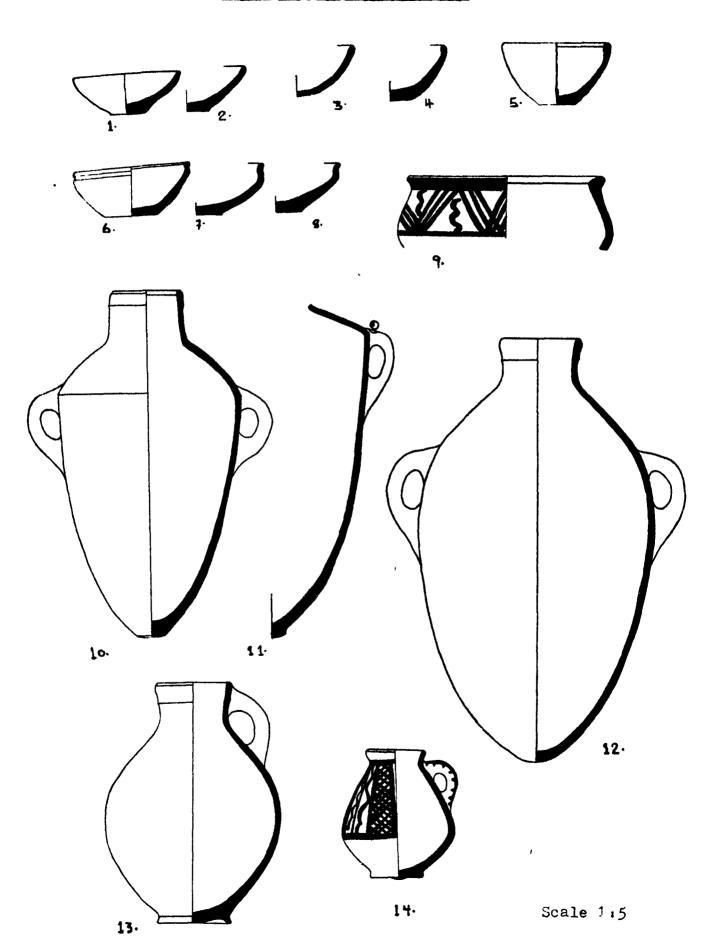
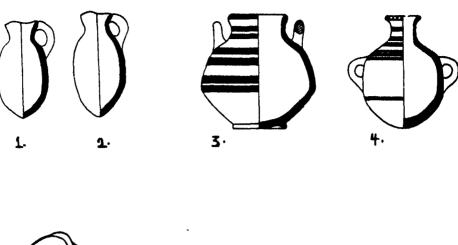


Plate XIX : Tomb 877 A 1

No.	Designation	Source	Field Mo.	Plate No.	Description
1.)	Jug	M.T.,	P2924	Pl.12:19,	"Brown ocher 2"
2.)	Jug	M.T., Z core,	P2923, brown oche	Pl.12:20, r 2 surface	"Roman sepia
3.)	Jar	M.T.,	P2985,	Pl.12:22,	"Same as No. 21"
4.)	Jar	M.T., fired, faded t	P2904, naples yell o vandyke b	Pl.12:23, ow 2 surfactorown 3 "	"Intact, well e, decoration
5.)	Lamp	M.T., blue-bl blacken	P2902, ack 3 core, ed by fire	Pl.13:11, brown oche	"Well fired, r 2 surface,
6.)	Funnel	M.T. fired,	P2918, burnt umber	P1.13:10, 2 surface	"Intact, well

Plate XIX : Tomb 877 A I





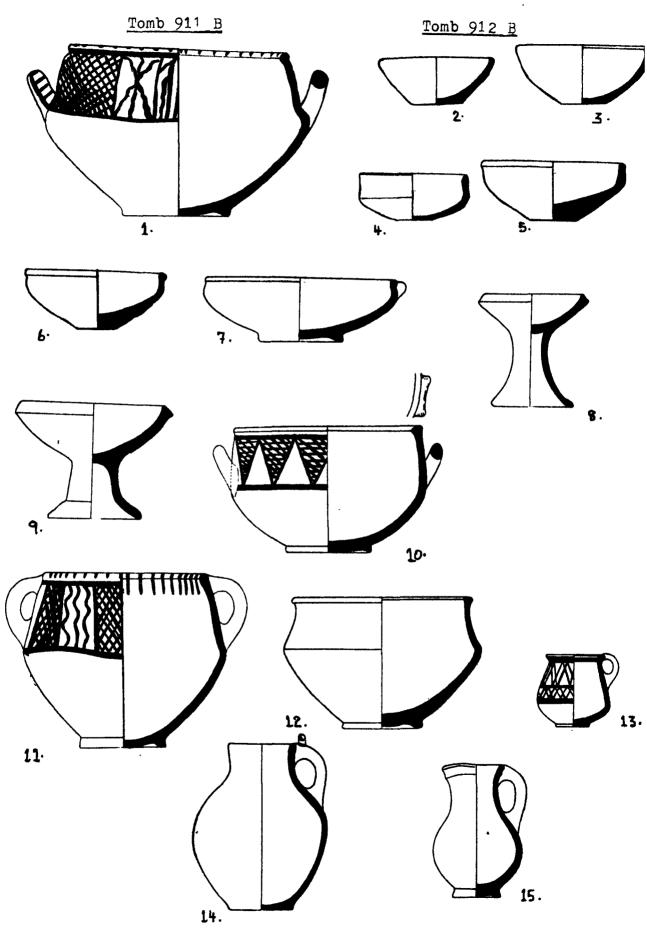


<u>Tomb 912 3</u>

No.	Designation	Source	Field No.	Plate No.	Description
14.)	Jug	M.T., mixed g	P3500, rits, brown	P1.34:18, ocher 2	"Many large
15.)	Jug	M.T., mixed g mark "	P3536, rits, brown	P1.34:19, ocher 3 su	"Intact, many rface, thumb

Plate XX

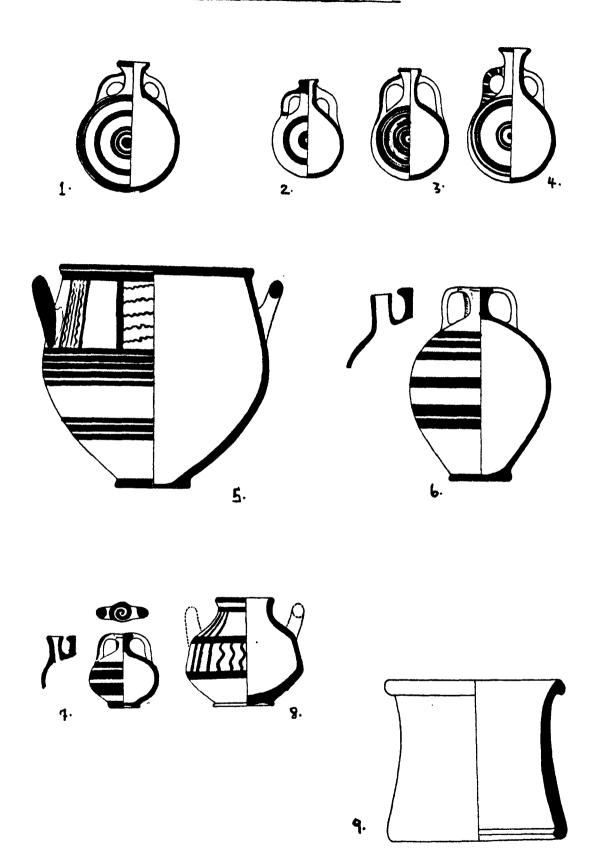
No.	Designation	Source Field No. Plate No. Description
1.)	Bowl	M.T., T.911B P3084, P1.31:4, "Complete, some large grits, burnt umber 1 core, brown other 2 surface, spaced horizontal burnishing, indian red 2 decoration"
		Tomb 912 B
2.)	Bowl	M.T., P3527, P1.34:1, "Many pre-dominantly light grits, well fired, blue-black 3 core, burnt umber 2 surface"
3.)	Bowl	M.T., P3535, P1.34:2, "Intact, brown ocher 2 surface"
4.)	Bowl	M.T., P3538, P1.34:3, "Many mixed grits, lightly fired, brown other 3"
5.)	Bowl	M.T., P3528, P1.34:4, "Many predom-inantly light grits, brown ocher 2"
6.)	Bowl	M.T., P3526, P1.34:5, "Same as Me.4"
7.)	Bowl	M.T., P3519, P1.34:6, "Intact, well made, brown ocher 3 surface, spaced horizontal burnishing outside, thumb handle"
8.)	Chalice	M.T., P3502, P1.34:11, "Light grits, permanent brown 3 core, brown ocher 2 surface".
9.)	Chalice	M.T., P3521, P1.34:12, "Intact, many mixed grits, well fired, burnt umber 2 surface. blackened by fire inside"
	Bowl	M.T., P3513, P1.34:7, "Well fired, naples yellow 3, indian red 3 decoration"
1.)	Bowl Jug	M.T., P3514, P1.34:8, "Intact, many mixed grits, brown ocher 2 surface, indian red 2 decoration"
2.)	Bowl	M.T., P3537, P1.34:10, "Some light grits, blue-black 2 core, brown ocher 2surface"
3.)	Jug	M.T., P3523, P1.34:17, "Intact, many minute mixed grits, well made, well fired, chiefly brown ocher 3 surface, indian red 3 to sepia 1 decoration"



Scale 1:5

Plate XX1: Tomb 912 B

No.	Designation	Source Field No. Plate No. Description
1.)	Flask	M.T., P3522 P1.34:13, "T085, burnt umber 3, traces of close burnishing, indian red 3 decoration"
2.)	Flask	M.T., P3509, P1.34:14, "T.057, few light grits, brown ocher 2, indian red 3 decoration."
3.)	Flask	M.T., P3524, P1.34:15, "Intact, t 065, many light grits, brown other 2 arrface, traces of close burnishing, indian red 3 spiral decoration"
4.)	Flask	M.T., P3566, P1.34:16, "T060, many minute mixed grits, permanent brown l core, brown ocher 3 surface, traces of close burnishing, indian red 3 decoration "
5.)	Bowl	M.T., P3516, P1.34:9, "Intact, many light grits, brown ocher 3 surface, blueblack 3 decoration superimposed on indian red 2; Mycenaean(?)"
6.)	Stirrup Cup	M.T., P3520, P1.34:21, "Fine ware, well made, brown ocher 2, traces of horizontal burnishing, indian red 2 decoration; Mycenaean"
7.)	Stirrup Cup	M.T., P3546, P1.34:22, "Fine ware, few minute light grits, well made, brown ocher 3, close horizontal burnishing, indian red 2 decoration; Mycenaean "
)	Jar	M.T., P3517, P1.34:23, "Blue-black 3 core, brown ocher 2 surface, traces of horizontal burnishing, indian red 3 decoration"
)	Stand	M.T., P3512, P1.34:20, "Intact, many mixed grits, brown other 2 surface"



Scale 1:5

Plate XXII

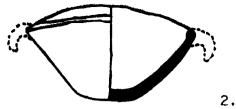
No. Designation Source Field No. Plate No. Description

- 1.) Bowl M.11,L.3102/VIIB, bl038, Fl.65:6, "Fragmentary, buff, white grits, well fired, well made, wet-smoothed, red decoration on rim"
- 2.) Bowl M.11,L.3102/VIIB, bl085, Pl.66:8, "Fragmentary, coarse, pink-buff, numerous white grits, well fired, poorly made, wet-smoothed"
- 3.) Bowl M.11, T.3103, bl039, Pl.55:5, "Buff, dark core, white grits, wet-smoothed"
- 4.) Bowl M.11, T.3098, bl040, Pl.68:15, "Intact, buff, white grits, well fired, wet-smoothed"
- 5.) Bowl M.ll, T.3098, bl041, Pl.68:14, "Pink-buff, dark core, white grits, well fired, wet-smoothed, red decoration on rim"
- 6.) Jug M.11, T.3014, b105, P1.57:1, "Fragmentary, fine, cream-buff, some minute white grits, wet-smoothed, black decoration; warped"
- 7.) Jug M.11, T.3014, bl06, Pl.57:2, "Orange-buff, numerous gray and white grits, irregular vertical burnish outside, red decoration"
- 8.) Jug M.11,T.3004, b38, P1.59:5, "Fragmentary, fine, gray, heavily fired, brown-gray wash and irregular burnish outside"
- 9.) Jug, M.11,T.3004, b37, Pl.59:6, "Fine, buff to bink-buff, numerous white grits, lightly fired, burnish outside, red and black decoration"

L.3102/VIIB



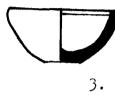
1.



Tomb 3103



Tomb 3098





4.



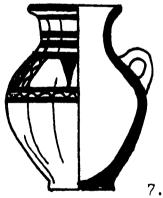
5.

Tomb 3014



6.





Tomb 3004



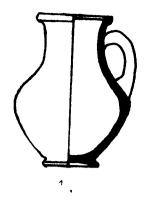


9.

Scale 1:5

Plate XXIII: Tomb 3015

No.	Designation	Source Field No. Plate No. Description
1.)	Jug	M.ll, blOl, Pl.57:8, "Complete, pink-buff, some white grits, well fired, well made, wet-smoothed"
2.)	Jug	M.11, b98, P1.57:9, Coarse pink buff, numerous large white grits, heavily fired, wet-smoothed "
33)	Jug	M.11, b132, P1.57:13, "Pink-buff, gray core, numerous gray and white grits, wet-smoothed, red decoration"
4.)	Jug	M.11, b100, P1.57:16, "Pink-buff, reddish core, numerous white grits, well fired, poorly made, wet-smoothed, red decoration"
5.)	Jug	M.11, b90, P1.58:15, "Pin'r-buff, dark gray core, numerous large gray and white grits, well fired, vertical burnish outside"
6.)	Jug	M.11, b263, Pl.58:13, "Complete, fine, pink-buff, gray core, occasional white grits, well fired, irregular vertical burnish outside"
7.)	Jug	M.11, blo2, Pl.59:10, "Fire, creambuff, well fired, traces of knife-shaving, wet-smoothed, black linear decoration"
₽.)	Bowl	11.11, b103, Pl.61:20, "Intact, fine, pink-buff, well fired, poorly hand-made, roughly applied, red-brown wash inside and out; Cyprioto "
9.)	Lamp	white grits, well fired, yet-smoothed, traces of burning on lip "







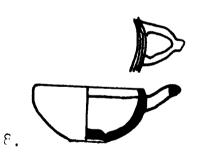




5.









Chapter Three: Footnotes

- 1) See Albright, W.F., "Archaeological Method in Palestine An American Interpretation", Eretz-Israel 9, 1969, pgs. 120-133
 - See also Dever, W.G., "Archaeological Methods and Results: A Review of Two Recent Publications", Orientalia 40, 1971, pg. 459ff.
- 2) A ceramic repertoire is the complete range of pottery forms found at one site or throughout a number of sites for a given time period.
- 3) Amiran, R., A.P.H.L., pg. 131
- 4) Amiran, R., A.P.H.L., pg. 92
- 5) Amiran, R., A.P.H.L., Pl. 32:8, pg. 105
- 6) This rim-to-shoulder handle is especially used on jugs, and is exclusively found in LB IIB.
- 7) Amiran, R., A.P.H.L., pgs. 189-190
- 8) Amiran, R., A.P.H.L., Pl. 48:2, pgs. 155-157
- 9) Epstein, C.M., P.B.W., Chapter Four
- 10) Amiran, R., A.P.H.L., pg. 147
- 11) Amiran, R., A.P.H.L., Pl. 47:6, pg. 151
- 12) Epstein, C.M., P.B.W., pgs. 141-142
- 13) Amiran, R., A.P.H.L., Pl. 48:4, pg. 157
- 14) Epstein, C.M., P.B.W., Summary of Chapter Four, pg. 141ff.
- 15) Amiran, R., A.P.H.L., pg. 170
- 16) Amiran, R., A.P.H.L., Pl. 46:14, pg. 149
- 17) Amiran, R., A.P.H.L., Pl. 46:11, pg. 149
- 18) Amiran, R., A.P.H.L., Pl. 62, pg. 197
- 19) Amiran, R., A.P.H.L., Pl. 69:8, pg. 218
- 20) Amiran, R., A.P.H.L., Pl. 69:7, pg. 218
- 21) Guy, P.L.O., M.T., pg. 5
- 22) Epstein, C.M., P.B.W., pgs. 141-142

23) The reliable Megiddo pottery is that of Groups A and B. A major difficulty in using Kenyon's A and B classifications is the absence of a terminal date for A and, thus a starting date for B. The ceramic separation of these two groups is based on Cypriot imports which, as previously noted, are scarce. By using the development of bichrome pottery, it may be possible to distinguish A from B typologically.

Comparing the dating systems of Kenyon, Amiran and Epstein, the Late Bronze Age I period (1570 - 1400 B.C.) could be divided into two phases based on Epstein's peak bichrome period (ca. 1575 - 1500 B.C.), and her decline period in bichrome (ca. 1500 - 1400 B.C.). True bichrome disappears after ca. 1475 B.C. according to Epstein, and this is probably related to the capture of Megiddo by Tuthmosis III, but bichrome-inspired motifs and forms are recognizable and outlast the original pottery.

Although inadequate by itself in justifying a division of the Late Bronze Age I period into stages A and B., T. 3027 at Megiddo may offer evidence that occupation during the fifteenth century B.C. did continue uninterrupted at Megiddo. Thus, the influence of bichrome pottery may not have ended arbitrarily ca. 1475 B.C., with a change of government in northern Palestine. Furthermore, T. 1145 B would fit well into the campaign period of Tuthmosis III, illustrating the decline of true bichrome and the familiarity with Basering I wares, which probably did not come into use in Palestine before the fifteenth century B.C. Further evidence to support this speculated division of the Late Bronze Age must be sought at other major and well-documented sites.

Appendix

A Comparison of C.M. Epstein's and K.M. Kenyon's Interpretations of Temple 2048

The excavators, as well as other scholars, have questioned the apparent lack of a temple in the sacred area throughout Middle Bronze II and the early Late Bronze Age. Epstein and Kenyon represent two views bearing upon the stratigraphy and chronology of Area BB.

The sacred area of BB was used in the Early Bronze Age, and as Epstein has pointed out, its ground level was higher than the surrounding levels since that time. Epstein is particularly interested in the sacred area in the Middle Bronze II period, covering Strata XII to IX.

The sacred area had a series of rubble layers under Stratum VIII which were about 30 cm. apart but did not fill the whole area under the later temple building. Loud did not know whether the layers were part of Stratum IX, and stated that they could even have belonged to Stratum XIII, or anywhere between.

Epstein noted two sets of houses of Stratum XII which were oriented to the sacred area and remained there until Stratum VII. She interpreted double sets of walls west and south of the sacred area as precinct walls, which changed as the temple was modified. In the north part of Area BB she found another building clearly defined and oriented to the sacred area. For these reasons Epstein concluded that the entire Area BB had as its central focus, a temple.

She also supplied ceramic evidence for these conclusions. In the Megiddo field notes, she observed "rubbish dumps" which are not shown on the plans. The pottery and objects in the dumps were common cultic and votive objects, and included two Bichrome jugs and sherds from Bichrome kraters. Epstein found these dumps to indicate the existence of a temple in the sacred area in Strata IX and X.

After checking Strata XI and XII for similar dump areas, she found that there were none, but that small rooms enclosed in a double set of walls west and south of the temple area served that purpose. In these rooms were few cultic objects or finds typical of these strata. She concluded that the temple in Area BB was newly built in Stratum XII, in the same location but with a different orientation.

After examining the Stratum VIII temple, Epstein noted that the excavators assumed that the three successive stages they saw belonged to three successive strata, while she maintained that the pottery of the Stratum VIII building could as easily belong to IX. While she observed the middle phase of the temple definitely correlating to Stratum VII, she diagnosed the pottery above the only floor as that of Stratum VIIA. Since the middle phase was tied to Stratum VII and the temple was in use during IX, she concluded that the early phase covered both Stratum VIII and Stratum IX.

The key to the understanding of the temple is the rubble pavement shown on Plan IX of M.II. Epstein argued that the layers of dirt and masonry rubble could have been chippings from the sacred area itself, and that the earlier temple had been broken down to its foundations, and the stones for the new temple chosen from the old ones. The unused

stones were then used to fill in the foundation trenches of the old walls. The rubble layers would give a better base for the new temple and were laid in exactly the space of the old temple's foundations. Epstein believes the new temple was built in Stratum XII and used throughout Strata XII, XI, and X. This would have been Phase I of the new temple.

Phase II covered Strata IX and VIII, while Phase III belonged to Stratum VIIB and Phase IV to Stratum VIIA. Thus temple 2048 likely began in Middle Bronze IIC and dated to ca. 1650 B.C. plus or minus 50 years.

Although Epstein's interpretation does shed light on our understanding of the pottery of the temple, we are still left with the problem of a temple with only one floor, which wasn't even added until the latter period of its use.

Kenyon's interpretation of the sacred area at Megiddo is quite different from Epstein's. Referring to the rubble pavements on Plan IX as "ghost walls" of Stratum VIII, Kenyon claimed that they corresponded almost exactly with the wall outline of the Stratum VIII temple. It does not appear from my examination of the S.IX plan and the S.VIII plan, that this is the case. The rubble layers did not project into the space covered by the wings of the north end of the temple, and stone slabs with more patches of rubble sat in odd places in the centre of the rubble outline. They were rough, uneven, varied in height, and overlapped each other in sections. Kenyon suggested these patches of rubble and stone in the centre of the area were part of an earlier 'standing stones' complex, but Loud had given up this

explanation because the levels between the top of the standing stones and the bottom of the rubble patches were too different.

Kenyon pointed out that the rubble layers did not reach quite as high as the newly built foundations of the Stratum VIII temple, but she suggested that the excavators simply missed seeing the top of the rubble.

Kenyon agreed with Loud in stating the Stratum VIII building was only foundational. The structure lacked a floor and a doorway. Its walls were built of roughly finished rubble, and in the final analysis this kind of building was in complete contrast to the temple of Stratum VIIB and VIIA.

Kenyon stated that the earliest main phase of the temple was in Stratum VIIB, for in this phase the walls were made of ashlar masonry, and here the first and only floor was laid. The VIIA temple followed that of Stratum VIIB, although Kenyon thought the walls may have been somewhat thinner in VIIA. The internal floor level was the same in VIIB and VIIA.

She argued that the foundations of temple 2048 were cut down into "featureless fill." Two main factors influenced this statement. In the central sacred area features had been removed as early as Stratum XIIIA. She cited L.4008 of Plan XII as one piece of wall which survived. To the northwest and southeast of the temple area in Stratum X, walls were cut by the ghost walls of Stratum IX.

Kenyon then compared the plans of the Stratum VIIB temple with the ghost walls of IX, and found them slightly out of line. She stated that on structural grounds temple 2048 must be later than the buildings of the VIIB plans. On stratigraphic considerations, she claimed that after the period of the VIIB structures in Area BB, the central area walls were removed, the ground levelled, and the foundations sunk for the new temple, 2048. Thus temple 2048 was first built in Stratum VIIB.

The rubble pavement was Phase I, built during Stratum VIIB, and dug into the levelled ground. The stages of building, while appearing to belong to Strata IX, VIII and VIIB, all actually belonged to VIIB.

After examining the tombs cut into the eastern houses zone and the pottery of the VIIB and VIIA temple phases, Kenyon concluded that Stratum VIIB came to an end when the town was destroyed by Tuthmosis III ca. 1482 B.C. Again on the evidence of pottery, Kenyon stated that there was a hiatus in occupation between ca. 1482 to 1400 B.C. and a corresponding paucity of pottery common to the fifteenth century B.C. The Stratum VIIA inhabitants apparently remembered the city plan after eighty years absence from the site since most of the rebuilding in VIIA was similar to VIIB architecture.

Although the plan of Stratum VIIA in M.II is fragmentary, one can see that the buildings were very similar to those of the earlier stratum. After eighty years abandonment the temple floor was used again without any change in level, and L.2087 in the northwest block of the eastern houses, was exactly the same as in Stratum VIIB. Further to the point, neither the excavators nor Epstein saw any evidence of violent destruction in the Late Bronze levels, and certainly not abandonment of the site. The plans of the strata show considerable continuity, and although there are several places where

the level of debris between VIIB and VIIA reached a metre or more, this was the exception, and in some areas the same floor was reused, at the same level. One would expect to find pottery and domestic objects in the final occupation level of a stratum which had been violently destroyed, but this was not the case in Area 8B,

One of Kenyon's main points in arguing the cultural gap between VIIB and VIIA was that no burials were recorded on the Stratum VIIB plan. Thus the inhabitants of Stratum VIIA, changing the tradition which originated in the Middle Bronze Age, no longer buried their dead within the city limits. This point is important because Kenyon has correlated Area BB to Area AA, Stratum IX, through this cultural habit.

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