

THE HASHEMITE KINGDOM OF JORDAN

ANNUAL
OF THE
DEPARTMENT OF ANTIQUITIES
OF
JORDAN

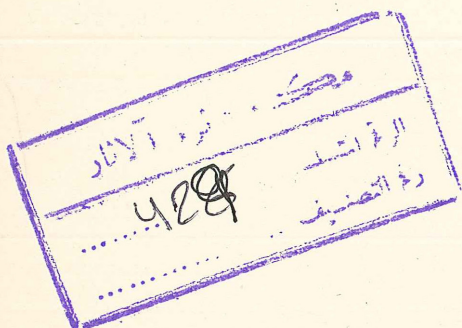
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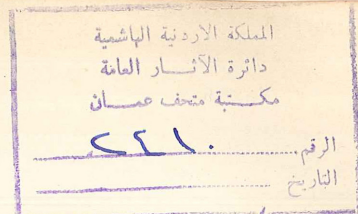
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Edited by
G. LANKESTER HARDING, F.S.A.
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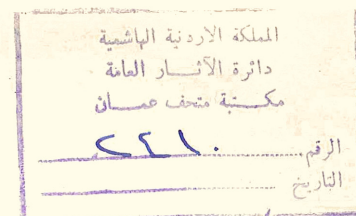


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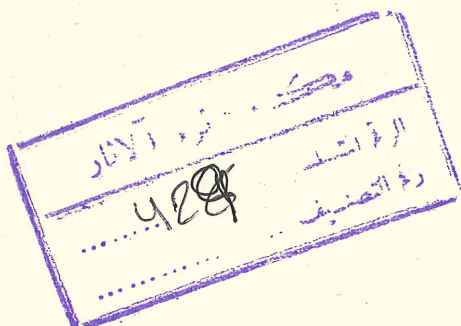


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NOTES AND NEWS

The past year has been one of considerable activity on the part of the Department. It is satisfactory to be able to record that all budget cuts have now been restored, and staff has even been increased, so that it will now be possible to maintain better control over ancient sites and to provide better conditions for visitors to the chief show places. A new Antiquities Law, embracing features of the old laws of both Palestine and Jordan, has come into force, together with an Antiquities Order covering special sections of the law. Among other improvements is the reduction of visiting fees, which are now 400 fils (8s.) for Petra, and 50 fils (1s.) for each other site.

A major operation was the survey of the Jordan valley carried out in connection with the Yarmuk dam scheme, with funds provided by the United Nations Relief and Works Agency for Palestine Refugees in the Near East. This was done by Mr. James Mellaart and Count Henri de Contenson, assisted by Hassan Awad and Nasri Nasir. Field work was completed in three months, during which time 76 sites were examined, many of them for the first time: they ranged in period from Neolithic to Medieval Arab. Perhaps the most important discovery was Tell Shuneh, lying under the modern village of Shunet Mushawah, where a sounding revealed five layers of occupation from Chalcolithic to Early Bronze III, the latest strata containing large quantities of Kh. Kerak ware. Other important early sites in which soundings were made are Tell Um Hamad el Sharqi, Tell Abu Habil, Jiftlik, Tell el Mefjer and Ghrubba. The results from the last-named are published in the present volume, and it is hoped to continue publication of the others in subsequent numbers.

Other works were undertaken with a grant from Point 4 Economic Development (Tourist) Section. These were: enclosing Tell el Sultan at Jericho with a wire fence; clearing and enclosing the Roman Theatre in Amman; completing the restoration of the mosaics in the Church of SS. Cosmos and Damianos at Jerash; clearing the remaining stretch of the cardo between the Forum and South Tetrapylon; and beginning on the restoration of the stage of the South Theatre, also at Jerash. The mosaic work was carried out by Herr Gauer after completion of his work for the Palestine Archaeological Museum at the Palace of Hisham, Jericho, and the other works at Jerash were under the direction of Miss Diana Kirkbride, with Mr. Theo. Canaan as architect, and assisted by Hasan Awad. Nearly a third of the scaena was finished, and work will be continued in this year (1954) on the Department's budget.

The Department again collaborated with the École Biblique et Archéologique Française and the Palestine Archaeological Museum in a third season's work at Kh. Qumran, of which a brief report appears on p. 75. The amount of material from Qumran Cave IV, referred to in the previous *Annual*, has turned out to be very much greater than was at first anticipated, and as the Government felt itself unable to contribute further large sums for the acquisition of it, they agreed that foreign institutes might, through the Director of Antiquities, acquire material, on condition that it remained in the country until study and translation had been completed, which period is reckoned at not less than two years. Contributions have so far been received from McGill University, Montreal, Manchester University and the Vatican Library. It is believed there is still more material to come, but the quantity is as yet unknown.

The Palestine Archaeological Museum, through the generosity of Mr. J. D. Rockefeller, Jnr., has again been active at Kh. Mefjer (Hisham's Palace) at Jericho. A German mosaic expert, Herr Gauer, and his wife spent five months on repairs to the great floor of the baths, and in the process trained a group of young men from Jericho in the technique, so that they were subsequently able to continue minor repairs on their own with only occasional supervision from the Curator. One of the young men, Ahmad Hamzeh, was in charge of this latter work. In the Museum itself further work was done on the carved stucco from the Palace, and arches, domes, panels and figures have been restored with great skill by the formatore, Mubarak Saad. Mr. G. U. S. Corbett worked on architectural features and reconstructions for some months, and Mr. R. W. Hamilton has kindly undertaken to prepare all the material for publication. Mr. Oleg Graber will contribute a section on the frescoes.

With the help of another generous gift from Mr. Rockefeller, a group of scholars are working on the manuscript fragments in the Palestine Archaeological Museum, their activities being controlled and co-ordinated by R. P. R. de Vaux, O.P., and Abbé Milik. Dr. Frank Cross of the American School of Oriental Research and Mr. John Allegro of Manchester University spent a year on the work, and they will be succeeded by Father Skehan and Mr. Strugnell. It is much to be regretted that owing to serious illness Père Barthélemy, one of the first to take up this work, has been unable to continue.

The first volume of the Qumran texts, consisting of all the material recovered from Cave I, is being published by the Clarendon Press, Oxford, with the help of a grant from the Palestine Archaeological Museum. Subsequent volumes in the series, to be called *Discoveries in the Judean Desert*, will cover the material, both textual and archaeological, from Murabaat, Kh. Mird and Qumran.

In addition to the work on the Jerash Theatre referred to above, the Department this year (1954) will carry out the following work:

Petra: Three years ago heavy rains caused the collapse of a stretch of retaining wall on the south side of the torrent bed within the city area, and subsequent floods have started to eat their way behind the wall, endangering among other things the triumphal arch. This wall must be restored and strengthened for a considerable distance to prevent erosion.

Palace of Hisham: Final touches to the mosaic floor of the baths and a general cleaning up of the site, which has not been touched since the end of the Mandate, will be carried out during the winter.

Kh. Qumran: The difficult problem of preserving the existing remains of the settlement must now be tackled, its walls (all of rubble only) must be reinforced to prevent rain getting in and causing collapse, and some means found of preserving the plaster facing of walls and cisterns. The Department will also collaborate in a fourth season of excavation on the site.

MAMILLA CEMETERY

HISTORICAL TOMBSTONES IN ARABIC

THE cemetery of Mamilla lies to the west of the Old City of Jerusalem, some 300 feet from the city wall. It was used as a burial-place by the inhabitants of this town at least since early Byzantine time, when a church to the memory of Sta. Mamilla—hence the name of the cemetery—stood in the middle of it.¹ It is perhaps the Beth Memel of the Talmud.² Eustratius, of the Monastery of Mar Saba, when describing the Persian conquest of Jerusalem in 614 A.D. mentioned 'Mamilli' as one of the cemeteries where part of the Byzantine victims of that well-known massacre were buried.³ In his Chronicle of Jerusalem and Hebron, Mujir ad-Din calls it Mamilla, and mentions another Christian name, Babila, and the Jewish one, Beit Mello.⁴

The centre of this cemetery is occupied by a large pool, which measures 316 feet east and west. The east wall is 218 feet long, the west 200 feet. The average depth of the pool is 19 feet. Thirty-eight feet from the lower end of the pool is a chamber, in which the conduit narrows from 21 inches square to 9 inches square, and can be closed by a stone to regulate the flow of the collected rainwater of this pool to the so-called Pool of Hezekiah or the Pool of the Patriarch's Bath in the Christian Quarter of the Old City of Jerusalem, as well as the north-west tower of the Citadel. There are also three caves to the west of this cemetery.

Mamilla has been the principal Muslim cemetery in Jerusalem since the Ayyubid conquest of the town in 1187 under Saladin, and ceased to be so only after 1928. It has been specially venerated by Muslims because a descendant of the Prophet called Abu 'Abd-illāhi Muḥammad b. 'Ibrāhim b. 'Aḥmad, the Qurashi, the Hashimite, left al-Jazīra-l-Khaḍrā, a town opposite Ceuta in Spanish Morocco, for Jerusalem, where he died in 599 A.H. (1202/3 A.D.) and was buried in Mamilla.⁵ The only mausoleum still existing whose owner lived in the late Ayyubid period and died in the early Mamluk period is the Kubakiya.⁶ Between the years 789 and 800 A.H. (1387-1398 A.D.), as-Sitt Tunshuq al-Mudhaffariya, a charitable woman whose one-time residence in Jerusalem is used now as a Muslim orphanage, built here a dome over the tomb of her brother Bahādur at al-Qalandariya, a Byzantine chapel known as the 'Red Monastery,' converted into a zawiya called al-Qalandariya, after a chief of a group of dervishes named ash-Sheikh Ibrāhīm al-Qalandarī, who stayed here together with his followers, and who was then supported by that benevolent lady. The zawiya collapsed about

¹ C. Clermont-Ganneau, *Archaeological Researches in Palestine*, Vol. I, London, 1899, pp. 242-244.

² C. Warren and C. R. Conder, *The Survey of Western Palestine (Jerusalem)*, London, 1884, p. 375.

³ P. P. Peeters, 'La Prise de Jérusalem par les Perses,' in *Mélanges de l'Université Saint-Joseph*, Beyrouth, Vol. IX (1923), p. 38.

⁴ Mujir ad-Din, II, p. 413.

⁵ Mujir ad-Din, II, p. 488.

⁶ Max van Berchem, *CIA*, Part II, Fasc. I (Jérusalem Ville), Cairo, 1923, no. 68, pp. 204-210.

893 A.H. (1487/8 A.D.),¹ and the modern 'Palace Hotel' occupies the site where the Qalandariya once stood. The road leading to Terra Sancta College and separating the Qalandariya from Mamilla was constructed in Turkish days when 'Umar 'Abdus-Salām Husseini was the Mayor of Jerusalem. Besides this there existed once at the north-east extremity of this cemetery a special wing where the Jerusalem followers of the popular Ṣūfī 'Pole', Abū Yazīd al-Biṣṭāmī, were buried.² Only one tomb with a long epitaph of this mausoleum remains.

The tombs of this cemetery were numbered by order of the Supreme Muslim Council, as it had been the intention during the Mandate to have the grounds of the Mamilla Cemetery included in the building zone of the Town Planning Area of Jerusalem.

In July 1946 I had the opportunity to trace the ancient tombs of this cemetery, and I was encouraged to prepare these epitaphs for publication by my teacher, Prof. L. A. Mayer, to whom my thanks are extended for his courtesy in revising this article.

EPITAPH I (Pl. I, no. 2), 697 A.H. (1297/8 A.D.). Slab of hard limestone inset in the W. side of Tomb no. 127/1, 12 m. to the S. of the Kubakiya. Dimensions measured within the frame 45 × 77 cm.; seven of originally eight lines of provincial Mamluk naskhi; many diacritical points and differentiating signs serving as filling ornaments.

- (١)
 (٢) (بسملة). كل من
 (٣) عليها فان ويبقا (sic) و(جه ربك ذو الحلال)
 (٤) والاكرام. هذا قبر الامير صلاح الدين محمد
 (٥) ازدمر السلحدار الناصري^٣ اخو (sic) المقر الأ
 (٦) شرف السيفي سالار^٤ كافل المملله الشريفه
 (٧) توفى (sic) الى رحمة الله تعالى سنة سبعة (sic) وتسعين وستماية
 (٨) رحمه الله ورحم من ترحم عليه وجميع المسلمين.

(1-3) . . . Qur'an LV. 26, 27. . . . (4) This is the tomb of the Amir Ṣalāh ad-Dīn Muhammad (5) Ūzdamur, the Armour-bearer (officer) of (al-Malik) an-Nāṣir, brother of His Most Noble (6) Excellency Seif ad-Dīn Sallār, Viceroy of the noble provinces. (7) He passed into the mercy of God the Exalted in the year 697 (1297/8 A.D.), (8) may God have mercy upon him, and on him who implores mercy on him, and (also) on all Muslims.

¹ Mujir ad-Dīn, II, pp. 413-414.

² *Ibid.*, p. 494.

³ Gaston Wiet, *al-Manhal aṣ-Ṣāfi*, Cairo, 1932, no. 390, p. 57, where this amir is recorded to have died in 696 A.H. (1296/7 A.D.). For correct pronunciation of this name, see L. A. Mayer, *Saracenic Heraldry*, Oxford, 1933, p. 247.

⁴ *Ibid.*, 1062, p. 152. Died in prison in 710 A.H. See also L. A. Mayer, *Saracenic Heraldry*, Oxford, 1933, pp. 196-197, and Mujir ad-Dīn, II, p. 493. In Ramadān, 702 A.H. (April, 1303 A.D.), al-Amīr Kaykaldī an-Najmī supervised the building of the entrance door and minaret of the shrine of Sheikh 'Ali al Bakkā in Hebron, by order of al-Amīr Seif ad-Dīn Sallār, then Viceroy and Governor-General of the noble provinces of Egypt and Syria.

It is worthwhile noticing that the word 'brother' on this epitaph seems to be the 'blood-fraternity' (*Blutsbrüderschaft*) of young Mamluks who were members of the same rank (*tabaqa*). A good number of Mamluk firmans used to be issued by the 'brother' (اخوه) of the ruling sultan.

EPITAPH 2 (Pl. I, no. 1), 713 A.H. (1313 A.D.). Slab of hard limestone embedded in the W. side of Tomb no. 703 in the W. extremity of the cemetery beside the tomb of al-Qurashi. Dimensions measured on squeeze within the frame 38 × 45.5 cm.; seven lines of provincial Mamluk naskhi; a few differentiating signs and diacritical points serving mainly as filling ornaments.

- (١) بسملة.
- (٢) ربنا آمنا بما انزلت واتبعنا
- (٣) الرسول فاكتبنا مع الشاهدين
- (٤) هذا قبر الفقير الراجي رحمة الله وغفرانه
- (٥) القاضي شرف الدين منيف¹ الحاكم بالقدس
- (٦) الشريف توفي الى رحمة الله ثالث عشر
- (٧) جمادى الاول (sic) سنة ثلاث عشرة وسبعمائة.

(1-3) . . . *Qur'an* III. 53. . . . (4) *This is the tomb of the one yearning and hoping for the mercy of God and His forgiveness, (5) the Qādī Sharaf ad-Dīn Munīf, ruling in Jerusalem. (6) He passed to the mercy of God on the 13th of (7) Jumada I in the year 713 (September 5th, 1313 A.D.).*

The deceased is Sharaf ad-Dīn Munīf b. Suleimān b. Kāmil as-Sulami, the Shafī'ite Qādī of Jerusalem. Born in Adhru' in Syria on 14th Safar, 643 A.H. (= July 11th, 1245 A.D.), Qādī in Jerusalem in 698 A.H. (= 1298/9 A.D.) and thereafter.

EPITAPH 3 (Pl. I, no. 3), 722 A.H. (1322 A.D.). Slab of hard limestone embedded in the W. side of Tomb no. 253, in the N.E. side of the cemetery and 35 m. to the N. of the Kubakiya. Dimensions measured on squeeze within the frame 63 × 85 cm.; eight lines of elegant Mamluk naskhi, with many diacritical points and differentiating signs, often disguised as ornaments, filling the intervening spaces.

- (١) الله
- (٢) بسم الرحمن الرحيم.
- (٣) يديشهم ربههم برحمة منه ورضوان
- (٤) وجنات لهم فيها نعيم مقيم خالدين فيها ابدا.
- (٥) هذا قبر العبد الفقير الى الله تعالى الشيخ.
- (٦) جلال الدين ابراهيم بن محمد القلانسي رحمه الله.
- (٧) توفي الى رحمة الله تعالى ورضوانه ليلة يسفر صباحها عن
- (٨) يوم الاحد ثالث ذو (sic) القعدة سنة اثنين (sic) وعشرين وسبعمائة.

¹ Mujir ad-Dīn, II, p. 467.

(1) *Allah.* (2) *In the name of the Compassionate, the Merciful.* (3-4) *Qur'an ix. 22 and part of 23.* (5) *This is the tomb of the servant yearning for God, the Exalted, ash-Sheikh* (6) *Jalāl ad-Dīn Ibrāhīm b. Muḥammad al-Qalānisi, may God have mercy upon him.* (7) *He passed into the mercy of God and His forgiveness at a night the morning of which was* (8) *Sunday, 3rd Dhu-l-Qi'da of the year 722.*

The deceased is Jalāl ad-Dīn Abu Is-ḥāq Ibrāhīm b. Zein ad-Dīn Muḥammad b. Ahmad b. Maḥmūd b. Muḥammad al-'Uqeilī, known as Ibn al-Qalānisi. Born in 654 A.H. and was a man-of-letters in Cairo, where the Mamluk amirs built him a zawiya and visited him. He was deaf. He came to Jerusalem, where he died on Saturday evening, 3rd Dhu-l-Qi'da, 722 A.H., at the age of sixty-eight.¹

Jalal ad-Din is the brother of 'Izz ad-Din Ahmad b. al-Qalanisi, Inspector-General of Police (محتسب) and Treasurer (ناظر الخزانة) in Damascus, who died in Damascus in 736 A.H.²

As a matter of fact, lines 1 and 2 of this epitaph form the Basmala, but the arrangement of the word Allah being out of the line is due to the intention of elevating the Divine name.

EPITAPH 4 (Pl. I, no. 4), 733 A.H. (1332 A.D.). Slab of hard limestone embedded in the W. side of Tomb no. 248, in the N.E. side of the cemetery and 34 m. to the N. of the Kubakiya. Dimensions measured on squeeze within the frame, 38 × 55 cm.; five lines of provincial Mamluk naskhi; many diacritical points and a few differentiating signs, all serving mainly as filling ornaments.

(١) بسملة
 (٢) هذا قبر العبد الفقير الى الله
 (٣) تعالى الشيخ حسام الدين
 (٤) توفي في شهر صفر سنة ثلاثة
 (٥) وثلاثين وسبعماية.

(1) *Basmala.* (2) *This is the tomb of the servant yearning for God,* (3) *be He exalted, ash-Sheikh Husām ad-Dīn.* (4) *He died in the month of Safar in the year* (5) 733.

EPITAPH 5 (Pl. II, no. 5), 736 A.H. (1335 A.D.). Slab of hard limestone embedded in the W. side of Tomb no. 247, N.E. of the cemetery. Dimensions measured on squeeze within the frame, 63 × 33 cm.; five lines of provincial Mamluk naskhi.

(١) بسملة. ان المتقين في جنات و
 (٢) عيون ادخلوها بسلام آمين. هذا قبر العبد
 (٣) الفقير الى الله تعالى الشيخ الزاهد العالم
 (٤) ابو يعقوب توفي الى رحمة الله آخر ربيع الاول سنة ست وثلاثين
 (٥) وسبعماية.

(1) and part of (2) *Basmala.* *Qur'an, xv. 46 and 47.* (2) *This is the tomb of the servant* (3) *yearning for God, be He exalted, the pious and learned Sheikh* (4) *Abu Ya'qūb. He passed into the mercy of God on the last day of Rabi' I in the year* (5) 736.

¹ Mujir ad-Din, II, p. 495, and Abu-l-Mahasin Ibn Taghri Bardi, *al-Manhal aṣ-Ṣāfi*, Vol. I (photostat at the Hebrew University), p. 26 (A).

² al-Hanbali, *Shadharāt adh-Dhahab*, VI, Cairo, 1351 A.H., pp. 56 and 112.

EPITAPHS 6 and 7 (Pl. II, no. 6), 740 A.H. (1339 A.D.) and 749 A.H. (1348 A.D.). Slab of hard limestone to the E. of the Pool. Divided into two parts by a thick perpendicular line to serve for two epitaphs each of four lines of elegant Mamluk naskhi; a few differentiating signs and diacritical points serving mainly as filling ornaments. Dimensions measured on squeeze within the frame, 63 × 35 cm.

Epitaph to the right reads:

- (١) بسملة
 (٢) هذا قبر الشيخ صلاح
 (٣) لدين خليل بن سالم مات ليلة
 (٤) الجمعة العشرين من ربيع الاول سنة اربعين وسبعمية.

(1) *Basmala*. (2) *This is the tomb of ash-Sheikh Ṣalāḥ* (3) *ad Dīn Khalīl b. Sālim*. Died on the night of (4) *Friday, 20th Rabi' I, in the year 740*.

Epitaph to the left reads:

- (١) بسملة.
 (٢) هذا قبر الحاج ابراهيم بن
 (٣) سالم توفي يوم الاربعاء ثاني
 (٤) شهر شوال سنة تسع واربعين وسبعمية.

(1) *Basmala*. (2) *This is the tomb of Hajj Ibrāhīm b.* (3) *Sālim*. Died on *Wednesday, 2nd of the* (4) *month of Shawwāl, in the year 749*.

EPITAPH 8 (Pl. III, no. 8), 761 A.H. (1359 A.D.). Slab of hard limestone inset in the W. side of Tomb no. 310, extreme N. of the cemetery, 80 m. to the N. of the Kubakiya. Dimensions measured on squeeze within the frame, 77 × 111 cm.; eight lines of elegant Mamluk naskhi, with many diacritical points and differentiating signs, all serving mainly as filling ornaments.

- (١) بسملة.
 (٢) للذين احسنوا الحسنى وزيادة ولا يرهق
 (٣) وجوههم قتر ولا ذلة اولئك اصحاب
 (٤) الجنة هم فيها خالدون. هذا قبر القطب الشهير الشيخ
 (٥) الامام العالم العامل مرابي الطالبين مرشد السالكين
 (٦) ولي الله في العالمين الشيخ علي العسني البسطامي¹
 (٧) قدس الله روحه ونور ضريحه توفي عصر يوم الخميس ثاني عشر
 (٨) من شهر صفر سنة احدى وستين وسبع مائة والحمد لله وحده.

(1) *Basmala*. (2-4) *Qur'an* x, 26. (4) *This is the tomb of the famous Pole, the Sheikh, (5) the Imam, the learned, the Governing, The Educator of the (Dervish) students, the Guide of (those) walking*

¹ Mujir ad-Din, II, p. 499, and ad-Durar al-Kāmina, II, p. 259 (no. 2138).

(the Path), (6) *God's Saint on Earth, the Sheikh 'Ali of 'Usfān,*¹ *the Bistāmi.* (7) *May Allah sanctify his soul and enlighten his tomb! Died on the afternoon of Thursday, the 12th.* (8) *of the month of Safar, in the year 761. Praise be to God, the Unique.*

During his lifetime, the deceased was the head of the Bistāmiya Sufi sect in Jerusalem, whose zawiya still exists in Upper Bab Hutta quarter of the Old City of Jerusalem, and who followed then the steps of the Persian Sufi, Abu Yazid al-Bistāmi, who died between 261 and 264 A.H. (875-877/8 A.D.). The well-known Ghūṣein family of er-Ramle are the guardians of the Bistāmi Waqf property.

EPITAPH 9 (Pl. III, no. 9), 948 A.H. (1541/2 A.D.). Marble slab embedded in the W. side of Tomb no. 243, some 15 m. to the N.E. of the pool. Dimensions measured on squeeze within the frame, 41.5 × 70 cm.; six lines of Early Ottoman Thulth, the first two lines of which are of smaller letters. Many diacritical points and a few differentiating signs serving mainly as filling ornaments.

- (١) يرحم الله امرى² (sic) اذا استغفره ودعا لي بالمغفرة
 (٢) هذا قبر العبد الفقير الى الله تعالى
 (٣) السعيد الشهيد المحتاج
 (٤) الى رحمت (sic) الله تعالى علي بن يعقوب
 (٥) المتوفا (sic) صاحب القبر من شهور
 (٦) في سنة ثمانية (sic) واربعين وتسعمائة.

(1) *May God be merciful to a man if he asked Him for forgiveness and prayed for my forgiveness.*
 (2) *This is the tomb of the servant yearning for Allah, may He be exalted, (3) the happy, the martyr, who is in need (4) of God's mercy, may He be exalted, 'Ali b. Ya'qūb, (5) the deceased, the owner of the tomb, in the months (6) of the year 948.*

EPITAPH 10 (Pl. II, no. 7), 965 A.H. (1557/8 A.D.). Marble slab covering the tomb of Abi 'Abd-illāhi-l-Qurashi in the W. extremity of the cemetery near Tomb no. 703. Dimensions measured on squeeze within the frame, 65 × 35 cm.; three lines of poetry in Ottoman Thulth; a few differentiating signs and diacritical points serving mainly as filling ornaments.

- (1) *Sheikh 'Abdullah Qurashi, that is, the centre of miracles,
 Which 'indicate' the time of that chief of saints;*
 (2) *(has) his resting-place in the vicinity of Jerusalem, called Mamilla,
 Where the light of mercy is descending by night and day.*
 (3) *He who restored his shrine in Babilla was that true king.
 The chronogram is, 'In the World the King did beautiful things.'*

A.H. 965 (=began on Sunday, October 24th, 1557)

¹ Near Mecca (cf. *Yāqūt*, III, p. 673).

² For the spelling of 'Amra' = 'imru', see *Islamica*, Vol. I (1925), p. 1.

- (۱) شیخ عبد الله قرشي^۱ یعنی مدارکم اثار^۲
 اصفیا سروراندن اول اثار روزگار
 (۲) مرقد بیت المقدس قریبدر مامله نام
 نور رحمت^۳ نازل اولور لیل ونهار
 (۳) مشهدين تعمير ايدن اول شاه حق^۴ بابلاندا
 قلدى تاريخي جهانده شاه خويياه كار^۵.

—۹۶۵—

HAMDI NUBANI

¹ Mujir ad-Din, II, p. 488. Sheikh Abu 'Abdillah al-Qurashi belonged to the noblest pre-Islamic Meccan family, the Banū Hāshim, to whom the Prophet belonged. Had he been a Turk, he would have been called a 'sultan,' a title reserved for saints who wielded some 'power' over natural events.

² These 'manifest' miracles were alluded to by Mujir ad-Din himself, once Chief Justice of Jerusalem and Hebron in the late Mamluk period, who testifies that his prayers, offered near the tomb of al-Qurashi and that of ash-Sheikh Arslān near by, were fulfilled.

³ *nūr-i rahmet* (lit.: 'the light pouring down' like rain). *Rahmèt* as rain is first mentioned in Sura VII, verse 56.

⁴ 'That true king,' in contradistinction to the 'spiritual king,' as it were, is the reigning Ottoman Sultan. In both cases, however, the title 'Sultān' is only hinted at.

⁵ It may tentatively be suggested that the year 965 (began October 24th, 1557), and written below the inscription, indicates the second restoration carried out during the reign of the Grand Turk, Suleimān the Magnificent (1520-1566). Mujir ad-Din records the first restoration of the tomb by Sheikh Abū Bakr aṣ-Ṣafadi in the months of 722 A.H. (began January 20th, 1322). The chronogram, as it now stands (=68+306+845=1219 A.H.) (=1803/4 A.D.). Therefore, this is the third restoration of the tomb during the reign of Selim III (1789-1809). Hence Turkish is used.

The scanning of these doggerel verses is fifteen syllables to the first and thirteen to the second hemistich of each verse, thus being neither 'Arabic' nor 'Persian' in metre.

A TYPOLOGICAL STUDY OF THE EL KHADR JAVELIN- AND ARROW-HEADS

LATE in 1953, a farmer of the village of El Khadr, 5 km. west of Bethlehem, discovered a hoard of arrow-heads and javelin-heads in bronze. Three were inscribed. The hoard was split up, and found its way into the hands of antiquities dealers. The first of the inscribed pieces (I) was bought by Abbé Milik on November 1st, 1953.¹ The second and third appeared on the market later, and were acquired by Messrs. Cross (II) and Harding (III=Amman Museum no. J5137).²

The entire hoard seems to have consisted of some twenty-six pieces; of these nineteen were secured for publication; of the remaining seven, the writers have seen six.

The three inscribed pieces (Pl. IV) read *ḥs* 'bd**l**'t,³ *ḥiṣṣ*/*ḥiṣṣ* 'abdlabō(')t/'abdlabi(')t, 'the dart of 'Abdlabi't.' The name is well known, thanks to its occurrence in a list of bowmen from Ugaritic (321 : III : 38). The goddess, *lb't*, is most easily identified with 'Atirat-Qudšu. In this case 'Abdlabi't would be a pendant to 'Abd'atirat of the Amarna Letters.⁴

The script of the javelin-heads is intermediate between the little group of Proto-Canaanite inscriptions from the 13th and early 12th centuries B.C., all from Palestine, and the corpus of 11th/10th-century Phoenician inscriptions (chiefly from Byblus). It can scarcely be earlier than the 12th century B.C., nor later than the early 11th. A date *circa* 1100 B.C. is entirely suitable.⁵ To be noted are the 'dotted' 'ayns, which have no parallels later than *circa* 1200 B.C., the form of *beth*, precisely identical with that of the 13th-century Lachish bowl (shifted ninety degrees in stance), the slender *daleth*, tightly coiled *lamedh*, and archaic (unparalleled) *ḥeth* (on nos. II, III; the *ḥeth* of no. I has good parallels in the Beth-shemesh Ostrakon) and *šade*. Most extraordinary of all, the javelin-heads are written vertically, and in the case of II and III, with symbols in the stance of left-to-right writing. Vertical writing prevailed in the 15th century B.C.; the latest Proto-Canaanite inscription written from left to right is the Lachish ewer (third quarter of the 13th century B.C.). Moreover, the evolution of the script, especially the stable stance of 12th/11th-century forms, indicates that right-to-left horizontal writing became thoroughly dominant by the end of the 12th century, if not earlier. Thus the little inscriptions on the javelin-heads are the earliest exemplars of conventionalized alphabetic script. At the same time, they establish beyond cavil that the 'Phoenician' alphabet evolved from a Proto-Canaanite precursor.

¹ This piece has been presented by Abbé Milik to the Palestine Archaeological Museum.

² The writers wish to thank Mr. Harding for permitting them to study and publish his javelin-head and arrow-head (J5138), and Mr. Yusif Sa'ad and the Palestine Archaeological Museum for permission to publish the arrow-heads from Tomb 419, Tell el-'Ajjûl, and for preparing and photographing the weapons of their hoard.

³ No. II omits 'aleph.

⁴ A detailed discussion of the linguistic details of the reading and of the identification of Labi't is to be found in the writers' article, 'Inscribed Javelin-heads from the Period of the Judges, etc.,' *BASOR*, 134 (April 1954).

⁵ The palaeography of the javelin-heads is discussed in detail in *BASOR*, article cited above.

The recovery of the little hoard provides a special opportunity for typological study. This is true for several reasons. The hoard is more or less homogeneous; at least twelve pieces are sufficiently well preserved to permit accurate drawing; the hoard is from a period when javelin- and arrow-heads are rather rare; and most important, the results of typological dating can be checked by palaeographical evidence from the inscribed pieces. Moreover, there is a special need for systematic typological study of weapons, especially of such common pieces as javelin- and arrow-heads.¹ For the most part, archaeological reports have given little attention to the typology of arrow-heads, especially in the period Late Bronze I to Iron I, when types are sufficiently differentiated to make their study most significant. The disinclination to study them is caused by a number of factors. While small copper weapons have been found in great abundance, generally they are found in advanced stages of corrosion; the difficulty of cleaning them and drawing them is considerable. Hence a few examples are photographed; at best simple outline drawings are made. Quite naturally such reporting is of no value, especially if uncleaned examples are photographed. The general shape of arrow- and javelin-heads is only rarely enough to give a basis for dating; the so-called 'leaf-shaped' form, for example, dominates, with only slight evolutionary changes, from the Middle Bronze to the Early Iron Age. The details of form which are, on the contrary, of great use for precise dating are quite often wholly obscure in published photographs and drawings.

A serious typological study of the small copper weapons from Palestine either must be done in museums, working with the pieces themselves, or must await future publications when stricter and standardized procedures in description and drawing have been established. The present paper, while limited to a study of arrow- and javelin-heads in the transition from L.B. II to Iron I forms, reflects our frustration in attempting comparative study, and therefore attempts in its restricted compass to make some methodological suggestions.²

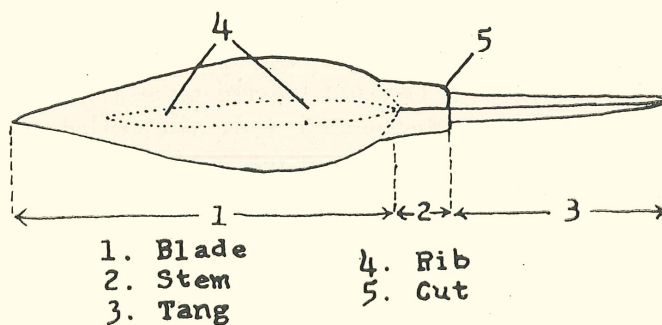
A list of types with a proposed terminology, taken for the most part from botanical terms descriptive of leaf shapes, is given in Fig. 1. Its usefulness is limited to M.B. II to Iron II shapes. Three-bladed, triangular or quadrangular types and elaborated barbed forms, most of which were introduced towards the end of Iron II, and which flourished in the Persian and later periods, are omitted. No serious attention has been given to iron arrow-heads, which begin to dominate in Palestine in the 10th century B.C.³

The important typological elements of the arrow-head are: (1) the shape of the blade, (2) the existence of, and form of, the stem, (3) the existence of, and type of, the 'cut,' (4) the form of the tang, (5) the existence of, and form of, the rib, and (6) the treatment of the blade point.

¹ Petrie's *Tools and Weapons* (London, 1917); Bonnet's *Die Waffen der Völker des alten Orients* (Leipzig, 1926); W. Wolf's *Die Bewaffnung des altägyptischen Heeres* (Leipzig, 1926), all of which are useful in many ways, are of little value for detailed typological analysis.

² A *caveat* should be placed before all of the generalizations made below. Often they are made on the basis of a set of data insufficient or too poorly reported to permit inductive results which are certain. Typological sequences may be much oversimplified at a number of points.

³ Cf. Olga Tufnell, *Lachish III. The Iron Age*, Text: p. 386; W. F. Albright, 'The Excavation of Tell Beit Mirsim III' (*AASOR*, XXI-XXII), § 45-47.



I. Lanceolate



II. Oblanceolate



III. Lozenge-shaped



IV. Ogee



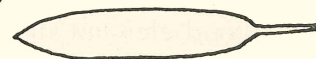
V. Ovate



VI. Pointed-ovate



VII. Oblong



VIII. Deltoid



IX. Barbed-deltoid



X. Linear



XI. Spatulate



XII. Eliptic



F.M.C.

FIG. I

The shape of the blade is not necessarily a criterion for dating. On the other hand, certain shapes do tend to dominate in certain periods. Characteristic of L.B. I and especially L.B. IIA are the long, narrow oblanceolate and elliptic blades.¹ Ogee shapes² and broad, oblanceolate or spatulate shapes³ appear to become common at the beginning of the Iron Age, though (broad) lanceolate and pointed ovate or simple ovate forms mark L.B. and Iron I styles as well. It is wise, at least at present, to give weight to shapes of blades only when a number of pieces are in hand.

More important in tracing the evolution of arrow-heads between M.B. II and the end of Iron I is the development and treatment of the stem. In M.B. II and L.B. I, the stem is virtually non-existent as a differentiated element of the arrow-head. In L.B. I, square (in cross-section) tangs tend to disappear with the development of rhomboidal tangs. The rhomboidal shape of the tang requires that at the base of the blade the flat of the blade rise at the centre, on either side tapering to a point, which is prolonged, as it were, to form the edge of the tang—at right angles to the cutting edges of the blade. At the two 'points' where the blade becomes the tang is a bulge, the rudimentary stem. A second element in the formation of the stem is the 'cut.' At least as early as the end of L.B. I, abruptly tapered or vertical cuts into the rudimentary stem begin to appear. At the end of L.B., the stem has become developed, especially in the javelin-head and larger arrow-heads. Heavy rhomboidal stems with vertically cut rhomboidal tangs are characteristic of 11th/10th-century types. The stem becomes pronounced when long, especially oblanceolate and elliptic shapes give way to broader blades in the transition from the Late Bronze Age to Iron I. In the former, the narrow neck of the blade serves as a kind of stem, or to put it differently, the stem is part of the blade rather than a separate element.

The rib of the arrow-head may be a significant element. A high rounded rib on an oblanceolate blade is characteristic of L.B., especially of IIA (the Amarna Age)⁴; probably the rib is skeuomorphic in origin, in imitation of socketed lance-heads, where the rib is structurally necessary. Slightly raised, flat ribs seem to characterize blades transitional from L.B. II to Iron I.⁵

The treatment of the blade point is also a useful typological element under certain circumstances. Aside from linear forms, javelin-heads and arrow-heads in M.B. II and L.B. I and II are usually tapered in thickness towards the point, or simply flat, sharpened

¹ See Pl. III, a homogeneous lot from Tomb 419 (unpublished), Tell el-'Ajjûl. The tomb is L.B. IB or L.B. IIA. The specimens are numbered in the Palestine Archaeological Museum as follows: line 1, from left to right: 33.1681, 33.1576, 33.1637, 33.1615, 33.1628, 33.1630, 33.1618, 33.1667, 33.1632, 33.1664, 33.1633, 33.1660, 33.1666; line 2: 33.1658, 33.1672, 33.1665, 33.1652, 33.1654, 33.1650, 33.1681, 33.1629, 33.1617, 33.1682, 33.1674, 33.1675, 33.1683, 33.1684, 33.1605. Line 1 (beginning with no. 3) exhibits a series based on the treatment of the central rib. Nos. 4, 5, 6 are typical of the period with a high, rounded central rib. Line 2 exhibits a series based on treatment of the base of the blade. Line 1: 1 is a blunt 'bird stunner'; 1: 2 is a linear form, probably used for hunting.

² Cf. Macalister, *Gezer III*, Pl. 215: 46; Vol. II, p. 372; *Tell en-Nasbeh*, Pl. 104: 15, 17 (Iron II); *Megiddo II*, Pl. 176: 61, 65 (Strata VB-VA, 10th century B.C.).

³ Cf. Riis, *Hama II: 3* (Copenhagen, 1948), p. 123.

⁴ Cf. Wolf, *Die Bewaffnung*, etc., Pl. 9: 15, 16; (our) Fig. 3, line 1, esp. nos. 3-6.

⁵ See *Hama II: 3*, pp. 122, 123; and the discussion of the El Khadr points.

on all sides to a point. Beginning in Iron I, a new type develops with a heavy, thickened point, which in extreme cases may be lozenge-shaped, or even rhomboidal in cross-section, with the thinnest part of the blade near the middle, or even near the base of the blade.

Before turning to a discussion of the El Khadr types, a brief excursus may be made on the distinction between the javelin- and the arrow-head. Hitherto no attempt has been made to distinguish the two: large points, generally over 10 cm. in overall length, have been called javelin-heads.¹ Smaller points, or indeed all 'dart'-heads, large or small, have been called arrow-heads. Quite tentatively, we may draw a line between the two at a blade-length of about 6 cm.² Blade lengths of more than 6 cm. are generally associated with proportionately much thicker and heavier blades, and in the case of Iron I heads, with thickened blade points. The difficulty which complicates matters is that we must also distinguish between war heads and hunting arrow-heads; and needless to say, functional differences prevent, at least at present, any simply typological arrangements.

In the drawing (Fig. 2: see also Pl. IV) there is a tentative arrangement of the El Khadr pieces into a typological series of javelin-heads (J I, J II, etc.), and arrow-heads (A I, A II, etc.). To distinguish function, however, in the case, for example, of J III: 7 and A V: 10, is exceedingly precarious. The difference in function in the case of J I and A I or A IV, on the other hand, is immediately apparent.

The inscribed javelin-heads from El Khadr are thick, rather broad, ob lanceolate blades. Their stems are developed, especially in J I: 3, with tapered cuts, rhomboidal tapering tangs. Slightly raised, flat ribs are on each of the three; none is thickened at the point of the blade. In addition to the inscriptions, a thin line engraved in the blade circles the edge, decorating the javelin-head.³ None of the other pieces has such decoration.

The closest parallels to these three pieces are the Ruweiseh arrow-head published by Guigues and Ronzevalle,⁴ and a second in the Beirut Museum yet to be published. These can be dated only by the inscriptions they carry (*circa* 11th century B.C.). From datable archaeological contexts come excellent parallels from Tell Abū Hawām: slightly earlier types from Stratum V (13th century) and slightly later from Stratum III (11th/10th century).⁵ Other parallels come from Hama, presumably from the 12th/10th centuries.⁶ They are 'heavier,' tending to spatulate blade shapes, with abrupt, vertical cuts in place of the tapered cuts and tangs of our forms; thus they may be considered

¹ Cf. W. F. Albright, *TBM II (The Bronze Age)*, § 59.

² The length of the tang is, more or less, irrelevant. Thus overall measurements are not as significant as blade sizes in determining the function of the piece.

³ Not shown on the drawing.

⁴ *Mélanges de l'Université Saint-Joseph*, XI: 7, Pl. III.

⁵ See list appended below. For chronological discussions of these strata, see W. F. Albright, *TBM III*, p. 6; Maisler, 'The Stratification of Tell Abū Huwām on the Bay of Acre,' *BASOR*, 124, pp. 21 ff.; G. Van Beek, 'Cypriote Chronology and the Dating of Iron I Sites in Palestine,' *ibid.*, pp. 26 ff.

⁶ *Hama II*: 3, p. 123, § IV B; p. 33, Fig. 20. Until the chronology of the Hama cemetery levels is clarified, we cannot rely too much on these parallels. Cf. Schaeffer, *Stratigraphie comparée et Chronologie* (Oxford, 1948), pp. 112 f., whose dates for Str. F (=Cemetery I-II) are clearly too high. But see Van Beek, *op. cit.*: p. 28, n. 8a.

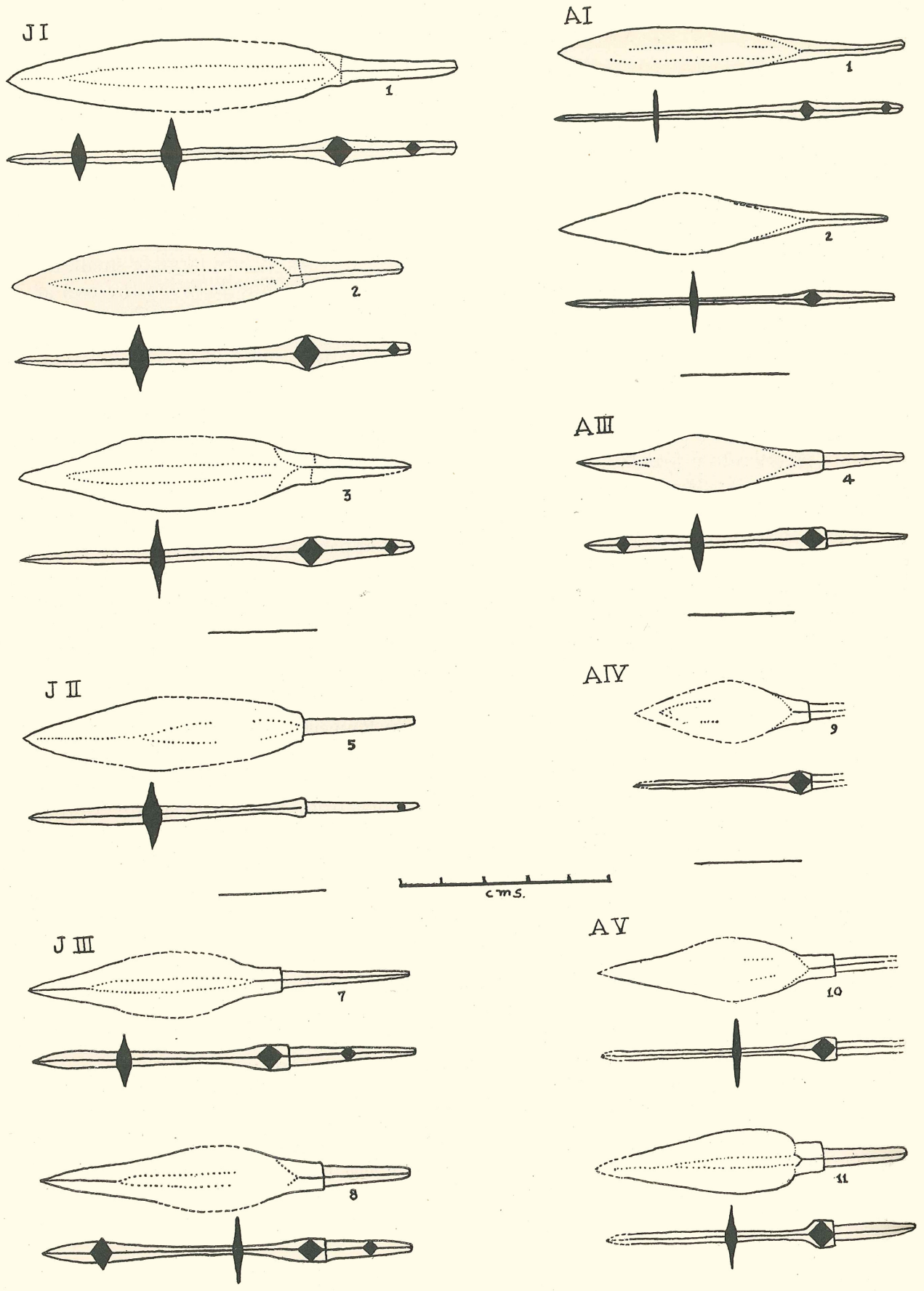


FIG. 2

F.M.C.

to be more advanced typologically if not later in date. Excellent parallels are also found in Megiddo VII (L.B. II) and V (11th century); in unpublished pieces from L.B. II Lachish (Tell ed-Duweir) and Tell el-Fūl (11th century B.C., Str. II). For details, see the list at the end of the paper.

Class A I has closest affinities with L.B. arrow-head forms: they have no true stem, and in the case of A I: 1, the narrow oblanceolate form characteristic of L.B. II blades. A III: 4 is an ogee blade. Best parallels are from Iron I (see above). The type continues into Iron II in iron and in an occasional bronze specimen.

Classes J III, A IV and A V have their affinities with Iron I forms, and at a number of points anticipate iron arrow-head types. The abrupt cut, lanceolate shapes, elongated rhomboid stems and, in several cases, thickened points characterize developed Iron I types. The rib, if present, is vestigial—though heavy raised ribs do appear on deltoid and certain other special types in the Iron Age.

The pieces in the hoard thus run the gamut from types whose closest affinities are L.B. (A I), or transitional from L.B. II to Iron I (J I, J II¹), to Iron I types (A III–V, J III).

The spread of the series is extraordinarily broad, from A I: 1 to A V: 11. Whether this typological spread reflects a chronological spread in the hoard is difficult to say; it would not be surprising if this were the case. Certainly no such variety came from a single workshop; probably no such variety was being manufactured at one time. One may speculate that the inscribed pieces were votive offerings presented to a temple, presumably a shrine of Labī't-Asherah. In this case, the hoard may be a collection of disparate origin in time and place, perhaps booty taken in raids, together with pieces of the raider himself. Venturing even further in the realm of speculation, we may observe that El Khadr was almost certainly not the centre of a settled L.B.–Iron I Canaanite occupation, and that the political situation in the Judean hill country in the late 12th and early 11th centuries was characterized by perennial raids by newly arrived Israelites on the rich Canaanite cities of the Shephelah and Plain. We may have chanced upon the loot of an Israelite raider.

At all events, the hoard is to be dated 12th/11th-century according to typological indications, as well as the palaeographical evidence of the inscribed javelin-heads.

Appended is a list of the pieces published, with parallels taken chiefly from Palestinian excavations. The numbering follows the arrangement in the photograph (Pl. IV) and the drawing (Fig. 2).

DESCRIPTION OF THE EL KHADR HOARD

J I: 1 length: 10.5 cm.; blade length: 7.7 cm. Blade oblanceolate. Undeveloped stem (rhomboidal in section); tapered cut to rhomboidal, tapering tang. Slightly raised, flat rib. Inscribed with late-12th-cent. B.C. alphabetic characters. Decorated with a thin, engraved line circling blade.

¹ J II shares its treatment of the stem with L.B. II heads. The round tang is exceptional, and may be simply the result of the corrosion of thin edges of an originally square or rhomboid tang. Its blade, on the contrary, with slightly thickened point, vestigial rib and modified oblanceolate shape, fits best with early Iron I types.

- J I: 2 l. 9.3 cm.; bl. 6.6 cm. Oblanceolate blade. Rudimentary, rhomboidal stem; tapered cut to rhomboidal, slightly tapered tang. Slightly raised, flat rib. Inscribed and decorated as J I: 1.
- J I: 3 l. 9.2 cm.; bl. 6.7 cm. Modified (pointed) oblanceolate blade. Developed stem; tapered cut to rhomboidal, tapered tang. Slightly raised, flat rib. Inscribed and decorated as J I: 1.

PARALLELS TO J I

Ruweish: *Mélanges de l'Université St.-Joseph XI*: Pl. III. Megiddo: *Megiddo II*, Pl. 176: 57 (Str. VII, L.B. II); Pl. 176: 66 (Str. VA, 10th cent.); *Megiddo I*, Pl. 81: 16 (Str. V, 11th cent.); *Megiddo Tombs*, Pl. 89: 2 (L.B. II?). Tell el-Fâr'ah: *Beth Pelet II*, LIV: Tomb 936 (13th cent.). Tell Abū Hawâm: *QDAP*, IV, Pl. 33: 360, 361, and esp. 362 (Str. V, L.B. II); cf. pp. 58, 59; Pl. 33: 125, 127, 128 (cf. p. 26; Str. III, 11th cent.). Tell el-Fûl: *AASOR*, IV, Pl. 33: 12; compare the treatment of the stem with J I: 3 (Str. II, 11th cent.). Hama: *Hama II*: 3, p. 123 (§ IVB); cf. p. 33, Fig. 20 (12th/10th cents.?). Tell Beit Mirsim: *TBM II (AASOR, XVII)*, Pl. 41: 20, 21a, 21b (Str. C, L.B.). Cf. unpublished arrow-heads from Tell ed-Duweir in the Palestine Archaeological Museum: PAM 37.828; 35.3063; etc. (L.B. II). Tell el-'Ajjûl: Fig. 3, line 1: 7; line 2: 3-12, etc. (L.B. IIA?). Beth Shan: PAM 36.1677 (Str. VIII, 14th cent.).

- J II: 4 l. 8.7 cm.; bl. 6.7 cm. Broad oblanceolate blade. Cut vertical and abrupt at base of blade; round (?) tapered tang. Vestigial flat rib. Thickened at point. Badly corroded.
- J II: 5 l. 9.2 cm.; bl. 6.5 cm. As J II: 4.

PARALLELS TO J II

For blade shape, see J I, J III; the treatment of the cut (virtually without stem) is most closely paralleled in L.B. II: Tell el-'Ajjûl (Fig. 3), l. 1: 4, 5, 7-9; l. 2: 13, 14; *Ancient Gaza II*, Pl. XVI: 131, 2 (L.B. II). Megiddo: *Megiddo II*, Pl. 176: 66 (Str. VA, 10th cent.). Gezer: *Gezer III*, Pl. 75: 3-7, 11 (L.B. II, Tomb 30). Hama: *Hama II*: 3, p. 122, §IVA (1200 B.C. and later; for treatment of base). Tell Jemmeh: *Gerar* 23: 29 (Level 189, 10th/9th cents.).

- J III: 6 l. 8.5 cm.; bl. 6.0 cm. Blade lanceolate. Fully developed rhomboidal stem; vertical cut to tapered, rhomboidal tang. Vestigial flat rib; thickened at point.
- J III: 7 l. 8.9 cm.; bl. 5.5 cm. As J III: 6.
- J III: 8 l. 8.7 cm.; bl. 6.1 cm. Narrow lanceolate. Treatment of stem, cut, tang and rib as J III: 6. Heavily thickened point.

PARALLELS TO J III

In addition to elements in common with pieces listed above for which comparative material has been cited, see for the peculiarities of this class: 'Ain Shems: *'Ain Shems Excavations*, Pt. IV, Pl. 53: 7; cf. Pt. V, pp. 150 f. (Str. III, 1200-1000); Pl. 53: 9 (note thickened point; Str. II, Iron I); *Rumeileh*, p. 8, Fig. 6 (Str. IIA, 11th/10th cents.). Cf. *Beth Shan. Four Canaanite Temples*, Pl. 31: 10 (Str. VI, 13th/12th cents.); Pl. 32: 6 (Str. VIII, 14th cent.). Iron arrow-heads frequently are of this type. See esp. *Megiddo I*, Pl. 81: 22 (Str. V, 11th/10th cents.).

- A I: 1 8.1 cm.; bl. 5.6 cm. Blade: narrow elliptic. No true stem. Tapered to rhomboidal tang, with slight thickening (rudimentary stem) at base of blade. Blade flattened at centre (in lieu of rib), and uniformly thin.
- A I: 2 l. 7.8 cm.; bl. 5.8 cm. Blade broad elliptic, tending to lozenge-shaped. Treatment of base of blade and tang much as A I: 10. No rib. Little or no thickening at point.

PARALLELS TO A I

Parallels to A I: 1 are chiefly from L.B. See under J I. Add to them esp. *Gezer III*, Pl. 215: 16, 21 (4th Semitic, 1200-1000 B.C.). *TBM II* (*AASOR*, XVII), Pl. 41: 20, 21a, b (Str. C, L.B.). The lozenge-shaped type occurs as early as M.B. II (*Ancient Gaza I*, Pl. 20: 59), and is popular in Iron I and later at Tell Jemmeh: *Gerar*, Pl. 29: 24 (12th-10th cents.); Pl. 29: 31 (10th/9th cents.); etc. The treatment of the base is a better typological criterion.

A II: 3 l. 7.0 cm.; bl. 5.3 cm. Blade, pointed ovate. The stem is rather like J II, though more developed; it remains, however, an element of the blade. The cut is profound to a short, untapered tang. The central rib is vestigial. The blade is fairly uniform in thickness. Affinities are with Class J II.

A III: 4 l. 7.7 cm.; bl. 4.9 cm. Blade ogee. Long, developed stem. Abrupt, but shallow cut to tapered rhomboidal tang. No central rib. Point slightly thickened to give lozenge-shaped cross-section.

A III: 5-7 Broken. Treatment of stem and tang like that of A III: 4 (cf. J III: 7). The shape of blade cannot be reconstructed.

PARALLELS TO A III

Megiddo I, P. 81: 4, 7 (Str. IV, 10th cent.); Pl. 80: 22 (Str. III, 8th cent.). *Megiddo II*, Pl. 176: 61, 65 (VB, A, 11th/10th cents.). *Gezer III*, Pl. 215: 34, 35, 46 (cf. *Gezer II*, p. 372; the type begins in 4th Semitic, 1200-1000 B.C.). The ogee shape is also found in Iron II (cf. *Tell en-Nasbeh I*, Pl. 104: 15, 17).

A IV: 8 Badly corroded. bl. *circa* 5 cm. Developed stem; rhomboidal tang. Thickened at point.

A IV: 9 Badly corroded. bl. *circa* 3.8 cm. Reconstructed shape, broad lanceolate. Short, but developed stem. Vertical cut to rhomboidal tang (broken). Vestigial flat rib. No thickening of blade point.

A V: 10 l. 6.7 (plus) cm.; bl. 6.0 cm. Blade lanceolate. The stem is distinct element, rhomboidal. The cut is profound (vertical). Tang is broken, but probably not tapered. The blade may have had a vestigial rib.

A V: 11 l. 7.4 cm. (reconstructed); bl. 4.8 cm. (reconstructed). Blade pointed ovate. The stem is more developed than any of the other pieces: thick, rhomboidal, sharply tapered to the blade, and the cut is vertical and deep to a slightly tapered, rhomboidal tang. A distinct, flat rib, and thickened point characterize the blade.

PARALLELS TO A V

For parallels, see section on Class J III, esp. the examples from Beth Shan and Rumeileh (*Ain Shems Excavations III*).

FRANK M. CROSS, JR.
J. T. MILIK

THE NEOLITHIC SITE OF GHRUBBA

GHRUBBA is situated on the southern side of Wadi Nimrin about 2 km. west of the Police Post of Shunah on the main Jerusalem–Amman road, map ref. 20501445. Only a very slight rise in the ground, about one metre in height, marks the otherwise flat site, which would easily have escaped notice had it not been for a fall of rock which exposed a large pit full of black ashes on the southern side of the wadi. The extent of the site was difficult to determine; along the edge of the wadi it was traced for about 150 m. past the modern cemetery, which is on the highest point of the site, and comes to an end just west of a single house built on the southern edge of the wadi. Its extent eastward and southward cannot be determined without digging. This site was obviously one of those straggling settlements along the edge of a wadi like the Ghassulian site of Tell Ghanam on the other side of the Wadi Nimrin, where we traced occupation debris for about 5 km. Sites of this type are not likely to have extended far from the wadi.

Our attention was drawn to the special interest of this site by the sherds which had fallen from the pit; these sherds, some of which could be fitted to others which we discovered stratified in the pit, were painted and showed little resemblance to those collected at Tell Ghanam or from Teleilat Ghassul, 10 km. due south of Ghrubba.

The pit was excavated and it was found that only a small section had been destroyed by the fall of rock. It was of oval shape, measuring *circa* 5 × 3 m., and was cut through a layer of not very stable gravel down to the underlying soft limestone. To prevent its sides from collapsing it had been cut in stages, leaving a ledge all round (see plan and section, Fig. 3).

Stratification of the Pit

Layers 1–4 sealed the pit and extended beyond it, and a modern burial had caused a disturbance. In layer 4 a small beaker (no. 30) of Ghassulian type was found and this suggests that the four top layers are of later date than the pit and the ash layers in it. The pit was filled with alternate layers of ash, soil and gravel, either fallen from the side of the pit or deliberately put there.

Below layer 4 sherds of the same pot were often found in different layers, showing that the interval between the deposit of the ash layers cannot have been very long. The alternation of ash and clean gravel and soil layers demands an explanation, and perhaps this pit was used for outdoor cooking in the warm season, during which the ash layers accumulated. During the winter months, when inclement weather would necessitate cooking under cover, rains washing down mud and gravel would account for the small number of sherds found in them. Some such habit might explain this curious pit fill.

The Pottery

The pottery from the pit fill (layers 5–15) was homogeneous. No complete pots were found, but some pots could be partly reconstructed on paper (no. 110). Painted

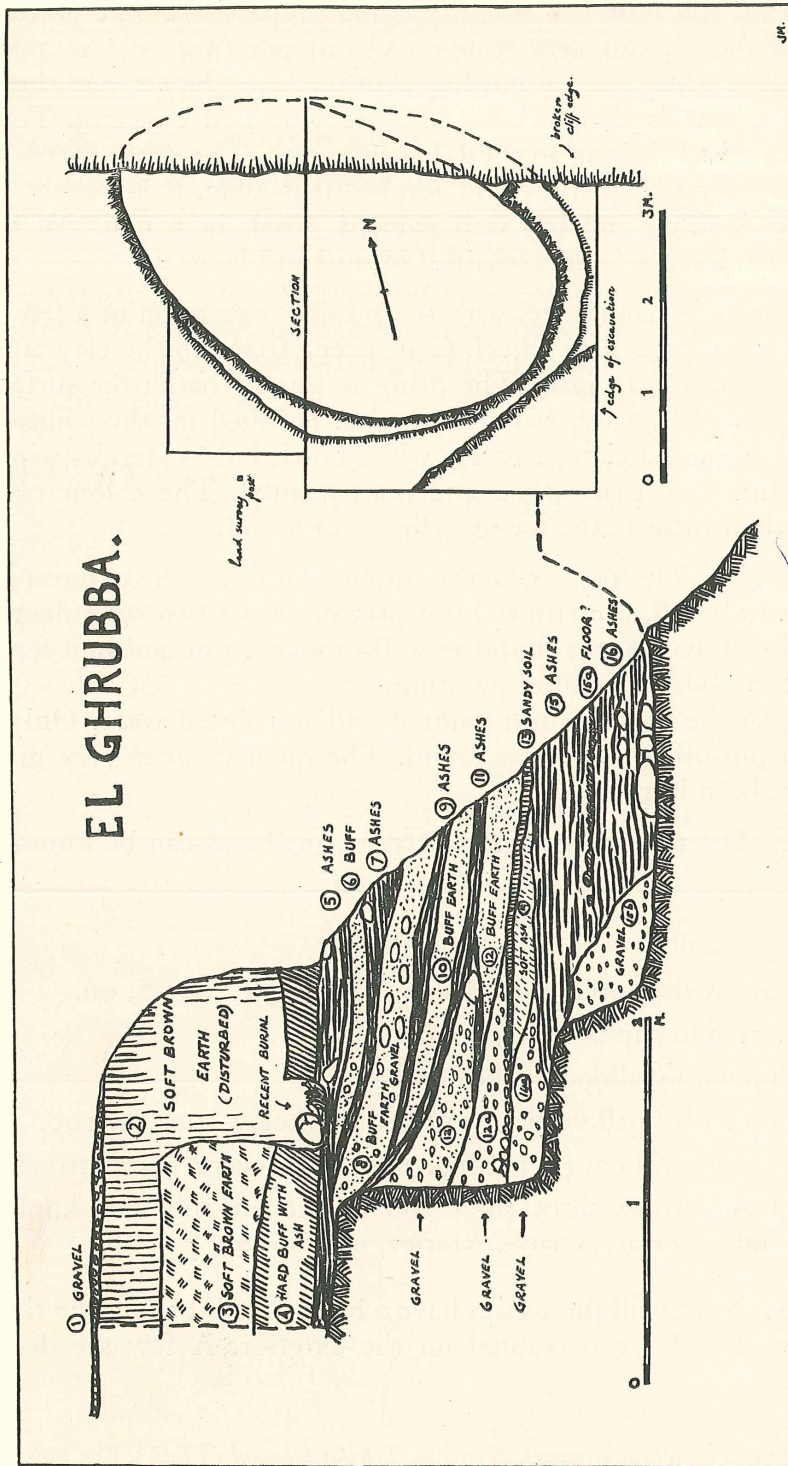


FIG. 3

and unpainted ware was found in roughly equal proportions. The pottery from layers 1-4 which sealed the pit was very scanty and one pot (no. 30)¹ is quite different in ware and shape. Red gritty ware is not found in the lower layers, and the mottled grey-red, rough surface ware is characteristic of pottery at Tell Ghanam, Tell Ghassul and Tell Mafjar, all of which belong to the Ghassulian period. The other sherds found with it, decorated in poor red washy paint, could also be Ghassulian. Below layer 13 the number of more primitive-looking and less well painted sherds increased. All the best pieces came from layer 12, but fine ware remained in use until layer 5.

Ware. All pottery is handmade, with the possible exception of a few pieces² which may have been turned on a slow wheel. Grits occur freely in the clay and straw occurs in a few cases³ in addition to grits. The firing is usually hard; the surface is rough or wet-smoothed in the plain ware, wet-smoothed or polished for the painted ware. A few pieces are burnished, and a class of coarse white bowls have exteriors wiped with twigs, whereas the interior is wet-smoothed and matt-painted. The colour of the surface is buff, pink, greyish or brown; the use of a slip is not found.

Painted decoration. The paint which is applied either to the exterior or the interior or to both is generally red, sometimes brownish, in one or two cases deep red to brown (nos. 90, 130). Lustrous paint is found as well as matt paint and in a few cases it looks as if the pot has been burnished after painting.

The pottery can be divided into painted and unpainted ware. Only one sherd of unslipped brown burnished ware was found. The quality varies very much and many of the sherds have been burnt.

Painted ware. The number of shapes is very small and can be summed up as cups, bowls and jars.

A. *Cups* or small bowls (Fig. 5 and Pl. V):

Cups with simple profiles, nos. 63, 71, 72, 75, 76, 96.

Very fine cup or bowl, no. 64.

Cup with scalloped edge, no. 81.

Cup with small vertically placed lug below rim, no. 100.

Lobed ointment (?) pot, no. 119, with several compartments.

Cups with straight sides and thickened rim and knobs, painted on interior only, coarse exterior, nos. 68, 69, 73.

Decoration. Nearly all these cups have a band of paint along the rim with another pattern below it and are decorated on the exterior. A few are decorated on the interior only.

¹ Cf. lugs on bird vases (Mallon, Koepfel, Neuville, *Teleilat Ghassul I (T.G.)*, Fig. 57).

² Nos. 1, 3, 4, 6-8, 39, 49.

³ In coarse white bowls only, nos. 18, 87, 89, 90.

B. *Bowls* of various shapes, with straight sides or curved profile and flat bases (Fig. 5 and Pl. V):

- (a) Fine thin burnished bowl, no. 70, a very deep bowl painted outside.¹
- (b) Bowls painted inside and out, nos. 65, 80, 83, 85.
- (c) Bowls painted inside only with rough scraped exteriors, nos. 66, 67; with lug, nos. 90, 91.
- (d) Coarse white bowls, nos. 62, 78, 86, 92, made of very light-coloured clay, painted inside only with very rough scraped or twig-wiped exterior. Like other bowls which are painted inside only, they often have a horizontally placed lug just below the rim. Some of these bowls have a straw admixture as well as grits.

C. *Jars* (Fig. 6 and Pl. V). Some of the large jars are magnificent specimens, such as no. 122; not enough remained of this to rebuild it, but a tentative reconstruction drawing could be made. Jars of this type seem to have two loop handles on the body. Other jars of roughly the same type have lugs on the neck, nos. 117, 118, placed either vertically or horizontally.

The necks on these jars are never clearly marked off from the body, nos. 99-110; some of the smaller jars have small necks, nos. 112, 113, or bead rim, no. 116.

Decoration. Very common is a group of more or less horizontal lines at the base of the neck to distinguish neck from body. Above these, groups of diagonal lines are common, nos. 101, 110, 122, and below the lines groups of multiple chevrons often combine with a row of dots in the few sherds. Where enough is preserved, a band of triangles, no. 122, or a band of herringbone pattern, marks the end of decoration. The lower part of the vessel remains undecorated.

Other common motifs are rows of triangles on the neck, nos. 98, 99, 102, 106, 118. In some cases the decoration is like that on the cups, i.e. horizontal lines below the rim with chevrons below, nos. 107, 109, 112.

A very fine jar neck has a modified herringbone pattern, no. 111 (cf. *Megiddo*, Chicago Oriental Institute Publications, Vol. XLII, Pl. II, no. 38, in painted and incised ware). Some of the more complicated patterns, which seem to belong to both large and small jars, are illustrated in nos. 121-130.

Plain ware (Fig. 4 and Pl. V). A number of shapes are common to both plain and painted vessels, such as jars nos. 26 and 27; cups nos. 14, 17, 22, 82; simple bowls with mat impressions on the base, nos. 2, 4, 10, 15.

Variants of the same shapes are found in plain ware only. See jars nos. 38, 43, 44, 45, 46; bowls, some with flattened rims, nos. 1, 3, 5-7, 11, 12; cups, nos. 16, 25, with plastic finger-imprinted band; deep bowls, no. 23, with knobs, no. 24, and bowls with perforated rim lug, nos. 19, 20.

¹ Cf. Garstang, *Prehistoric Mersin*, p. 36, no. 42.

Two very typical shapes found in plain ware only are a jar with bow rim, nos. 39-42, 47, and the hole-mouth jar, nos. 31-37.

Primitive ledge handles, nos. 34, 36, 56, 57, indented ledge handles, nos. 58, 59, and plastic decoration, no. 31, are common on these hole-mouth cooking pots, some bowls, no. 21, and a cup, no. 25.

Plastic decoration is also found on a pottery stand with a perforated side, no. 60.

Miscellaneous sherds include fragments of large storage jars, nos. 48, 49, small pedestal bases, no. 50, with a mat impression, nos. 51-53, and a primitive loop-handle.

The pottery must have been precious at this period, as mending holes are very common on plain as well as on painted ware, nos. 3, 16, 90, 101 and 109.

Other objects (Fig. 6). Two clay spoons of red-washed ware were found, nos. 54, 55, and a fragment of a figurine is illustrated, no. 134, also a clay spindle whorl, no. 135.

Two fine chipped and polished flint axes were found, one of brown flint polished all over, no. 132, the other of light grey flint with only the cutting edge polished, no. 133, as well as two brown flint sickle blades, no. 136, retouched and steep backed with a lustre on the cutting edge.

A bun-shaped brick, *circa* 25 × 30 cm. and about 15 cm. thick, of brown clay, was the only other object found in the pit.

*The Place of Ghrubba among the Early Painted Pottery Cultures in the North-East.
Comparison of Ghrubba Material with that of the Ghassulian Period*

Our first impression was that the material from Ghrubba represented a variant of Ghassulian (Chalcolithic), as the plain ware and the few stone and clay tools and objects found could easily be matched with material from Ghassul and the roughly contemporary sites of Jericho VIII and Tell Ghanam. The two axes nos. 132 and 133 in no way differed from those found at Ghassul (*T.G. I*, Pl. 27) or from those we picked up at Tell Ghanam, the large site of the same period just across the wadi from Ghrubba.

The simple sickle blades no. 136 were also found at Tell Ghanam and Tell Ghassul (*T.G. II*, Pl. 110).

As for the pottery, bowls with mat impressions on the base, either with straight sides or with a rounded profile, indented ledge handles, nos. 58, 59 (cf. *T.G. I*, Pls. 40-43, from level IV), and small primitive spouts, no. 104 (cf. *T.G. I*, Pl. 54: 3), as well as a rather globular jar shape with high neck, nos. 99, 122, etc. (cf. *T.G. II*, Pl. 78: 7, 9, 12), all looked very Ghassulian.

The bow rims also (nos. 39-42), although not found at Tell Ghassul, had been found at Jericho VIII,¹ which is closely related to Ghassul.

A closer comparison showed, however, that none of the patterns common at Ghrubba, except some of the simplest, was found at Ghassul. Decoration of latticed bands and hatched triangles as well as wavy lines, which are common at Ghassul,² were conspicuous

¹ *Liverpool Annals of Archaeology and Anthropology (AAA)*, XXII (1935), Pl. XL, nos. 3-5.

² *T.G. II*, Pls. 80, 89, 90.

by their absence at Ghrubba. Rows of solid triangles on the rim form an exception, but lines of dots, chevrons and diagonal parallel lines which are characteristic motifs at Ghrubba are not common at Ghassul. Typical Ghassulian shapes, such as the cornet, jars with vertically placed lugs, animal vases, small cups with a burnished slip such as were found at Tell Mefjer, stone vessels and side scrapers were not found at Ghrubba. Nearly all the pottery at Ghrubba was handmade, whereas the use of the slow wheel was common at Ghassul.

Comparison of the Ghrubba Neolithic Pottery with that of Related Sites in Palestine and their External Relations

Besides Ghrubba, the following Neolithic sites are known in Palestine: Jericho, where Prof. Garstang first discovered Neolithic pottery¹ and where Dr. K. M. Kenyon's recent excavations have produced a much larger amount of the same pottery. From Abu Gosh,² west of Jerusalem, Neolithic pottery is reported, as well as from Tell Avid,³ but no comprehensive accounts have yet been published.

In the Northern Palestine *Megiddo XX*⁴ and the site of *Sha'ar ha-Golan*,⁵ situated in the northern Jordan valley on the north bank of the Yarmuk, have also produced comparable material. The material from the latter site, called Yarmukian by its excavator Dr. Stekelis, clearly belongs to this period. Layer XX at Megiddo unfortunately also contained later material. A few sherds of Neolithic pottery were also found at *Magharat Abu Usba*⁶ near Mt. Carmel and at Tell es Sa'idiyah in the central Jordan valley.⁷

The published Neolithic pottery can be divided into four classes, painted and incised ware, painted ware, burnished ware, and plain or coarse ware.

Painted and Incised Ware

This ware is covered with a red or brown paint or wash, leaving in reserve the area to which incised ornament is applied. The reserved area is always clearly defined from the painted area by incised lines, and usually consists of a horizontal band below the rim of bowls and at the base of the neck, passing through the openings of the loop handles, in the case of jugs. Below this horizontal band there is often a continuous zigzag.

The interior of these reserve bands is filled with diagonal incised lines or more often with a herringbone pattern.

The number of shapes decorated in this technique is small; shallow bowls,⁸ straight-

¹ *AAA*, XXIII, 1936, Pls. XXIX-XXXI.

² *Syria*, 1952, p. 140 ff.

³ *American Journal of Archaeology (AJA)*, LV, 1951, p. 85 ff.

⁴ *OIP*, LXII (*Megiddo II*), Pl. 2.

⁵ *Israel Exploration Journal (IEJ)*, I, 1950/51, p. 1 ff., Pls. 1, 2.

⁶ *IEJ*, II, 1952, p. 155 ff. and Figs. 16 and 17.

⁷ *Annual of the American Schools of Oriental Research (AASOR)*, XXV-XXIX (1945-1948), Pl. 149, nos. 9, 10.

⁸ *Megiddo II (OIP, LXII, Pl. 2, no. 37)*.

sided bowls¹ and jugs with two loop handles² are the most common. A rather straight-necked jar is found at Megiddo³ and two sherds from Tell es Saidiyah⁴ are typical and may belong to the following period like the Tell Far'ah sherd.

Only at Jericho and at Sha'ar ha-Golan is there proof that this pottery belongs to the Neolithic period of Palestine; at Jericho it occurs together with the painted Neolithic pottery, at Sha'ar ha-Golan it occurs with plain ware which has close parallels with Ghrubba. But at the site of Ghrubba itself no painted and incised ware was found.

Beyond Palestine, painted and incised ware with red slip and decorated with herringbone pattern was found at Byblos.⁵ There it occurs together with grey burnished incised ware of Mersin Neolithic type. At Mersin painted and incised ware has not been found, but at Hassuna⁶ it occurs from layer Ib (which marks the beginning of the Hassuna period) onwards, not becoming characteristic, however, until layer IV. Shapes and decoration, which includes herringbone patterns, show little resemblance to the Palestinian material.

Painted Ware

Painted ware is much more common at Ghrubba than at Jericho: this class seems to be absent at Sha'ar ha-Golan. Although Tell es Sultan, the site of ancient Jericho, is only 13 km. from Ghrubba by Wadi Nimrin and Wadi Nu'aïmi, the pottery from both sites is by no means identical. The handmade fabric is more or less the same, buff with small grits, but whereas the Ghrubba pottery is well fired, that of Jericho is often very soft. The straw admixture found only in a few of the coarse white bowls at Ghrubba is more common at Jericho. The surface of the Ghrubba pots is buff, pink or whitish and a slip is practically unknown, whereas at Jericho pink or even red slip occurs on the finest pieces. Burnished surfaces and painted designs are common at Jericho, rare at Ghrubba. Lustrous paint, while occurring at Ghrubba, is more common at Jericho, but matt paint occurs at both sites; red washy paint like the Chalcolithic occurs only at Jericho. Decoration in more than one colour is unknown at Ghrubba but occurs in a few cases at Jericho.

More important than these technical differences are the stylistic ones. With the exception of one or two sherds the use of solid areas of paint is unknown at Ghrubba, where all ornament is essentially linear, i.e. the decoration tends to cover only a small part of the vessel decorated. At Jericho, on the other hand, the paint covers most of the vessel, and the design more often than not is left in reserve. This technique links the Jericho painted pottery with the painted and incised class, the difference being that the areas in reserve are decorated with incised lines.

¹ Sha'ar ha-Golan (*IEJ*, I, Pl. 1, nos. 2, 8).

² Tell Far'ah, in Chalcolithic Ghassulian layer (*Revue Biblique*, 54, 1947, p. 407, no. 34).

³ *OIP*, LXII, Pl. 2, no. 38.

⁴ *AASOR*, XXV-XXIX (1945-1948), Pl. 149, nos. 9, 10. Sherds of this ware are also said to occur at Jericho VIII in Chalcolithic Ghassulian.

⁵ *Bulletin du Musée de Beyrouth*, IX, 1951, p. 37, class 6.

⁶ *Journal of Near Eastern Studies (JNES)*, IV, 1945, Fig. 3.

The number of patterns at Ghrubba is much larger than at Jericho, as a glance at the illustration will show; at Jericho the solid triangle and the chevron predominate.

The shapes, primitive as they are, show little more than a general resemblance; shallow bowls, common at Jericho, are rare at Ghrubba; bowls with flaring straight sides with a vertically placed loop handle characteristic of Jericho are missing at Ghrubba, where the predominant bowl shape is similar but with a wider base and a horizontally placed lug. Jars with two loop handles on the body occur at both sites, as well as jars or jugs with high neck and lugs on the neck (Ghrubba nos. 117, 118).¹

Lugs at Ghrubba are usually placed horizontally, but vertically at Jericho. Low pedestal bases and flat bases with mat impressions are found at both sites (Ghrubba no. 50). This short comparison² shows clearly that Ghrubba represents a different painted pottery tradition from that of Jericho and Sha'ar ha-Golan, and it is exactly this use of a linear style of decoration which relates Ghrubba, and the few sherds from Megiddo,³ to the earliest painted pottery culture of Cilicia, Northern Syria and Northern Mesopotamia during the Hassuna period.

In the Early Chalcolithic layers of Mersin (XXIV-XXX) one finds the closest parallel for the Ghrubba pottery, both in shapes and in decoration. Decoration in matt or burnished red paint on a burnished pink or buff slip applied to interior, exterior or to both faces is very common. Simple bowls (Ghrubba nos. 71, 96, and *Prehistoric Mersin*, p. 52, no. 14, and p. 58, no. 23), deep bowls (Ghrubba no. 61, *Prehistoric Mersin*, p. 36, no. 42), jars (Ghrubba no. 99, *Prehistoric Mersin*, p. 53, no. 6, p. 71, no. 2, p. 52, nos. 1 and 4, p. 55, no. 4), and the use of lugs placed horizontally at the rim of bowls (Ghrubba nos. 89, 91, 92, *Prehistoric Mersin*, p. 42, no. 1) are common at both sites. The most characteristic pattern is the chevron (Ghrubba no. 84, *Prehistoric Mersin*, p. 50, no. 26), but triangles (e.g. *Prehistoric Mersin*, p. 71, no. 2, at the beginning of Halaf influence) are not common. Linear decoration is the only one in use until the beginning of Halaf influence. This similarity is so strong that some of the pieces could be interchanged without being detected. At Mersin the black and brown burnished pottery of the preceding Neolithic period continues in use, but without the incised design, and a sherd of exactly the same brown burnished ware was found at Ghrubba and similar sherds occur also at Jericho.

At Hassuna near Mosul the pottery called Hassuna archaic painted ware strongly resembles the Ghrubba painted pottery both in technique and in colour of the paint, whereas only a few sherds at Ghrubba show the technique of the developed Hassuna ware (standard ware with matt paint on an unburnished surface). The patterns of Ghrubba, on the other hand, are more varied than those of Hassuna archaic ware,⁴ and though many of the simple shapes are the same, the jars at Hassuna do not have the long neck found both at Mersin and at Ghrubba. True chevrons also are not so common

¹ Cf. also *Megiddo II*, Pl. 2, no. 31.

² When Dr. Kenyon's new material from Jericho is published we will no doubt be able to make a better comparison. The writer has had the benefit of seeing a certain amount of the pottery from the recent excavation.

³ *Op. cit.*, Pl. II, nos. 30, 31, 34, 36.

⁴ *JNES*, IV (1945), Figs. 7 and 8.

at Hassuna as at Mersin and Ghrubba,¹ and some of the Ghrubba patterns (nos. 94 and 122) are found in the Samarra ware, which appears to be a variant of developed Hassuna,² indicating a date for Ghrubba later than early Hassuna.

Burnished Ware

One brown sherd, already referred to above, was found at Ghrubba, but at Jericho red and brown burnished as well as brown burnished ware with incised decoration is more common.

Plain and Coarse Ware

Little plain ware has been published from Jericho, so that a comparison is necessarily incomplete. Bowls with knobs like Ghrubba no. 88, bowls with flaring sides (nos. 4, 10) and small jars with lugs (no. 28) are also found at Jericho. Mat-impressed bases, perhaps showing the earliest attempt to turn a pot, plastic decoration, small ledge handles on hole-mouths and other shapes are also found at Jericho, though one of the most characteristic shapes in plain ware at Ghrubba, i.e. the jar with bow rim (nos. 39-42), does not appear at Jericho until the following period.³

Some of the painted Jericho shapes are, however, found in red burnished ware at Byblos.⁴

Conclusions

The site of Ghrubba presents a Neolithic culture distinct from that of Jericho IX and the so-called Yarmukian from Sha'ar ha-Golan.

The Neolithic pottery found in the mixed layer XX at Megiddo belongs to the same group as Jericho and Sh'ar ha-Golan but shows some linear decoration like Ghrubba.

Ghrubba's closest contacts appear to be with the earliest painted pottery of Mersin, the other early sites of Cilicia and also the Amuq B culture.⁵ This group is a western variant of a complex called Hassuna and Samarra in Northern Mesopotamia. Patterns from both areas are found in the Ghrubba pottery, which suggests that the people who brought this pottery to Palestine came from an area in contact with both areas, in other words probably Northern Syria. The road by which these people came is probably the magnificent natural road which leads from the Amuq plain by way of the Orontes valley and the Bega'a plain to the Jordan valley.

The presence of two distinct Neolithic painted pottery cultures in Palestine demands an explanation. No stratified site has produced both types so far. Jericho Neolithic and Sha'ar ha-Golan are clearly two forms of one culture to which some of the Byblos

¹ The false chevron common to Hassuna and Samarra ware occurs on the Megiddo jar (*op. cit.*, Pl. 2, no. 30).

² Cf. Al Matarra (*JNES*, XI, 1951, p. 12, no. 17, p. 13, no. 14, p. 14, no. 14) or Hassuna (*JNES*, IV, 1945, Pl. 18, no. 1).

³ *AAA*, XXII (1935), Pl. XL, nos. 3-5 (Jericho VIII).

⁴ Cf. Garstang, *Story of Jericho*, Fig. 6, with Barrois, *Manuel d'Archéologie Biblique*.

⁵ Tell Jedeidah XIV (material is still unpublished).

material is also related. There is little evidence to suggest that both cultures existed side by side (the distance between Ghrubba and Jericho is 13 km.) without seriously influencing each other, or that the one developed from the other.

In the writer's opinion one is earlier than the other, and the fact that Ghrubba shows strong northern influence, whereas Jericho does not, leads one to regard the Jericho and Sha'ar ha-Golan pottery as later in date than that of Ghrubba.

Until more evidence is forthcoming the writer is inclined to place Ghrubba in the later phase of the Hassuna period, and Jericho and Sha'ar ha-Golan towards the end of the same and the beginning of the Halaf period in North Syria and Mesopotamia.

JAMES MELLAART

ILLUSTRATED SHERDS FROM GHRUBBA

(All handmade unless otherwise stated)

	<i>Body</i>	<i>Firing</i>	<i>Grits</i>	<i>Surface Colour</i>	<i>Surface Treatment</i>	<i>Decoration</i>	<i>Layer No.</i>	<i>Remarks</i>
1	bf	h	f	bf	sm		9	Wheel-made
2	br	s	straw	bf	ro	m.r.p.	16	Very coarse
3	bf	h	f	bf	sm		5	Wheel-made
4	bf	h	f	bf	sm		5	Wheel-made
5	bf	h	f	wh	sm	m.br.p.	12	
6	r	h	f	or/r	sm	m.r.p.	5	Wheel-made
7	r	h	f	or/r	sm	m.r.p.	14, 16	Wheel-made
8	bf	h	f	bf	ro	m.r.p.	7	Wheel marks
9	bf	h	f	bf	ro	m.r.p.	7	
10	bf	h	f	bf	sm	m.r.p.	16	Mat impress on base
11	r	h	f	r	sm		14, 16	Wheel-made
12	gy/br	h	f	gy	ro	inc.	9	
13	gy/br	h	f	br	sm		7	
14	gy/br	6	f	gy	sm		7	
15	wh/bf	h	f	wh	ro	m.r.p.	14, 16	
16	bf	h	c	r	sl bur		14	
17	bf	h	me	bf/gy	sm		4	Grey core
18	r	h	straw	or/r	ro	r.bur.	9	Grey core
19	bf	h	f	bf		m.r.p.	7	
20	r	h	f	r	ro		7	
21	r	h	f	or/r	sm	m.r.p.	9	
22	bf	h	f	bf	sm		16	
23	bf	h	f	bf	w		9	
24	bf	m	f	bf	sm		5	
25	bf	m	f	bf	sm		13	
26	gy/bf	s	f	bf	ro		5	
27	bf	s	straw	bf	sm		6	
28	bf	h	f	bf	sm		12	
29	bf	h	straw	bf	ro	m.r.p.	5-12	
30	r	h	sandy	bf/r	ro		4	Ghassulian
31	bf	me	me	bf	sm		14	
32	bf	me	me	bf	sm		12	
33	bf	me	me	r	sm		5-12	
34	r	me	me	r	sm		12	Burnt
35	bf	me	f	bf	sm		5-12	Grey core
36	gy	me	me	bf	sm		11	
37	bf	me	me	bf	sm		14, 16	
38	gy/bf	me	me	gy/bf	sm		9	
39	gy	h	f	gy	sm		14	Wheel-made
40	gy/bf	h	c	bf	sm		16	
41	bf	h	c	bf	bur		12	
42	gy	h	f	gy	sm		14	Burnt
43	bf	h	f	bf			14, 16	Grey core

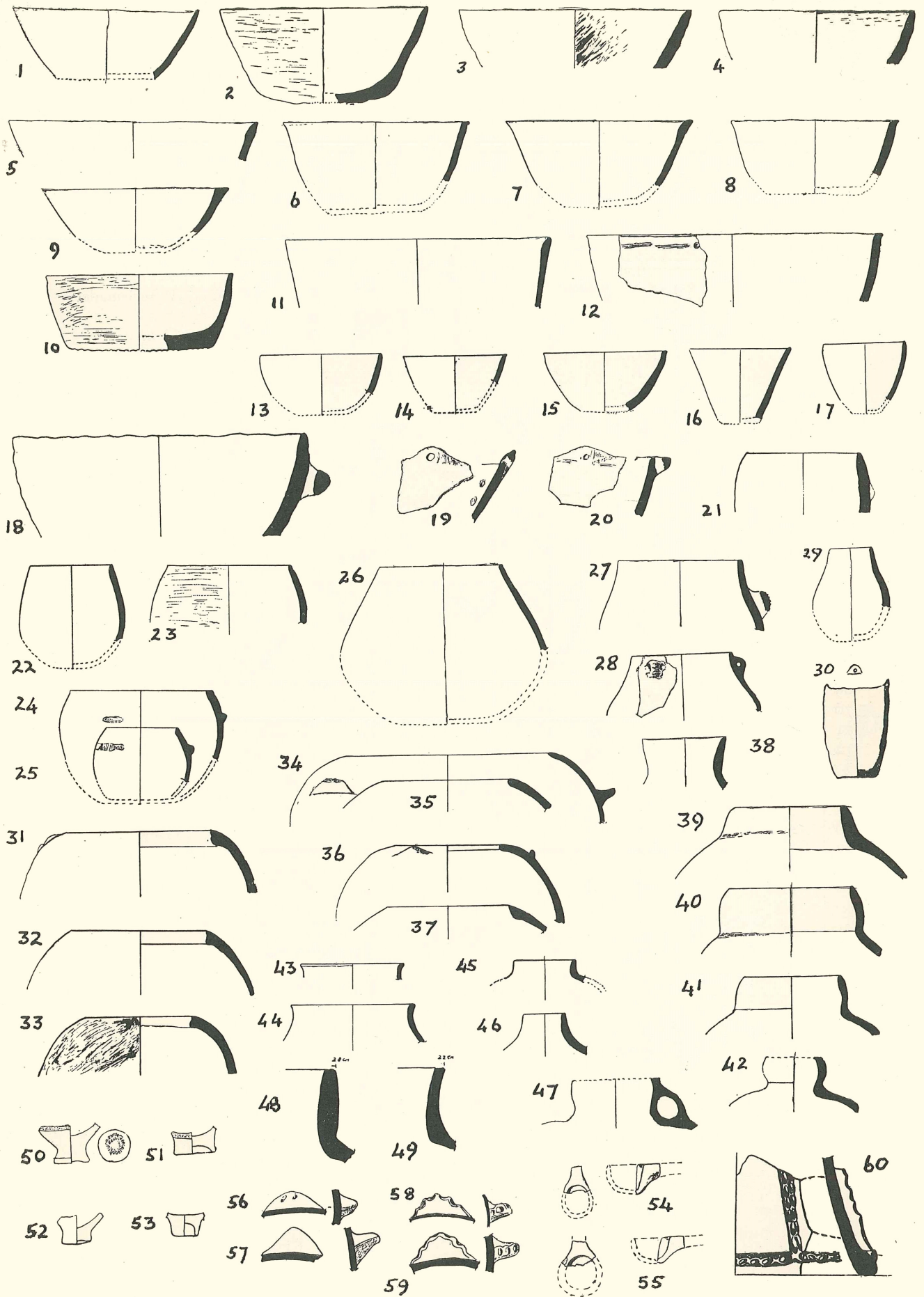


FIG. 4. Ghrubba, Pottery, Scale 1 : 5

	<i>Body</i>	<i>Firing</i>	<i>Grits</i>	<i>Surface Colour</i>	<i>Surface Treatment</i>	<i>Decoration</i>	<i>Layer No.</i>	<i>Remarks</i>
44	bf	h	f	bf			5-12	Grey core
45	gy/bf	s	me	gy/bf	sm		9	
46	gy	h	f	gy	sm		5-12	
47	bf	h	c	bf	sm		14	Burnt
48	bf	h	shell	bf	sm		14	
49	bf	s	f	bf	sm		surface	Wheel-made
50	bf	me	f	bf	sm		5	
51	r	h	f	r	sm		4	Grey core
52	bf	h	f	bf	ro		12	Burnt, grey core
53	r	h	f	r	sm		5	Red wash, grey core
54	r	h	sandy	r	ro		7	Red wash
55	br	h	f	r	sm		5	
56	r	h	f	r	ro		14	
57	r	h	f	r	ro		7	Grey core
58	r	h	sandy	r	sm		5-12	Grey core
59	r/bf	h	sandy	r	sm		9	
60	r	h	f	bf	sm		surface	Wash
61	r	h	f	r	sm	m.r.p.	5-12	Washy paint
62	bf	h	f	bf	ro	m.r.p.	5-12	
63	gy	h	f	bf	sm	m.r.p.	5-12	Burnt
64	bf	h	f	bf	sm	m.r.p.	surface	Fine
65	bf	h	f	bf	sm	m.r.p.	16	Burnt
66	r	h	f	bf	ro	m.r.p.	11	
67	bf	h	f	bf	ro	m.r.p.	12	
68	bf	h	f	bf	sm	m.r.p.	7	
69	bf	h	straw	bf	ro	m.r.p.	9	
70	bf	h	f	bf	bur	m.br.p.	12	Fine
71	bf	h	f	bf	sm	l.r.p.	14, 16	Burnt
72	r	h	f	r	w	m.r.p.	12	Burnt, grey core
73	bf	h	f	bf	ro	m.r.p.	12	
74	bf	h	f	bf	sm	l.r.p.	9, 12	
75	gy	h	f	bf	br sl	l.r.p.	5-12	
76	or	h	f	or	sm	m.r.p.	9	Grey core
77	bf	h	f	bf	sm	m.r.p.	16	
78	bf	h	f	bf	sm	m.r.p.	12	
79	bf	h	f	bf	sm	m.br.p.	5-12	
80	bf	h	f	bf	sm	m.br.p.	9	
81	bf	h	f	bf	sm	m.r.p.	5	
82	gy	s	me	bf	sm		5	
83	bf	h	f	bf	sm	m.r.p.	16	
84	r	h	f	or	sm	m.r.p.	12	
85	bf	h	f	bf	sm	m.r.p.	6	
86	bf	h	f	bf	ro	m.r.p.	9	
87	wh/bf	h	straw	wh	ro w	m.r.p.	9	
88	bf	h	f	r		m.r.p.	16	
89	wh/bf	h	straw	wh	ro w	m.r.p.	14	
90	bf	h	straw	bf	ro	m.r.p.	9	
91	bf	h	f	bf	ro	m.r.p.	16	

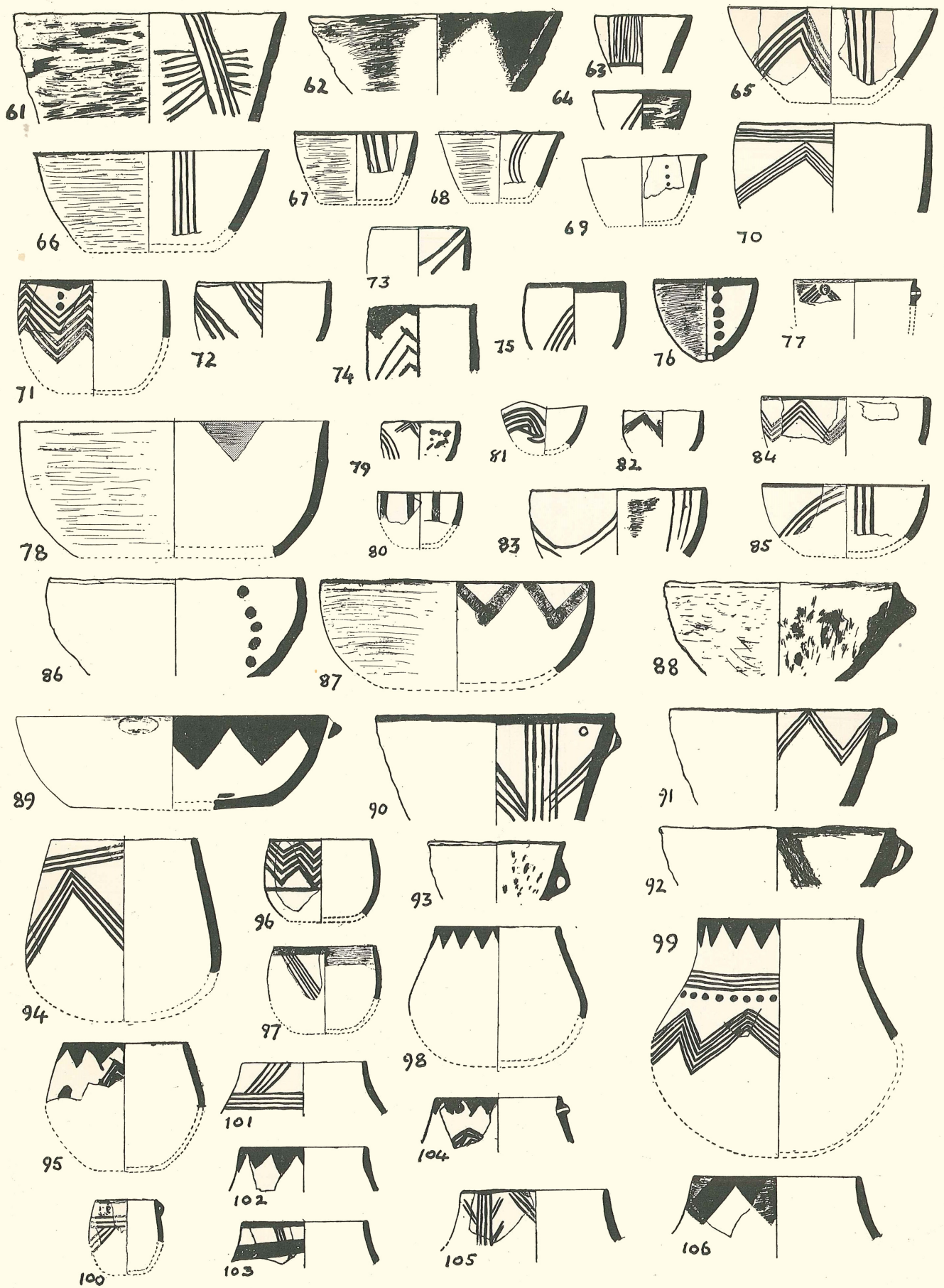


FIG. 5. Ghrubba, Pottery, Scale 1 : 5

	<i>Body</i>	<i>Firing</i>	<i>Grits</i>	<i>Surface Colour</i>	<i>Surface Treatment</i>	<i>Decoration</i>	<i>Layer No.</i>	<i>Remarks</i>
92	bf	h	f	bf	ro	m.r.p.	7	
93	bf	h	f	bf	sm	m.br.p.	9	
94	bf	me	m	bf	sm	l.r.p.	5	
95	bf	h	f	bf	ro	m.r.p.	16	
96	gy	h	f	gy	sm	m.r.p.	16	Burnt
97	bf	h	f	bf	bur	m.r.p.	9	
98	bf	h	c	bf	sm	m.r.p.	12	
99	bf	h	f	bf	sm	m.r.p.	9	
100	bf	h	f	bf	sm	m.r.p.	5-12	
101	bf	h	f	bf/gy	sm	m.r.p.	12, 14	Grey core
102	bf	h	f	bf/gy	sm	m.r.p.	9	
103	bf	h	f	bf/gy	sm	m.r.p.	5-12	
104	bf	h	f	bf/gy	sm	l.r.p.	9	
105	bf	h	f	bf	sm	m.r.p.	12	Burnt
106	bf	h	f	bf	sm	m.r.p.	5	Fine ware, grey core
107	bf	h	f	bf	ro sm	m.r.p.	5-12	
108	bf	h	f	bf	sm	m.r.p.	5-12	
109	r	h	f	r	sm	m.r.p.	10	
110	bf	h	f	bf	sm	m.r.p.	12	
111	bf/r	h	f	r	bur	m.r.p.	5-12	Grey core
112	bf	h	f	bf/gy	bur	br.p.	12	Fine ware
113	gy	h	f	bf	sm	m.r.p.	5-12	
114	gy/r	h	f	bf	bur	m.r.p.	7	
115	r	h	me	bf	ro sm	m.r.p.	11	
116	bf	h	f	bf	ro	m.r.p.	5	
117	bf	h	f	bf	sm	m.r.p.	12	
118	bf	h	f	bf	ro sm	m.r.p.	5-12	Burnt
119	bf	h	f	bf	sm	l.r.p.	12	
120	bf	h	f	bf	bur	m.br.p.	12	
121	bf	h	f	bf	sm	m.r.p.	9	
122	bf	h	f	bf	sm	l.r.p.	9, 12	
123	bf	h	f	bf	bur	m.r.p.	surface	Light brown inside; dark triangle
124	bf	h	f	bf	sm	m.r.p.	5	
125	bf	h	f	bf	sm	m.br.p.	14	
126	bf	h	f	bf	sm	m.r.p.	7	
127	bf	h	f	bf	bur	m.r.p.	5-12	
128	bf/r	h	m	wh/or	sm	m.r.p.	16	
129	bf	h	f	wh/bf	bur	m.br.p.	9	
130	bf	h	f	bf	sm	l.r.p.	12	
131	bf	h	f	bf	sm	m.r.p.	9	

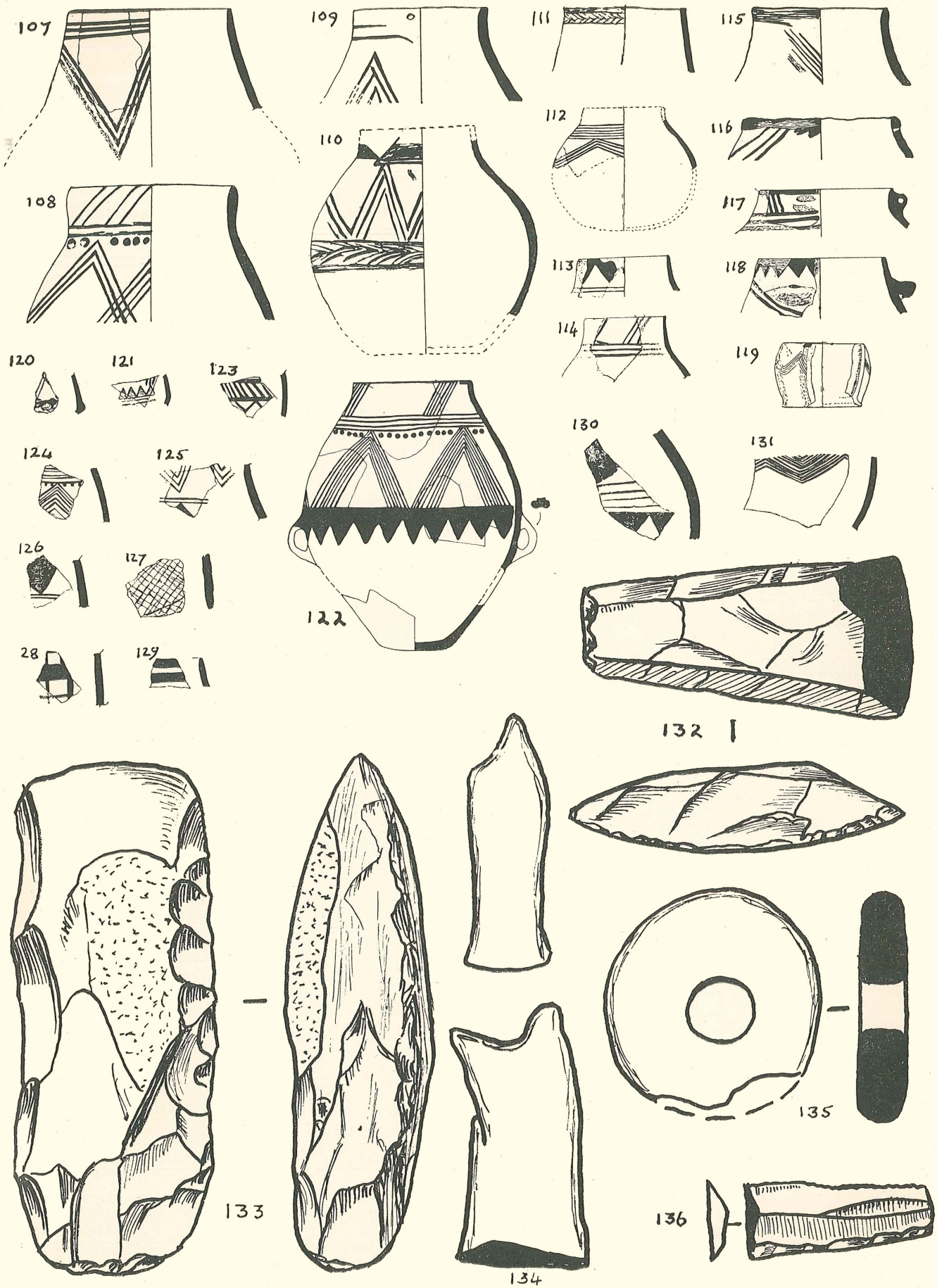


FIG. 6. Ghrubba, Pottery. Scale 1 : 5 ; remainder 1 : 1

Objects

132	Celt, light grey flint	Polished cutting edge, broken	Surface
133	Celt, brown flint	Polished all over	Surface
134	Figurine (?)	Grey gritty clay, coarse	Layer 9
135	Spindle whorl	Buff gritty ware, smoothed	Layer 14, 16
136	Sickle blade, brown flint	Retouched and backed, lustrous cutting edge	Layer 9
	Sickle blade, brown flint	Retouched and backed, no lustre	Layer 6 (not illustrated)

Contractions

bf	buff	f	fine	l	lustrous	p	paint	sl	slip
br	brown	gy	grey	m	matt	r	red	sm	smoothed
bur	burnished	h	hard	me	medium	ro	rough	w	wiped
c	coarse	inc	incised	or	orange	s	soft	wh	white

TOMBS OF THE INTERMEDIATE EARLY BRONZE-MIDDLE BRONZE AGE AT TELL AJJUL

DURING recent years, an increasing amount of material has been forthcoming of a period which lies between the Early Bronze Age of Palestine and the full Middle Bronze Age. The first publication of such material was from Sir Flinders Petrie's excavations at Tell Ajjul in southern Palestine, in *Ancient Gaza I* and *Ancient Gaza II*.¹ Petrie recognized the distinctiveness of the material and applied the name 'Copper Age.' This is appropriate in the sense that certain groups are distinguished by the frequency of weapons which are probably all copper. But it is now clear that the period comes after that conventionally known as the Early Bronze Age, and therefore suggests an anomalous technological phase. Further material was excavated by Professor W. F. Albright at Tell Beit Mirsim and the period was called by him 'Middle Bronze I.' This is also an unsatisfactory term, for the culture represented is completely different from that of the true Middle Bronze Age, the first stages of which are exemplified by the succeeding strata G-F at T. Beit Mirsim and by Petrie's Courtyard Cemetery at T. Ajjul (*AG II*). Material also appears at Tell Duweir which is in course of publication, and probably the richest site is Jericho, where both occupation on the Tell and tombs are well attested. The Jericho evidence throws into very clear relief the complete break, stratigraphical and cultural, between this phase and both the preceding Early Bronze Age and the succeeding Middle Bronze Age (see *PEQ*, 1954). In a preliminary survey of the Jericho evidence, I had already suggested the use of the term Intermediate Early Bronze-Middle Bronze Age, and the subsequent excavations have confirmed the appropriateness of the name for an intrusive culture with a minimum of connections with the preceding and succeeding phases.

The dates proposed for this phase by Professor Albright (*AASOR*, XIII) are *circa* 2100 B.C. to 1900 B.C., and he suggested that the material had links with North Syria. With these suggestions, and also with the association he proposes between the incursions into Palestine and Syria which this evidence indicates and those implied in the Egyptian Aechtungstexte (see *BASOR*, 81), I am broadly in agreement, but I do not propose to discuss the problem here. M. Dunand associates the comparable and contemporary disturbances at Byblos with the Amorites, as does also Père de Vaux, and with this also I am in agreement, taking this as the period at which was established the dual Semitic population of Palestine referred to in the Bible, the Canaanites on the coast and the plains, the Amorites in the hill country.

The growing archaeological evidence is throwing into relief the composite nature of the culture of this E.B.-M.B. phase. Evidence of the type of occupation comes only from T. Beit Mirsim and Jericho, and indicates the nomadic character of the newcomers. At T. Beit Mirsim, only the slightest structural remains were found (*AASOR*, XIII), and at

¹ Henceforth quoted as *AG I* and *AG II*.

Jericho the evidence suggests a camping phase, followed by a phase with houses of a slight and poor structure (*PEQ*, 1954). The evidence from the Jericho tombs suggests the presence even on this one site of at least two distinct groups among these nomads (*PEQ*, 1953).¹ This evidence will be discussed in detail in a forthcoming volume on the Jericho tombs, but briefly it is that there are two distinct types of tomb, with different burial customs and different types of offerings. In one the tomb chamber and shaft are small and neat; there is a single, or at most double, intact crouched burial, while the offerings with adult burials are invariably a dagger or a pin and beads, presumably the difference being between male and female; infant burials usually have no offerings, but are otherwise similar. In the other type the tomb chamber is very large and roughly cut, the shaft very deep and wide. The bones of the burial are always scattered and at least partially unarticulated, the body obviously having been exposed or temporarily buried before being placed in the tomb. The offerings consist of from one to about eight pots, mainly of a peculiar toothbrush-jar-like form which is probably funerary, for it is not found in the occupation levels. There is at present no evidence to suggest chronological differentiation between these types of burial and I am inclined to see in them two separate tribal groups within the band of nomad invaders.

Finds from other sites suggest a similar differentiation within the body of invaders. In the north, at Megiddo and in East Jordan at T. el Husn, there appears at this time an entirely different type of pottery, much more sophisticated and with clear associations with inland Syria (*Megiddo Tombs*, 877, 912 etc. and *P.E.F. Annual*, VI, Four Tombs from Jordan), but equally intrusive in Palestine. At T. Duweir and at T. Ajjul again different facies appear. The purpose of this article is to set out the characteristics of the Ajjul groups, some of the material from which is now in the Institute of Archaeology and which is here republished.

Petrie excavated two distinct 'Copper Age' cemeteries, the 100-200 cemetery east of the Tell (*AG I*) and the 1500 cemetery north of the Tell (*AG II*). Many of these tombs were considerably denuded. The records of these tombs, both published and on the tomb cards preserved at the Institute, are unfortunately most inadequate, particularly those of the 100-200 cemetery. The only plans are minute sketch plans, and in some cases sections, on the backs of the cards, and even these are often lacking, possibly because the tombs in question were denuded. These are the basis of the published plans and sections, *AG I*, Pl. LVI, and *AG II*, Pl. LIII, but the published plans do not even reproduce the sketch plans accurately, tending to give them a much more regular appearance. The records of position of bodies and bones are usually very inadequate and often lacking. Nevertheless, certain features do emerge with reasonable certainty, and these are summarized below.

Tomb Types

A. Shaft a more or less regular rectangle, with an oval chamber at its narrow end. The shaft varies in depth from 3 ft. 6 in. to 9 ft., the majority being about 7 ft. or 8 ft. The average

¹ The exploration of additional areas in 1955 has suggested the presence of at least two more groups, which approach more nearly to T. Ajjul in burial customs.

size of the shaft is about 6 ft. by 4 ft.¹ The chamber is usually low, with its diameter averaging about 5 ft. by 4 ft. In no case are door-blockings recorded, but this is not conclusive that none existed. 22 examples in 1500 cemetery, 8 in 100-200 cemetery.

- B. Probably similar, but no roof to chamber survives. Since the shaft and chamber are two separate entities on plan, the chamber was probably originally roofed. 3 examples in 1500 cemetery, 7 in 100-200 cemetery.
- C. Arcosolia type, in which there is a rectangular shaft with at its base a narrow scoop into one wall, the same length as the shaft. The base of this scoop is usually below the level of the shaft. 7 examples in 1500 cemetery.
- D. Rectangular shaft with an oval chamber on its longer side. 3 examples in 1500 cemetery.
- E. Probably similar, but no roof survives. 2 examples in 1500 cemetery.
- F. Oblong chamber, no surviving roof, slight scoop at one short end, representing shaft. 1 example in 1500 cemetery.
- G. Rounded shaft, rounded chamber. Only in a very few instances is the depth of the shaft in this type recorded. Where it is, it is shallow, about 3 ft. The shaft is usually about 5 ft. in diameter and the chamber about 5 ft. by 6 ft., but a few examples are very much larger. 19 examples in cemetery 100-200. 2 examples in cemetery 100-200 are of this general type, but the chamber is bi-lobed in plan.
- H. Plain Pit
 - 1. Rounded. The majority are 4 ft. to 5 ft. in depth, but some are as shallow as 1 ft. 6 in. The majority are about 5 ft. by 5 ft. 18 examples in cemetery 100-200, 1 in cemetery 1500.
 - 2. Rectangular. About 4 ft. to 5 ft. deep, 5 ft. by 6 ft. 6 in. in dimensions. 1 example in cemetery 100-200, 2 in cemetery 1500.
- J. Rounded chamber, roof destroyed, a slab door recorded, but no mention of shaft, which presumably existed. 3 examples in cemetery 100-200.
- K. Two rounded chambers opening off a single rectangular shaft. 3 examples in cemetery 100-200.
- L. A rectangular pit, lined and probably originally roofed with stone or brick. The records are not clear as to whether in most cases there was a separate shaft with an entrance into the chamber, but in some cases there certainly was.
 - 1. Lining of dressed stone. 3 examples in cemetery 1500.
 - 2. Lining of rubble. 5 examples in cemetery 1500 and 1 in cemetery 100-200.
 - 3. Lining of mudbrick. 1 example in cemetery 1500.

Types A, B, C, D, E and F should probably be grouped together as varieties of the same general type characterised by a rectangular shaft, with type A as the predominant variety. This is the characteristic type of cemetery 1500, with altogether 15 examples in cemetery 100-200 belonging to it. The rectangular pit, type H2, with two examples from the 1500 cemetery and 1 from the 100-200 cemetery, may be associated with it. Type K with 2 chambers opening from a single shaft typologically belongs to this group from the rectangular plan of the shaft. Types G and J with rounded shafts form a separate main group, which belongs exclusively to cemetery 100-200. The rounded pit of

¹ It should be noted that the depths in all types may not indicate the true depth, owing to denudation.

type H1 is presumably associated with it, again belonging to cemetery 100-200, with a solitary example in cemetery 1500.

The type with the structural walls and roof, type L, is almost entirely associated with cemetery 1500, and is in keeping with the rectangular plan of the shafts in that group, but there is one example in cemetery 100-200.

Cemetery 1500 is thus very consistent and exclusive in its tomb plans, all but one of the tombs having a rectilinear surface opening. Cemetery 100-200, on the other hand, has tombs or graves predominately with a rounded surface opening, but a minority follow the plans of the 1500 group.

A study of the distribution of the different types of tombs within the cemeteries does not suggest that there is any significance in their grouping. An exception may be that the group of tombs with structural walls, type L, in itself remarkable by its contrast with the other types, forms a concentrated block in cemetery 1500, in three roughly parallel lines. The other types enclose this block on all sides, which suggests that these tombs are the earliest in this cemetery.

The siting of the 100-200 cemetery tombs seems to bear some relation to the mysterious tunnel which stretches out 500 ft. to the east from the Tell (*AG I*, Pl. LV), for all the E.B.-M.B. tombs lie to the south of it, though there are M.B. tombs on either side. On the face of it, this could be explained either by the fact that the builders of the tunnel knew of the position of the older cemetery, or *vice versa*. The former alternative actually looks more probable, for the tunnel makes a sudden loop as if to avoid the cemetery. Moreover, the tunnel seems to be associated in some way with the causeway over the great Fosse, and though the Fosse is ascribed by Petrie to the Copper Age, on analogy with other sites it almost certainly belongs to the Middle Bronze Age.

In *AG I*, sections 7-8, Petrie makes some generalizations about the types of tombs on the basis of the orientation of the shaft with reference to the chamber, and also to the association of a dagger type with one type of tomb. None of these bear examination, for in fact the orientation of tomb and chamber has no fixed rule. The only correct generalization is that the head of the burial appears to be to the east, with a few exceptions.

The burials in cemetery 1500 are with very few exceptions shown by the sketch plans to be intact, crouched, single burials. The records of the 100-200 cemetery are unfortunately much more unsatisfactory. In 22 cases there is no record at all about the burial; in 14 the tomb card is marked as disturbed; in 8 cases scattered bones are recorded, and this can be deduced with probability in 3 more cases; in 9 cases the burial is described as contracted but the tomb is marked as disturbed, which suggests the burial was not intact. In 8 cases there was apparently an intact crouched burial: of these, 2 were child burials and in one of them the body was intact but the skull missing. In the light of the Jericho evidence, it would appear very probable that the burial customs in this cemetery correspond with a very few exceptions to those of the second type of burial at Jericho (see above, p. 42), in which the bodies were exposed before burial. Those in which bones were scattered almost certainly do, while it is very probable that those recorded as disturbed also do, for there were no objects in the tombs of this period

to encourage systematic grobbin, and the offerings in fact appear to be intact, and there is no evidence of re-use. Therefore, any disturbance after the period of burial appears improbable. It may be guessed, moreover, that those tombs of which the excavator did not bother to keep a record other than the finds contained similar scattered bones. The intact crouched burials occur in tombs of type G and H 1, which are the two predominant types in this cemetery.

The distinction between the two cemeteries is maintained by differences in the grave goods. The great majority of the tombs in both cemeteries have in them a storage jar of a type which is distinctive of this period. There are two main varieties of these jars. Type B, here nos. 9-10, Petrie's type 30F, is a rather plump vessel, with a sharp-cut, wide base, an approximately cylindrical neck and an extremely vestigial ledge handle. This is confined to cemetery 1500. Type A, here nos. 6-8, Petrie's type 30G, is not unlike it, but tends to be more elongated, with a base narrower in proportion to the height of the vessel, a rim tending to flare outwards and no handles. This is largely confined to cemetery 100-200, but 3 examples are found in cemetery 1500. In addition, a similar type of jar but with the addition of a dumpy spout on the shoulder is found in both cemeteries; there is, however, again a distinction in that the 3 examples in the 100-200 cemetery have, like the plain jars there, no handles, while in the 1500 cemetery 3 have the vestigial ledge handle and 4 have no handles and are identical with the 100-200 specimens. A type which is common to the two cemeteries is a small jar with two lug handles at the base of the neck: the varieties do not seem to be identical, but only one of the 1500 cemetery examples is referred to a drawn type. In cemetery 100-200 there are in addition to the jars a few examples of shallow bowls with wide bases and slightly angled walls (Fig. 7. 1-3) and of some barrel-shaped cups (Fig. 7. 4). None of these occurs in cemetery 1500.

As far as can be judged from the specimens preserved at the Institute of Archaeology, the pottery vessels all have in common the technique that the body of the vessel was made by hand and the rim and sometimes part of the upper part of the body was added on a fairly fast wheel. The ware of all is noticeably thin, that of the jars especially so in comparison with the jars both of the Early and Middle Bronze Ages. It is well-levigated, with few large grits, and is evenly fired. The contours of the pots are even but the small irregularities due to hand-building are very plain to the touch. Characteristics which are especially noticeable in the vessels at the Institute from the 100-200 cemetery are the yellowish-drab colour of the ware, the harsh texture of the surface and its softness, for it can be scratched with a finger-nail. These last characteristics are less prominent in the 1500 specimens, but only as a matter of degree.

If any continuity is to be postulated from the Early Bronze Age, it might be claimed that the pottery of the 1500 cemetery suggests that this is the earlier, in that most of the jars have vestigial ledge handles, while those of the other cemetery have none. But since in every other respect the pottery has such a complete break with that of the preceding period, it is to be doubted whether this deduction is valid, and it may be that the distinction lies in the preceding, extra-Palestine, traditions of the two groups.

The evidence of the pottery forms may be summarized thus. Cemetery 100-200

has none of the types of vessel which occur in the 1500 cemetery, the only overlapping being in Petrie's form 33*M* (Fig. 9. 12), but even here the varieties are not identical. Cemetery 1500, on the other hand, has largely its own repertoire, but contains a few of the forms typical of cemetery 100-200.

The distinction is maintained in the weapons. Cemetery 1500 is characterized by the presence of daggers. These are in some cases the sole offering and in some are placed with a jar of Type B, nos. 9-10 (Petrie's 30*F*). Only in one instance does one occur with another type, A, nos. 6-8 (Petrie's 30*G*). The daggers are of various types, though all are narrow in proportion to their width. The types are classified below (pp. 51-52), and on pp. 53-55 are tabulated together with the tomb and pottery types. It does not appear, however, that there is any differentiation of the tomb-types in which they occur, except that with the exception of Tomb 1533, which is noted as probably disturbed, all the tombs of type L, with structural walls, contained a dagger. It can therefore be deduced that this type of tomb contained male burials.

In cemetery 100-200, there were only two daggers. Tomb 277 contained a short dagger with a curved bone handle, and Tomb 294 contained a long one, both of types which occur in the 1500 cemetery. On the other hand, in this cemetery there were two javelins with the curled top to the tang, which occur only at this period. One was found in Tomb 227 of type G2, a variety of the most common type in this cemetery, in which no record is given of the skeletal remains and thus may therefore have been scattered (see p. 44 f.). The second came from Tomb 275, for which there is unfortunately no tomb card and no published record.

The other objects were scanty. Three tombs in cemetery 1500 contained limestone rings, not published, but listed on the tomb cards as tent-weights, which seems rather improbable; as there is no indication of size, no suggestion, however, can be made. In cemetery 100-200, Tomb 198 had a fine string of carnelian beads (*AG I*, p. 3). The large ones are barrel-shaped and from their very regular finish must have been lathe-turned. Most of them have a thick white patina; the smaller ones, in all shapes from plain annular to truncated spheres, are much more irregular, and the patination is more varied. Three tombs in the 1500 cemetery had beads. 1553 had a short string of small cylindrical jasper beads, with a single carnelian of a slightly irregular barrel shape. Tomb 1546 had a string of paste beads, now white in colour, cylindrical in shape, regular in circumference, with a regular cylindrical hole, but of varying lengths: they were presumably therefore made as a rod on a central core, and then cut into lengths. They are recorded in the tomb-card as having been found at the waist of the skeleton. Tomb 1567 had a single carnelian bead, of truncated barrel shape.

The characteristics of the two cemeteries may be summarized thus. Cemetery 1500 has tombs of which the surface openings are, with a single doubtful exception, rectilinear and approximately rectangular in shape. The tombs, with very few exceptions, contain single, intact, crouched burials. The associated pottery consists of jars only, of three types, a storage jar with a vestigial ledge handle found only in this cemetery and 3 examples of a similar type without handles characteristic of the other cemetery, a similar jar with a spout, some with and some without the ledge handle, and a small jar with two

lug handles at the neck. Thus this cemetery has its own characteristic types which do not appear in the other cemetery, but also half a dozen pots of a type which do occur there. 21 out of the 51 tombs are provided with daggers, in 10 instances as the sole offering.

In cemetery 100-200, the great majority of the tombs have rounded shafts, but 19 out of 56 have a rectangular shaft. The great majority of the burials appear to consist of scattered, unarticulated or partly disarticulated bones, but there are a few intact crouched burials. The pottery offerings include more varieties than are found in the other cemetery. None of the storage jars nor the spouted jars have ledge handles. Besides these and the jar with lug handles at the neck, there are a number of shallow bowls and barrel-shaped cups. There are only 2 daggers in the whole cemetery, but on the other hand there are 2 javelins, which are not found in the 1500 cemetery.

Cemetery 1500 can thus be described as exclusive in its tomb types, method of burial of body and predominance of daggers, but has borrowed some pot types from the other cemetery. Cemetery 100-200 has borrowed some tomb types and burial methods and the occasional dagger-offering, but has its own exclusive pottery types.

There is no clear evidence as to the relation between the two cemeteries. The greater homogeneity of burial customs in the 1500 cemetery might suggest an earlier date, which might be supported on typological grounds by the presence of vestigial ledge handles on the jars, but both points are of arguable weight. There is nothing conclusive suggesting a social distinction on the grounds of richness or offerings, though it is possible that the much higher proportion of daggers in the 1500 cemetery might be evidence of a warrior aristocracy. It could also be argued that greater expenditure on burial rites can be deduced from the greater skill involved in cutting rectangular shafts, and in the somewhat greater average depth of the shafts, though actually the tomb chambers seem to be more carefully differentiated from the shafts in the types more common in the 100-200 cemetery.

Neither of these lines of argument produces conclusive results. On the whole, on present evidence it would appear more probable that two different groups in the population are indicated. This is the suggestion which appears most probable at Jericho, where the distinction is even more clear-cut. Neither of the Ajjul groups corresponds exactly with the Jericho groups. The 1500 cemetery corresponds to the E.B.-M.B. A group at Jericho (see p. 42) in the intact crouched burials and the presence of daggers, but the tomb type is quite different, and the Jericho burials are never accompanied by pots. The 100-200 cemetery corresponds to the E.B.-M.B. B group at Jericho in the probable burial custom of dismembered bodies, but though the Jericho tombs have pottery it is of a different type, a type which is represented at the Institute in pots deposited by the Palestine Exploration Fund in groups from Khirbet Samieh and a cave near Olivet—both groups unfortunately without further evidence of provenance.

As has already been said, the Jericho and T. Beit Mersim evidence suggests that the newcomers at this period were nomads. If the evidence from the Jericho and Ajjul tombs is to be interpreted as is here suggested, it would fit quite well into such a picture, of a group of invaders with a tribal background but no homogeneous culture, except in a

very broad sense, united only as invading warriors, and maintaining their own domestic traditions as they settled down.

K. M. KENYON

Bowls

1. Shallow, wide base. Groove on exterior rim, and faint incised line below. Pinkish-buff ware with some white grits. Surface of harsh texture, easily crumbling off, evenly fired. Traces of buff slip. Hand-made with suggestion of slow wheel-turning above level of lower groove. Tomb A. 223 (*AG I*, Pl. XXXVII, 13Y.6).
2. Similar bowl. 2 grooves below exterior rim. Similar ware. Hand-made, with rim as last. Tomb A. 115 (*AG I*, Pl. XXXVII, 6R).
3. Shallow, fairly narrow base. Yellow-buff ware, harsh texture, crumbling surface. Evenly fired. Hand-made, possibly smoothed on slow wheel. Tomb A. 103 (*AG I*, Pl. XXXIX, 22 N.6, recorded as N.8 in list).

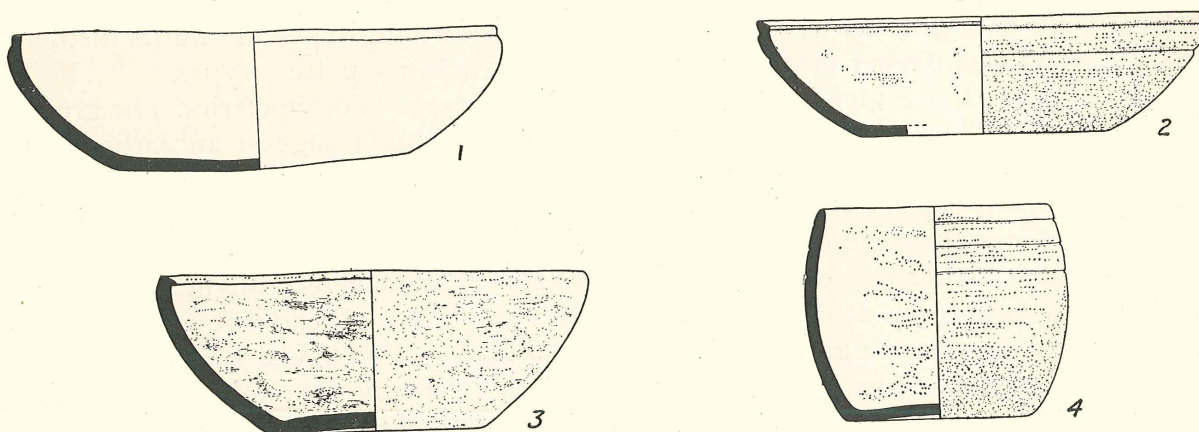


FIG. 7. Scale 1 : 4

Cup

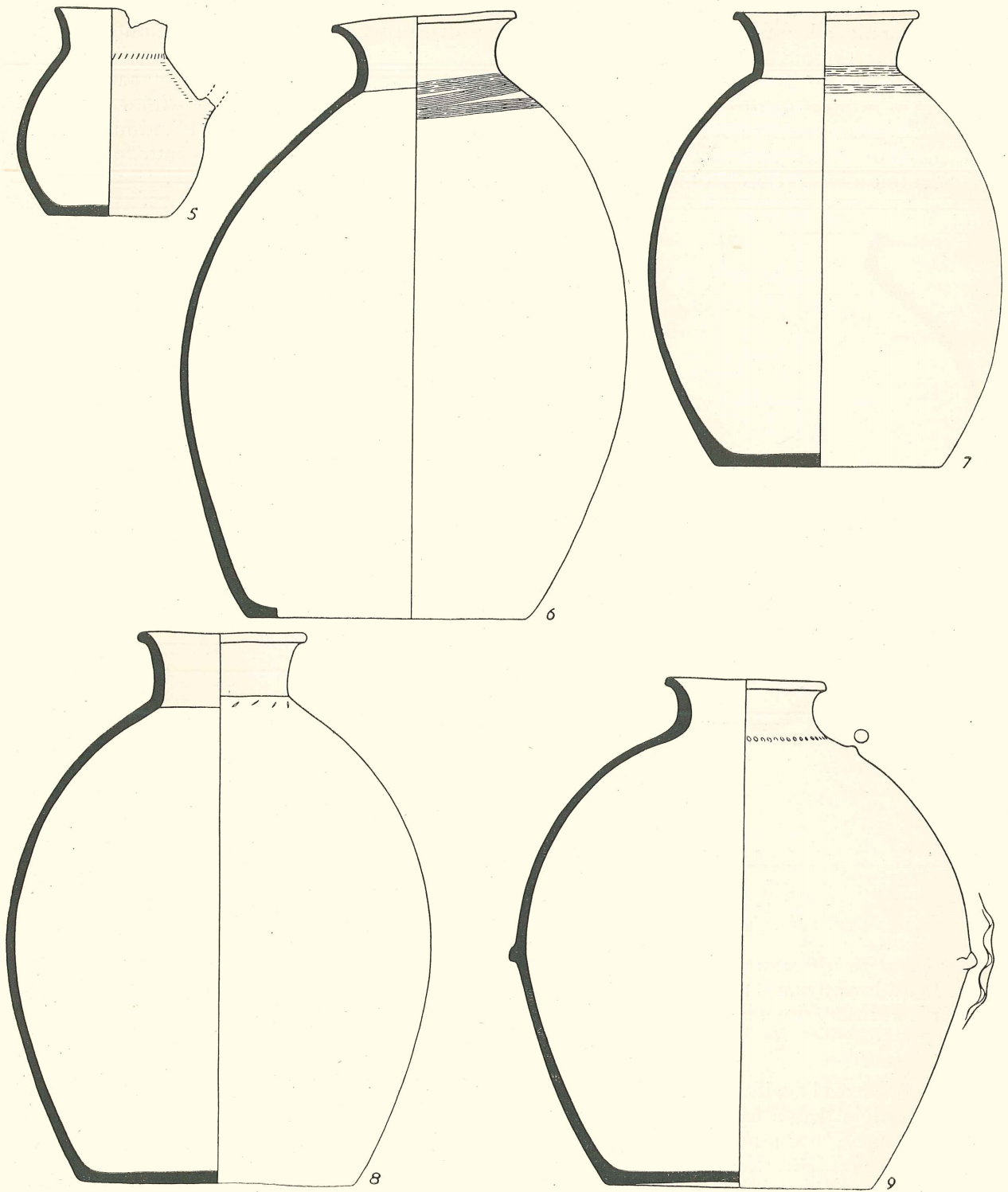
4. Barrel-shaped: 3 lines incised free-hand below exterior rim. Reddish-brown ware, some white grits, evenly fired. Thin drab slip in and out, applied after incision of lines. Surface harsh in texture, crumbling, badly decayed inside. Hand-made, and probably smoothed on slow wheel. Tomb A. 244 (*AG I*, Pl. XL, Z4).

Jars, small

5. Small jar, globular, wide base, upright rim, handle (broken) from girth presumably to top of rim. Decorated with line of slashes at base of rim and down to base of handle. Yellow-buff ware, a few white grits, evenly fired. Harsh texture, soft surface. Hand-made, probably including rim. Not marked, and published as *AG I*, Pl. XLII, 30H. Certainly this period from ware and from cemetery 100-200 since published in *AG I*.

Jars, Type A

6. Ovoid, flaring rim. Faint combed lines below rim, applied free-hand with comb of about ten very fine teeth. Yellowish-buff ware, evenly fired. Soft, harsh-texture surface. Drab slip.



4—H.K.J.

FIG. 8. Scale 1 : 4

Hand-made, with rim added on wheel. Owing to thinness of ware, the vessel has sagged at the shoulder before firing, but after application of rim which has been pulled out of true. Tomb A.1116 (cf. *AG I*, Pl. XLI, 30 G.2).

7. Similar jar, smaller. Combed lines below rim, possibly applied on slow wheel, apparently in part with three-tooth and in part with two-tooth comb. Yellowish-drab ware, with a very few white grits, evenly fired. Soft, harsh-texture surface. Traces of drab slip. Hand-made, rim added on wheel. Jar unmarked and the *AG I* drawings are not sufficiently accurate for certain identification. A closely similar jar from A.198, with rim broken.

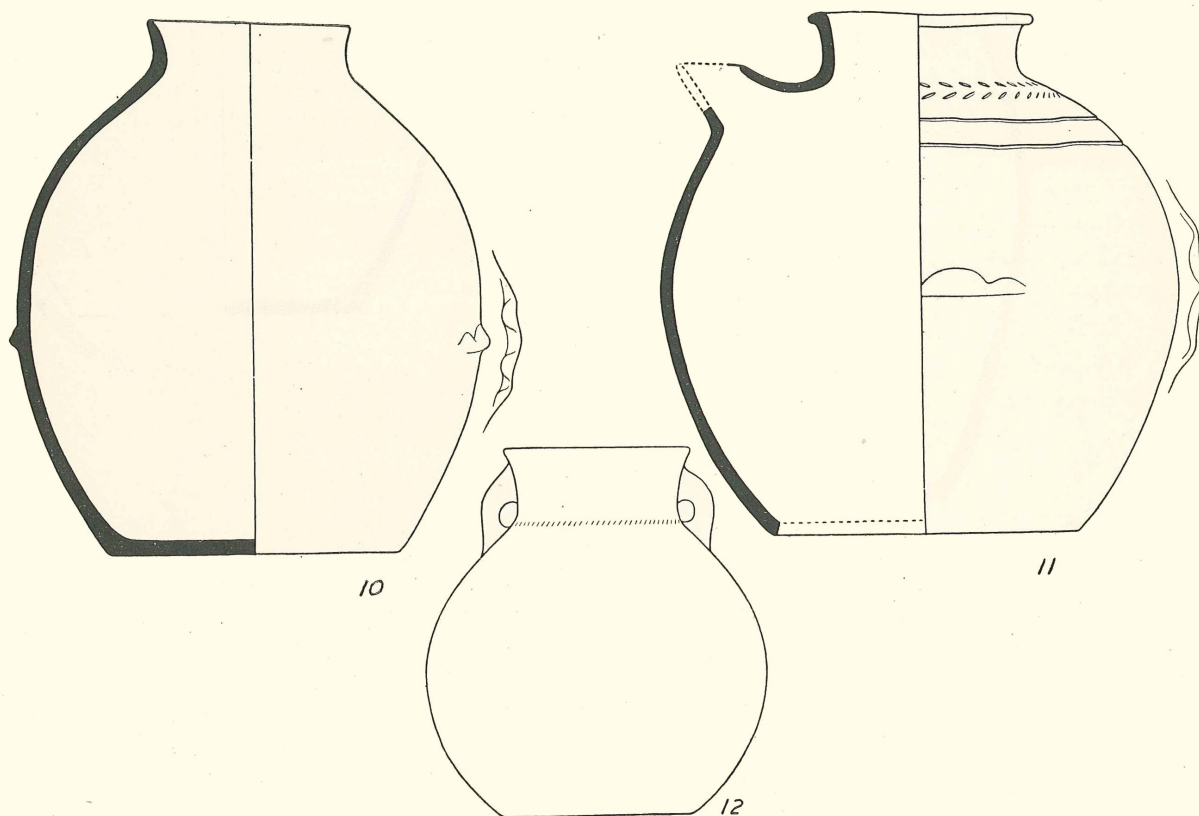


FIG. 9. Scale 1 : 4

8. Similar jar, greatest girth somewhat higher. Line of irregularly-spaced slashes at base of neck. Hard brown ware, a very few white grits. Harsh-texture surface, fairly soft. Thin, drab slip. Hand-made, rim added on wheel. Tomb A.244 (cf. *AG I*, Pl. LXI, 30 G.0).

Jars, Type B

9. Globular ovoid, wide base, upright neck, lip turned out. Line of blunt slashes at base of rim. 2 vestigial ledge handles. Grey-drab ware, evenly fired. Harsh-texture, fairly soft surface. Self-slip. Hand-made, upper part probably smoothed on wheel, rim added on wheel. Tomb A.1540 (cf. *AG II*, Pl. XXIX, 30F.8).
10. Plump ovoid, wide base, upright neck. 2 vestigial ledge handles. Light-grey ware, some white grits. Harsh-texture, fairly soft surface. Hand-made, possibly including rim. Not

marked, but probably is type *AG II*, Pl. XXIX, 30 F, and therefore from Tomb A.1548 or 1554, since 1556 is marked in register as not kept.

Jar, Type C

11. Plump, wide base, spout on shoulder, upright rim, lip turned out. Decorated free-hand below rim with a band of slashes in herringbone pattern and 2 incised lines. 2 vestigial ledge handles. Light drab ware, some white grits. Slightly harsh-texture surface, fairly hard. Hand-made but wheel-smoothed; rim wheel-made, but has sagged slightly. Tomb A.1559. (cf. *AG II*, Pl. XXIX, 30 J.9).

Jar, Type D

12. Jar with two lug handles at the neck. Drawn after Petrie, *AG I*, Pl. XLIV, 33 M. 7, as no example in Institute of Archaeology. Jars of varying sizes of this general form are illustrated under Type 33M.

Dagger Types

- I. Short blade, rounded tip, slight mid-rib, blunt hilt attachment (Fig. 10. 1, cf. *AG II*, Pl. XI, 56, from Tomb 1539).
- II. Medium length, rounded tip, no defined mid-rib, blunt hilt attachment (Fig. 10. 2, cf. *AG II*, Pl. XI, 54, from Tomb 1570).
- III. Medium length, fairly pointed, slight mid-rib, blunt hilt attachment (Fig. 10. 3, cf. *AG II*, Pl. XI, 55, from Tomb 1548 and Fig. 10. 4, cf. *AG II*, Pl. XI, 55, from Tomb 1516).

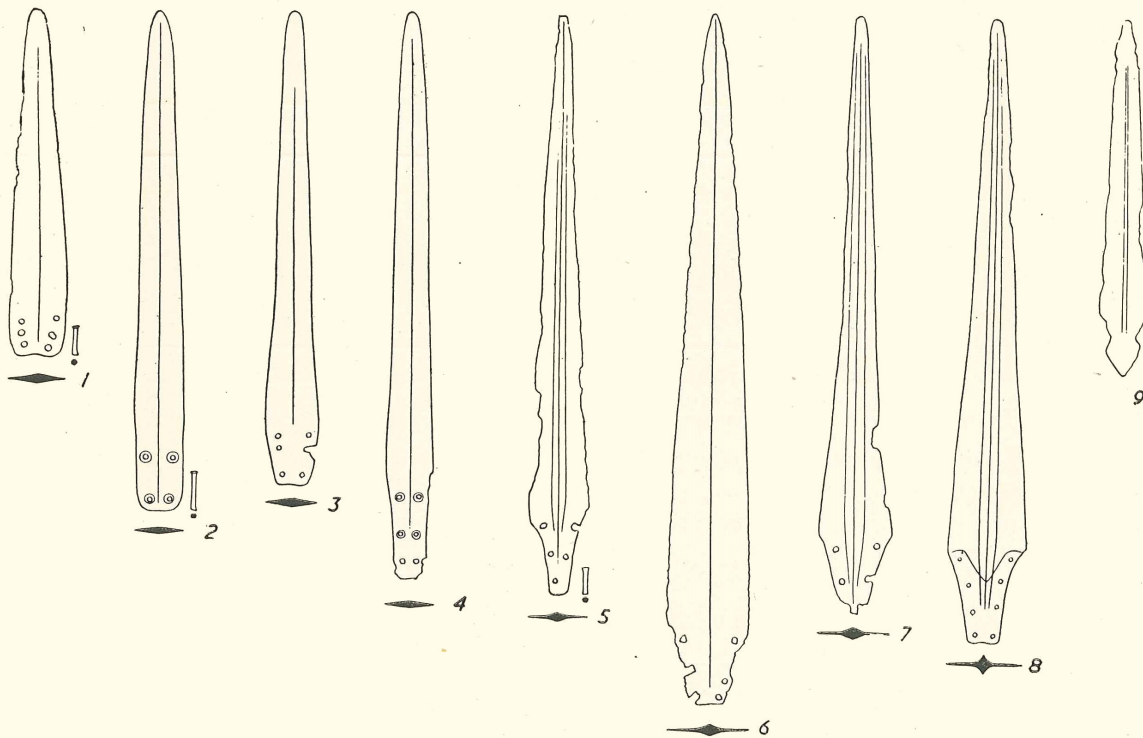


FIG. 10. Scale 1:4

- IV. Long, fairly pointed, broad shoulder, straight tapering sides, fairly pronounced mid-rib, narrowing hilt attachment (Fig. 10. 5, cf. *AG II*, Pl. XIII, 64, from Tomb 1565, and Fig. 10. 6, cf. *AG II*, Pl. XII, 61, from Tomb 1537).
- V. Medium length, pointed, broad shoulder, slightly concave sides, pronounced mid-rib, narrowed hilt attachment (not illustrated).
- VI. Long, pointed, broad shoulder, slightly concave sides, pronounced mid-rib, narrowed hilt attachment (Fig. 10. 7, cf. *AG II*, Pl. XIII, 66, from Tomb 1542).
- VII. Long, pointed, broad shoulder, straight tapering sides, pronounced mid-rib, narrowed hilt attachment (Fig. 10. 8, cf. *AG II*, Pl. XIII, 67, from Tomb 1534).
- VIII. Short, pointed, straight tapering sides, pronounced mid-rib, narrowed hilt attachment (Fig. 10. 8, cf. *AG II*, Pl. XIII, 68, from Tomb 1552).

Tomb No.	Type of Tomb	Burial Type					Pottery Types							Javelin	Dagger Types								Misc.			
		Intact Crouched	Scattered	Disturbed (sic)	Disturbed Crouched	No Record	Fig. 30 F.	Fig. 30 G.	Fig. 30 J.	Fig. 33 M.	Fig. 24 F.	Fig. 29.	Fig. 22 N.		Fig. 6 R.	I	II	III	IV	V	VI	VII		VIII		
164	H I	I																								
165	H I		I																							
166	H I					I																				
173	G				I																					
177	G					I																				
182	H I		I																							
183	H I					I																				
185	H I					I																				
190	H I					I																				
191	H I					I																				
198	G	I																								
199	G		I																							
200	A																									
203	G	I																								
204	?																									
206	G			I																						
207	?																									
208	H I																									
217	G																									
226	G	I																								
227	G																									
234	H 2			I																						
236	H																									
239	G				I																					
240	A																									
244	A																									
248	A		I																							
249	K	I	I																							
250	B			I																						
258	B				I																					
265	B				I																					
271	K																									
273	B																									
274	B			I																						
275																										
276	B		I																							
277	H I		I																							
278	G				I																					
280	B			I																						
294	G			I																						
443	A				I																					

Beads

A NEOLITHIC SITE AT WADI EL YABIS

IT appears to be worth while to put on record a Neolithic site discovered by Mr. Trevor Trought at Wadi el Yabis, where a cistern was being dug by the Agricultural Research Station a few months ago.

The site lies in the Jordan Valley between Deir Alla and Kirbet esh Shuneh on the east side of the Jordan, about a hundred yards west of the road. Here a small bluff separates the gently sloping talus terrace from the flat cultivable lands. The cistern was excavated in talus deposits and showed the following section:

1. 30 cm. greyish black A horizon.
2. 60 cm. grey B (Ca) horizon with pebbles—level containing implements.
3. 10 cm. whitish gravel.
4. 30 cm. brown loamy sand.
5. 50 cm. grey gravel.
6. 25 cm. brown loamy gravel.

The two upper levels are a deposit formed in a swampy spring with underwater vegetation covering pebbles, implements and bones with a calcium carbonate crust. The spring water is still oozing out into the excavation for the cistern, but now in layer 6 and not in layer 2 as originally. For this reason and because of the presence of the bluff, the conditions suggested by the incrustation cannot obtain at the present day. At the time of the formation of the Neolithic horizon, therefore, topographical conditions must have been different.

Apart from the Neolithic implements to be described later, a few rough flakes were found. They had no particular characteristics, though their edges were worn. This may argue that an earlier stone industry than the Neolithic is present also. In addition, there was one small potsherd with no diagnostic characteristics except that the ware would be consistent with the Hellenistic period. All these finds had the same lime incrustation as that found on the Neolithic implements.

No Neolithic pottery has been found in the deposits, but this must not be taken to prove that this particular Neolithic belongs to the prepottery phase. In view of the temporary nature of the excavation the number of specimens obtained was small, and it may well be that sherds covered by heavy lime-crusts have escaped detection.

The stone artefacts consist of ground implements and flint tools and cores.

Ground Stone Artefacts. Eight different types can be distinguished, of which examples are illustrated (Fig. 11):

Flat-ended cylindrical hammers (Y1).

Flat-ended cylindrical hammers with shaft holes (Y6), with unfinished hole.

Oblong cylindrical pointed-butt and round-ended objects, possibly pestles (Y8) and (Y7, broken).

Flat-ended conical pestles (Y4, broken).

Pointed-butt celt (Y2).

Flat-based discs, possibly rubbers (Y3).

Stone ring with biconical hole (Y5). This type is usually called mace-head, though it is difficult to imagine how a ring with a biconical hole could be securely attached to a shaft. It is probable therefore that these widely distributed objects served a different function.

Spherical hammer stone, about 8.5 cm. diameter.

The majority of these ground artefacts were made of coarse-grained basalt which contains numerous very small vesicles. There is also a dense porphyritic basalt of which the only polished implement (Y2) is made, and a grey limestone. Except for the pointed-butt celt with its smooth surface, all implements have the characteristic rough surface left by alternate pecking and grinding, and no attempt was made to produce a smooth surface. The coarse basalt would not lend itself to a smooth polish in any case, but the grey limestone would. The flat disc (Y3), which from its shape suggests that it might have been a rubber, has not acquired a polish on its under-side, as it should have done had it been used. This suggests that manufacture took place on the spot and that the specimen is unused. That Wadi el Yabis was a manufacturing site is further supported by two other specimens, a flat-ended cylindrical hammer with an unfinished shaft hole (Y6), and a large trimming flake, 14 cm. long (Y9). On the other hand, it seems that tools were also used on the spot, since broken specimens occurred in numbers (for instance Y4). From this the conclusion may be drawn that Wadi el Yabis was an occupation site where tools were both manufactured and used, and that its location was determined by the position of the spring.

Attention must be drawn to Y8, an oblong cylindrical pointed-butt and round-ended object, nearly a foot long, the function of which is obscure. But as broken fragments of this type were also found the specimen was not unique here. If this type was intended to be used as pestles, one wonders why the end is not more flattened.¹

Flint Implements. The flint implements bear out the conclusions just noted, as there are cores and waste flakes indicating manufacture on the spot, as well as used flakes and blades, and sickle blades with silica polish (Fig. 12).

The cores are chiefly of the cylindrical type, and large enough to produce the rather larger blades to be described shortly. Others, however, are for smaller blades, and one (Y18) is a polyhedral flake core closely resembling a Clactonian core; it is 3.5 cm. long. No tools have been found which may have been manufactured from so small a core.

The following types of tools have been encountered:

Long blades (Y11), evidently used as knives.

One angle burin on a long blade (Y10).

Sickle blades with double saw edges and silica polish on both edges (Y13).

Notched blades (Y14).

¹ Mr. Sadek Nur, Khartoum, has kindly given the information that pestles of this type are used for the pounding of coffee, etc. in wooden mortars. This would explain the absence of flattening.

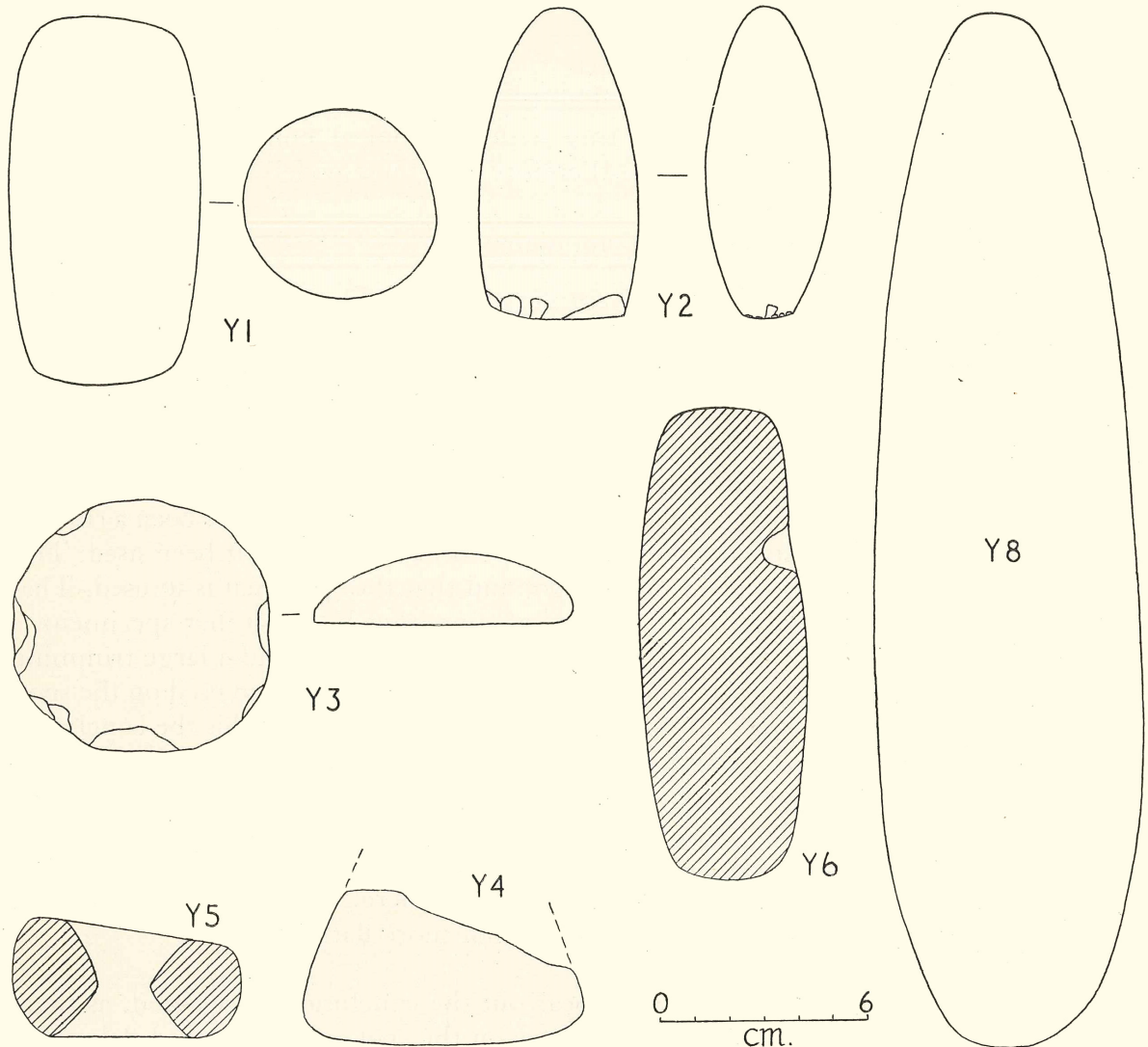


FIG. 11

Tanged long blade (Y12), worked bifacially across the surface of the point, the retouch being extremely flat and reminiscent of the Fayoum Neolithic. This may have been either the tang of a projectile head or, if turned round, it could conceivably be regarded as an awl.

Oval scrapers on short, broad flakes (Y15).

The edges of all these implements are quite sharp and unabraded.

Comparison with Other Sites. From the technological point of view the Yabis industry is Neolithic, though this does not preclude the possibility of it being of Chalcolithic age. It cannot be decided whether the absence of pottery finds is significant owing to the small size of the collection. Few comparable sites have been published. The type site of the Ghassulian, Teleilat Ghassul (Koeppel, 1940) is Chalcolithic and characterized by

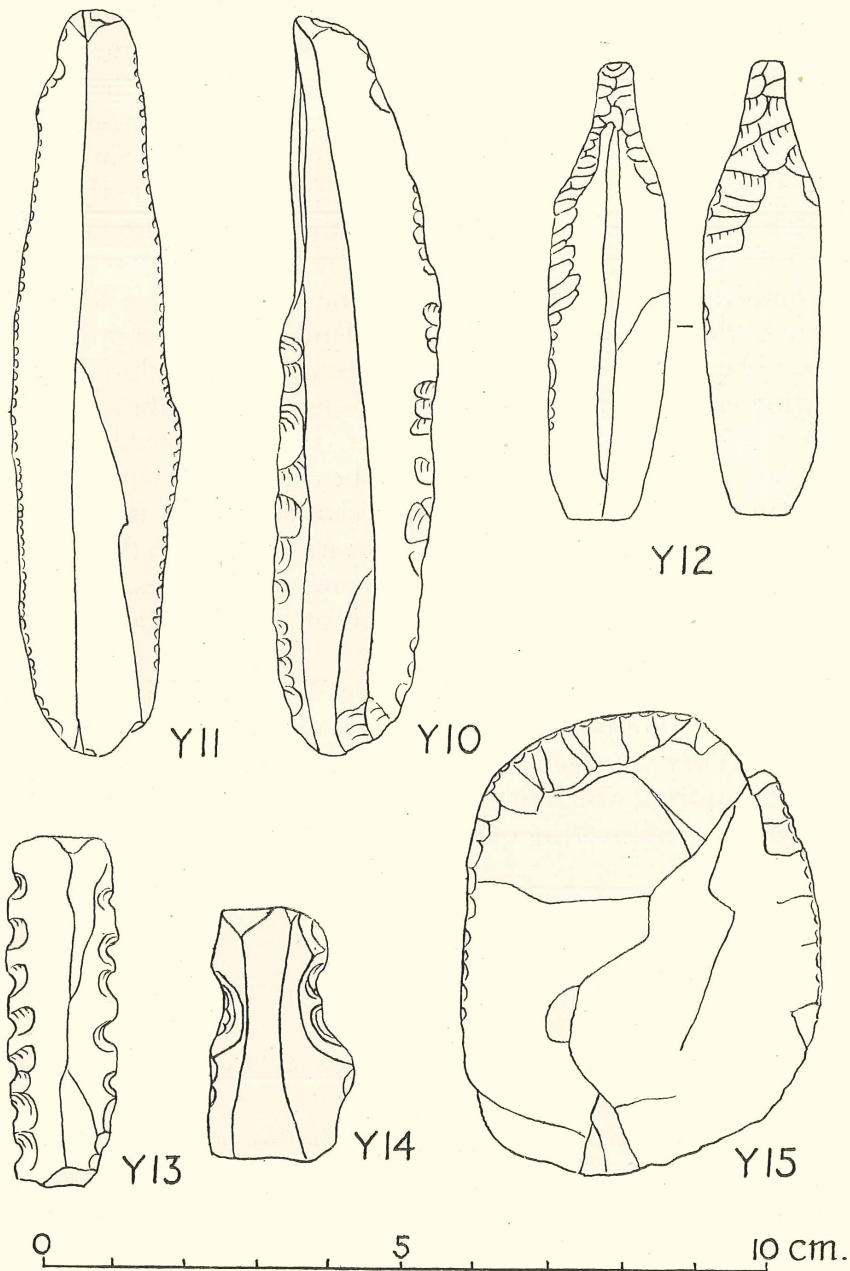


FIG. 12

large numbers of flint chisels, a tool that has not been found at Wadi el Yabis. Similarly, the Ghassulian contains very flat convex and round scrapers with flat marginal retouch, which again are absent at Wadi el Yabis. Of the ground stone tools, however, the 'mace-head' (Y5) with the biconical hole and the pointed-butt celt (Y2) have their counterparts at Ghassul, but these types are by no means confined to the Chalcolithic.

The Yarmuk industry is regarded by Stekelis (1951) as Neolithic, since the flint industry, pottery and art objects differ in type, forms and technique from the leading types of the Chalcolithic culture. It must, however, be pointed out that the herring-bone pattern found on the pottery is well known from the Chalcolithic. Basalt tools from the Yarmukian include pestles and mace-heads as found on the Yabis. Since the ground tool equipment has not been described in detail, comparison is restricted to the flint implements. Every single type from the Yabis occurs at the Yarmuk also, and there are some striking resemblances such as the double-edged sickle blade (Y13) with Yarmuk, Fig. 7, no. 11, and the tanged blade (Y12) with Fig. 7, no. 19. But since all these types range from the Neolithic to the Bronze Age such resemblance is hardly significant. A more important fact seems to be that the Yarmuk industry contains many flint axes, celts and hoes with polished cutting edges which have not been found at the Yabis.

The Tahurian of Neolithic Jericho (Crowfoot, 1935) has yielded polishing stones, celts and pestles of lava and limestone which might be comparable with the Yabis industry, but the flint equipment comprises a microlithic element which is absent at the Yabis. There is little point in going farther afield for comparison, though the Fayoum Neolithic contains the biconical 'mace-head' among other comparable types. The fifty-odd specimens recovered from Wadi el Yabis do not permit of assessing the frequency of implement types statistically.

It is thus not possible to place the industry from Wadi el Yabis in detail, though the absence of pottery finds and of polished flint celts would favour a Neolithic, and possibly early Neolithic, date. Very few such sites, however, have so far been made known from Jordan and adjacent countries, which makes it worth while to put Wadi el Yabis on record, a locality which owing to engineering operations would otherwise be lost to archaeology.

D. V. W. KIRKBRIDE

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A CAVE AT ARQUB EL DHAHR

THE cave was found by a cultivator, who reported the find to the Asst. Inspector of Antiquities, Rashid Bey Hamid. In due course he cleared this cave and part of an adjoining one; the material was completely mixed in the cave, and there was no sign of stratification whatsoever.

The approximate map reference of the site is 216.228: the area of the ancient settlement is about 3-4 dunums, and the caves here described were in the scarp to the west of the settlement. This scarp, varying in height from about 3 to 10 metres, delimits the site on the east, south and west sides, and traces of many other caves can be seen in it.

The small cave, which contained the greater part of the material, was roughly cut in the soft limestone, approximately 3 metres in diameter and 2 metres high at its highest point. No true entrance was visible, the rock having weathered away. The second cave was very much larger, but owing to the dangerous condition of the roof, could not be completely cleared. Only a very few sherds were found in the area excavated by the entrance. The settlement itself might be worth investigation some time, as there are no surface remains later than the Early Bronze Age.¹

G. L. H.

DISCUSSION

As will be seen from the parallels cited below, the pottery falls into two main groups:

- (a) Late Chalcolithic-Early Bronze I,
- (b) Early Bronze III.

Late Chalcolithic-E.B. I. By far the larger proportion of the vessels belongs to the Late Chalcolithic and E.B. I periods and probably represents burial offerings deposited over a considerable length of time at the end of the 4th and the beginning of the 3rd millennia B.C. Since the recent excavations at Tell el Far'ah (near Nablus) and Jericho, it has become increasingly apparent that the distinction between Late Chalcolithic and E.B. I pottery is not as clear as was once supposed. It is possible that certain aspects, at least, of these cultures are, in fact, contemporary.² This possibility is illustrated by our present group. Many of the shapes—for example, the small bowls with lug- or loop-handles (nos. 107-114)—are similar to those found in both the Upper Chalcolithic levels at Far'ah and the E.B. I tombs at Ai. Until excavation throws more light on this problem, therefore, it would be misleading to attempt to distinguish here between the Late Chalcolithic and E.B. I examples, if indeed there is any chronological distinction to be made.

¹ The settlement and tombs described here are apparently about 4 km. west of the E.B. site called 'Arqûb ez-Zahar visited by Glueck. Cf. *AASOR*, XXV-XXVIII, pp. 146-147 and 425-426.

² R. de Vaux, *Revue Biblique*, 1949, pp. 137-138; Miss K. M. Kenyon, *PEQ*, 1954, p. 55.

Most of the forms are well represented in the existing repertoires of Late Chalcolithic and E.B. I pottery and do not require further individual discussion. The most interesting fact to be noted about the group as a whole is the large proportion of vessels decorated in the painted style of the Ophel tomb groups. It is sometimes implied that this linear decorated pottery was confined to a 'South Judean' cultural province at the beginning of the Early Bronze Age, its place in the north being taken by 'band slip' ware.¹ However, the Arqub el Dhahr group, from a site right in the north of East Jordan, contains only one piece described (and that doubtfully) as being of 'band slip' ware, while, on the other hand, painted linear decoration (usually red on pink) is plentiful. It may also be significant that by far the largest single source of parallels for the shapes of our pots is Ai, a Southern site, while Megiddo and Beth-Shan occupy relatively minor positions in this respect. In any event, it seems likely that, just as the boundaries of the Late Chalcolithic Esdraelon (grey-burnished ware) culture are appearing, from the evidence of recent excavations, to spread towards the south, so the E.B. I painted ware province may extend further north than is sometimes supposed.

Early Bronze III. The second, and much smaller, group of pottery belongs to the E.B. III period, and includes two fragments of Khirbet Kerak ware (nos. 208 and 214). In the absence of stratigraphy there is nothing to prove whether or not all the objects from the E.B. III group were in fact laid down at the same time and form a homogeneous deposit. Some of our vessels—e.g. nos. 57, 70, 136—might just as easily belong to the E.B. II phase. It also needs to be stressed that many 'typical' E.B. III forms are no more than degenerations of earlier ones. It is naturally often difficult to tell whether any one particular vessel belongs to the end of the E.B. II period or to the E.B. III (after the appearance of Khirbet Kerak ware); and it is at least possible that some burials were made in our present tomb before the beginning of the true E.B. III period.

Incised Marks on Pottery. A few words may be said about the incised marks which appear on some of the vessels in the tomb. They are most common on bowls, where they appear on the inside of the vessel, but they also occur on the loop- and ledge-handles of jars (e.g. nos. 186, 191, 196, 204, etc.), and on one hole-mouth rim (no. 207). It will be noticed that these marks are not confined to vessels of either the Late Chalcolithic-E.B. I or the E.B. III group. Similar incisions have been noted on pottery from other excavated sites in Palestine from all phases of the Early Bronze Age. It is not the purpose of the present note to give a complete corpus of such marks, but the following occurrences may be mentioned: Beth-Shan XVI and X (*Museum Journal*, 1935, Pl. III, no. 8, Pl. IX, no. 13); Megiddo XVII (*Megiddo II*, Pl. 5, no. 7); Tell el Far'ah, E.B. II (*Revue Biblique*, 1948, p. 565, nos. 3 and 9); Jericho 7 m. level (*AAA*, XXII Pl. XXXIX, nos. 13, 16, 18, etc.).

The purpose of these marks is obscure. Those on the Arqub el Dhahr pottery have all been incised before firing, which makes it almost certain that they are not marks of ownership. Nor is it likely that the use to which the bowl or jar was destined would be indicated before the vessel finally left the kiln; while the fact that the same mark often

¹ E.g. Albright, *Archaeology of Palestine*, 1954, p. 72.

appears on vessels of different sizes (e.g. on the bowls, nos. 13, 62 and 64), whereas bowls of similar size are found with different marks, precludes the possibility of their being signs of capacity. Everything points, therefore, to the incisions being true potters' marks, either the personal signature of the potter himself or, perhaps, the trade mark of the kiln which produced the vessels. In either case, the marks provide evidence of the drifting away of industry from the home to the workshop which, during the course of the Early Bronze Age, was the concomitant of the rise of an urban civilization.

CONCLUSIONS

The tomb was first used during the Late Chalcolithic–Early Bronze I period (round about the end of the 4th millennium B.C.) by a community whose pottery, at least, shows closer relations with that of Southern Judea than it does with that of the Esdraelon Plain. After an interval of about five hundred years or so the tomb was re-used during the E.B. III period.

PETER J. PARR

	Body Colour	Firing	Grits	Surface Colour	Decoration	Remarks	Comparisons
1	bf	m	f1	br	r.bur.in.		Cf. Tell el Far'ah (<i>Revue Biblique</i> , LIV (1947), p. 413, no. 9), E.B. I.
2	bf	s	f	br/r	bur.in.		
3	pk	h	m ²	pk			
4	pk	s	m ¹	r		10 ex.	Cf. Tell el Far'ah (<i>RB</i> , LIV (1947), p. 419, no. 32).
5	pk	m	f	r		10 ex.	
6	pk	s	f	br	br.bur.in.		Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXIX, no. 361) for shape. Pattern burnish appears in Beth-Shan XI and Megiddo, Stage IV.
7	bk	h	f	pk	r.p.		
8	bf	s	m	pk	r.p.	2 ex.	For decoration, cf. Jericho, Level VI (E.B. I) (<i>AAA</i> , XXIII, Pl. XXXVI, no. 7).
9	bf	s	f	bf	r/br.p.		
10	pk	m	f	pk	br.p.out.	Wheel marks in	
11	pk	m	m ¹	bf	br.p.		
12	bf	m	f	bf	br.p.	4 inc. strokes;	
13	bf	m	f	bf	r.p.	2 ex.	
14	bf	h	m ²	pk			Cf. Jericho, Tomb A (E.B. III) (<i>AAA</i> , XIX, Pl. VIII, no. 14). Ai, Sanctuary A (E.B. III) (<i>Ai</i> , Pl. LXXXV, no. 1517).
15	bf	m	f	br	bur.in.	Wheel marks	Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. IV, no. 11); Megiddo, Stages IV-I (Types Ib and Id).
16	r	s	m	r	lat.bur.in.		Cf. Ai Palace (E.B. III) (<i>Ai</i> , Pl. LXXXVI, no. 1603).
17	pk	s	c1	pk	r.p.in.	Wheel marks in	
18	pk	s	c1	pk			
19	gy	h	m	bf	r.p.		
20	bf	m	m ²	bf			
21	pk	s	m ²	bf	br.p.		
22	pk	h	m	pk/bf	r.p.		
23	pk	s	f	pk			
24	gy	h	m ¹	bk	tr.po.out.	Esdraelon ware	Cf. Jericho, 11 m. level (E.B. II-III) (<i>AAA</i> , XXII, Pl. XXIX, no. 26).
25	bf	m	f	pk	lat.bur.in.	5 ex.	Cf. Beth-Shan, Level XVI (<i>MJ</i> , Pl. III, no. 4).
26	cr	m	m ¹	pk	tr.r.p.		Cf. Beth-Shan XII (<i>MJ</i> , Pl. VIII, no. 20).
27	bf	m	f	bf	r.p.		
28	bf	m	f	pk	r.p.		Cf. Tell el Far'ah, Upper Chalco. (<i>RB</i> , LVIII (1951), p. 567, fig. 1, no. 4).
29	bf	m	f	bf	tr.bur.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXXIX, no. 1012).
30	pk	m	f	pk	r.p.out.	tr.bur.	Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. III, no. 10).
31	bk	h	m	pk	r.p.		
32	bf	s	f ²	bf	r.p.		
33	bf	m	m	bf	r.p.		
34	gy	m	m	pk	r.p.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXXIII, no. 957); Tell el Far'ah, Tomb 11 (Upper Chalco.) (<i>RB</i> , LVII p. 576, fig. 7, no. 3).
35	bf	m	f	pk	r.p.		
36	bf	s	m ²	bf	r/br.p.		Cf. Jericho, Level VI (E.B. I) (<i>AAA</i> , XXIII, Pl. XXXVI, no. 7).
37	bf	s	f	bf	bur.		
38	bf	s	m ¹	pk	bur.		
39	bf	s	m	bf	r/br.p.	bk.core	
40	bf	h	f	pk	r.p.		
41	pk	s	f	pk	r.p.	3 ex.	
42	bf	h	f	bf/bk	bur.		
43	gy	m	m	bf	r/br.p.	4 ex.	
44	bf	h	f	pk	bur.		
45	wh	m	m	wh			
46	pk	m	m	pk	r.p.	Tr.bur. 2 ex.	
47	bf	m	m	r/br			
48	pk	s	m	pk	bur.		
49	bf	m	f	bf	br.p.out.	2 ex.	Cf. for carinated profile, Tell el Far'ah, E.B. I (<i>RB</i> , LIV, p. 413, nos. 9, 12, 15, etc.).
50	bf	h	f ²	bf	br.p.		Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. III, no. 11); Megiddo, Stages III-I (Carinated Bowls, Type 6).
51	pk	m	f	pk	br.p.out.		
52	bf	m	f	bf	br.p.out.	3 ex.	Cf. Tell el Far'ah, Upper Chalco. (<i>RB</i> , LVIII (1951), p. 567, no. 5); Tell Nasbeh, Tomb 67 (<i>TN</i> , Pl. 51, no. 1110).
53	pk	h	f	pk	r/br.p.out.		
54	bf	s	f	bf	tr.r.p.		
55	pk	m	m ²	pk	r/br.p.	2 ex.	
56	bf	h	f	bf	br.p.	2 ex.	
57	bf	h	m	bf	bur.in.		Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXIX, no. 467).
58	br	h	m	bf	bur.	Coarse	Cf. Beth-Shan, Level XIV (<i>MJ</i> , Pl. V, no. 21); Tell el Far'ah, E.B. IIA (<i>RB</i> , LV, p. 565, no. 3).
59	bf	m	f	bf	Li.br.p.		Cf. Ai, Tomb B (<i>Ai</i> , Pl. LXXXIX, no. 17).
60	gy	m	f	bf.in.	br.out.	Vertical bur.	Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXXIX, no. 990).
61	bf	m	f	pk	r.p.		
62	bf	m	f	pk	r/br.p.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXXII, no. 905); Tell el Far'ah, Upper Chalco. (<i>RB</i> , LV, p. 559, no. 28)
63	gy	s	f	bf	br.bur.	2 ex.	
64	bf	m	f	bf	r.p.out.	2 ex.	
65	cr	h	m ²	br			Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXX, no. 666).
66	bf	m	f	pk	r.p.		
67	bf	s	f	pk	tr.r.p.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXIII, no. 919).
68	pk	m	m ²	pk	r.p.out.		
69	pk	m	m	r	r.bur.out.		
70	r	s	m ¹	r			Cf. Megiddo, Stage II (Type 22A); Beth-Shan, Level XIII (<i>MJ</i> , Pl. V, no. 17).
71	pk	s	f1	pk	r.bur.	2 ex.	Cf. Jericho, Level V (E.B. II) (<i>AAA</i> , XXIII, Pl. XXXIX, no. 11); Ai Sanctuary (E.B. III) (<i>Ai</i> , Pl. LXXV, no. 1531).
72	bf	s	m ²	bf	tr.bur.		Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. IV, no. 5).
73	cr	m	f ²	r	r.bur.	4 ex.	
74	bf	m	m ²	r/br.	bur.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXXII, no. 831).
75	bf	h	f	bf	bur.	4 ex.	Cf. Ai, Tomb B (<i>Ai</i> , Pl. LXVIII, no. 37).
76	bf	h	f	bf	bur.	4 ex.	
77	cr	h		cr.in.	bur.	4 ex.	Very fine ware
78	bf	h	f	li.br.	br.p.		
79	pk	m	f ²	r.	bur.		
80	bf	h	f	bf	bur.	2 ex.	Cf. Tell Nasbeh, C.T. 5 (E.B. I) (<i>TN</i> , Pl. 51, no. 1094).
81	bf	m	m ²	bf	bur.out.		
82	bf	h	m ²	bf	bur.		

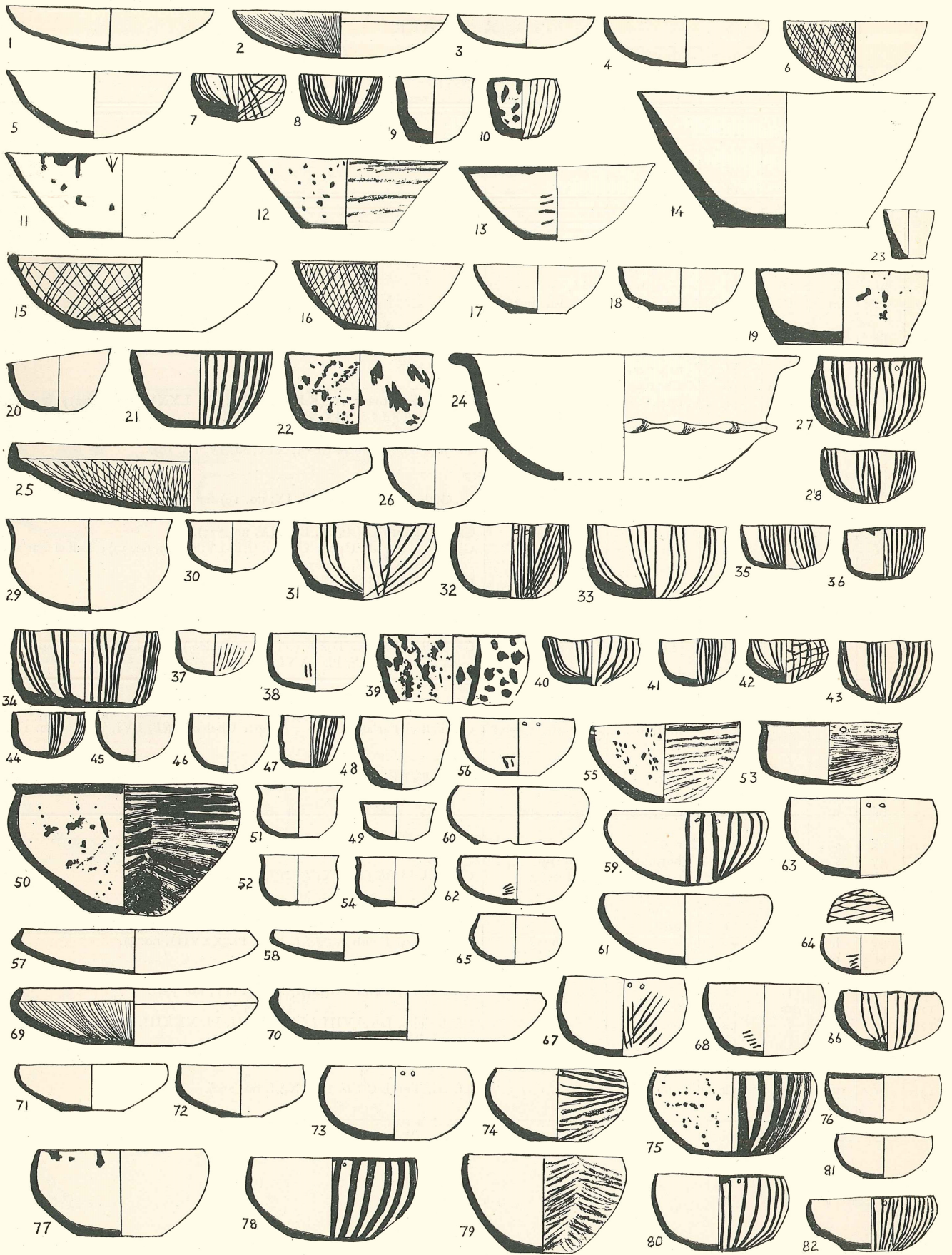


FIG. 13. Scale 1:5

	Body Colour	Firing	Grits	Surface Colour	Decoration	Remarks	Comparisons
83	bf	m	m	bf	bur.		
84	br.	s	m	bf	br.bur.		
85	gy	h	m ¹	bf	bur.		
86	gy	h	f ²	bf	br.bur.		
87	bf	h	f ¹	bf	bur.	4 ex.	
88	pk	m	f ¹	pk	r.p.out.	2 ex.	
89	pk	s	f	pk	r/br.p.out.	3 ex.	
90	bf	h	f ²	bf	br.lat.bur.	4 ex.	
91	r	m	f	pk	r.p.out.	3 ex. turning marks.	
92	pk	m	f	cr	br.p.out.	4 ex.	
93	pk	m	f	bf	br.p.out.		
94	bf	s	f ¹	bf	br.p.out.	2 ex.	
95	pk	m	f	pk	r/br.p.out.		
96	br/bf	m	m ²	pk	br.p.		Cf. Ai, Sanctuary A (E.B. III) (<i>Ai</i> , Pl. LXXV, no. 1402); Jericho Tomb A (<i>AAA</i> , XIX, Pl. IV, no. 9).
97	pk	s		pk			
98	bf	h	m ²	bf	r/br.p.		Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. IV, no. 10).
99	bf	h	m	pk	r/br.p.	Bk. patches	
100	bk	s	c	pk	tr.r.p.		
101	bf	m	f	pk	r.p.	Bk. patches	Cf. Beth-Shan XI (<i>M³</i> , Pl. IX, no. 19) for rim.
102	bf	m	m ¹	bf/pk	r.p.		
103	bf	m	f	pk	r.p.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXIX, no. 773).
104	bf	m	f	br.out.	bur.out.		Cf. Tell el Far'ah, Upper Chalco. (<i>RB</i> , LV, p. 559, no. 27); Tell el Far'ah, E.B. II (<i>RB</i> , LV, p. 567, no. 5).
105	bf	m	f ¹	br.in.			Cf. Ai, Tomb B (<i>Ai</i> , Pl. LXXIX, no. 22).
106	bf	m	f ¹	pk	br.out.		
107	bf	h	m ¹	bf	br.bur.		Cf. Tell el Far'ah, Tomb 10 (Upper Chalco.) (<i>RB</i> , LVIII, p. 573, no. 6); Ai, Tomb C (<i>Ai</i> , Pl. LXVIII, no. 58).
108	gy	s	f	bf	tr.bur.		Cf. Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 12); Ai, Tomb G (<i>Ai</i> , Pl. LXXI, no. 807).
109	gy	h	f	bf	br.pol.	Very fine ware; ripple combing	
110	bf	s	f ¹	bf	r/br.		
111	bf	s	f	pk.in.	li.br.bur.	5 ex.	Cf. Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 11).
112	bf	m	f	bf.in.	br.bur.out.		
113	pk	m	f	pk	r/br.		
114	gy	h	f	bf	r/br.	3 ex.	Cf. Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 12).
115	pk	s	m	pk	r.p.		
116	bf	h	f	pk	r/br.	bur.out. and base	
117	pk	s	m	pk	r.p.		Cf. Beth-Shan, Level XIV (<i>M³</i> , Pl. VI, no. 3).
118	gy	s	m ²	bf	bur.out.	Band slip	
119	pk	s	f ¹	pk.in.	r.bur.out.	bur.lines	Cf. Beth-Shan, Level XIV (<i>M³</i> , Pl. VI, no. 4).
120	bf	h	f ²	bf	li.br.bur. out		
121	bf	h	m ²	bf	br.		Cf. Megiddo, Stages III-I ('High Bowl', Type 4B).
122	gy	h	f	gy		Hand made	Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. XXVIII, no. 4).
123	bf	m	c ²	bf			
124	bf	m	m ²	bf			
125	bf	s	f	bf			Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. V, no. 3-4).
126	pk	h	m	pk	tr.r.p.		
127	pk	m	f	pk	bur.out.		Cf. Jericho, Level VIII (<i>AAA</i> , XXIII, Pl. XXXIII, no. 18).
128	pk	s	f ¹	pk			Cf. Ai, Tomb B (<i>Ai</i> , Pl. LXXIX, no. 60).
129	pk	s	f	r/br.			
130	bf	s	m	bf	tr.r.bur.		
131	bf	m	m	pk	r.bur.		Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXXI, no. 730).



FIG. 14. Scale 1:5

	<i>Body Colour</i>	<i>Firing</i>	<i>Grits</i>	<i>Surface Colour</i>	<i>Decoration</i>	<i>Remarks</i>	<i>Comparisons</i>
132	pk	m	f1	pk	r.bur.		Cf. Megiddo, Stage III (Type 28A).
133	pk	m	f	pk	r.bur.		Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. XXVII, no. 12).
134	bf	m	f1	bf	br.bur.		
135	pk	m	m ¹	br.	r.bur.	Coarse	Cf. Jericho, Tomb A (<i>AAA</i> , XIX, Pl. III, no. 20).
136	bf	m	f1	bf	br.bur.		Cf. Tell el Far'ah, E.B. IIA (<i>RB</i> , LV, p. 565, no. 2).
137	pk	m	m ²	pk			
138	bf	h	f	pk			
139	pk	h		pk		Wheel made	
140	pk	s	m ¹	bf	tr.br.bur.		
141	pk	s	f1	pk	tr.bur.		
142	pk	s	f	pk	r.p.		
143	bf	h	f	bf	br.bur.		
144	bf	m	f	bf	bur.		Cf. Tell el Far'ah, Tomb 8 (Upper Chalco.) (<i>RB</i> , LVI, p. 135, no. 10).
145	bf	m	f1	bf	br.bur.		
146	bf	m	f	bf	bur.		Cf. Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 17).
147	bf	h	f1	bf	br.bur.		
148	pk	h	f	pk	tr.r.bur.		
149	pk	s	f	pk			
150	pk	m	f1	pk	r.bur.		
151	bf	s	m ²	pk			
152	bf	s	m ²	bf/pk			Cf. Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 21).
153	pk	m	m ¹	pk	tr.r.bur.		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXIX, no. 847).
154	pk	s	f	pk	r.bur.		
155	pk	h	f	pk	r.p.		
156	bf	m	f	bf/pk			
157	pk	s	m ¹	bf	tr.bur.		(High loop-handled cups occur in Megiddo, Stages VII-IV.)
158	gy	m	f1	bf	br.p.		
159	bf	m	f1	bf	li.br.		
160	bf	m	f	bf/pk			
161	pk	s	f	pk			Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXII, no. 834).
162	pk	s	f1	pk			
163	pk	m	f	pk			Cf. Tell el Far'ah, Tomb 3 (Upper Chalco.) (<i>RB</i> , LVI, p. 113, no. 13).
164	pk	h	f	pk	r.		
165	bf	m	f	pk	tr.bur.		
166	bf	h	f	cr.	r.		
167	bf	h	f	bf/pk	r/br.		
168	cr	m	f	bf	bur.		
169	bf	h	f	bf	bur.		
170	bf	h	f	bf	y/br.		
171	bf	s	f	bf	r.bur.		Cf. Tell el Far'ah, Upper Chalco. (<i>RB</i> , LVIII, p. 567, no. 3).
172	bf	h	f	pk	r.bur.		
173	pk	h	m ¹	bf	r.tr.bur.		
174	bf	m	f	bf	y/br.		
175	pk	h	f	pk	r.		
176	bf	m	f	bf	r.		
177	bf	h	f	bf	r.bur.vert.		
178	bf	m	f	bf	br/r	High bur. x on base	Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXIX, no. 373).
179	bf	h	f	bf			
180	pk	s	f	pk	r/br.bur.	Lat. base	



FIG. 15. Scale 1 : 5

	Body Colour	Firing	Grits	Surface Colour	Decoration	Remarks	Comparisons
181	gy	h		bf	bur.	x on base, two coats slip inside neck	
182	bf	m	f	bf	y/br		Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXXIII, no. 988).
183	gy	m	f	bf	br.bur.		
184	pk	s	f2	pk	r.bur.		Cf. Ai, Tomb C (<i>Ai</i> , Pl. LXXIX, no. 145ii).
185	bf	m	f1	bf	r.bur.		Cf. Ai (Sanctuary B?) (<i>Ai</i> , Pl. LXXVII, no. 2022).
186	pk	m	f	bf	r.bur.		
187	gy	h	m	bf	br/r.		
188	bf	s	f	br	tr.r.		
189	bf	h	f	bf	r.		
190	bf	h	m2	bf	br.r.bur.		
191	pk	h	c2	pk	r.		Cf. Jericho, Level VIII (<i>AAA</i> , XXII, Pl. XL, nos. 1-4).
192	bf	s	m	bf	r.		
193	bf	m	m2	pk	r.		
194	pk	h	c2	pk	r.		
195	bf	h	f	bf	br/r.	Wheel finish	Cf. Ai, Tomb G (<i>Ai</i> , Pl. LXVII, no. 778).
196	bf	s	m2	bf			
197	pk	s	m	pk	r.		
198	bf	m	m2	bf	bur.		
199	bf	m	m1	bf	bur.		
200	bf	m	f	bf	br.bur.		Cf. for decoration, Jericho, 9.21 m. level (Lower E.B.) (<i>AAA</i> , XXII, Pl. XXXVI, no. 19); Tell el Far'ah, Tomb 5 (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 31).
201	bf	m	m2	bf	y/br.		Cf. for spout, Tell el Far'ah (Upper Chalco.) (<i>RB</i> , LVI, p. 127, no. 25).
202	bf	h	f	bf	y/br.		
203	bf	m	f	bf	br.		
204	pk	s	f1	pk	br.bur.		
205	bf	h	f	bf	y/br.		Cf. Tell el Far'ah, Upper Chalco. (<i>RB</i> , LVI, p. 127, no. 31).

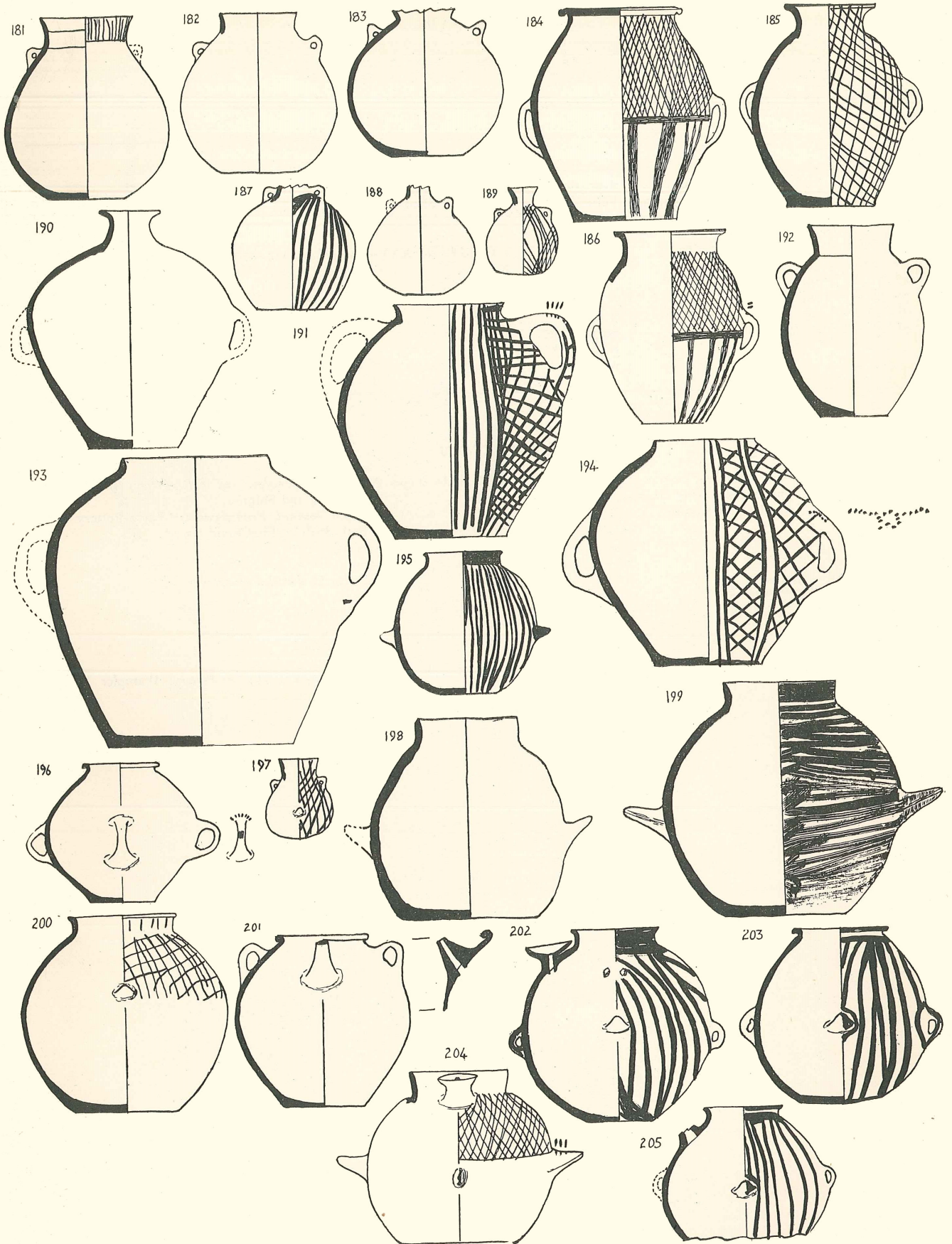


FIG. 16. Scale 1 : 5

	Body Colour	Firing	Grits	Surface Colour	Decoration	Remarks	Comparisons
206	gy	m	c ²	br			Cf. Megiddo, Stages VII-IV (Type 13B).
207	bf	m	m ²	bf	r/br.	7 inc. dots	
208	pk	h	f	r	bk. merging to r.bur.	Vertical bur., Kh. Kerak ware	Cf. Beth-Shan, Level XII (<i>MJ</i> , Pl. VII, no. 17).
209	bk	h	m	bf	r/br.		Cf. <i>AASOR</i> , XXV-XXVIII, p. 425, and Pl. 2, No. 2.
210	gy	h	m	br.			
211	bf	m	m	pk			
212	pk	m	m	pk			
213	pk	m	c ¹	pk	r.bur.		
214	pk	m	f	r	r.po.	Applied dec. Kh. Kerak ware	

Contractions

AAA *Annals of Art and Archaeology*, Liverpool
AASOR *Annual of the American Schools of Oriental Research*
Ai. *Fouilles d'el-Tell*: Marquet-Krause
 bf buff
 bk black
 br brown
 bur. burnished
 c coarse
 cr cream
 ex. examples
 f fine
 gy grey
 h hard
 in. inside
 inc. incised
 li light
 lat. lattice
 m medium

Megiddo Stages *Notes on the Chalco. and E.B. Pottery of Megiddo*: Engburg and Shipton.
MJ *Museum Journal, Pennsylvania*: 'Early Pottery from Beth-Shan': FitzGerald (1935).
 out. outside
 p paint
PEQ *Palestine Exploration Quarterly*
 pk pink
 po polish
 r red
RB *Revue Biblique*
 s soft
TN *Tell Nasbeh*, Vol. II: *The Pottery*: Wampler
 tr. traces
 wh white
 y yellow

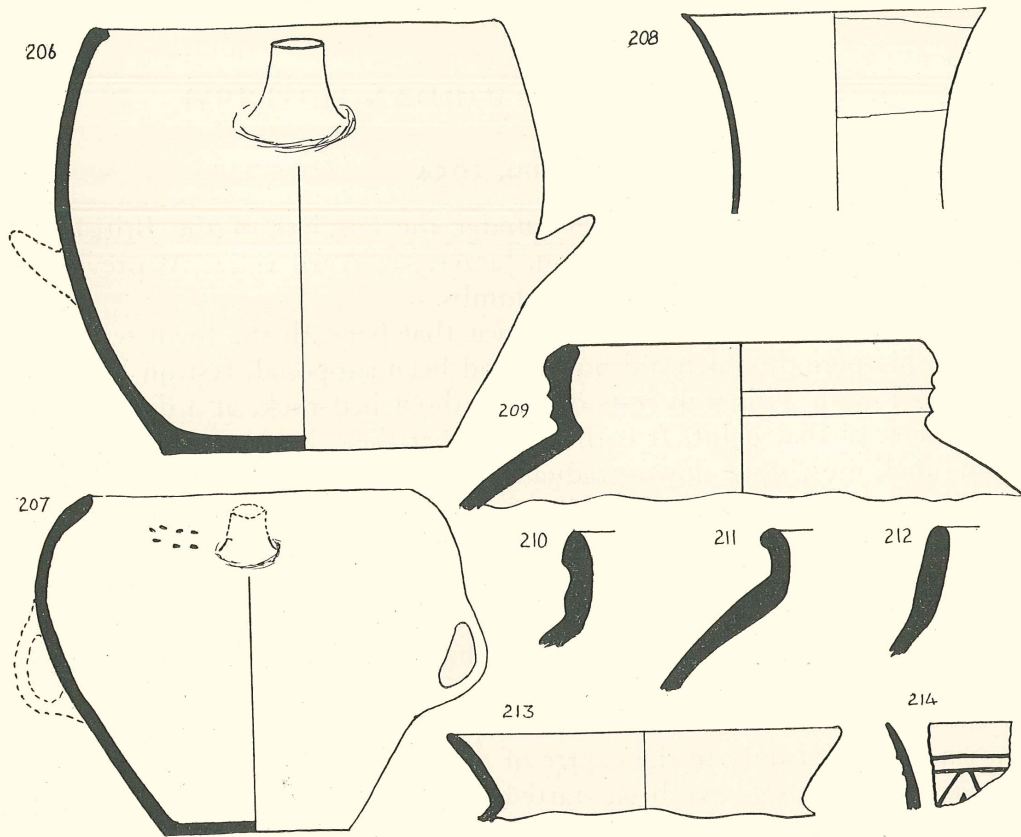


FIG. 17. Scale 1:5

EXCAVATIONS IN JORDAN, 1953-1954

JERICHO, 1954

THE third season's work at Jericho, under the auspices of the British School of Archaeology in Jerusalem, lasted from January to April 1954. As previously, work was carried out both on the Tell and in the tombs.

The outstanding discovery on the Tell was that beneath the town wall of the pre-pottery Neolithic period, which did not, as had been supposed, rest on bed-rock, there was a yet earlier wall. This wall rests on undoubted bed-rock, at a depth of 14.50 m. below the surface at that point. It is thus clear that there is no natural hill beneath the Tell, for the rock must slope down gradually from the west to the spring on the east of the Tell. The new wall is excellently built of undressed stones. It survives, in two phases, to a height of 5.50 m., with a face on a slight batter, and is no doubt built against a fill, representing the earliest occupation on the site, a fill which has yet to be excavated.

The duration of the pre-pottery Neolithic phase, as indicated by the depth of deposit, thus proves to be very much greater than was expected. Levels of this period, in fact, account for the greater part of the surviving height of the mound. It remains to establish the extent of the settlement and if possible the lines of the successive town walls, known at present only in the centre of the west side of the Tell. With this object in view, two new trenches have been started, at the northern and southern extremities of the Tell. So far, only levels of the Middle and Early Bronze Age have been reached in the new areas.

Above the debris covering the face of the newly discovered wall was found a building with the plastered walls and floors typical of the pre-pottery Neolithic stage, but unusual in plan. The central feature was a room of exceptional size, in the middle of which was a plastered basin. At either end of this room, which was rectangular, were annexes with curved walls. The size and unusual plan of this building, and the central basin, suggest a ceremonial use, and it is possible that it is a temple.

A further house-phase precedes the building of the later wall. This wall was found to be contemporary with a house of plan and structure now recognized as characteristic of the period. Beneath the floors of this house, and overlying the debris of the one below, were found a large number of skeletons. Some were intact, some had had the skulls removed, and others had been collected together as a jumble of limbs at a time when the flesh had partly but not completely decayed. The fact that these bodies lay beneath the floors of a house which was contemporary with a massive defensive wall suggests that they may represent the remains of a massacre, and that the wall may be a precaution against a repetition of such a disaster. Moreover, the fact that in some cases the skull had been removed suggests that it was from these bodies that were derived the skulls which formed the basis of the remarkable plastered portrait heads found last year, which had been treasured in the succeeding period.

The most interesting fact which emerged concerning the Early Bronze Age was that the foot of the mound on the west side was defended in the last period by a double ditch, above which was a steep slope crowned by a wall. There are indications that there were also ditches in earlier phases of the defences. The ditch of the last phase was found filled to a considerable depth by water-laid silt. Above this were built the houses of the Intermediate Early Bronze phase, probably to be attributed to invading nomadic Amorites of the 21st century B.C. It thus appears that there was an appreciable interval between the destruction of the last city wall of the Early Bronze Age by the newcomers and the building of their earliest houses, a period during which they no doubt continued to live in tents.

For the first time during the work of the present expedition, remains have been found of the settlement of the Late Bronze Age. Above the group of Middle Bronze Age houses being excavated on the east side of the Tell was found, immediately under the surface, the foundations of a wall, with adjoining it a small area of intact contemporary floor. On the floor there was a small clay oven, and lying beside it a juglet of 14th-century B.C. date. This provides confirmation that above the silt which accumulated over the burnt Middle Bronze Age city during a period of abandonment, there was, at least in this part of the site, a settlement of the Late Bronze Age, which has been almost completely denuded away. This could have been the town attacked by the Israelites under Joshua.

The finds in the tombs were not quite so rich as in previous years. Those found included a tomb of the Late Chalcolithic period, re-used in Early Bronze III, several other Early Bronze III tombs and a large number of the tombs of the Intermediate Early Bronze-Middle Bronze period which contain single burials. Some of these had been re-used in the Middle Bronze Age, and at the end of the season a new group of Middle Bronze Age tombs was found. The most interesting of these was a single burial of a young warrior, complete with his weapons, a bronze belt and some very fine pottery.

An important development in connection with the tombs was a study by Professor F. E. Zeuner of the conditions which led to the survival of so much perishable material, such as wood and basket work. His conclusion was that owing to the position of Jericho on the zone of crushed rocks at the edge of the Jordan rift, gases, especially carbon dioxide and bituminous gases, had penetrated upwards and accumulated in the chambers, thus arresting decay by killing the various agents of decay.

KHIRBET QUMRAN

With the collaboration of the *École Biblique et Archéologique Française* and the *Palestine Archaeological Museum* the second and third seasons of excavation were carried out during the springs of 1953-1954, under the direction of R. P. R. de Vaux, O.P. The whole of the main building has now been cleared, and subsidiary constructions to the south and west (Pl. VII, 1). Also a trench was run from a small wady on the north towards the main building. It has now been established that there were three main periods of occupation of the settlement, and thanks to a large number of coins

(more than 400), the dates of these periods can be fairly closely fixed. The earliest coins found are those of John Hyrcanus, 135-104 B.C., and the latest, in any quantity, of the First Revolt, 68 A.D. There was physical evidence, in the form of a great crack right across the building and a subsidence of the eastern part, of a very strong earthquake, and coins point to that recorded by Josephus of 31 B.C., at the time when Herod the Great was near Jericho with his army (Pl. VIII, 3). Debris from the clearance of the building after this disaster was found, together with coins, in the trench referred to above. It would appear that the site was abandoned for a short time about this period, for coins of Herod the Great are conspicuous by their scarcity, only one having been found so far. Many coins of the Procurators testify to a flourishing community then, which was brought to an end in 68 A.D. The building was totally destroyed, largely by fire, and partly rebuilt on the fill, which last phase was, as testified by coins, occupied briefly by the Xth Legion. The only sign of subsequent use of the place was a small cache of coins of the Second Revolt.

It has also been established that the first construction was erected on foundations of a building of the Iron Age, as evidenced by sherds and even an ostraca. There is also a pottery kiln which, by its position beneath the walls of what we consider to be Level I, appears to belong to this early period.

The disentangling of the various levels of walls is extremely difficult, owing to frequent rebuildings and alterations, and is further complicated by the fact that the earthquake caused a 50-cm. sinkage of the eastern section of the building. Pottery does not as yet help much, as most forms are common to all periods, but a few are beginning to emerge which would seem to be characteristic of the first period.

Up to date five large cisterns have been cleared, each with a flight of steps leading down into it, and with a sump for collecting some of the mud from the water before it finally flowed into the cistern. The water was conducted from the waterfalls and rain pools in the Wady Qumran through a rock tunnel and open channel. A potters' quarter has been cleared, complete with shallow plaster-lined pits in which the clay was levigated, and two kilns, one large and one small (Pl. VIII, 2). Towards the end of the last season the purely domestic quarters were beginning to appear, including a room in which flour was ground in a conical basalt mill (Pl. VIII, 1). Parts of the mill were found in different areas of the building.

The main building includes a high tower at the north-west corner, reinforced with a glacis after the earthquake and what may be a dining-room with a low plaster bench running all round the room and three cupboards in the wall. In an adjoining room, but apparently fallen from an upper storey, were the remains of a long table-like structure of mud brick faced with plaster, and a bench, and a curious low plaster structure with two shallow cup-like depressions in it. From the fact that two inkpots were found among the debris one might assume that we have here the remains of the scriptorium, perhaps the very place where many of the scrolls were written. The cup-like depressions may have contained water for ritual washing of the scribes' hands before writing the sacred name.

Outside, but adjoining the outer wall on the south, was the largest room in the place,

the roof of part of which was supported on brick pillars (Pl. VIII, 4). This would appear to be the place of congregation and worship. A smaller room opened from this at right angles near the south-west corner, and in the main room a circular area in front of this door was paved with stones. The rest of the floor was plastered, and two different levels can be distinguished. In the second period the smaller room was divided into three, and in the southern part a large store of pottery, more than 1,000 vessels, many intact, was found *in situ*. Four main forms were represented, jars, large deep bowls, plates and beakers (Pl. VII, 2).

The main outline of the history of the settlement, as summarized in the first paragraph, is now clear, and it seems unlikely that further excavation will cause any radical modification of the story. At least one more season's work is necessary to complete the clearance, and the Department plans this year some conservation work on the existing walls to consolidate what is almost the only large building which has survived in Jordan unchanged from the time of Christ.

BETHLEHEM, 1951-1953

I. Excavations of the Custodia di Terra Santa in KHIRBET SIYAR EL GHANAM (east of Bethlehem), conducted by Father Virgilio Corbo, Franciscan

Not far from Bethlehem, in the property of the Custody known under the name of Khirbet Siyar el Ghanam, excavations have been made in two periods which have resulted in a complete exploration of those ruins.

1st Period: February 15th-September 30th, 1951

The work was begun at the west side of the ruins excavated by Guarmani; so there has been discovered all the west side of the 6th-century monastery, with a fine installation of oil-presses and wine-presses. Towards the angle south-west of the Byzantine building, under the pavement of the presses, a cave has been found; this cave was inhabited during the Herodian epoch, with remains of a small pool, walls and stones for presses.

In the north-west side in a cave-store, fragments of lunar-form table for an altar have been discovered. Of special interest is the mosaic of the bakery, with Greek inscriptions and with the new iconographic motive of the Calvary representation. In the west side has been excavated the courtyard with the stairs for access. In the background of the courtyard there were materials in great quantity left from a 4th-century building.

In the north-east angle of the monastery have been excavated the foundations of two apses belonging to two successive churches. Most archaic is that of the 4th/5th centuries, while the other apse, of the 6th century, is built with materials taken from the polygon of the Constantinian Basilica of the Nativity.

2nd Period: May-December 1952

The excavations were continued to determine some problems of the building masses. In the east behind the apses of the churches has been discovered a big water-pool

in which were precipitated many elements of the 6th-century apse. In the south side we could identify some walls belonging, together with the archaic apse, to a primitive monastery of the 4th/5th centuries. In the west side we continued the exploration of the caves of the Herodian-Roman epoch still buried under the mosaic pavements of the 6th-century monastery; while by the north side the drainage of the buildings was being cleaned.

The abundant materials explored will be published as soon as possible by Father Corbo. The monastery is identified with the ancient Poimnion or Monastery of Shepherds' Field.

II. Excavations of the Custodia di Terra Santa in KHIRBET ABU GHUNNEIM (north-east of Bethlehem) conducted by Father Virgilio Corbo, December 1952

The digging, which lasted a few days, brought to light a Byzantine hermitage (24.75 × 18.40 m.). While the area of the hermitage seemed to have been sacked, the church has been found in better condition. The church, of rectangular form and fairly long, is composed of the nave and an elevated presbytery closed by chancels. Of the mosaic pavement only some traces in the presbytery and near the chancels remain. The nave of the church has been divided—probably in the Arab period—by three small walls to make rooms.

The ruins are identified with the Fotino Hermitage (5th century).

III. Excavations of the Custodia di Terra Santa in BIR EL QUTT (north-east of Bethlehem), conducted by Father Virgilio Corbo, January-June 1953

With the excavations of Bir el Qutt has been discovered the beautiful Georgian monastery of the Abbot Anthony dedicated to St. Theodore. The identification has been made possible by the discovery of different inscriptions in the Georgian language.

The monastery has a square form, with the doors on the east, a cloister with a corridor around in the centre. In the north side were found the remains of the church, with a funeral crypt underground. The monastic cemetery was situated on the east side. At the south were the big stable and the workplants for the oil and the wine. In the west flank were the refectory and the kitchen. Not far from the east side a tomb of the Herodian-Roman epoch has been cleared. This tomb has been re-used in the 6th century by the Georgian monks.

The results of all these explorations will be published as soon as possible in a monograph which is being prepared by Father Virgilio Corbo, O.F.M.

Soundings at KHIRBET JUHZUM (Custodia di Terra Santa) conducted by Father Virgilio Corbo¹

Khirbet Johzum (map. ref. 123, 177) soundings have been made in that part of the ruins which are as yet unoccupied by the small but growing Bedouin village.

¹ *Bibliogr.* P. Virgilio Corbo, O.F.M., 'Ritrovamenti cristiani a Khirbet Giohdom (Betlemme),' in *La Terra Santa*, 1954, pp. 144-148.

The soundings revealed a long room (20 × 6 m.) with the pavement of fine mosaic; this mosaic overlay another more ancient one of rougher type but with the identical geometrical design. South of this room, another with mosaic of geometrical design was also found. In the wall which divides the two rooms was a tomb, in close proximity to which was a funeral 'stela.' This 'stela' has on one side a carving representing the concept of resurrection and immortality; the other side has the following inscription:

Κ[ύρι]ε Ἰ[ησο]ῦ Χ[ριστ]ῆ ἐλ[λή]σον τὸν ταπ[ε]ι[νὸν]
 Ἑλίας καὶ ἀ[π]πασσον τὸν δ[ο]υλό[υ]σσου
 Θεόδου[λον] μετὰ τῶν ἀγί[ων].

Among other objects worthy of note are the remains of beds used by the monks constructed of stones and lime, and three capitals on which are carved doves and snakes; the decoration of one of the capitals is intended to be a pictorial comment on Matt. x, 16.

Cut into the rock are tombs of a large, completely robbed necropolis.

The ruins belong to a Byzantine monastery of the 6th century.

The soundings at Khirbet Biyar Luqa have been stopped after two days of work because of quarrels between the two families which occupy the place. It is hoped to continue the work before long.

DOTHAN, 1954

Wheaton Archaeological Expedition, directed by Dr. Joseph P. Free

The second season of excavation at Dothan, 100 km. north of Jerusalem, was carried on in the spring of 1954 by the Wheaton Archaeological Expedition. The first two weeks were spent on the slope of the Tell to make certain that no important structure would be buried by the expanding dump. The slope area again yielded, as in the 1953 excavations, successive levels of Iron Age sherds, followed by Late Bronze, Middle Bronze and several levels of Early Bronze materials. At the base of the slope, Early Bronze materials appeared at the surface and continued through eleven levels, measuring a total of 7.15 m. We went into virgin soil 1.20 m. without finding a single sherd. The lower slope yielded the remains of the lower part of a great Early Bronze Age city wall, surviving to a height of 2.20 m. and measuring 3.5 m. in thickness.

During the last six weeks we excavated a main section of the Iron Age city of ancient Dothan on top of the tell. Towards the centre of the tell, on top of the Iron Age city, we found remains of the Hellenistic colony, attested by a Greek coin bearing the inscription 'Antiochus the King,' Hellenistic lamps and lamp fragments, five Rhodian jar handles, all inscribed, and sherds of typical Greek glazed ware. As we moved from the sub-areas closer to the centre of the tell towards the outer edge of the tell, the Hellenistic materials disappeared and we had Iron II materials in the upper levels.

On the top of the tell we excavated an over-all area 23 × 24 m. (circa 77 × 80 feet), which yielded the walls, houses and little streets of the Iron II period at ancient Dothan. In the upper Iron Age stratification we found an Assyrian bowl of the 'Palace-ware'

type, datable to the end of the 8th or the early 7th century (cf. G. Lankester Harding, 'Four Tomb Groups from Jordan,' *P.E.F. Annual*, VI, 1953, Fig. 21, 70). This Assyrian bowl, and a fragment of another, were among the many criteria which showed that in the first metre closer to the edge of the Tell we were in the first two centuries of Iron II (900-700 B.C.). So far no clear materials from the later part of the 7th century have appeared.

Other discoveries this season include an infant jar burial associated with Iron II lamps and sherds. The mouth of the large jar is somewhat smaller than the head of the infant, which makes it puzzling to determine with certainty how the child was placed in the jar. Not far from the child burial we found the skeleton of a man, also from Iron II, with fists still clenched and his back broken in two places, as reported by two doctors who visited us during the time we were excavating this area.

Towards the edge of the Tell we began to get Iron I materials at a depth of one metre. One cache yielded nine whole bowls and jars, including an unusual crater 40 cm. in diameter with fourteen handles about its circumference. Four of the handles ended in stylized animal heads.

This season we found some 130,000 sherds and recorded over 5,000 of them. The sherds from the slope again emphasized, as in the 1953 season, the more or less continuous history of ancient Dothan from the beginning of Early Bronze (*circa* 3000 B.C.) through Middle and Late Bronze and into the Iron Age (1200 B.C.). The pottery from the top of the tell showed the existence of a colony in the Hellenistic period (*circa* 300-100 B.C.) towards the centre of the tell, preceded in lower levels by the Iron II and Iron I cities.

AMMAN

Department of Antiquities

An important small temple has been discovered on the new aerodrome in the course of levelling operations, and was excavated by the Department of Antiquities under the direction of Mohamad Mustafa Saleh. A large quantity of objects and pottery has been recovered so far, and work is still proceeding. Finds include, among the pottery, Mycenaean ware, base-ring ware, Cypriote milk bowls, as well as local ware of the period. Among the objects may be mentioned fragments of stone vases in alabaster, diorite, breccia and basalt, small plaques of gold leaf, scarabs, cylinder seals, a bronze 'Khepesh' sword, bronze daggers, arrowheads, spearheads, axes, etc.

The lower part of some of the rooms was filled with ashes and burnt animal and bird bones, presumably from offerings. So far there is no indication as to whom the temple was dedicated, and it is in a curiously isolated position in the middle of a flat plain some 2 kilometres east from the centre of Amman.

The finds clearly indicate that it covers the period Middle Bronze II to end of Late Bronze, and it is the first time in East Jordan that these imported wares have been found in quantity. A full report will be published in a forthcoming *Annual*.

KHIRBET ISKANDER

Ashmolean Museum Expedition under the direction of Peter Parr

Two small trenches were dug at Kh. Iskander, in East Jordan, in June 1955, under the auspices of the Ashmolean Museum, Oxford. The site lies on the north bank of the Wadi el Wala, a few hundred metres from the point where the modern—and ancient—road from Amman to Kerak crosses the stream (map. ref. 223107). It was first visited by Nelson Glueck, and is fully described in Vol. III of his *Explorations in Eastern Palestine* (*AASOR*, XVIII-XIX (1939), pp. 127-129). It is a fairly large site, although low, and surface indications suggest that it consists of two distinct parts, an eastern and a western, on both of which the remains of house and/or fortification walls can be seen. The pottery collected by Glueck seemed to belong exclusively to the end of the E.B. and the beginning of the M.B. periods; that is, to what Glueck calls E.B. IV-M.B. I.

The first trench was dug on the eastern crest of the eastern half of the site, and reached bed-rock at a depth of almost 3 metres. Three main building places were discovered. To the lowest belonged the remains of a strongly built defensive wall, about 2 metres thick, built up against an artificially cut scarp in the natural slope of the hill. This wall was almost entirely destroyed, and was stratigraphically sealed by successive layers of occupation debris and beaten mud floors streaking down the slope, and representing a second building phase. Finally, the walls of new domestic buildings were set in this debris; and it is the remains of these buildings which appear on the surface today. The pottery from this trench has not yet been studied in detail, but that from the latest place seems to belong to a mixed E.B. IV-M.B. I culture (using Wright's terminology); while from the middle phase came a good example of a thumb-indented ledge-handle of early type (cf. Wright's Form 1a; and Jericho, pre-1st E.B. town wall: *PEQ*, 1952, p. 77, no. 4). The importance of this for dating the defensive wall will only be fully appreciated when the rest of the material is studied.

The second trench was dug on the northern edge of the eastern part of the site. Unfortunately there was insufficient time for bed-rock to be reached here. In the upper part of the trench several stone walls were uncovered, which seem to belong in general to the same phase as the latest walls in Trench I. From these levels came a mass of pottery which will probably make up into complete, or near-complete, vessels of typical M.B. I (E.B.-M.B.) form. Below these late walls was a thick deposit of alternating mud floors and ashy occupation material, seemingly of the same nature as that found in the second phase of Trench I.

A full report of the excavation will be published in a future edition of the *Annual*.

HANI' TEXT No. 73

Since writing the account of this text and drawings in the *Annual*, Vol. II, p. 30, Miss Florence Day of the Metropolitan Museum of New York has drawn my attention to an illustration of an animal in *Al Munjid* (1931 edition), p. 19 of the illustrations at the end of the book. This beast closely represents the animal shown on the reverse of our stone, and is called *tytl*, which is identified with *Antilope bubalis*. Dr. Morrison-Scott, of the British Museum (Natural History), does not, however, consider this identification likely, as the evidence for the existence of *bubalis* outside Africa is not satisfactory. (See Harper, F., 1945, *Extinct and Vanishing Mammals of the Old World*, Special Publication No. 12 of the American Committee for International Wild Life Protection, New York Zoological Park, N.Y. 60, p. 647.) He suggests a more likely identification is with the Oryx (*Oryx leucoryx*). I am much indebted to Dr. Morrison-Scott for the trouble he has taken in examining this problem.

In any case, the scene is now transformed into one of hunting, not of defence as I suggested before, and the various figures must be interpreted accordingly.

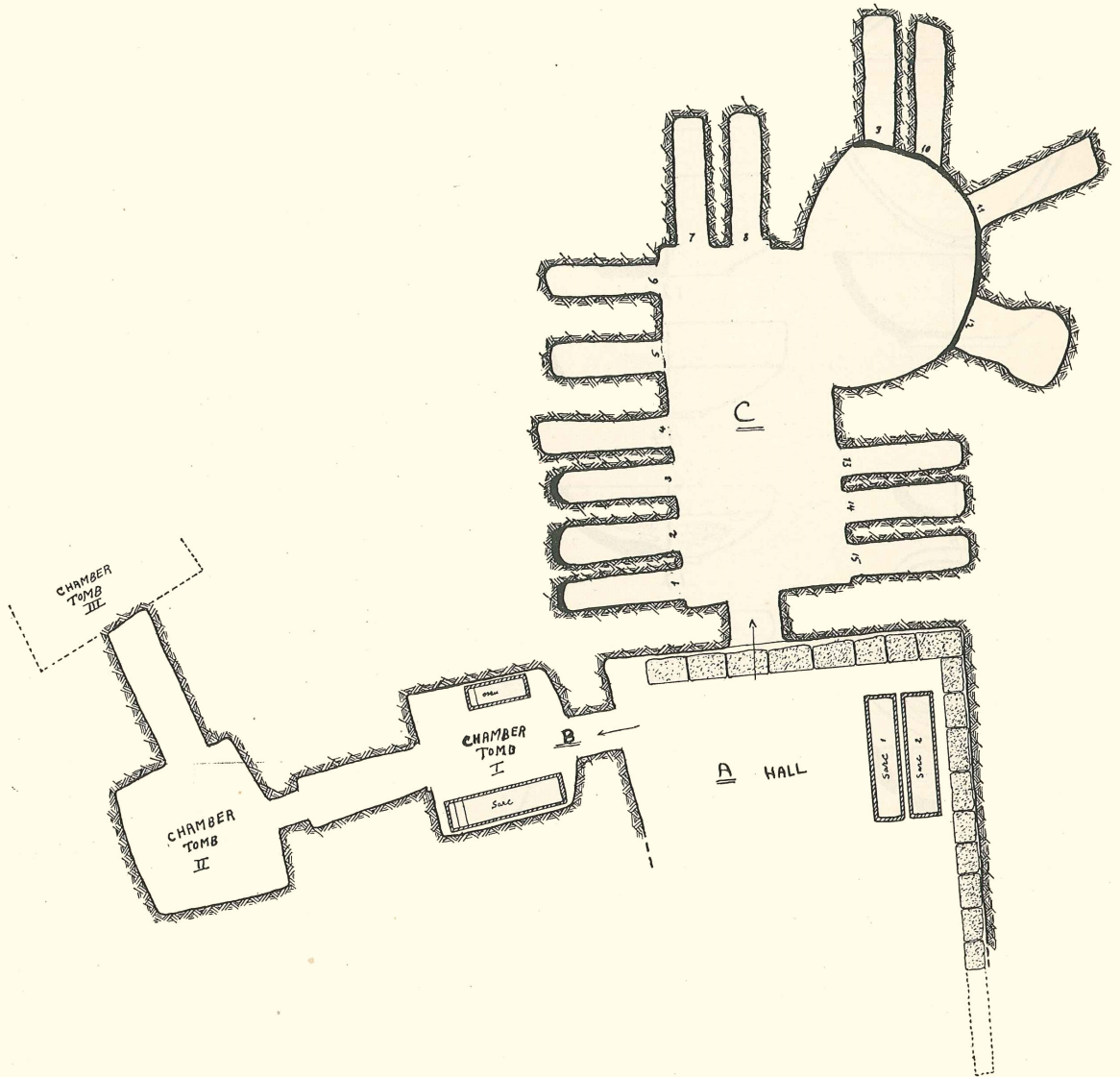
G. LANKESTER HARDING

ERRATA

Figs. 18 to 22 were inadvertently omitted from the *Annual*, Vol. II, and refer to the articles by Awni Dajani, viz.:

- 'An Iron Age Tomb at Al Jib.'
- 'A Hyksos Tomb at Kalandia.'
- 'An Herodian Tomb at Wadi el Badhan.'

Excavations at Wadi el-Badān



SCALE.

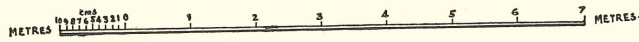


FIG. 18

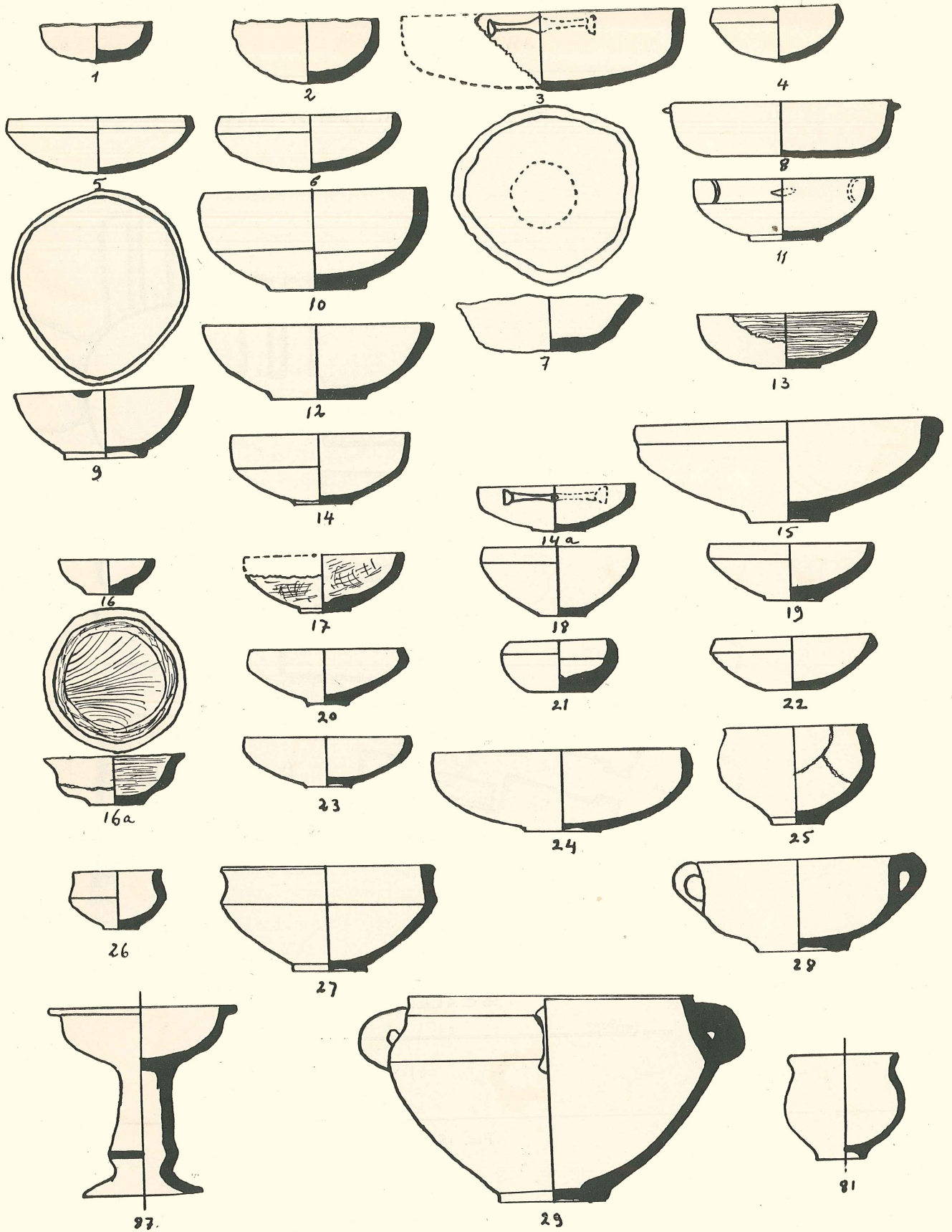


FIG. 19. Scale 1:5

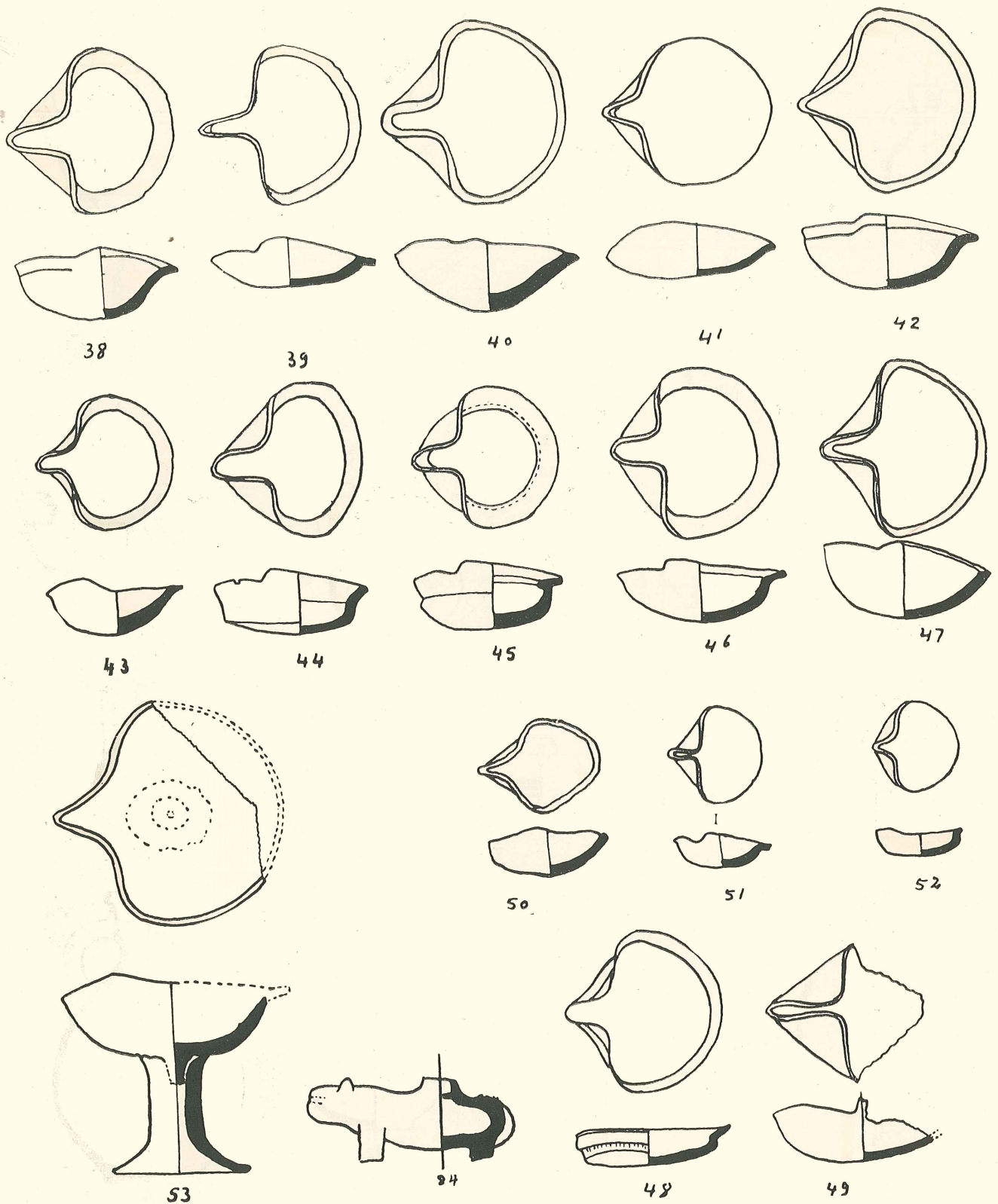


FIG. 20. Scale 1 : 5

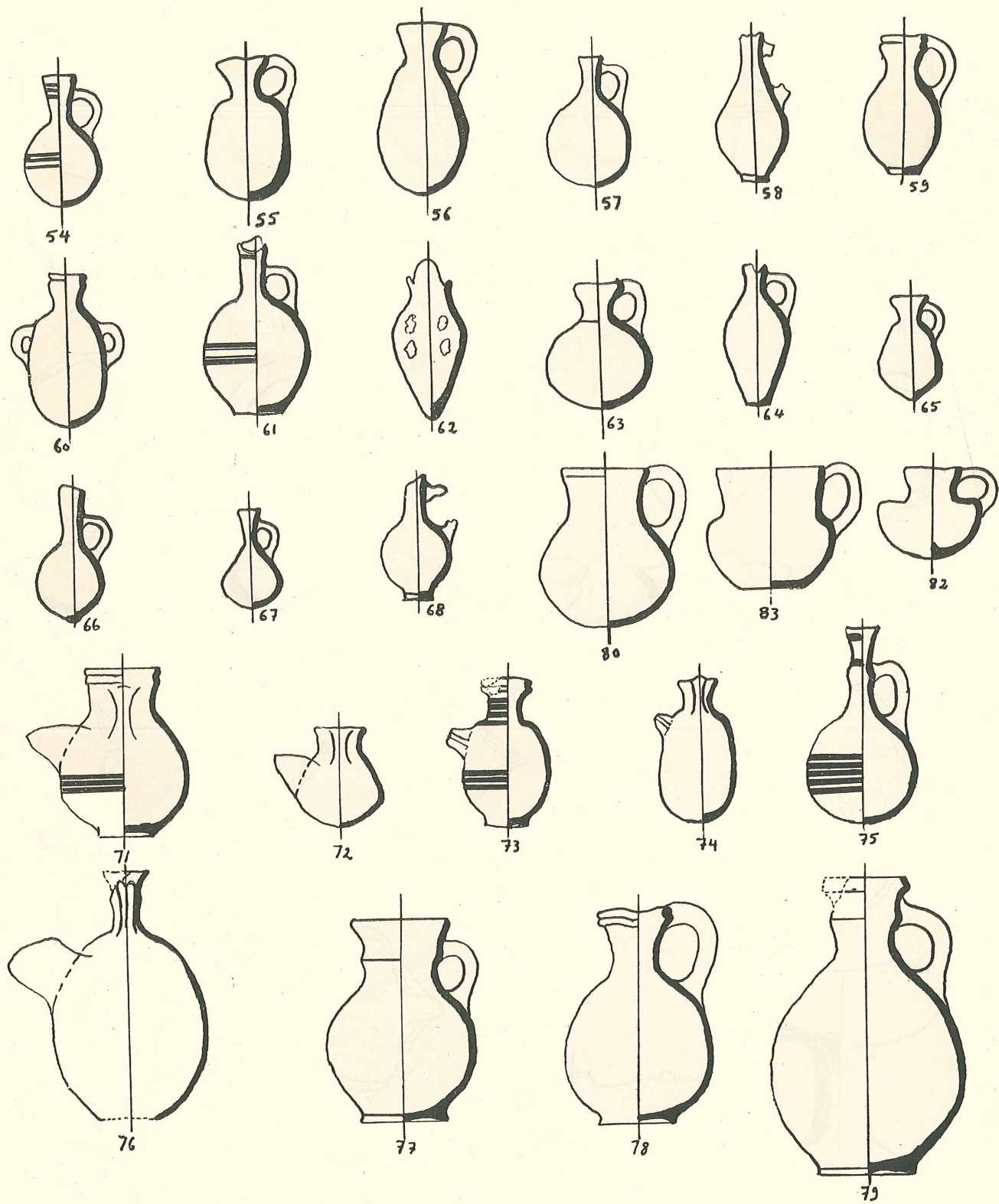


FIG. 21. Scale 1 : 5

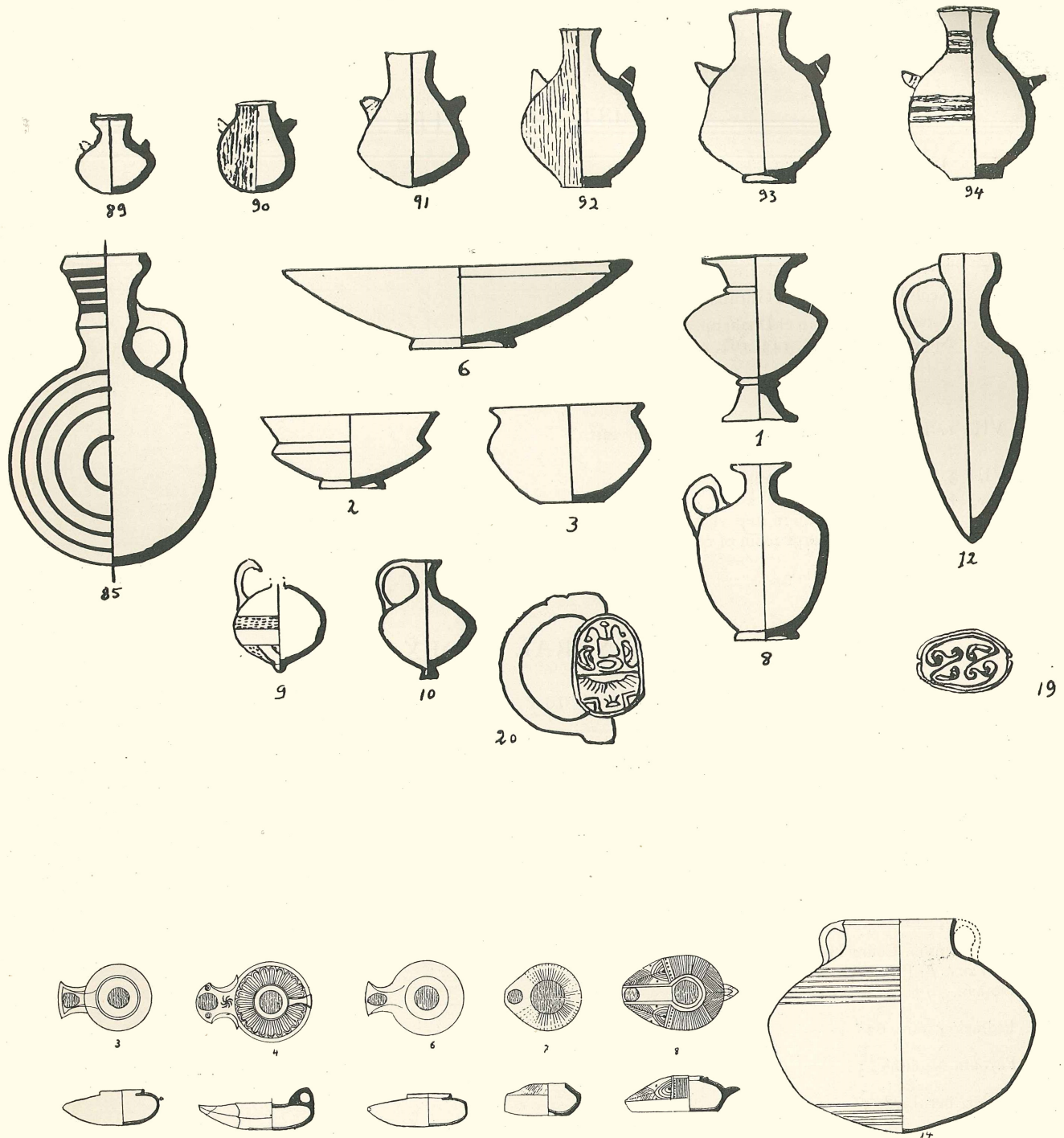


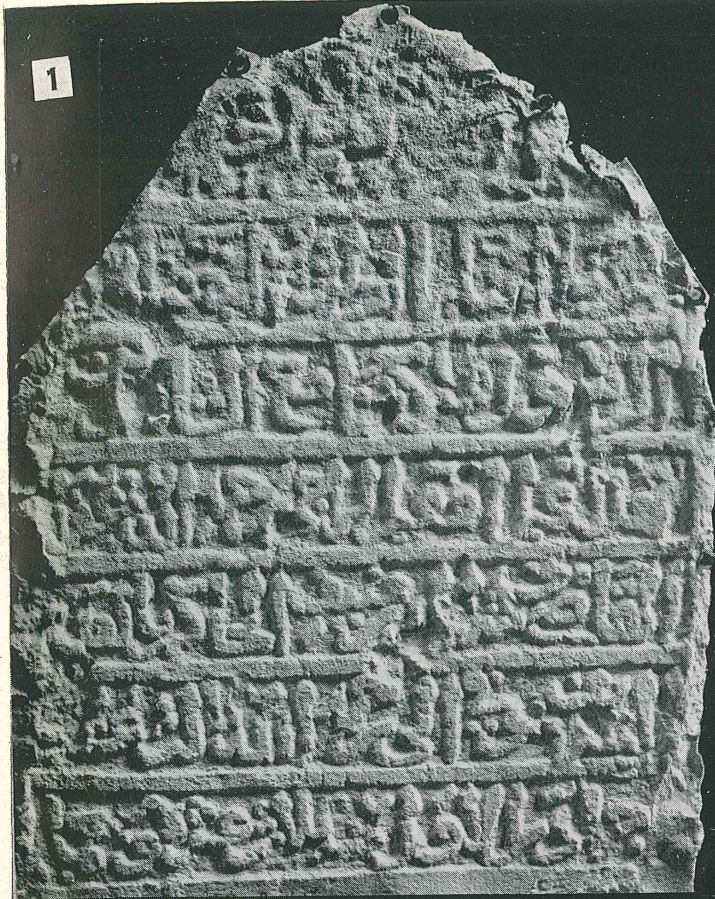
FIG. 22. Scale 1:5

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 6. Kh. Qumran, large room of congregation?

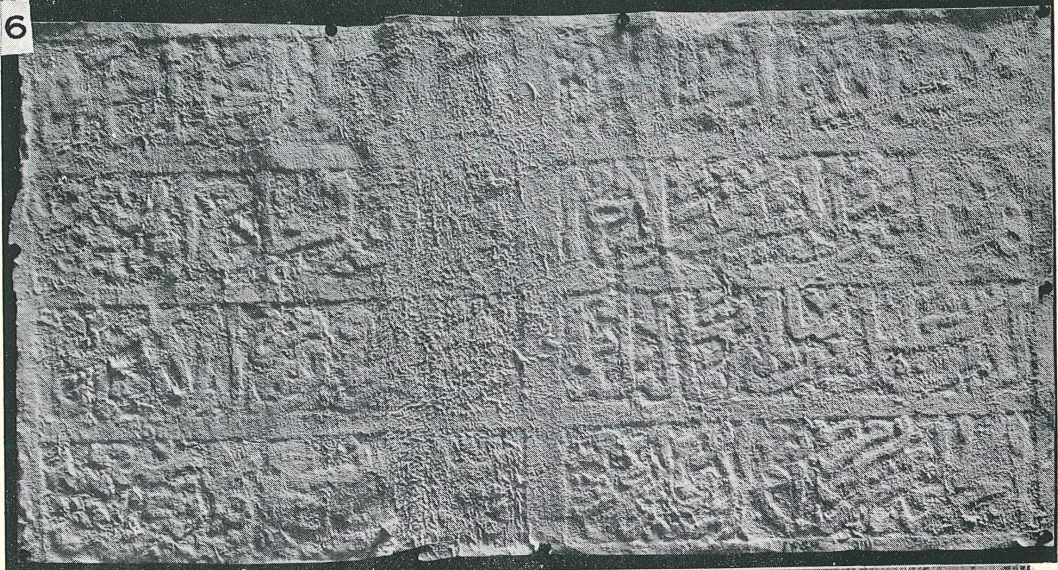
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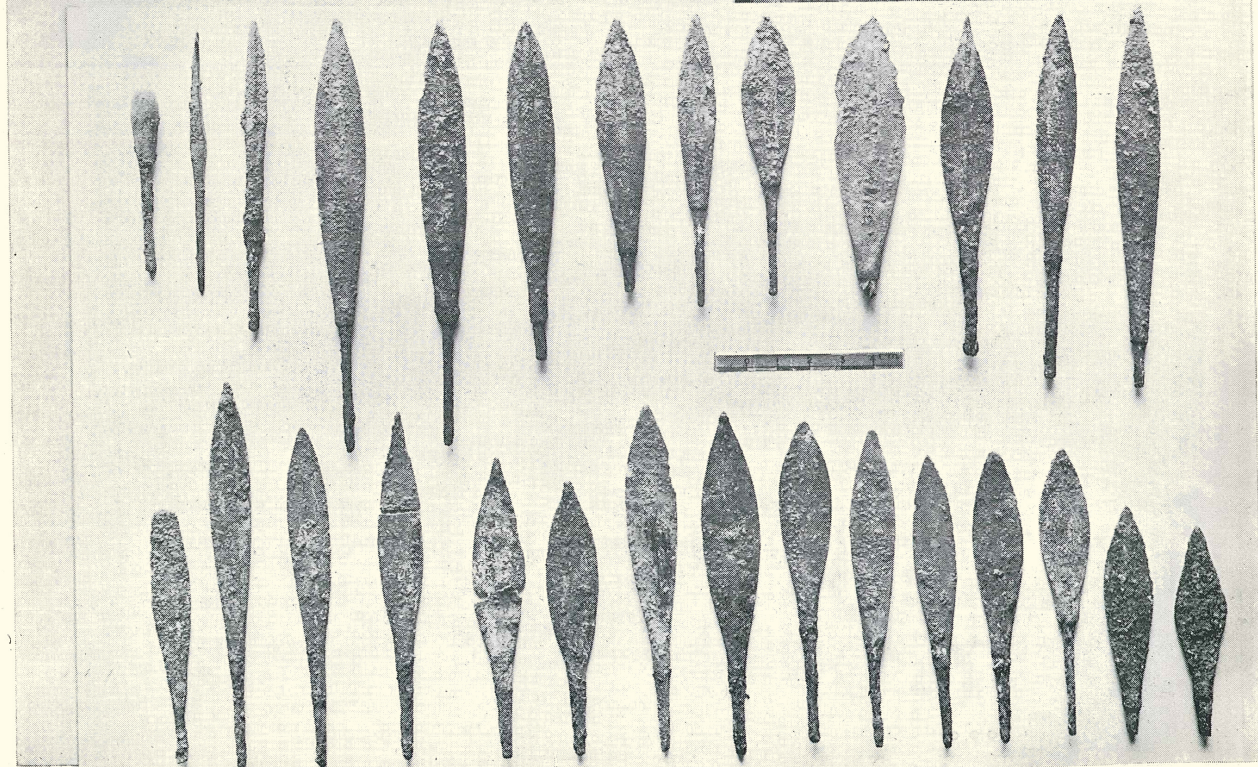
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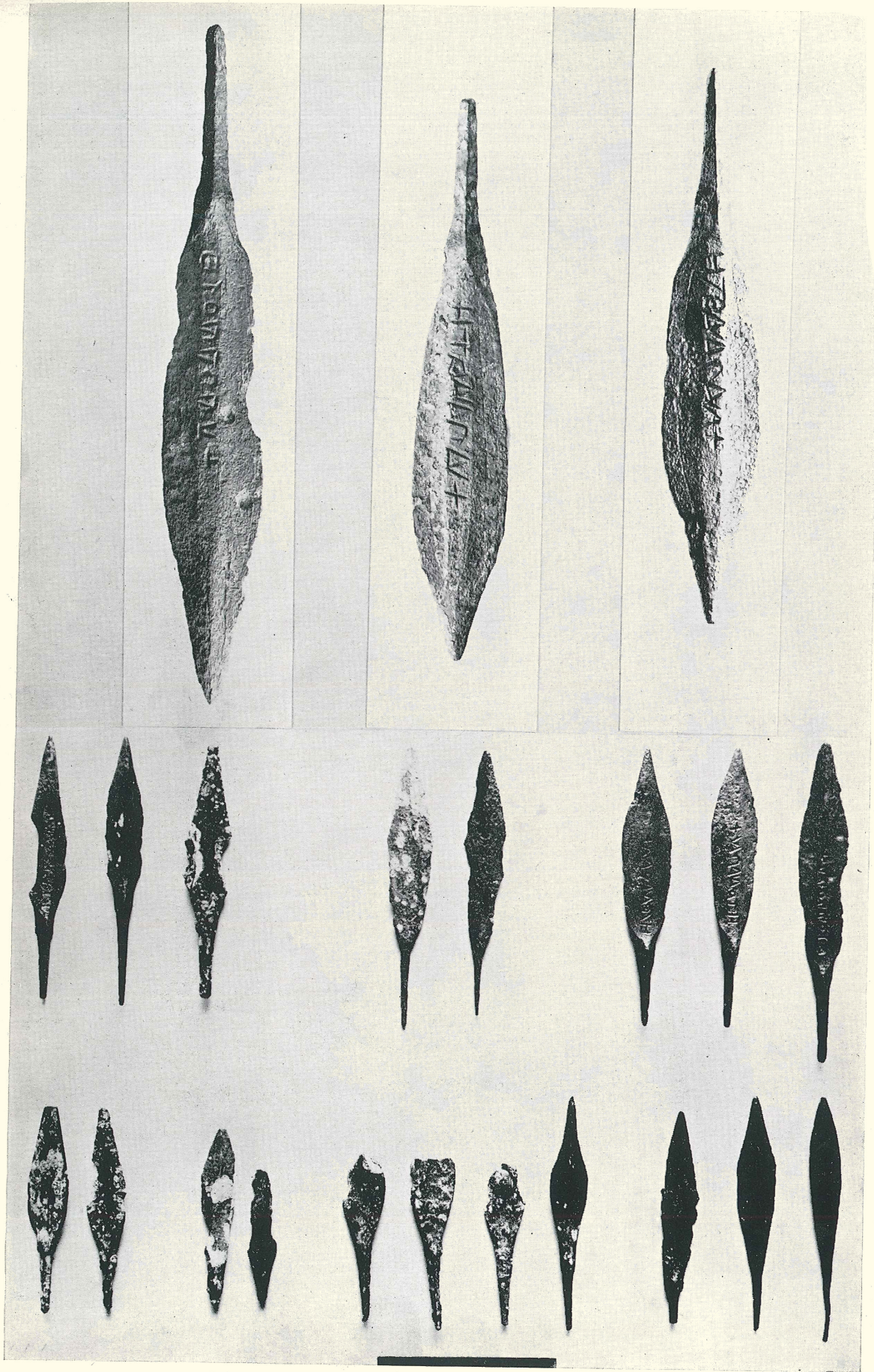


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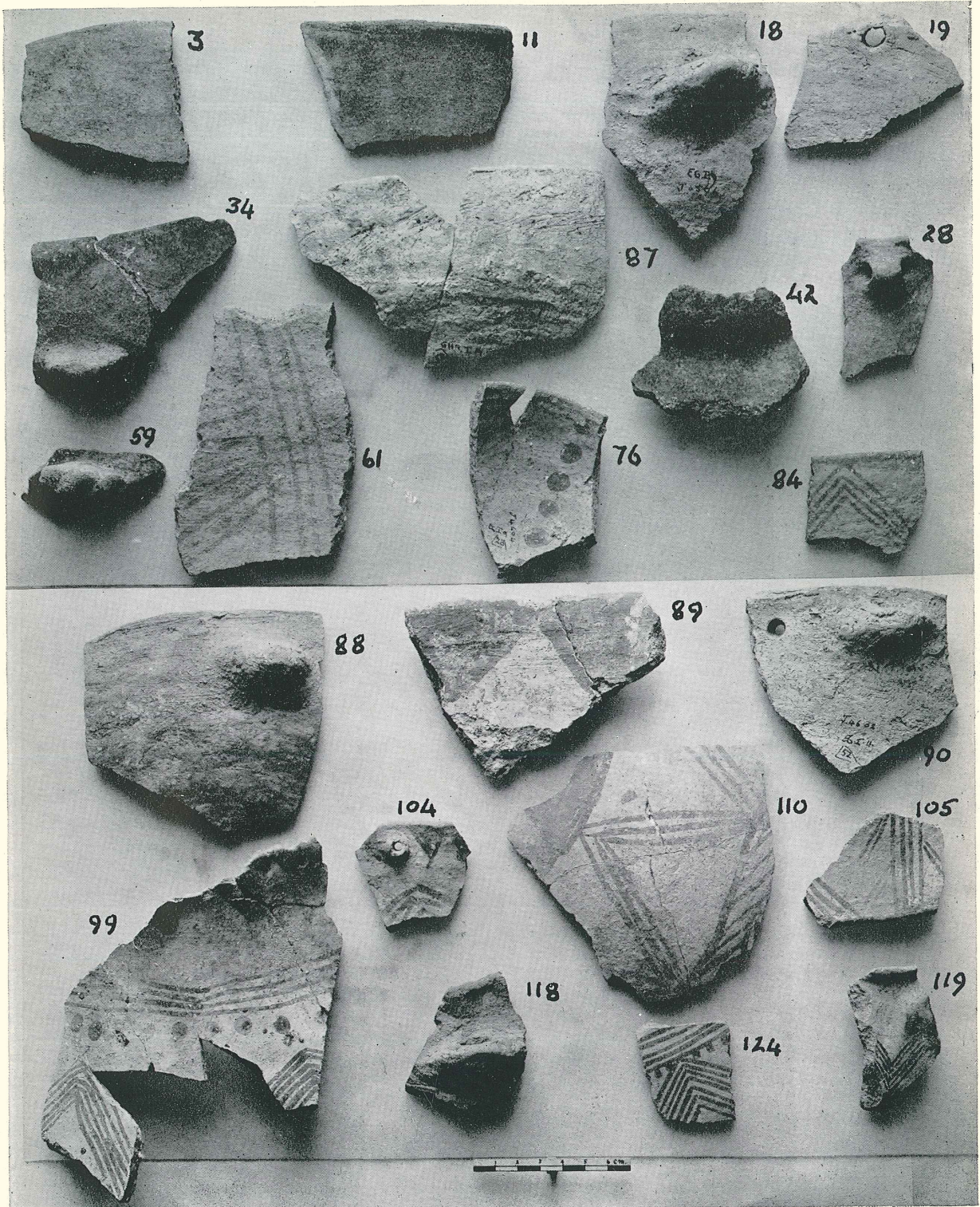


PLATE VI

