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THE CERAMIC INDUSTRY OF ANCIENT LEBANON IN
THE NEOLITHIC, CHALCOLITHIC AND EARLY BRONZE AGES

being a study

of

THE DEVELOPMENT OF THE CERAMIC INDUSTRY OF THE
NEOLITHIC, CHALCOLITHIC AND EARLY BRONZE AGES IN THAT
PART OF PHOENICIA WHICH NOW FALLS IN MODERN LEBANON.

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PREFACE.

The writer wishes to express her deep gratitude to the various Archaeologists who have helped her in the collection of material and supplied her with other information pertaining to this thesis.

To Emir Maurice Chéhab, the Secretary General of Services des Antiquités for his kindness in allowing me to excavate a Neolithic burial at Byblos and for giving me the facilities to examine the pottery store in the basement of the National Museum; to Mr. Dunand the Director of the Excavations at Byblos, for his advice and counsel and for answering my numerous questions on the problems I faced; to Mr. Harding and Miss Kenyon for their encouragement; to Mr. Dikaos, Director of Antiquities in Cyprus for his illuminating discussion on the Neolithic pottery of Cyprus; to Dr. Victor Luigis and Mr. Abd-el-Baki Youssif of the Cairo Museum for supplying me with all the information relative to the Pre and Proto-Dynastic Periods, exhibited in the Museum. To my Professor and advisor, Dr. D.C. Baramki, Professor of Archaeology and Curator of the American University of Beirut Museum, for his help, patience and guidance, for without him this work could never have been written.

Abstract.

In this thesis an attempt has been made at studying the development of the ceramic industry of the prehistoric era of Phoenicia from the Neolithic Age down to the end of the Early Bronze Age, roughly from about 5000 to 2300 BC. The ceramic industry and its development has been such a great aid in archaeology by virtue of the fact that pottery can be used as a criterion for dating as well as an index of the taste of the people making it.

So far no attempt has been made to classify the ceramic industry of Phoenicia and the present writer feels that in doing this she will be contributing in some small way to the study of the archaeology of the country.

It has been possible in the present study to place the pottery of the Neolithic Age of Phoenicia in a chronological order; to divide the pottery of the second half of the Chalcolithic Age into two phases and to classify the pottery of the Early Bronze Age into four distinct consecutive phases: First the pottery with the vertical burnishing which appears at the beginning of the Third Millennium, the lattice burnished pottery which follows soon afterwards, the monochrome painted

pottery which makes its appearance in the Fifth Dynasty and finally the highly burnished red slipped pottery with a combed design which comes into use during the Sixth Dynasty.

The above described classification will no doubt be of great help to Archaeologists wishing to dig in Lebanon and may be used as a guide for their work apart from the fact that it forms a useful groundwork for a more extensive and detailed analysis of the ceramic industry of the country.

CHAPTER I.

WHERE IT ALL BEGAN.

or

THE FOUNDATIONS OF CIVILIZATION.

In this paper it is proposed to study and classify the very earliest pottery made by man in that part of Phoenicia which falls within the present boundaries of modern Lebanon, and whenever Phoenicia is mentioned it is to be remembered that this restricted area of the country is to be inferred, unless otherwise stated. Only published material and the pottery exhibited in the National Museum of Beirut and in the Archaeological Museum of the American University of Beirut has been used in the preparation of this present work. A lot of material has been discovered in recent years, especially in the excavations at Byblos, which is still awaiting publication, yet it is possible from the material available to classify the pottery and draw comparisons and conclusions regarding certain trends in its manufacture which will be of help to scholars. The periods under examination are the Neolithic, circa 5000-4000 BC., Chalcolithic, circa 4000-3100 BC., and the Copper Age, generally known at the Early Bronze Age, covering the years, circa 3100-2200 BC. The Third Millennium BC. is generally referred to as the Early Bronze Age, but this is a misnomer as the alloy bronze was unknown in the early part of the age, and Copper Age would be a more appropriate term. However, as the term Early Bronze has gained general acceptance

and usage among scholars, and as the term has appeared in a large number of publications, the writer hesitates to use the term Copper Age for fear of creating confusion, and will reluctantly use the commonly accepted term.

It is essential that before we begin a detailed discussion of the subject in question, to probe into the earlier evolutions of man's culture that eventually led to the invention of pottery, run through the periods of this culture as a whole, and point out what service the invention of pottery has rendered to the study of Archaeology and to civilization.

In the Middle Palaeolithic Age, circa 180,000-80,000 BC., while man still lived in the simplest of cave dwellings, fire was first brought under control and put to use as a necessity for livelihood, comfort, security and communal economy. ⁽¹⁾ Also during this same period, the imagination of primitive man harnessed some of the simple things surrounding him, to a useful or a decorative purpose. For example, he clothed himself with animal skins, cooked his venison over a fire, decorated himself with sea-shells, and hunted with flint tools. These four integral parts of Middle Palaeolithic man's every day life were to become, some 100,000 years later, the rudimentary means necessary for the introduction of the early ceramic industry. In the Upper Palaeolithic Age, circa, 80,000-10,000 BC., ivory and bone tools were introduced and more elaborate hunting weapons, such

(1) Garrod, D.: The Stone Age of Mount Carmel.

as the harpoon and bow and arrow, were added to his repertoire of arms. This was at a time when self preservation was the motivating force of life. In other parts of the world, namely France and Spain, beautifully expressive murals depicting everyday life of this period have been discovered on the walls of man's dwelling caves. None of these early signs of the emergence of an artistic and creative culture has been discovered in Phoenicia so far, but let us remember that the climate of the Eastern Mediterranean is not conducive to the preservation of such expressions of art through the ages.

The Mesolithic Period, 8000-5500 BC. ushered agriculture and the domestication of animals into the Near East. Man's abode was still in the numerous natural caves of the region; however, there was the addition of a small patch of land, generally outside the entrance of the cave, cultivated for private use. It was during this period that man first descended from the hills into the plain, and evidence points to the Natufians as the first folk who attempted to expand this newly discovered form of economy.⁽¹⁾

The Neolithic Age, the period of one of the greatest and most useful discoveries of man, pottery, also marks the arrival of a new folk, the Mediterranean Race, in Phoenicia, who brought this new culture to its ultimate culmination. This communal life of the Neolithic folk, which started somewhere about 5000 BC., witnessed the introduction of architecture in

(1) Kenyon, K: Digging up Jericho.

the form of a temporary shelter. In the beginning, these were constructed of bundles of reeds, tied together and placed in four corners. Rush mats were stretched between them and others on top of these bundles to form rudimentary walls and a roof. There are no remains of this type of shelter in Phoenicia on account of the obliteration of any impressions of the reed and rush mats by the excessive rainfall and the continuous occupation of the site; but there is evidence of the use of such a hut in Egypt during the same period, remains of which have come to light in recent years in the form of impressions of the reeds and rush mats left on the mud at Naqada. When by bitter experience it was found that reeds and rush mats were of not too lasting a quality, and the necessity for a more permanent and more durable abode arose, man's ingenuity manifested itself and a more durable home was developed which took the form of a mud hut. A large number of such structures, or rather the foundations of such structures, have come to light at Byblos, which belong to the Neolithic Age, 4750-4000 BC. The early huts were constructed of lumps of mud, hand fashioned into shapeless bricks and then placed on a crude foundation of collected stones, "pierres de ramassage". On top of these, crude walls were set up, over which wooden rafters were placed. The rafters were necessarily

(1) Childe, V.: New Light on the Most Ancient East.

(2) Murray, D.: The Splendor that was Egypt.

small and short due to the lack of proper tools or implements for felling trees. This resulted in the construction of a narrow rectangular house. ⁽¹⁾ Above these wooden rafters came reeds and leaves or animal skins, with a final coating of mud tempered with straw. The floor consisted of a paste of crushed limestone; and the walls were plastered inside and outside with mud of the same quality as the bricks. The new challenge of living together in an organized community was met with courage, determination and patient hard work.

At this time, during the pre-pottery Neolithic Age, before 5000 BC., stone vessels made their appearance in a settlement in North Iraq, Jarmo by name; ⁽²⁾ and perhaps some may have turned up at Byblos, but have not been published so far.

According to the evidence at our disposal the invention of pottery occurred almost simultaneously in various parts of the Middle East. The approximate dates given to this development are as follows:

North Iraq	Jarmo	5000 BC.
Egypt	Merimde	5000 BC.
Egypt	Tasa	4900 BC.
North Iraq	Hassuna	4800 BC.
Phoenicia	Byblos	4750 BC.
Central Iraq	Samarra	4600 BC.

In the pre-pottery Neolithic Age (5500-5000 BC.) the animal

(1) Bulletin Du Musée De Beyrouth, XII, 1955.

(2) Childe, G.: New Light on the Most Ancient East.

skin had become more than a piece of clothing and was now used as a vessel for transporting and storing liquids. A few stone vessels were laboriously cut by hand, no mean feat considering the tools at their disposal. The furniture of the huts, consisting of such inflammable materials as rush mats, wicker baskets, combined with the timber roof, led no doubt to numerous conflagrations. The fact that mud, from which the walls and roof were made, when subjected to intense heat became impervious to water, was eventually brought to their attention. To people of imagination, the next step would be obvious, and after seemingly endless trial and error, success and frustration, pottery came into being. Dr. Schaeffer found some sun dried pottery at the Neolithic level at Ras Shamra, and he believes that after an accidental fire it was noticed that such pottery became impervious to water. To whom does civilization owe this great debt? It would seem logical that woman was the early home experimenter. Man spent his days out hunting, fishing and seeking means of livelihood for himself and his family; whereas, woman was left at home to mind the children, tend the crops, cook, sweep the floors and to use her imagination and spare time in pottery experimentation. It is generally conceded now that it was woman who ushered agriculture into world history by experimenting with edible

(1) Les Annales Archéologiques de Syrie, VIII et IX, 1958 & 1959; pp. 171-178.

(2) Childe, G.: What Happened in History, p. 49.

seed, while her consort was out hunting and when she had little else to do. Is it not conceivable that she also was responsible for the invention of all primitive industries such as the invention of pottery, weaving and wicker work?

The early pottery was hand made, and at first done by the same methods and techniques used in the construction of their houses, lump after lump of clay, fashioned by hand and built up into a crude shape, then smoothed over with mud of the same consistency and finally fired. A straw binder, such as that used in construction, was also employed. It is only possible to make pots with upright sides and a cylindrical form over a flat base by this method. However, more sophisticated forms became desirable in order to satisfy an innate aesthetic taste. The next step was to make the pot from a number of rings of clay, of unequal diameter, set one over the other in an effort to get a curvilinear vessel, see Plate III, 2. Later the wicker baskets provided a sturdy shape for a clay lining, and after firing left not only a good pot, but a basket-pattern decoration. When the wicker basket was dispensed with, the pots were incised before firing in imitation of the impression of wicker work in clay. Other simple decorations were made with the available tools, such as sea-

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- (1) Childe, G.: Man Makes Himself, pp. 76-77.
(2) Albright, W.: The Archaeology of Palestine, p. 66.
(3) Childe, G.: Man Makes Himself, p. 78.
(4) Childe, G.: Man Makes Himself, pp. 76-79.

shells with which it is possible to incise a pleasant rippled pattern, Plate XII, 1; some sharp implement, such as a fingernail or piece of bone was also used and produced the deeply incised line decoration so typical of the Neolithic Period, Plate VIII; strong hollow reeds were an obvious and handy tool for the polka dot impressions seen on Plate X. ⁽¹⁾ Later still the pots were colored and painted with dyes from local plants, Plate XIII. A method of decoration known as burnishing was employed with the use of river pebbles, producing a highly polished surface, Plate XV. Towards the end of the period, the pots witnessed the application of a slip, a fine clay solution of the same consistency and heat coefficient as the pot. The pot was dipped into the solution, or sometimes the slip was applied with a brush before firing. This became extremely popular in later periods, as we see in the smaller vessels of the Early and Middle Bronze Ages. Summing up, we thus see that it took the invention of fire, the development of a number of primitive implements, the removal of abode from caves in the hills to houses in the plain where clay was available, and the introduction of community life, together with the development of an artistic taste, combined to give us the earliest pottery.

The knowledge gained in the handling of clay led to the production of molded bricks for house construction during the

(1) Revue Biblique, LVII, 1950, pp. 583-603.

Chalcolithic Period. However, the "pierres de ramassage" foundation continued, but houses took on a circular or obsidal plan as more implements for lumbering were available and it was possible to fell larger trees.

The ceramic industry developed, but not quite as extensively as might have been expected, perhaps because of the advent of a new folk of a more primitive culture and perhaps due to the discovery of copper which produced new implements. This new industry, metallurgy, absorbed part of the time formerly devoted to other industries, such as ceramics, textiles and wicker work. The basic designs of the Neolithic Age continue to be used, but in a greater variety and in much larger quantities. Great strides were made in the development of shapes and forms, but the composition of the clay deteriorated, and a large amount of grey and white grits were used as temper. On the whole, also, the pots were poorly fired.

The use of quarried stone in construction (at first prised off the parent rock, and later quarried with proper (1) tools) copper axes for felling trees, coupled with an expanding industry and the growth of a more refined and sophisticated community, came in with the Early Bronze or Copper Age, 3100-2200 BC. The direct result was the rise of substantial and luxurious houses, built for man's comfort and ease. For the first time the abode becomes a place of relaxation, where man

(1) Revue Biblique: Ibid.

could while away his leisure hours, instead of merely a place in which to sleep and protect ones self from the elements.

Walled towns then mushroomed over the ruins of the Chalcolithic sites of Phoenicia, and into history dawned the era of urban-
(1)
ization.

There was more time to spend on the decoration of pottery and the artistic taste of the people was given full scope. These trends, coupled with the new desire for luxury gave rise to a large repertoire of fine decorations. The ceramic industry now became a closed guild and craftsmen flourished and gave vent to their esthetic sense. Forms developed into more delicate, fine, elongated shapes due to the coming of the slow moving
(2)
wheel. The lattice burnishing of Plates XLII-XLIV, is extremely delicate and tasteful, and most delightful to the eye. This ware seems to have been made first in Byblos and this fact gives us an inkling of the prosperity the town was enjoying. The painted animals and jars, Plates XLV-XLVIII, of Phase IIA are highly imaginative and result from the close contact of Byblos with the culture of the Third Dynasty of Egypt, which was due to the large volume of trade in timber at the time. The main motif of Phase IIB is unique, and consists among other things, of pellets of white pigment added over a burnished red slip. Forms developed into more delicate and fine shapes in an endless number of varieties. The pottery contains a certain

(1) Revue Biblique; *ibid.*

(2) Idem.

amount of fine flint or quartzite grits, and is of even consistency and well fired.

Thus pottery, its development, forms, ware and decoration are of the utmost importance to the Archaeologist and has established the most essential criteria for dating levels in an excavation. First of all, is its durability. Metal in process of time corrodes and turns into a fine green powder. Houses and buildings deteriorate and are destroyed by the ravages of time and history, leaving only foundations and fragmentary walls as a solitary witness of their past glory. Glass shatters. Civilization moves forward, old cities are razed, leveled and rebuilt again, but pottery remains. Pottery, once fired, stands up to the elements and sometimes it is possible from one sherd of a rim or a handle to reconstruct a pot almost completely. Broken pottery can be mended and restored in such a way as to deceive the eye of the amateur (see some examples of this exhibited in the National Museum of Beirut).

Secondly, there is the decoration, shape and form, peculiar to every period, culture and area. In areas, such as Phoenicia, where no early frescoes have been found, our only inkling into early art and our yard-stick for the artistic taste of the early ages, comes from the forms and decoration of the pottery. Painting of pottery before firing renders it indestructible and it is only necessary to find one small piece of it to gain knowledge otherwise unattainable.

Thirdly, and this is extremely valuable, is the universality of pottery, from Neolithic times down to the present day. Clay was and is always available, pottery was used by everyone, and for that reason can be utilized for dating purposes because of the long span of nearly 7000 years of its use. In its early existence, it was used by rich and poor alike; but with the changes in economy and developments of other media, the pottery became as classified as the people who owned it. It is quite easy to see what positions were held by various men in the social and economic structure of the day by the amount and quality of the types of pottery discovered in their houses or tombs. A large amount of poorly made pots in the level of a site, which should otherwise have had a higher standard, indicates a lack of prosperity. It is here, as in many other instances, that History must look to Archaeology for help. (1)

Thus pottery acts as an economic barometer for ancient times. All these facts, separately or combined, make pottery the most accurate dating criterion. It can be established that certain forms, decorations, ware and color (particularly in the earlier periods) when found on a scientifically excavated and properly recorded site, can be used to date a level accurately within one or two hundred years. This dating of pottery according to its location in a stratified mound is important particularly in the decades spanning the end of one

(1) Garrow, Duncan: Corpus of Palestinian Pottery.

period and the beginning of another. Without the careful excavation and complete records of the excavators of Phoenicia, this paper could never have been written; to them Archaeologists owe a great debt.

The excavated sites in Phoenicia are numerous but many others await the spade; particularly the many historical mounds, locally known to as "Tells" that dot the coast of the whole of ancient Phoenicia from the mouth of the Orontes in the North, to the Bay of Acre in the South.

The historical sites of Phoenicia may be classified under four groups. First of all we have the prehistoric stations and caves that are to be found in Ras Beirut, Furn esh-Shubbak, Nahr Beirut, the promontory of the Dog River, Nahr Ibrahim, Nahr el Jauz, Adloun and many other places. The caves and rock shelters of Ksar 'Akil near Antelyas, and the caves of Jezzine which have not been excavated up until the present time.

The second group of sites are the artificial mounds mentioned above, the occupation of which sometimes goes back as far as the Neolithic or at least the Chalcolithic Age, with the Hellenistic or Roman Periods occupying the topmost layers.

The third group are the visible ruins of cities or villages, sometimes accidentally discovered by bulldozers involved in the great construction boom of the country of Lebanon, sometimes they are visible in and among towns still lively with activity. Into this category falls Byblos, from whence came a great deal

of the important information used in this paper, and the cities of Sidon and Tyre which are under excavation at present.

Fourth, there are the ancient tombs and cemeteries, such as those in the vicinity of Sidon, which have yielded much of the Chalcolithic and Bronze Age pottery. Pottery in tombs is generally in an excellent condition. These cemeteries of the past were generally situated, with the exception of those of the Neolithic and Chalcolithic Ages, outside the city walls. The Neolithic burials are to be found near the houses in cradle or cist like graves made of an upright row of stones set in a circular or elliptical plan. ⁽¹⁾ Some have a sort of floor of pebbles. The graves contain a body, laid in a half-flexed position and the most useful pottery of the day, considered necessary for the departed, is placed around him.

The Chalcolithic period introduced a new method of burial. The body, still in the pre-natal flexed position, was placed in a large jar. These jars are of three main types with three known exceptions. (A) There are large jars, over a meter in length, with two rounded handles near the top and two a short distance above the base; (B) Jars of the same nature as (A) ⁽²⁾ but with angular handles; (C) Small jars, 58 cms. in length. ⁽³⁾ One jar had a form of pictographic art painted on it. The exceptions include one jar found in a cave burial that has five

(1) Bulletin De Musée De Beyrouth; XII, 1955.
(2) Dunand: Fouilles De Byblos, Vol. I.
(3) Revue Biblique, LVII, 1950.

handles and is decorated with two bands of a pinched rope pattern, one third of the way down the jar. Another is a globular jar with a round base and a narrow opening and the third is an ellipsoid jar with no handles at all. In these jars, located near the mouth, head and hands of the body, were placed the small bowls, cruses and small jars containing food and drink for the deceased. Some jars contained metal objects, such as silver earrings and finer rings, but generally no weapons were placed in the tomb; and when they were found, they were bent so as to render them useless to the new "owner"⁽¹⁾. Were these a peaceful folk who did not use many weapons? Were they afraid of the dead, or were there just not many weapons to be spared? In the one phase of the Chalcolithic Period where the jars were placed in common rock-cut caves, there were no metal objects whatsoever, which makes the terminology for these Late Chalcolithic (A), within the realm of possibility.⁽²⁾ In the other phase of the Chalcolithic, which might be called (B), the practice of burial beneath the floor or among the houses, came into being. Does this abrupt change in burial methods mean that a new folk appeared in the Chalcolithic Period, bringing its own culture and in time, with the expansion of the population, the labor of the excavation of caves in the rock became an arduous and time consuming task and was abandoned for easier burial near the home?

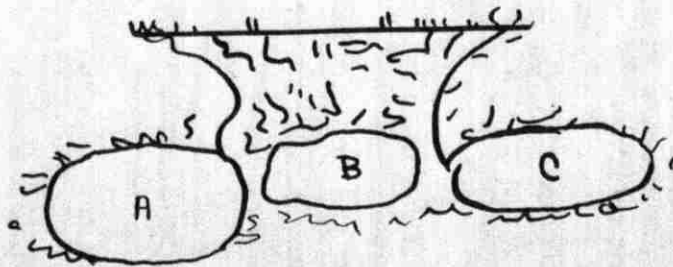
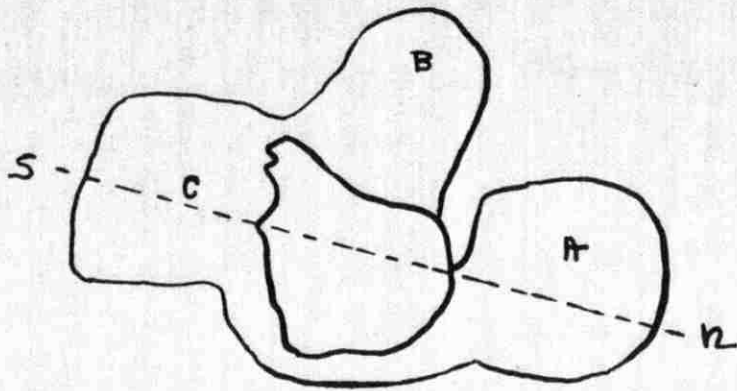
(1) Dunand: Fouilles de Byblos, Vol. I.

(2) Idem.

The Early Bronze Age tombs were cut in the face of the
(1) rock (See Plate I). (2) The bodies were laid along the sides of
the cave in an extended position. This very abrupt change in
burial customs must show the advent of a new folk or influence.
Vessels, which no doubt contained food and drink, were deposited
near the body.

It is intended in this paper to examine the pottery
discovered in the various sites of ancient Phoenicia which
falls within the boundary of modern Lebanon, explain its use
as a criteria for dating, describe it according to the ware
used, in other words: its composition, color and texture;
method of turning, firing and decoration; the type of binder
used, whether straw, flint, quartzite or limestone; the form
which is also of great importance as certain shapes are peculiar
to certain periods and predominate over all others; under this
latter heading comes the shape of the body and the type of rim,
neck, handles and bases used.

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- (1) Bulletin du Musée de Beyrouth, I.
Tombs 5 & 6 at Lebe'a, p. 42 et seq.
- (2) This is actually a Middle Bronze Age Tomb but it does not
differ basically from tombs of the Early Bronze Age.



CHAPTER II.

THE DAWN OF THE CERAMIC INDUSTRY.

According to a reliable source of unpublished information,^{*} no remains of the pre-pottery Neolithic Age were found at Byblos, but there are three stages of pottery and two of flint. A carbon 14 dating test gave the Middle layer of Neolithic Byblos an approximate date of 4750 BC.[†] and the Chicago Carbon 14 dating for the top layer is approximately 4400 BC.[‡] Mr. Dunand states that in the Neolithic Age of Byblos nine different types of pottery were produced, but these are not chronologically classified.⁽¹⁾ The nine different types may be classified as follows:⁽²⁾

1- Pottery without surface treatment; color, greyish brown to brick red; surface decorated with incisions made by a spatula with four or six teeth. Pottery with a scratched (griffé) surface, the scratching is sometimes short or elongated.

Exception, straight lines were incised with a double point. Forms; globular vases predominate with large openings or with funnel like rims.

Plate XII, 1.

2- Vessels cruder in appearance: Color inclined to red, deeply incised lines three mms. in width and depth.

* - Mr. Dunand kindly gave me this information in one of the few discussions we had together.

(1) Revue Biblique, LVII, pp. 584-586.

(2) This is a free translation from an article in French by Mr. Dunand in Revue Biblique, LVII, 1950.

Among these, triangle and herringbone patterns predominate, combined with scratching.

Plate VIII, 2.

- 3- Finely levigated, drab ware, well fired; burnished on the outside and inside; certain fragments are blemished with black spots; when beautifully polished, the surface has defects, the sides are ornamented by circles in two rows of incisions or with a scratched decoration, or long line, incised on the surface after polishing. The bowls and cups are deep and the sides are curveilinear. This is a common feature in this series. A vase with a carinated body, scratched on one side and polished on the other; the rim of a bowl with thick walls.

Plate IV, 2.

- 4- Grey ware, similar to the preceding but less fine and not so well burnished. Same decoration, deeply incised horizontal incisions, sometimes broken and sometimes filled with white paste.

Plates VII, 2; V, 2.

- 5- Rough pottery of grey ware; tempered with large limestone grits with micaceous substances, underfired; traces of rough painting in ochre or dark brown; this particular type of pottery is peculiar to large vessels.

- 6- Rough pottery of red ware, red slip sometimes flowing over into the interior of the vessel; decorated with incised oblique lines in three bands, one on top of the other; parallel white bands in some fragments.

- 7- Rough pottery of white ware tempered with micaceous or limestone grits; entirely covered with a white slip, on to two mms. in thickness.
Plate XIV.

- 8- Fine pottery of dark red ware covered with a black slip and punctuated by large fingernail scratching in horizontal lines.

- 9- Pottery of dark grey ware, tempered with limestone grits, inside and outside black with firing except thick pieces of large jars which don't have the firing on the outside. Rope pattern decorating everted rim found on one sherd. Globular in form, the neck curves outwards.

It is very difficult to establish a sequence dating for these types; but wherever possible, classification by stratification, when available, will be used to determine a possible sequence in the conclusion of this chapter. The pottery illustrated in this chapter falls into six general groups, namely, dippers with handles, cups, small bowls, large bowls,

jars of varying sizes with or without handles of either the cord-eye or the loop variety, and vases. Each vessel will be fully described according to type, ware, form and decoration. The scale is 2.5 unless otherwise specified. All Neolithic pottery is handmade and tempered with flint or quartzite grits, and occasionally with straw. It was not possible for the present writer to examine the pottery internally, therefore only those features and characteristics which can be detected on the surface will be mentioned. All published references are to the Bulletin du Musée de Beyrouth, IX, 1949-1950; XII, 1955; XIII, 1956.

PLATE II.

A dipper of cream ware; numerous flint grits; flat base; globular body; wide, long neck; one loop handle attached below rim to shoulder; no decoration.

Provenance: Byblos; Early Neolithic; not published but on display at National Museum.

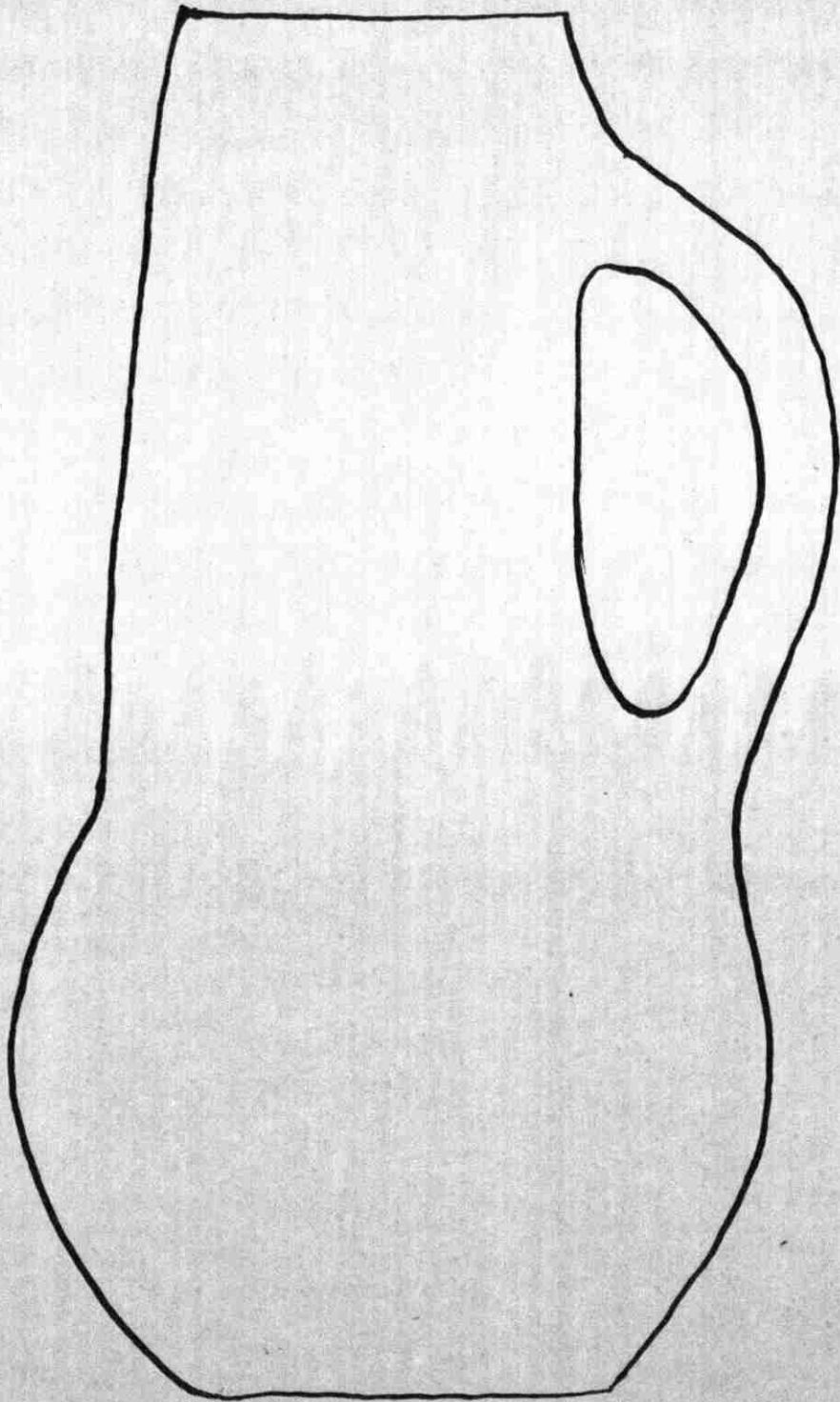
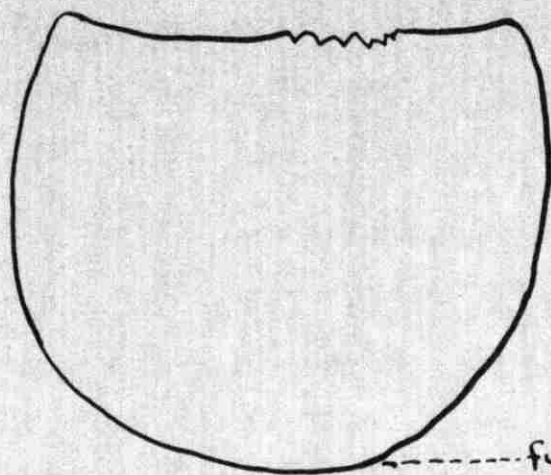


PLATE III.

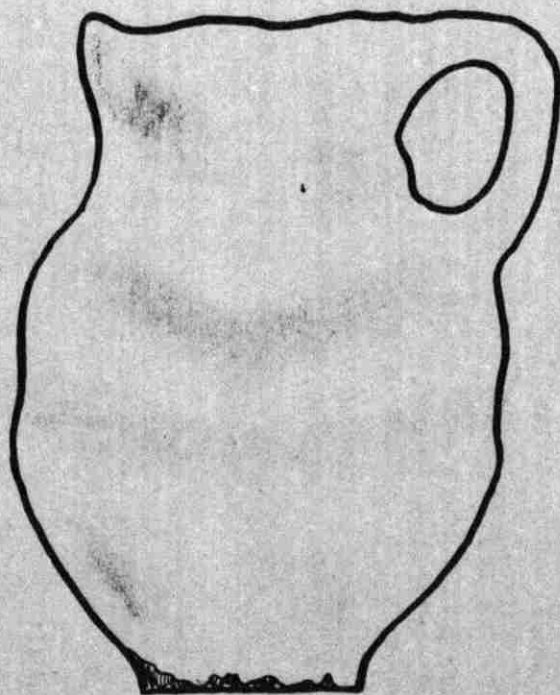
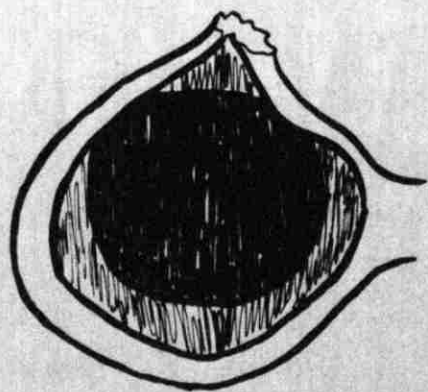
- 1- A small cup of buff ware; a large amount of large flint grits; on the inside are impressions of small pieces of straw; round base; hemi-spherical body turning inwards; no decoration.
Provenance: Byblos; Early Neolithic; unpublished but on display at National Museum.

- 2- A jug of exceedingly thick, light red ware; roughly made, showing evidence of clay rings used for structure of pot; a large amount of straw temper; some small flint grits; flat base; ovoid body; wide neck of medium height; loop handle from rim to shoulder; rim pinched to form spout at right angle to handle.
Provenance: Phoenicia; Early Neolithic; on display at A.U.B. Museum.



1

full scale

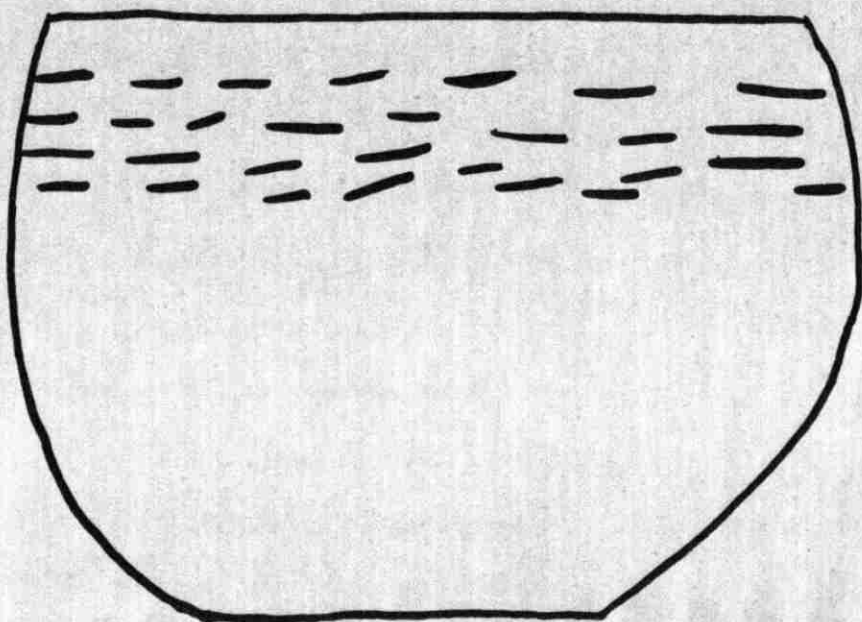


2

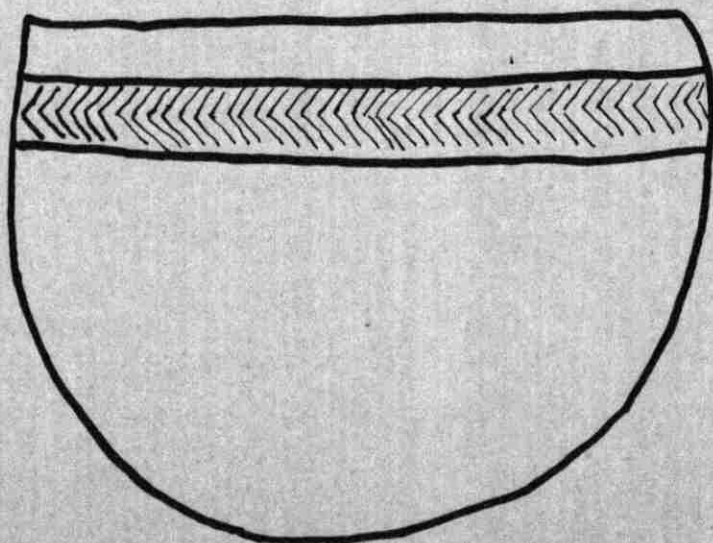
PLATE IV.

- 1- A large closed bowl of drab ware; numerous flint grits; flat base; decorated with deeply incised broken bands just below the rim.
Provenance: Byblos; Late Neolithic; unpublished but on display at National Museum, although some fragments were published in the Revue Biblique, LVII, 1950, Plate 12, 4.

- 2- A medium sized closed bowl of drab ware with numerous small flint grits; round base; hemi-spherical body; decorated below rim with an incised herringbone pattern enclosed within two horizontal lines more deeply incised.
Provenance: Byblos; Late Neolithic; unpublished but on display at National Museum.



1



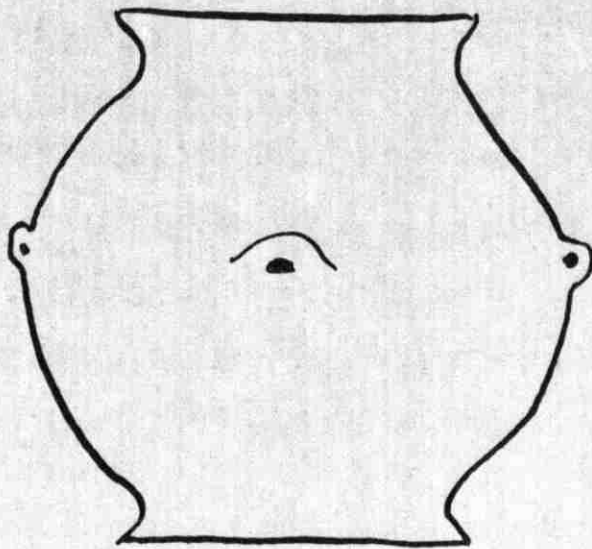
2

PLATE V.

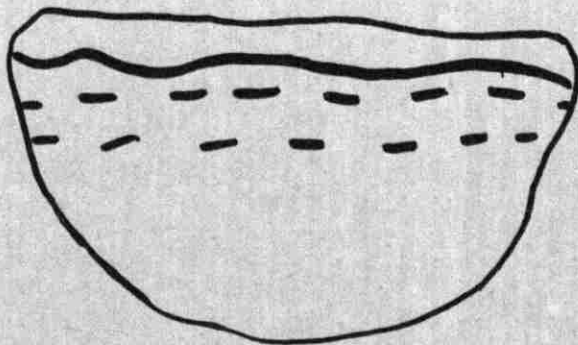
- 1- A small jar of greenish cream ware; few flint grits; flat base of disc type; globular body; small flaring rim; four cord-eye handles set in middle of body.
Provenance: Byblos; published as Neolithic.
- 2- A small bowl of cream ware; large amount of small flint grits; round base; hemi-spherical body; rim turning inwards; decorated, by using pieces of straw or twigs placed in the clay before firing, in an incised band around the top, below which are two bands of broken horizontal lines.
Provenance: Byblos; published as Eneolithique A.*

* Cf. Footnote PP.

Plate V



1



2

PLATE VI.

- 1- A large jar of cream ware; large amount of large flint grits; flat base; ovoid body; wide, hole-mouth; two loop semi-elliptical handles set just above the middle of the body.

Provenance: Byblos; Early Neolithic; unpublished but on display at the National Museum.

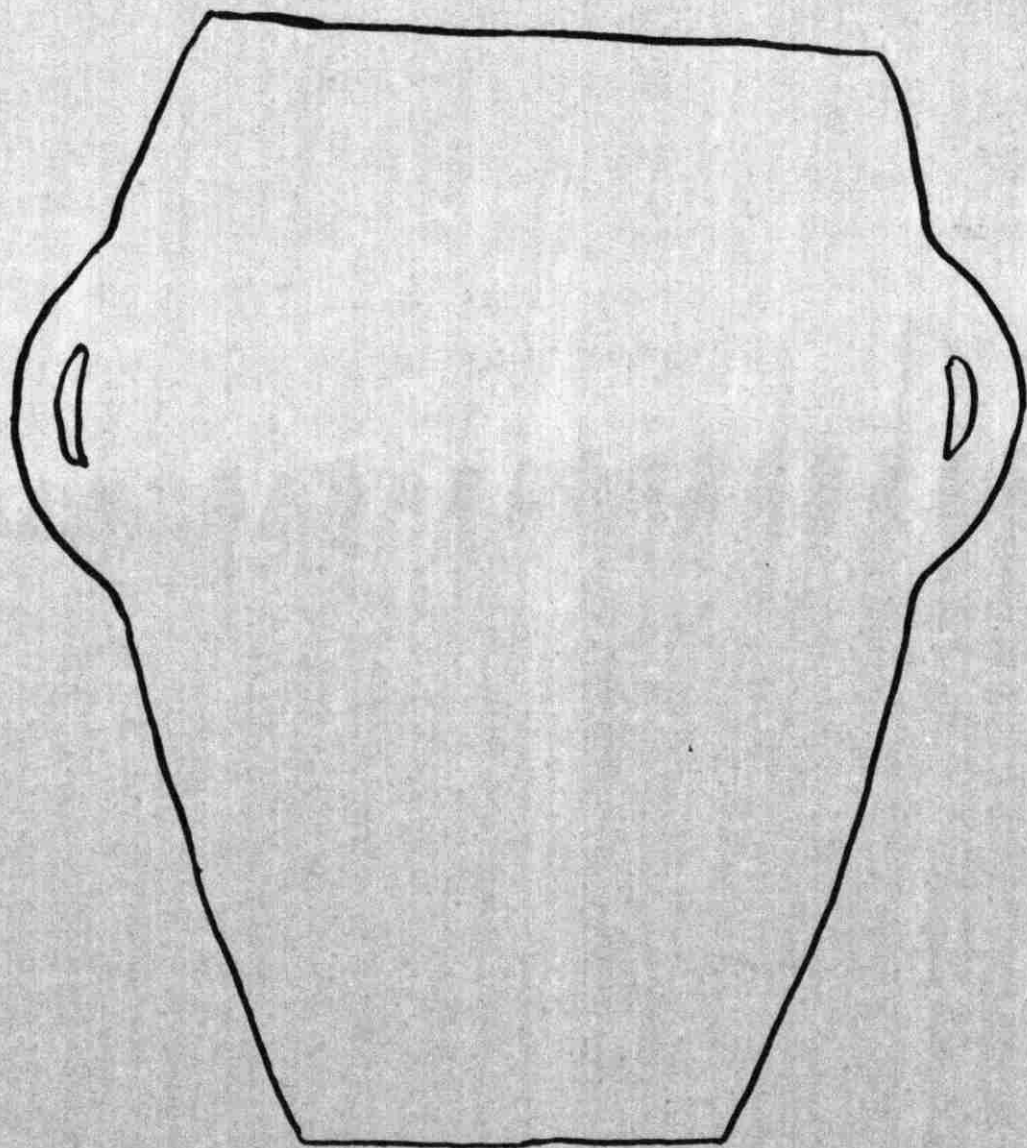
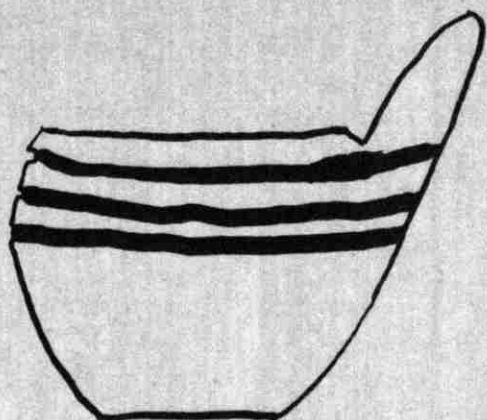


PLATE VII.

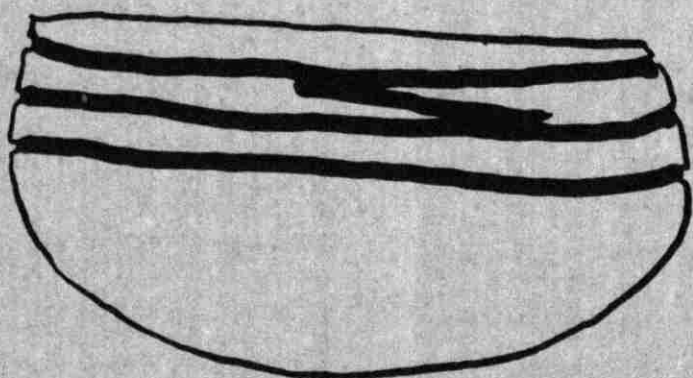
These two pots are both published as Eneolithique A, tomb 1016; as they are not on display the ware and amount of grits is unknown.

- 1- A cup; flat base; sides tapering inwards from the middle of the body; semi-conical handle rising above the rim; decorated with three very wide and deeply incised horizontal grooves around the top.

- 2- A small closed bowl; round base; decorated with three and part of a fourth, wide, deeply incised grooves around the top.



1



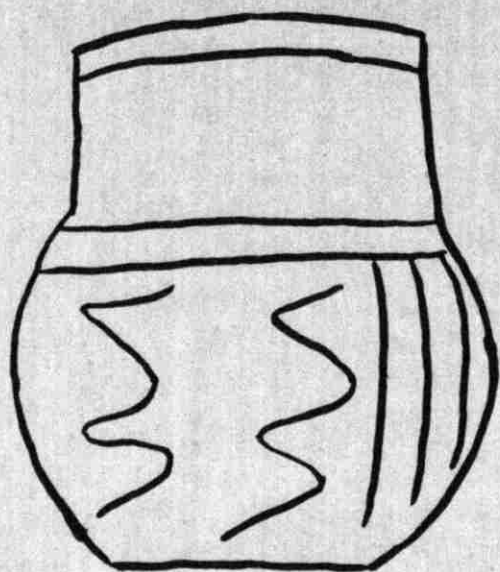
2

PLATE VIII.

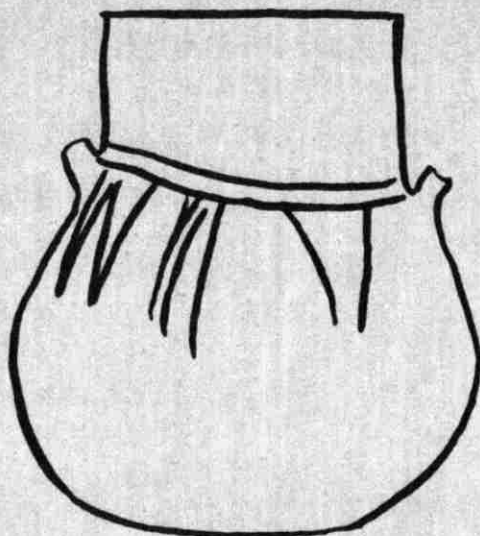
- 1- A small jar of buff ware; small number of flint grits; flat base; globular body; wide neck of medium height; decorated with deeply incised line below rim, two other horizontal lines at the top of the shoulder from which alternating groups of three vertical and two wavy lines drop almost to the base.
Provenance: Byblos; published as Neolithic.
- 2- A small jar; ware and grits unknown; round base; globular body, slightly depressed; wide neck of medium height; two handles horizontally placed at top of shoulder; decorated with two deeply incised horizontal lines just above shoulder, from which vertical and oblique lines drop as far down as the middle of the body.
Provenance: Byblos; published as Neolithic.
- 3- A small bowl; ware and grits unknown; flat base; globular body; decorated with an incised horizontal line below the rim, from which vertical oblique incised lines drop downwards almost as far as the base, developing in some cases into triangles filled with incised polka dots.
Provenance: Byblos; published as Eneolithique A, Tomb 1016.
- 4- A small bowl of buff ware; few flint grits; round base, hemi-spherical body with rim tapering inwards; decorated with two deeply incised horizontal lines below the rim

and two wavy lines across the body, of which the trough is filled with incised polka dots.

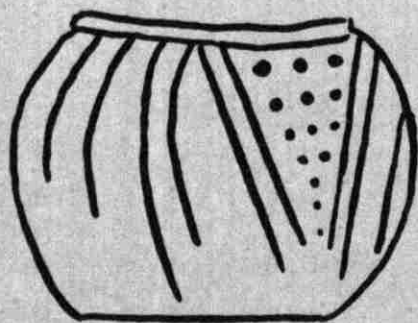
Provenance: Byblos; published as Eneolithique A.



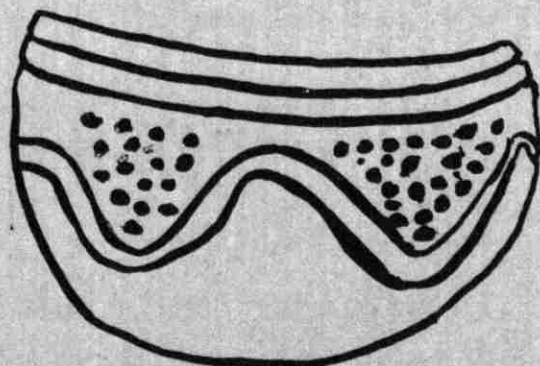
1



2



3



4

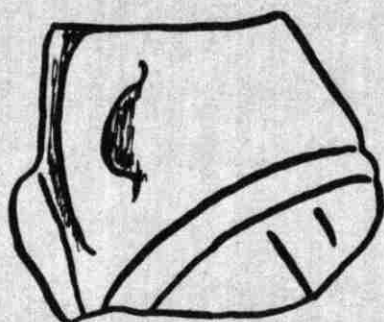
PLATE IX.

- 1- A sherd of a rim with a loop handle; ware and grits unknown; decorated with deeply incised lines.
Provenance: Byblos; published as Eneolithique A.

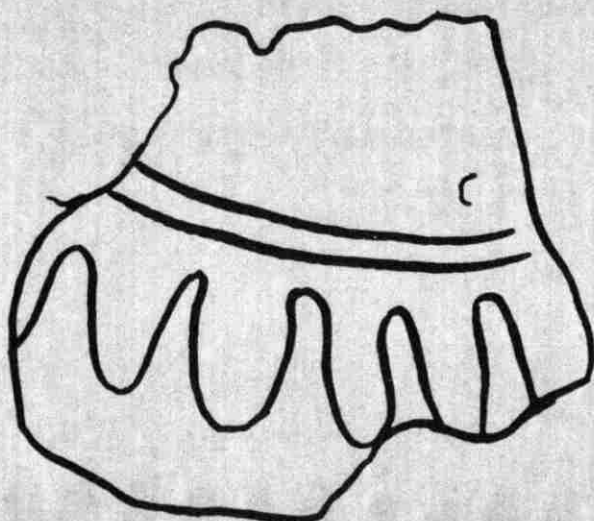
- 2- A sherd forming part of the neck and upper part of the body; ware and grits unknown; decorated with two deeply incised lines at the top of the shoulder and a single horizontal wavy line below the shoulder.
Provenance: Byblos; published as Eneolithique A.

- 3- A small closed bowl of cream ware; very few, very tiny flint grits; round base; body half elliptical in outline; decorated with one incised line below the rim and a zig-zag line dropping from it, forming a band of triangles; the upper triangles so formed, are filled with incised pin point dots.
Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.

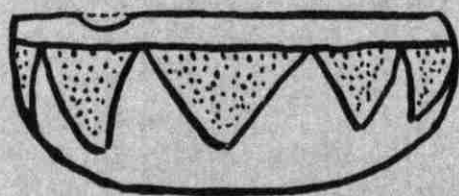
- 4- A small closed bowl of cream ware; a large amount of small flint grits; round base; globular body with rim tapering inwards; decorated with two incised horizontal lines below the rim and two parallel horizontal wavy lines across the body.
Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.



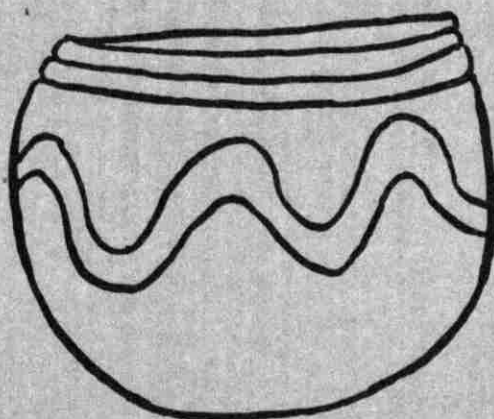
1



2



3



4

PLATE X.

A medium jar of buff ware; a number of large flint grits; flat base; piriform body; very wide neck of medium height; decorated with a band of 5 irregular rows of deeply stamped circles.

Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.

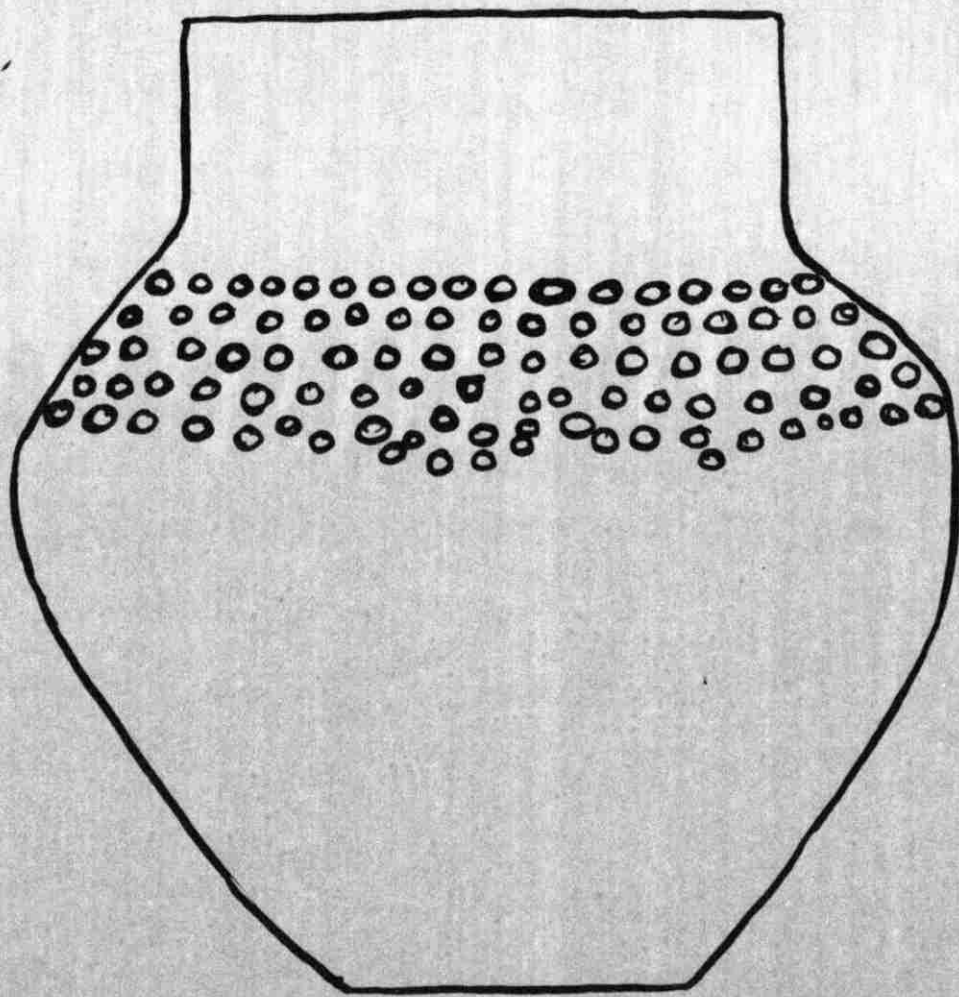


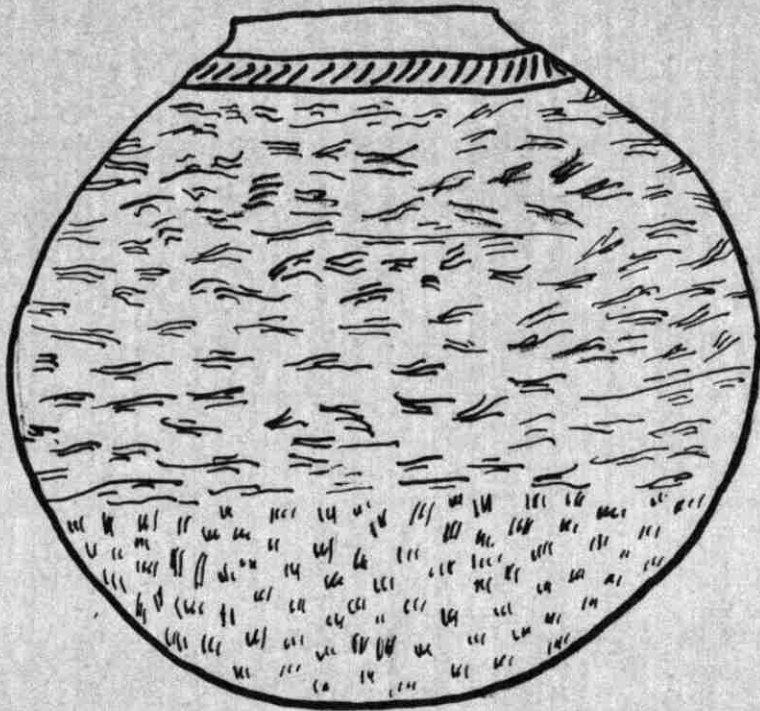
PLATE XI.

- 1- A medium jar of cream ware; a large number of small flint grits; round base; globular body; neckless; decorated by a band at top of shoulder of oblique incised lines; upper two-thirds of body decorated with horizontal "hen scratch" incisions, lower third of body with vertical "hen scratch" incisions.

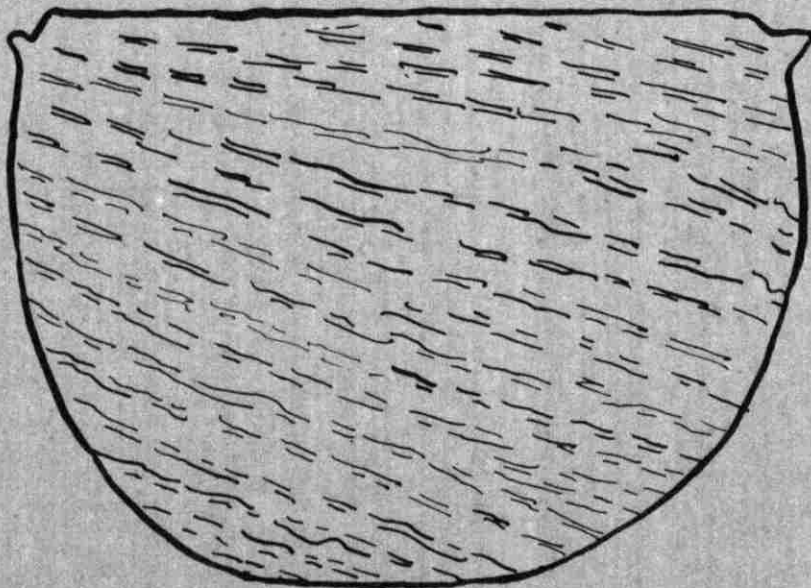
Provenance: Byblos; published as Neolithic.

- 2- A medium bowl of buff ware with few flint grits; round base; hemi-spherical body; slightly inverted rim; two small ledge handles just below rim; decorated with broken wavy lines that run obliquely across the surface.

Provenance: Byblos; published as Neolithic.



1



2

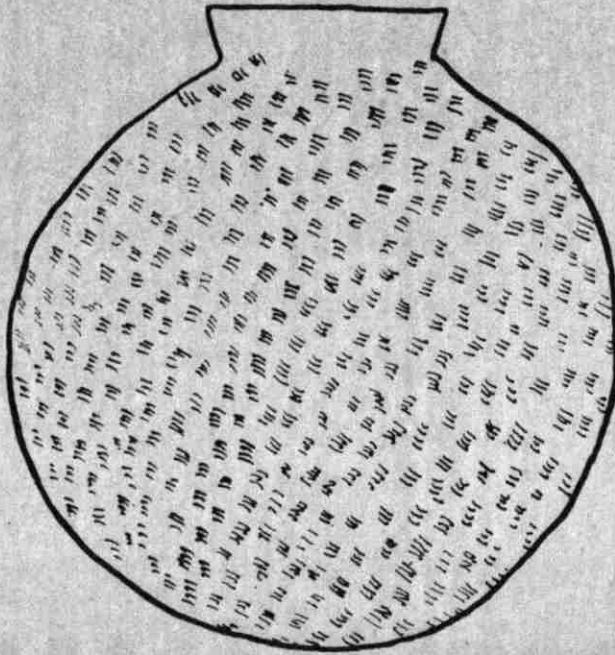
PLATE XII.

1- A medium jar of reddish ware; medium amount of small flint grits; round base; globular body; short flaring neck; decorated all over with groups of lightly incised short lines of a "shell pattern".

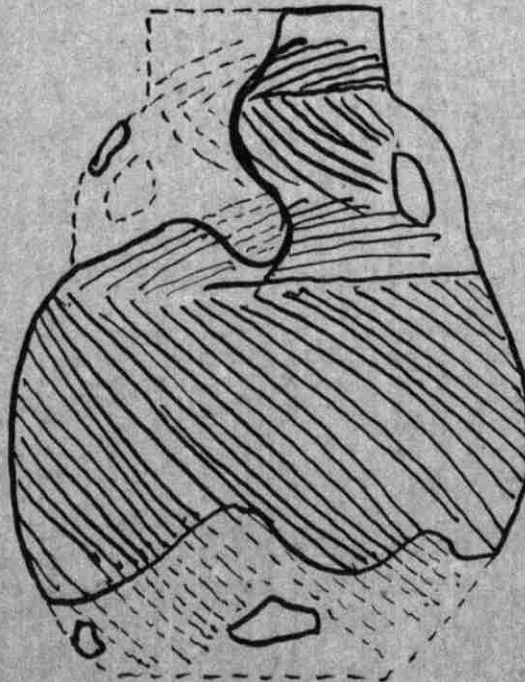
Provenance: Byblos; published as Eneolithique A.

2- A medium jar of buff ware with an irregular red slip; large amount of flint grits; flat base; ovoid body; wide neck of medium height; two loop handles attached at the middle of the neck and on the shoulder; body and neck decorated with separate, enlarged, deeply incised herringbone pattern.

Provenance: Byblos; published as Eneolithique A.



1



2

PLATE XIII.

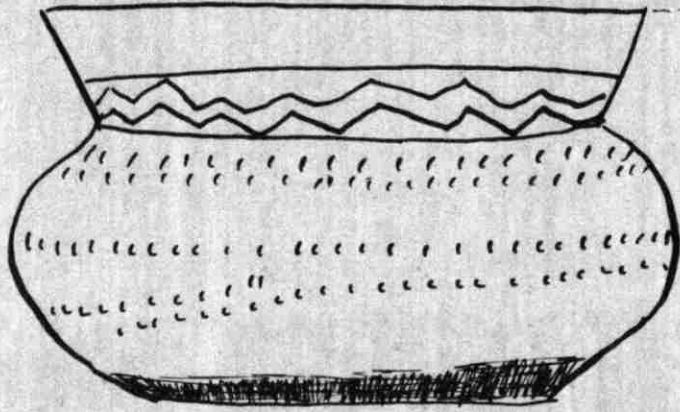
- 1- A boat-shaped deep bowl; buff ware with a few tiny flint grits; flat base; elongated body, slightly carinated two-thirds of the way from the top; short, very wide neck, slightly flared; painted red except near the base; decorated with deeply incised lines over the painting which consist of short vertical lines forming three irregular rows on the upper two-thirds of the body; short vertical lines on the shoulder in two rows; and on the neck two zig-zag lines enclosed within a band of two horizontal lines.

Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.

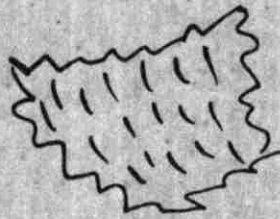
- 2- A sherd of buff ware, painted in a "grain wash" pattern.
Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.

- 3- A medium jar of buff ware; a few very small flint grits; flat base; piriform body; wide neck of medium height; painted red on neck and two-thirds of the way down the body; decorated with four horizontal bands of deeply incised, vertical, broken lines around the base of the neck; a band of four rows of incised pin point design is located one-third of the way down the body; all incisions over the painting.

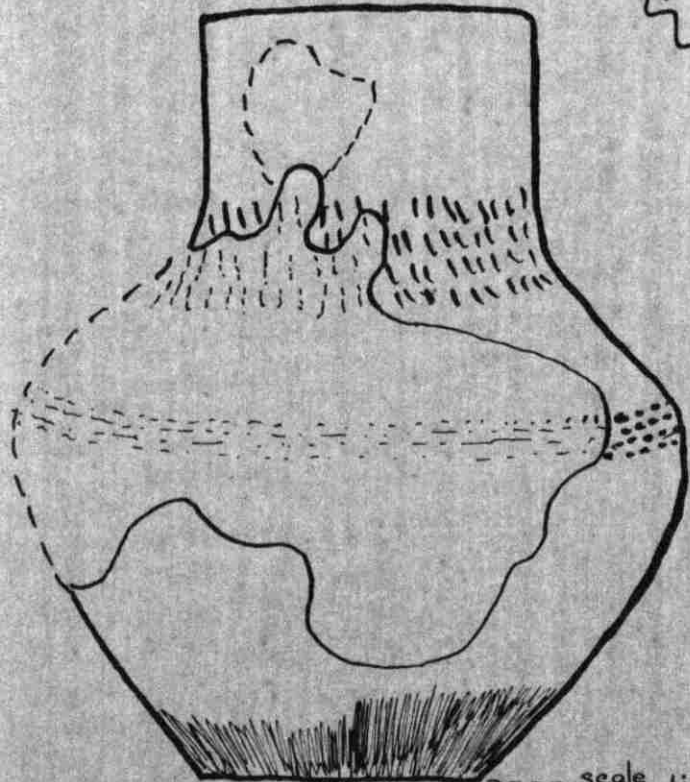
Provenance: Byblos; published as Eneolithique A.



1



2



3

scale 1:5

PLATE XIV.

- 1- A medium jar of cream ware; a few small flint grits; flat base; ovoid body; small, slightly flaring rim; highly burnished; decorated with lightly incised lines forming a band of oblique lines at the neck and another band of herringbone pattern just below it; on upper third of body, two bands, each consisting of two incised horizontal lines enclosing a herringbone pattern which in turn encloses a zig-zag line forming a band of triangles; the lower triangles are filled with an upright herringbone pattern.

Provenance: Byblos; unpublished but on display at the National Museum.

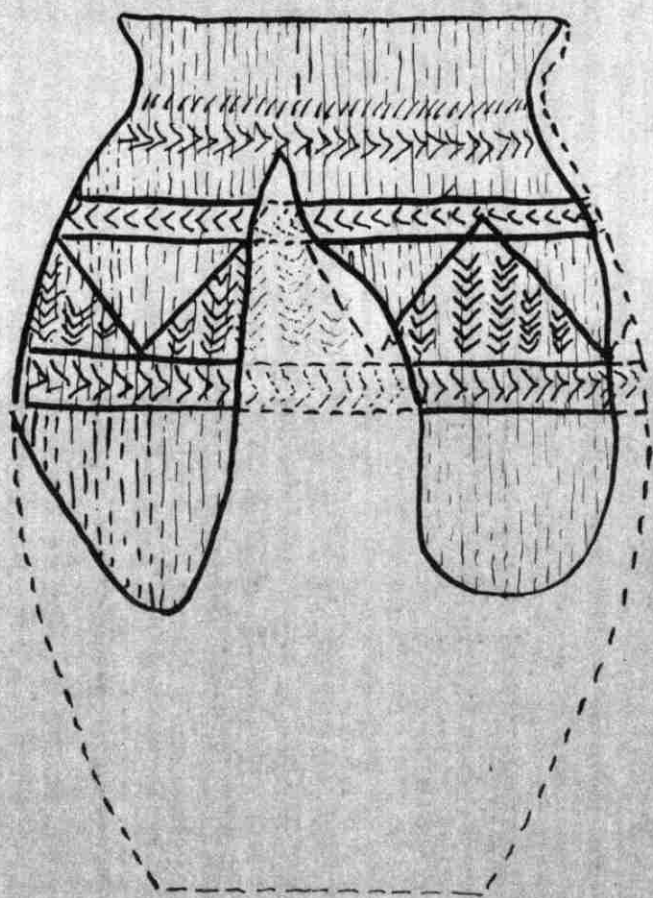
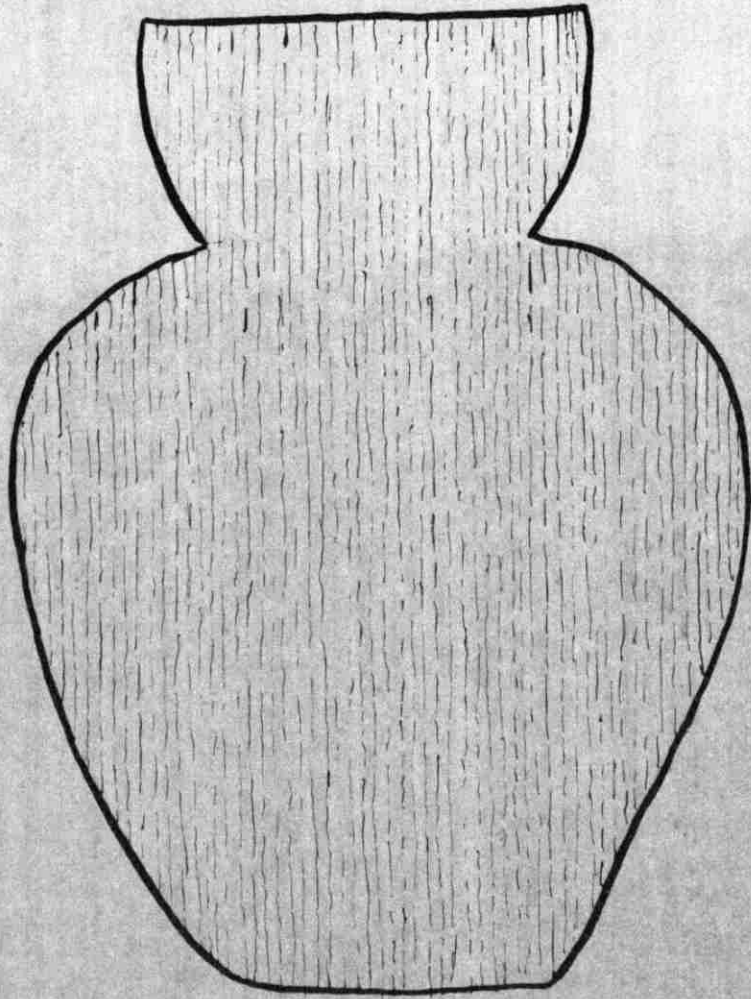


PLATE XV.

1- A medium jar of buff ware; small amount of small flint grits; flat base; ovoid body; cup-like wide neck of medium height, receding at junction of the body; decorated with a lead grey slip which has been highly burnished.

Provenance: Byblos; Late Neolithic; unpublished but on display at the National Museum.



CONCLUSION.

The writer is of the opinion that the pottery illustrated on Plates II, III, and VI is of the very earliest Neolithic Period. In the pot illustrated on Plate III, 2 one can see without any imagination at all, the clay rings that formed the structure of this jug, as well as the impressions of the straw which was used as a binder with the flint grits, which are in the ratio of approximately 4:1. This pot is in all probability, the earliest pot in the collection under study. The various methods of producing the earliest Neolithic pottery have already been discussed in the introduction. ⁽¹⁾ The other pot (Plate III,1), also contains a straw temper, but not in the same proportion, as here the flint grits are in a larger amount and of more considerable size. The dipper illustrated on Plate II contains numerous flint grits, and the straw temper used would only be detected by examining this pot more closely. The jar appearing on Plate VI also contains a large amount of large flint grits, but with no straw temper visible. The extreme simplicity and plainness of these four pots, the thickness of the ware, the absence of any decoration, the general crude appearance of the vessels, coupled with the fact that the vessels illustrated on Plates II, III, 2; and Plate VI, are provided with very simple handles would lead one to place them in one and the same

(1) Q.V.

category. While discussing the undecorated pottery, it should be mentioned that the pot illustrated on Plate V, 1, is described by Mr. Dunand as Neolithic. It does not always follow that all undecorated pottery of the Neolithic Period should necessarily be of the earliest period. The ware, grits and fineness of production must also be taken into consideration. The handles of this pot are unlike those of the earlier period, the form is more sophisticated and delicate. The expanding disc base and the everted rim lend a sophistication to the form that is incompatible with the motifs used in the more primitive forms. Attention should be drawn to the continuation of the type well into the Chalcolithic Period (cf. Plates XXI, 2; XXII, 2; and XXX). Since there is a much higher proportion of this pot, which developed from a Neolithic prototype to a more advanced form in the Chalcolithic Period, it seems hardly possible that the form would have been dropped completely, only to be revived again; but it probably survived elsewhere and was brought into Byblos by the Chalcolithic inhabitants somewhere about 3500 BC.

The primitive ware previously discussed, is followed by a phase of rippled surface decorations, bearing close similarity to the rippled surface of the Badarian pottery of Egypt. It is crudely decorated with a design made by shells, fish bones, fine twigs, or other tools of this nature, unknown to us today.

(1) Revue Biblique, LVII, p. 600.

The decoration was perhaps inspired by the pottery formed in baskets described in the introduction. No examples of this type of pottery which left such an impression on the surface have been found in Phoenicia so far. Mr. Dunand describes the pots illustrated on Plate XI, 1 and 2 as Neolithic.

On the pot illustrated on Plate XII, 1, we find the same shell pattern in an all over design, that was used for decoration around the bottom third of the pot illustrated on Plate XI, 1. We must draw attention to a ware created by a finer technique, a decoration that continues from one phase into another, but now appearing in a more uniform and pleasing pattern. The rim becomes flared. Compare this to the hole-mouth vessel figuring on Plate XI, 1. Does this not place the pot illustrated on Plate XII, 1 in a later sequence than the pot figuring on Plate XI, 1? Mr. Dunand refers to this particular type of vessel as Eneolithique A. ^{*}In the opinion of the present writer the scratched design, or griffé, as the excavator calls it, is earlier than the deeply incised ware, however it overlaps the period of the deep incisions and finally emerges as the pot illustrated on Plate XI, 1.

What could have been the inspiration for the introduction of the incised decoration? We know that straw was used as a temper since the earliest times, and we know that after firing it left small grooves or impressions on the surface of the pot. Do we see an attempt to use thick straw, inserted into the soft

* Since the publication of the Bulletin Du Musée De Beyrouth Mr. Dunand has changed this nomenclature to Neolithic, and the pots are exhibited in the National Museum as such.

clay before firing and laid out in some form of a simple pattern in the pots illustrated on Plate V, 2, and Plate IV, 1? If so, did this inspire the incised decoration of the later pots? The pots illustrated on Plate VIII, 1, 2 and 4, are described by Mr. Dunand as Neolithic. Is this not an attempt at abstract design in its simplest and most rudimentary form, logically replacing the early attempts of impressions made by straw? The three pots appearing on Plate IX, 1, 2 and 4, follow closely on the heels of this introduction and are described by the same authority as Eneolithique A. The pottery in this case is so similar and so closely related, that a division is almost impossible. The deep incision appearing on the pot illustrated on Plate VII and the wavy, dot filled designs of the pots 3 and 4 on the same plate, and Plate IX, 3, and the more delicate herringbone incision between the two deeply incised lines of the pot illustrated on Plate IV, 2 seem to be a gentle progression of this new pattern and heralds the appearance of a new motif, perhaps home-invented, or perhaps brought about through contact with other folk.

At some unknown time, the pellet or circle was introduced into the field of decoration. The use of straw was probably still at the back of the mind of the potter, so what more logical step would follow than that of a more developed form decorated with a stamped circle design set in several bands by means of a hollow reed? It is very likely that this

type of decoration was inspired by the use of straw in a more complicated method.

Towards the end of the period it is only natural to expect the discovery of stylized design in decoration, finer pottery produced with the skill that comes from experience, and in general a more artistic approach, perhaps brought on by the advent of prosperity.

We now witness the first appearance of painting as an element of decoration. Mr. Dunand describes painted sherds in his nine classifications but without seeing the forms it would be difficult to try to place these chronologically. The pottery figuring on Plate XIII seems to include the sum total of all the designs and patterns used during the entire Neolithic Period viz, incised circles, horizontal, vertical and zig-zag bands, coupled with the use of painting as an element of decoration and the entirely new boat shape form appearing on Plate XIII, 1. It is indeed quite remarkable that these incised patterns, the backbone of Neolithic pottery, are made over the red paint, enhancing the decoration and giving a most pleasing and original effect, which perhaps only later came into its during the Early Bronze IIB Phase, (Plates L-LIIB).

High burnishing and the use of a "slip" also seem to have come upon the scene toward the end of the period, as we can see in the fragmentary jar illustrated on Plate XIV, where again the herringbone pattern, zig-zag lines, incised bands

and high burnishing exist side by side, producing an extremely tasteful and artistic piece of pottery. The jar appearing on Plate XV seems to be a culmination of the period; it has a lead grey slip, polished to such a degree as to produce a shiny, almost black surface, resembling the basalt vessels of an earlier period, and in a most sophisticated and advanced form.

We have attempted to follow the pottery of this period in a method that was introduced by Sir Flinders Petrie in his study of Egyptian and Palestinian pottery and other artifacts, (1) namely that of sequence dating. There seems to be no way of using a sharp dividing and dateable line in the Neolithic pottery of Phoenicia, into phases due to the fact that forms run into each other, some even continue in varying degrees of progression; new ideas appear simultaneously with the existing ones and other than through the use of stratification placement, such as we find in the pottery found in the tombs, of which we have three; namely, Tomb 1016, Plate VII, 1 and 2; and Plate VIII, 3, there can be no positive placement as yet. In time when other sites are excavated, new data may be uncovered; but in this, the most difficult period to analyse, time may prove nothing other than what we suspect, a gradual development of a field, which in later years becomes a most complex and universal industry.

(1) Petrie, F: Diospolis Parva.
Petrie, F: A Mound of Many Cities.

CHAPTER III.

THE EXPANSION OF THE CERAMIC INDUSTRY.

Chalcolithic pottery is classified by Mr. W.F. Albright (1) in his work on Palestine, into Early, Middle and Late Phases, and he maintains that all the pottery from Byblos falls in the last of these phases. Mr. Dunand places the entire Chalcolithic cemetery at Byblos within sequence dating 39-63, which is contemporary with the Egyptian Chalcolithic Period of the North, or in other words between 3600-3200 BC. in round figures, leaving the period between the end of the Neolithic Period and approximately 3600 BC. without occupation at Byblos. Mr. Dunand's contention is based on the absence at Byblos of Egyptian Amratian (2) pottery, as well as Halafian and Ubeidian from Mesopotamia. This is not only true of pottery but also of other expressions of art of these civilizations.

The only attempt made in this paper is a discussion on the distinction and dating of the pottery of the burials in rock grottoes and the burials under or between houses. The pottery of the rock grottoes is illustrated on Plates XVI-XX, while those of the burials under or between houses, on Plates XXIII-XXVI. The other plates contain drawings of pots found in houses, on the rock or in the virgin soil.

(1) Albright: Archaeology of Palestine.

(2) Revue Biblique: Vol. pp. 600-602.

Plate XXXIV is an illustration of a specific Chalcolithic jar burial, presumably once located under a house, and its contents. This tomb was excavated by the writer on December 18, 1959 at Byblos, with the kind permission of the Secretary General of the Services des Antiquités and the Director of the excavations. Plate XXII contains drawings of pottery found in a grotto burial at Jelal-el Nammous. (1)

The pottery forms consisted of large storage jars, small jars with or without handles, twin-jars, juglets, deep bowls, shallow bowls, cups, cooking pots and zoomorphic vessels. Each will be described according to ware, form and decoration as in the preceding chapter. The scale is 2:5 unless otherwise stated, and all the pottery is handmade and tempered with numerous, large flint and limestone grits.

(1) Bulletin du Musée de Beyrouth, Vol. I, pp. 56 et seq.

PLATE XVI

Tomb 7 at Byblos, a rock grotto which was separated into two distinct levels by a layer of earth and stones. The upper layer contained a flint and a small cup used to melt metal, but no metal as such.

The cup from the upper level is at Byblos, not in the National Museum and cannot be illustrated.

- 1- Lower level; a jug of orange buff ware; large flint grits; flat base; spherical body; long narrow neck; remains of a handle attached to the rim and shoulder. It is decorated with a collar in barbotin around the neck from which drop six vertical bands, in the same style, towards the base.

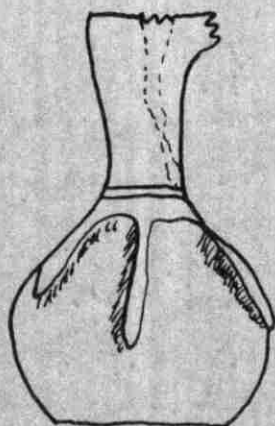
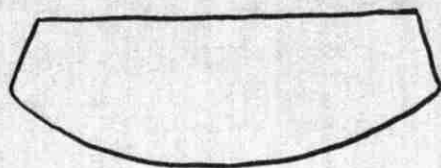


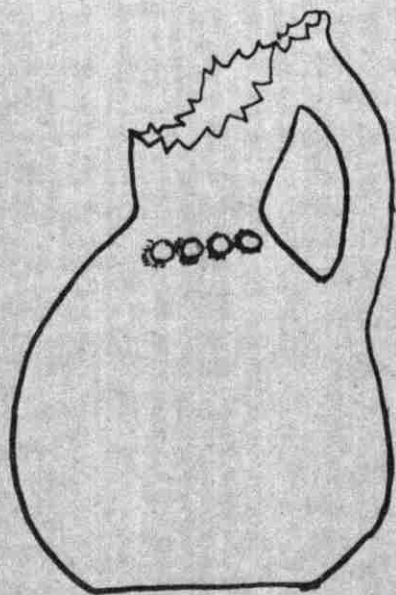
PLATE XVII.

These pots were found in a rock grotto, Tomb 8.

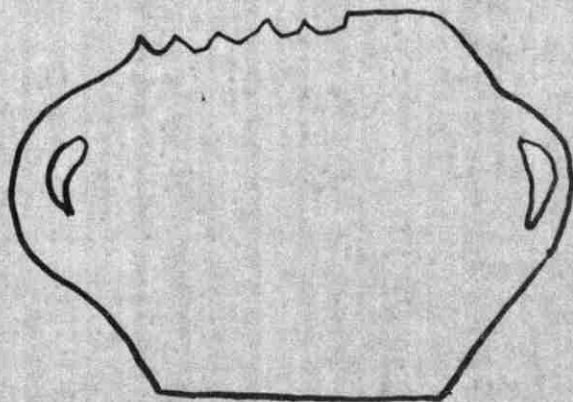
- 1- A shallow bowl of reddish buff ware; numerous very large grits; round base; carinated, slightly tapered above the carination.
- 2- A juglet of buff ware with an orange red slip; a few small flint grits; flat base; ovoid body; neck of medium width and length, slightly flared; loop handle from below rim to shoulder; top broken.
- 3- A cooking pot of red ware; numerous large flint grits; flat base; globular body; two loop handles on the body; top broken off; decorated with four nodules on top of shoulder.



1



2



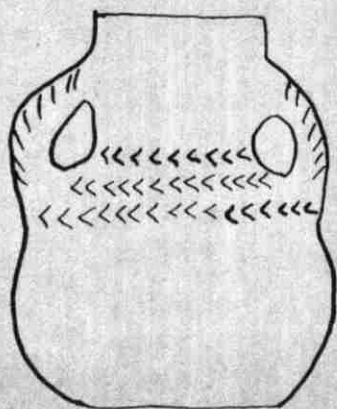
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PLATE XVIII.

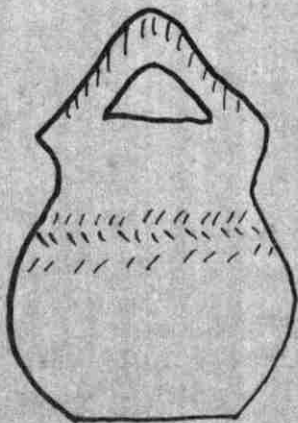
These pots were found in a rock grotto tomb, Tomb 9.

- 1- A small jar of orange buff ware, wet smoothed and containing a large amount of large grits; flat base; globular body; wide neck of medium height; two loop handles from well below the rim to the shoulder; decorated with three bands of incised herringbone pattern on neck and shoulder and a vertical herringbone pattern on each handle.

- 2- A small jar of buff ware with numerous large grits; flat base; globular body; flared rim; angular basket handle placed vertically above the rim; decorated with one band in the incised herringbone pattern just below the shoulder, beneath which is a row of oblique incisions; the handle is decorated with a vertical herringbone band.



1



2

PLATE XIX.

These vessels were found in Tomb 99, a rock grotto in which no less than thirty five pots were found.

- 1- A twin jar of red ware with numerous large grits; wet smoothed and a self slip; each with round base; globular body; long neck of medium width flaring towards rim; handle attached from rim of one jar to the other; each decorated below the neck with a row of incised herring-bone pattern below which there is a row of oblique incisions.
- 2- A small jar of buff ware with a drab slip; numerous amount of small grits, flint and some limestone; flat base; globular body; wide neck of medium height; two loop handles from below rim to shoulder; decorated with two horizontal bands of incised "rope impressions" just below the neck.

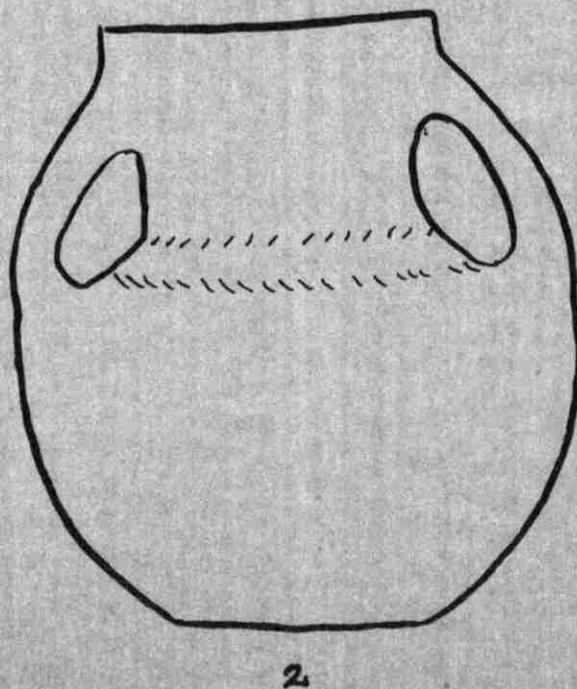
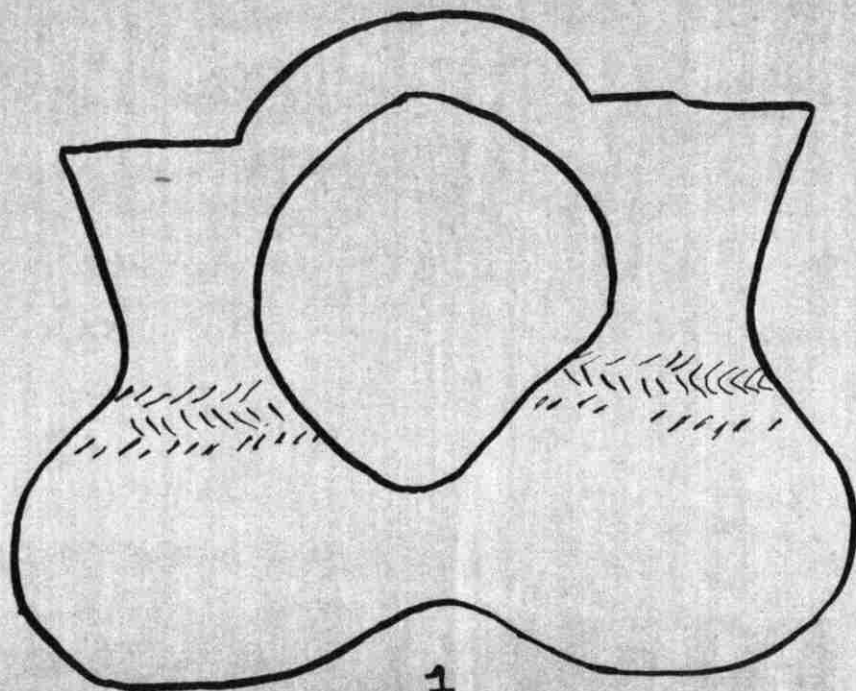
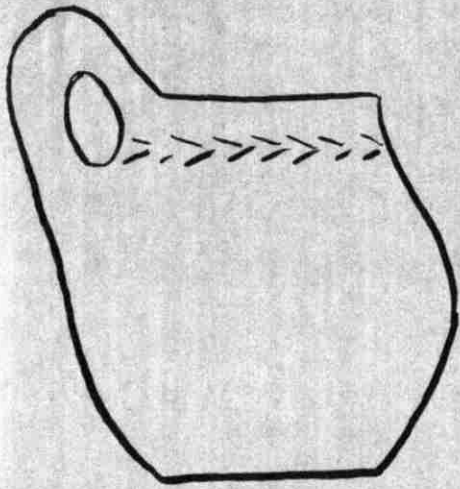


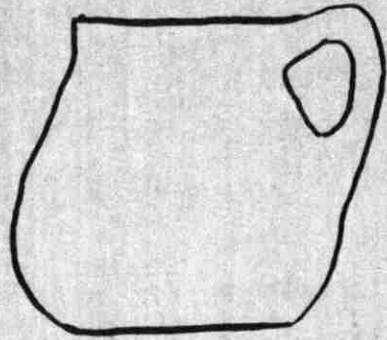
PLATE XX.

Tomb 99 continued.

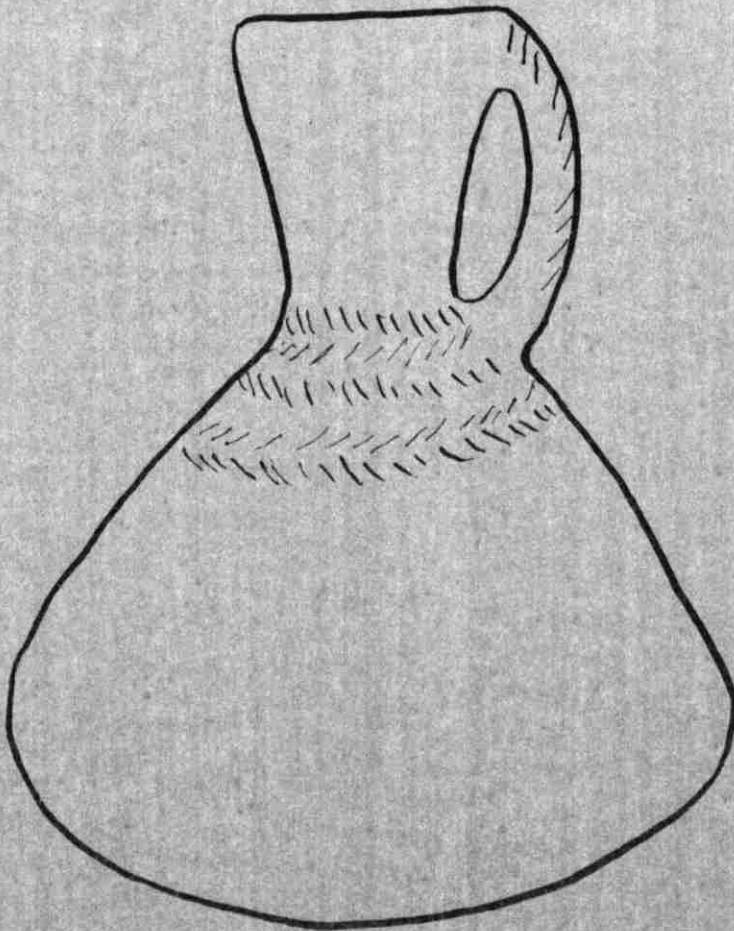
- 1- A cup of buff ware with numerous large grits; flat base; ovoid body; ear loop handle attached at top of shoulder and rising into a loop which descends to the rim; decorated below the rim with an incised horizontal band of herringbone pattern.
- 2- A cup of red ware with numerous, very large grits; flat base; ovoid body; loop handle attached at rim and shoulder, rising slightly above rim.
- 3- A juglet of light orange ware, wet smoothed; numerous large grits; round base; top-shaped body; narrow flared neck of medium height; semi-elliptical handle attached at rim and immediately below the neck; decorated with two incised horizontal bands of herringbone pattern at neck and shoulder, with a row of oblique incision between them. Vertical herringbone pattern on handle.



1



2

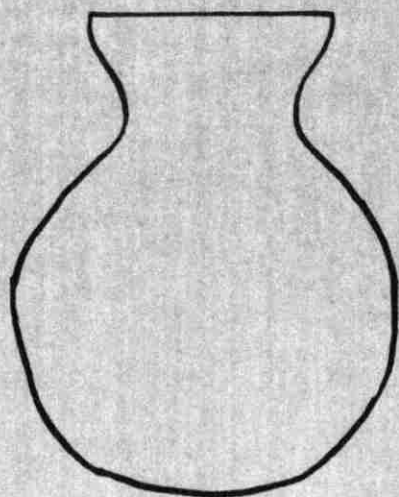


3

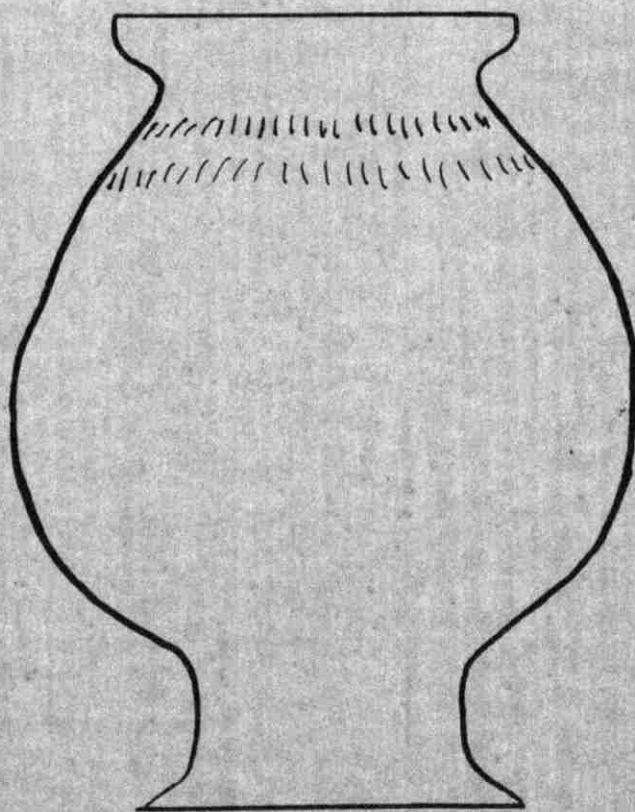
PLATE XXI.

These were found on virgin soil or on rock.

- 1 - A small jar of buff ware with numerous large flint grits; orange brown slip; round base; globular body; neckless; flared rim, inverted on top; highly burnished.
- 2 - A jar of buff ware; numerous flint grits; orange brown slip; ogee base; ovoid body; neckless; flared rim, slightly inverted at top; decorated with two horizontal bands of upright incisions.



1

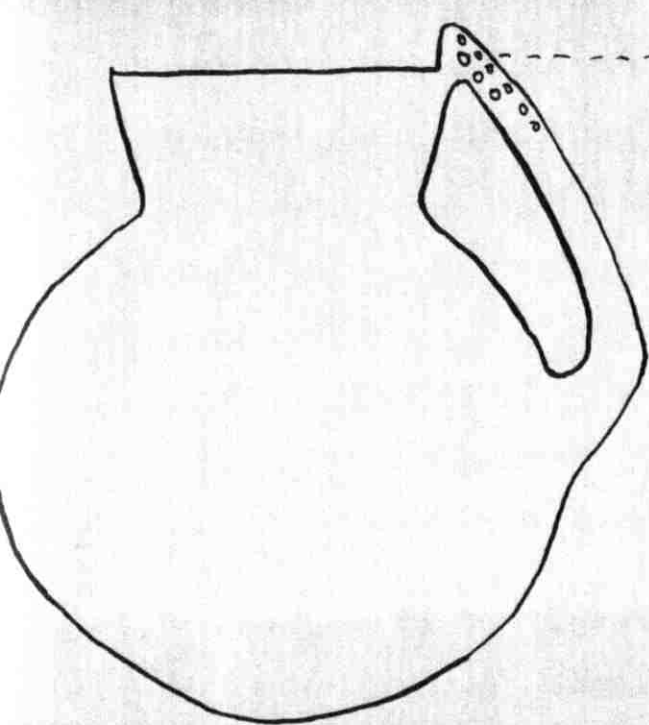


2

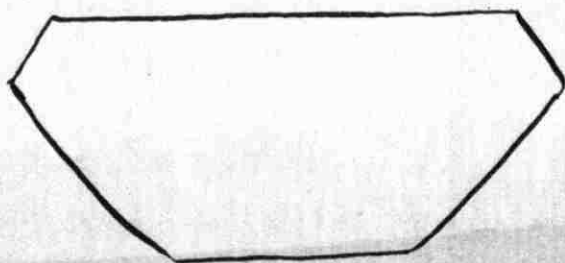
PLATE XXII.

These pots were found at Telal-el Nammous.

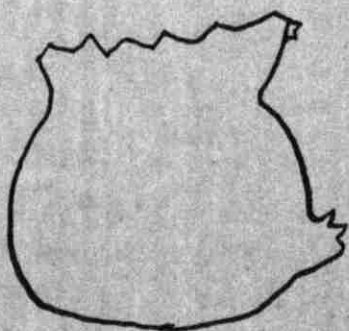
- 1- A medium jug of buff ware tempered with straw and a few small flint grits; wet smoothed with a dark red slip; flat-rounded base; globular body; neckless; wide flaring rim; handle rising above rim to middle of body, and decorated with four rows of stamped circles.
- 2- A closed bowl of light red buff ware; straw and a few grits as temper; wet smoothed and a dark red slip; flat base; carinated body.
- 3- A small jug of orange buff ware tempered with straw and a few flint grits; wet smoothed, with a dark red slip; flat-rounded base; globular body; neckless; wide flaring rim.
- 4- A small bowl of buff ware; wet smoothed; few flint grits; tempered with straw; flat-rounded base.



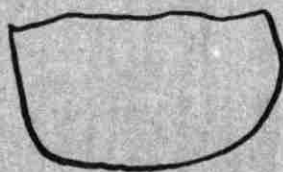
1



2



3

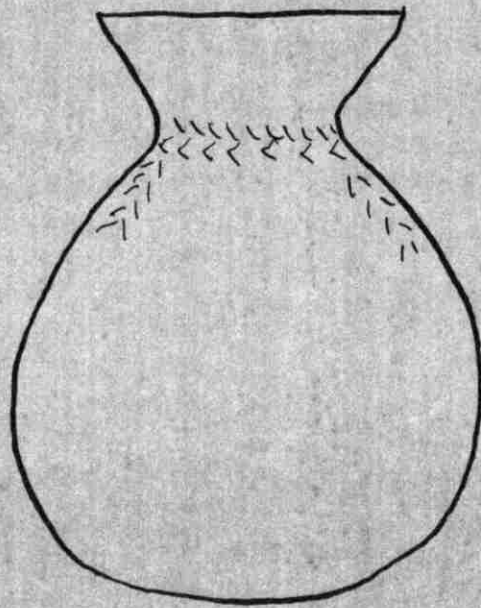


4

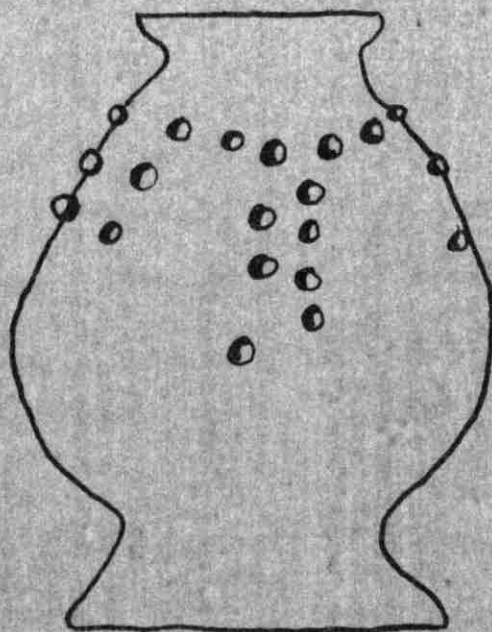
PLATE XXIII.

- 1- Tomb 54, a jar burial presumably under a house.
A small jar of orange buff ware with a self same slip; burnished; small flint and limestone grits; round base; ovoid body; very short neck of medium width; flared rim; decorated with a horizontal band of oblique incisions around neck, below which there is a band of herringbone pattern from which two vertical bands of the herringbone pattern drop a short distance.

- 2- Tomb 65, a jar burial, presumably under a house.
A jar of buff ware, wet smoothed; numerous grits; ogee base; ovoid body; neckless; flared rim; decorated with a row of horizontal pellets in relief at shoulder from which four groups of two parallel rows of circular pellets drop vertically in varying lengths.



1



2

PLATE XXIV.

1- Tomb 35, a jar burial.

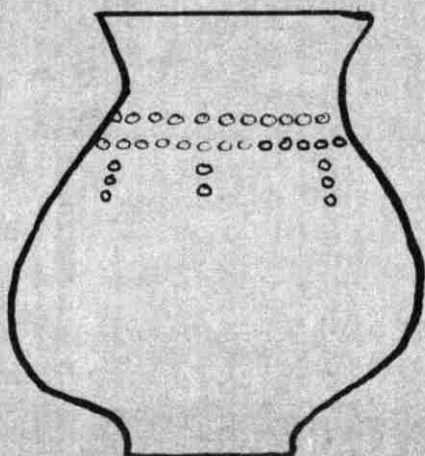
A small jar of cream ware with a fair amount of large grits; disc base; ovoid body; neckless; flared rim; decorated with two horizontal rows of incised circles probably stamped with a hollow reed, around top of shoulder, from which drop six upright rows of similar circles; each row consists of either two or three circles.

2- Tomb 165, a large jar burial.

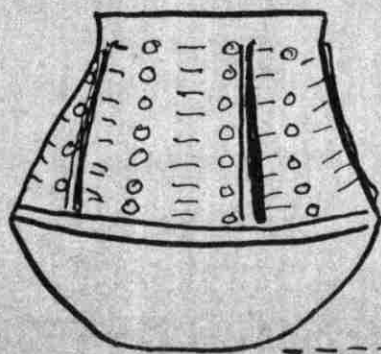
A small cup of orange buff ware, tempered with numerous grits; round base; ovoid body carinated above base and tapering towards rim. Decoration: the field is divided into four vertical panels by four upright bands in relief; each panel is decorated with four alternate bands of horizontal incisions and stamped circles; the four panels rest on a border of two horizontal incised lines at the point of carination.

3- Tomb 195, a jar burial.

Unable to find at the National Museum; ware cannot be described; round base; globular body; medium neck of medium length; two loop handles attached from rim to shoulder, now broken off; upper half of body decorated with irregular stamped circles and oblique incisions suggesting a vertical herringbone pattern.

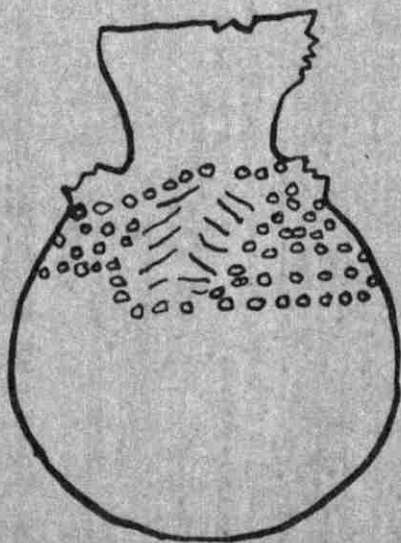


1



2

-----full scale



3

PLATE XXV.

1- Tomb 161; jar burial.

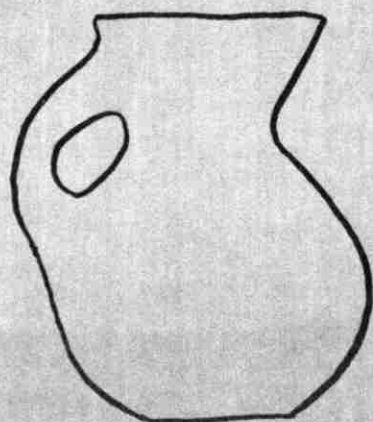
A juglet of buff ware with a self same slip; a large amount of grits; flat base; ovoid body; short neck of medium width; flared rim; loop handle attached to edge of rim and shoulder.

2- Tomb 15; a large jar burial.

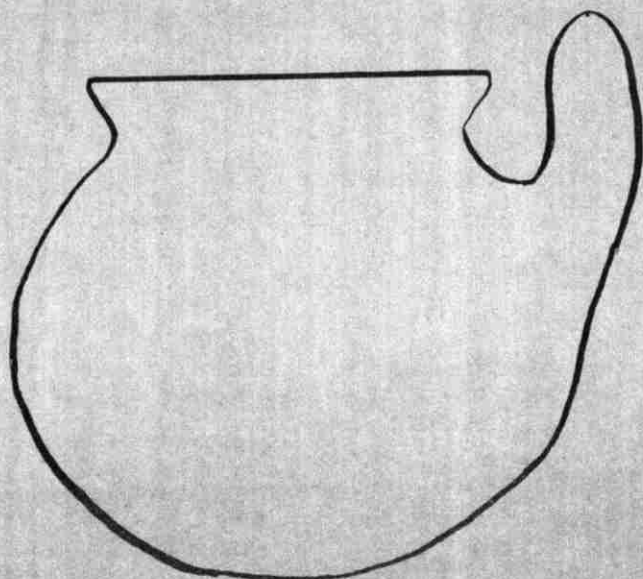
A cooking pot; ware cannot be described as it is not in the National Museum; round base; globular body; neckless; flared rim; vertical knob handle on one side.

3- Tomb 156; a jar burial.

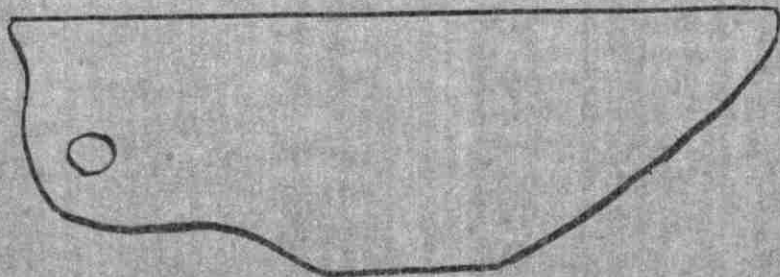
A shallow bowl of buff ware, wet smoothed; flint grits of medium size and number; small flat base; lug handle on one side.



1



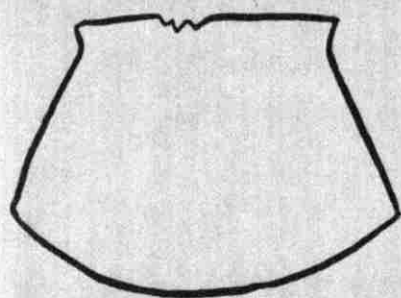
2



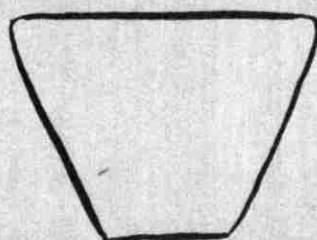
3

PLATE XXVI.

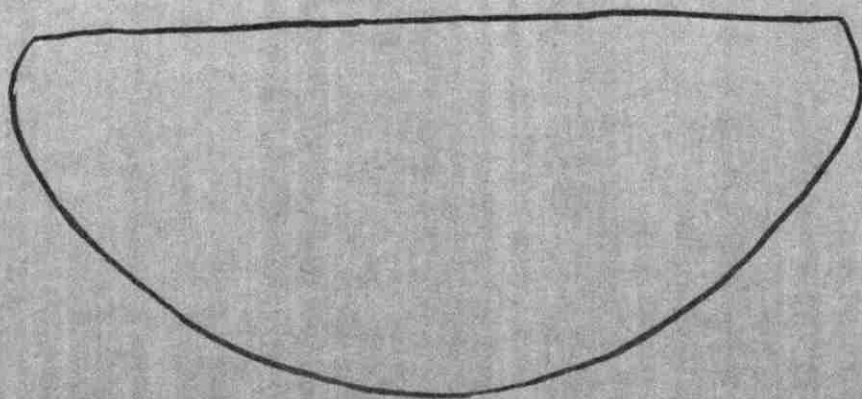
- 1- Tomb 170; a large jar burial.
A small cup of buff ware; large amount of grits, mainly flint with some limestone visible; round base, carinated.
- 2- Tomb 124; a small burial jar.
A small cup of buff ware with a light red slip; numerous large flint grits; flat base.
- 3- Tomb 117; a large jar burial.
A closed bowl of buff ware, with an orange slip; numerous large flint grits.



1



2



3

PLATE XXVII.

These pots are all from a burial discovered at Byblos, now on exhibition in the American University of Beirut Museum.

- 1- A jar of reddish buff ware with an orange slip and a medium quantity of grits; round base; ovoid body; neckless; small flared rim.
- 2- A small jar of buff ware with an orange slip; few very small grits; round bottom; ovoid body tapering towards neck; short, medium neck, slightly flared rim; highly burnished.
- 3- A shallow bowl of buff ware with a self same slip, few flint grits; round base; carinated body closing towards rim.

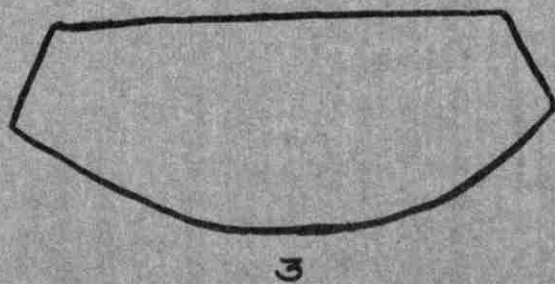
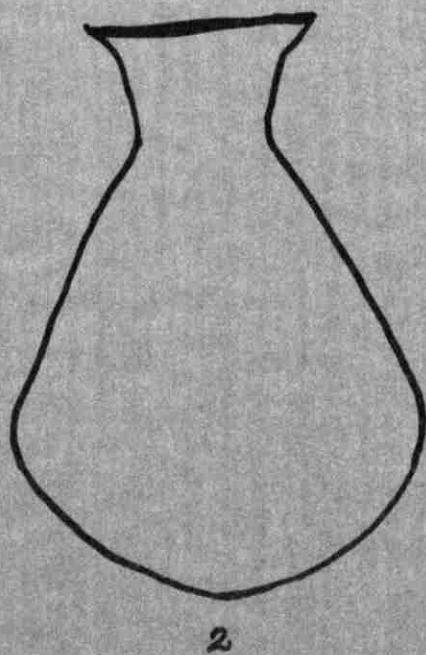
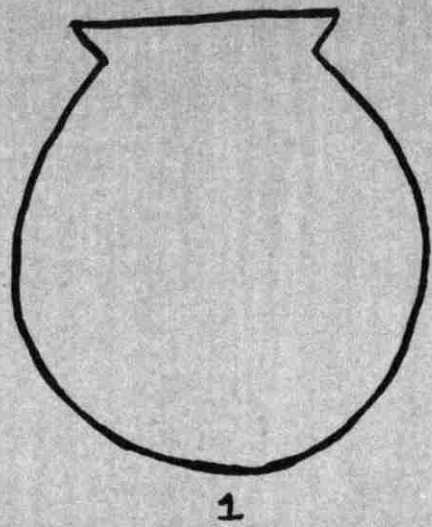


PLATE XXVIII.

A zoomorphic jar of buff ware; tempered with numerous small flint grits; cream slip; with a neck on top which looks like a duck.

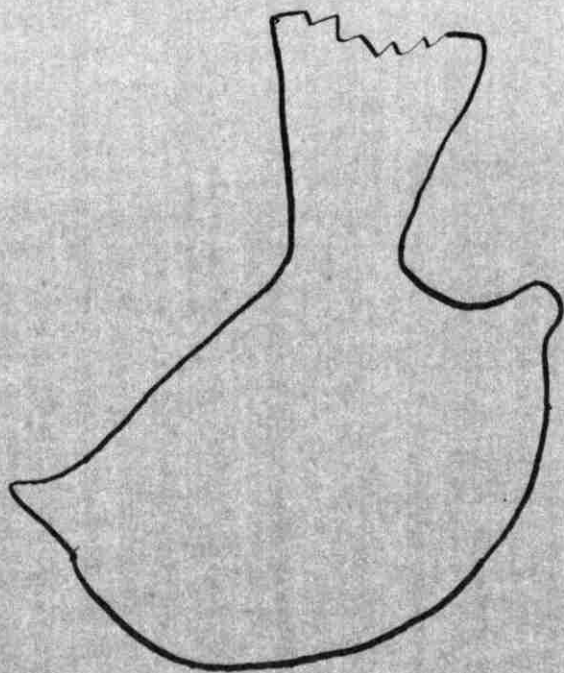


PLATE XXIX.

A cooking pot with traces of burning showing, of orange buff ware with a self same slip; numerous large flint grits; a tripod stand supporting the round base, consisting of three tapering legs, each seven centimeters high; globular body; slightly flaring rim.

Provenance: In a house; never found in burials except in the case of their being used for the body of a child as the burial jar itself.

Plate XXIX

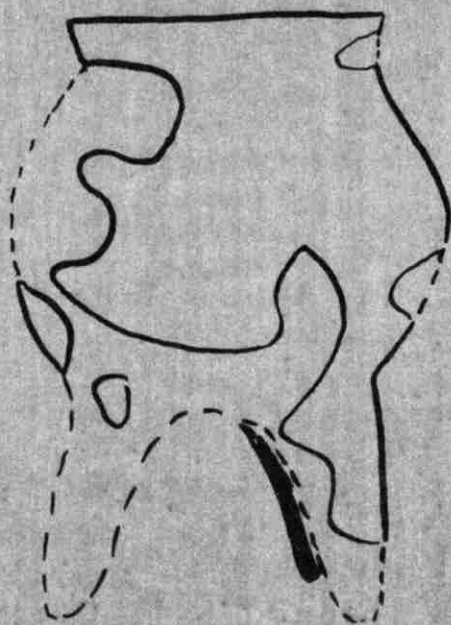


PLATE XXX.

A deep bowl of orange buff ware with a buff slip, large number of extremely large grits; round base; depressed globular body; flared rim; two loop handles with a jagged outward edge, attached just above rim and at shoulder. Provenance: Uncertain, perhaps under a house.

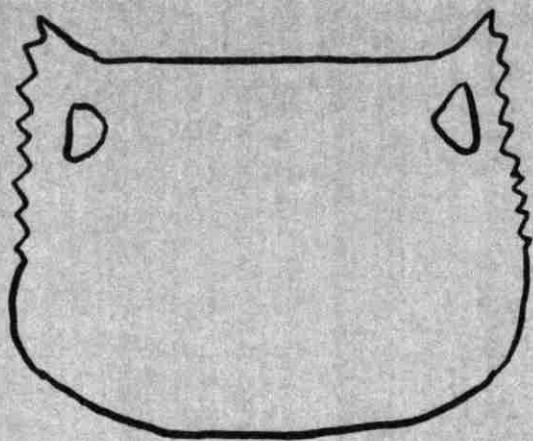


PLATE XXXI.

A jar of buff ware with an orange-red slip; a small amount of grits; a high ring base pierced with three holes; ovoid body; short neck; flared rim; burnished; decorated with two deeply incised horizontal broken lines around the neck, from which drop four sets of vertical broken lines, each set consisting of two rows.

Plate ~~XCI~~

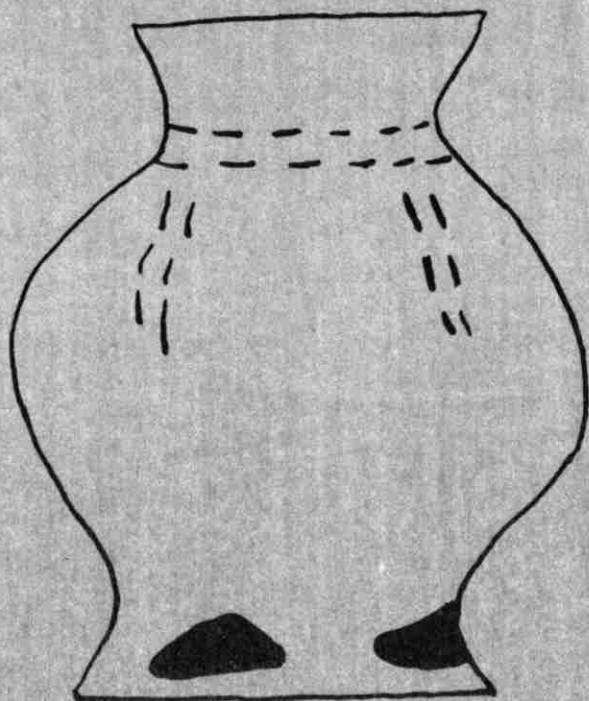


PLATE XXXII.

A large jar of buff ware with a great number of large grits; flat base; ovoid body; small neck; almost vertical rim; two elliptical handles attached at the middle of the body; decorated with an incised herringbone band around neck, below which is a row of oblique incisions in a vertical herringbone pattern from shoulder down through the upper half of the handle.

Provenance: Found in a house.

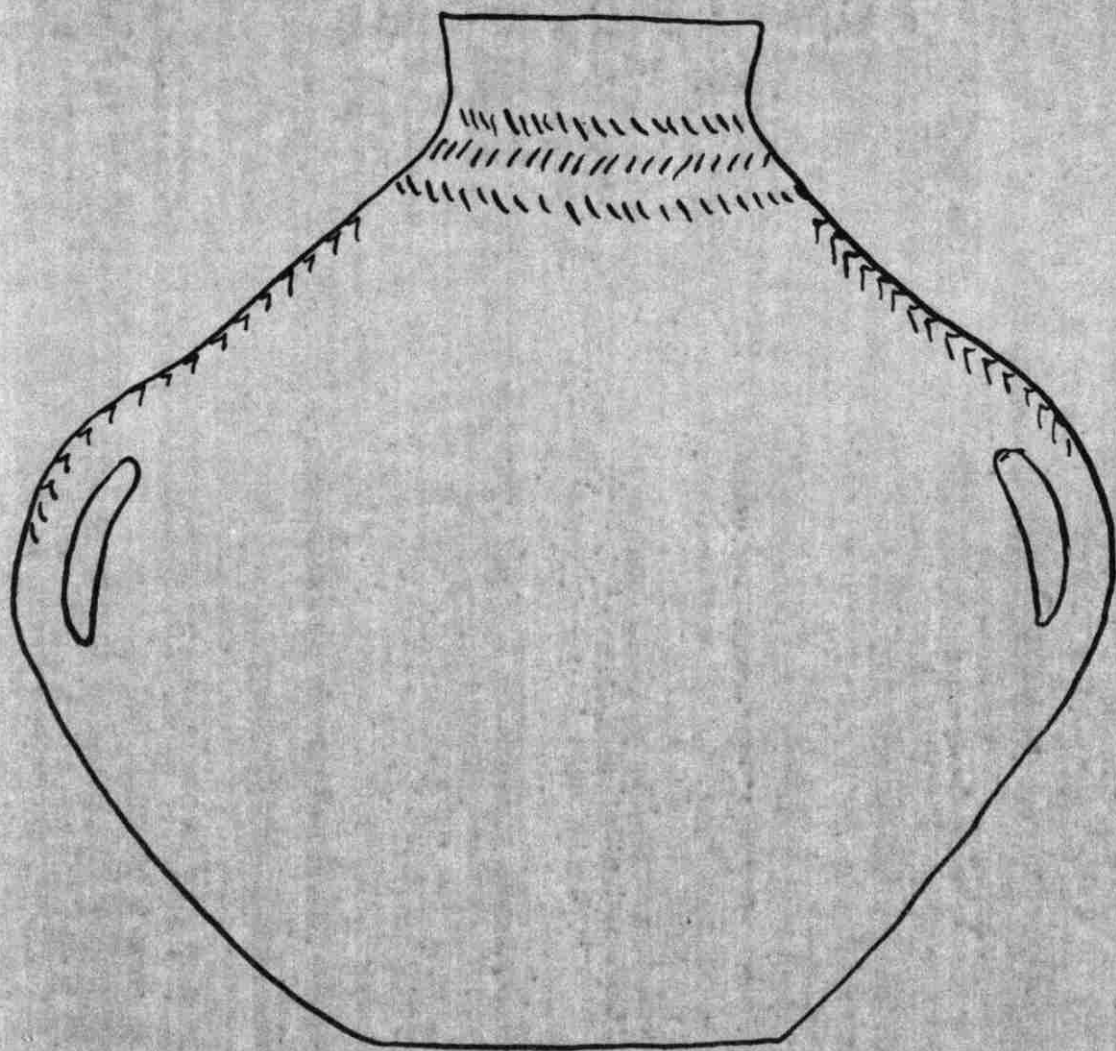
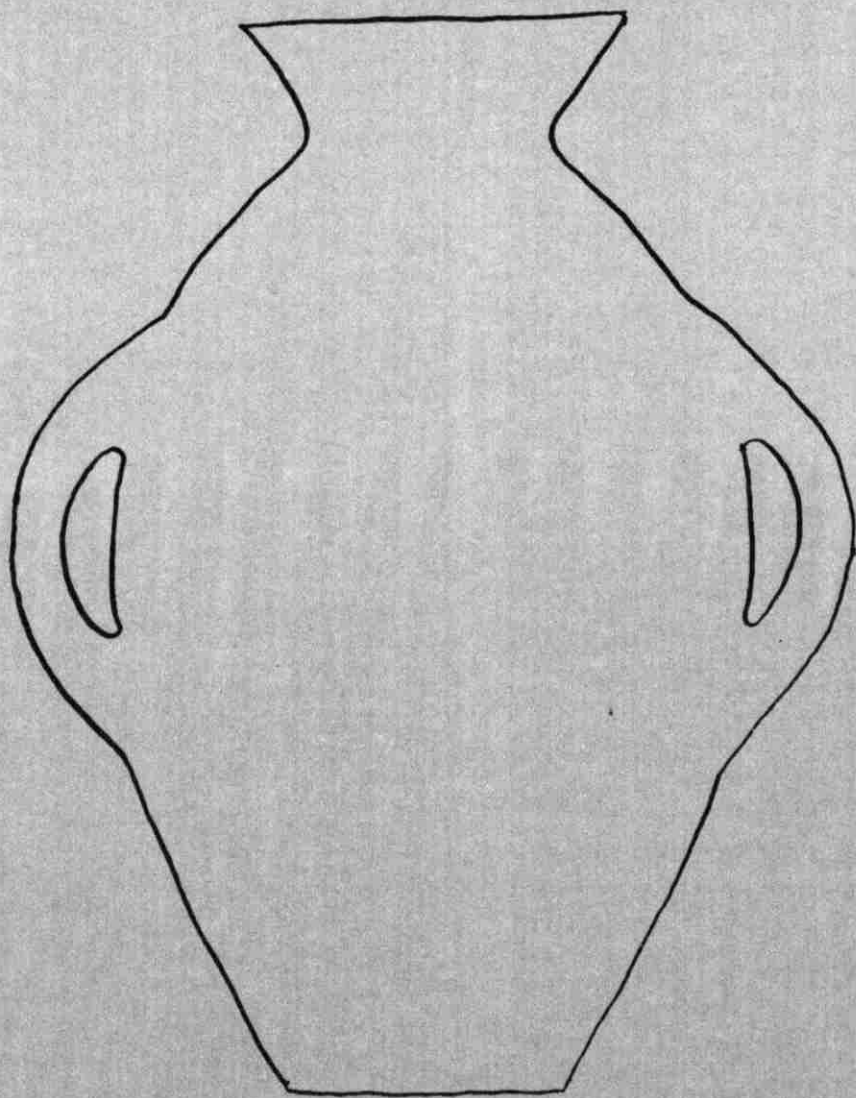


PLATE XXXIII.

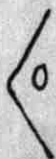
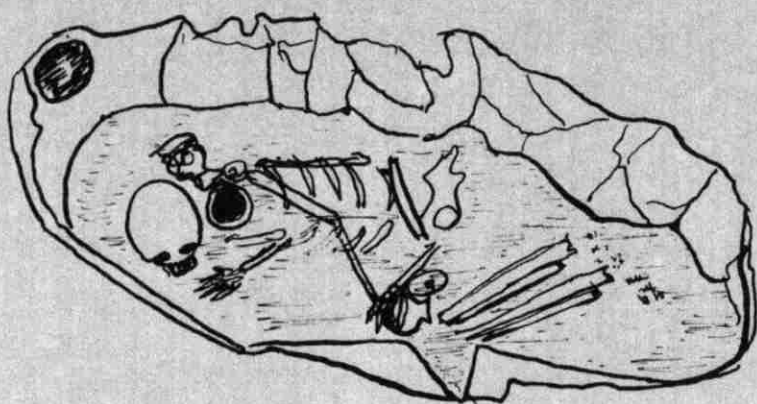
A medium sized jar of buff ware with a red slip; wet smoothed; numerous large grits; flat base; ovoid body; neckless; flared rim; two elliptical handles attached at the middle of the body.



T 1752 13/8
XLVII

December 18/1958
Byblos

inner jar 126 cm / 57 cm



2 angular handles on outer jar

195 cm / 72 cm

3 pots

- ① small jar 2 base + flared rim
DP 17 cm from top
- ② small shallow bowl
East side 33 cm from top
- ③ cruse
16 cm from S side
29 cm from N side

CONCLUSION.

The classification of Chalcolithic pottery of that part of Phoenicia included in this thesis is still extremely difficult, due to the lack of stratification which was of such great help in the division of this period in Palestine. The problem confronting us is one that can only be completely solved by Carbon 14 testing on bones found in the jar burials under or between houses and bones found in the jar burials in the rock grottoes. The pottery of the grotto burials seems to be finer in quality, and of more imaginative forms, but, of a more simple decoration in that the herringbone pattern pre-dominates. The herringbone pattern, is however, continuous throughout the period. It is essential for our purpose, first to try and establish whether the two burial practices are contemporary, or whether they belong to two different phases, and if so, which is the earlier practice, burial in grottoes or burial between or under the houses. We must now consider the facts at our disposal. Mr. Dunand feels, according to his report, that the grotto burials are the later, following the burials under the houses. The reason he gives is that pottery found in the rock grottoes is of a finer quality than that of jar burials under houses. Montet simply states that rock cut grottoes were used in the late Chalcolithic Period. Dr. Childe tells

(1) Dunand: Fouilles de Byblos, Vol. I.

(2) Montet: Byblos et l'Egypte.

(3) Childe: New Light on the Most Ancient East, p. 220.

us that this collective burial in caves is the first dated example since the Natufians and a practice repeated around the Mediterranean Area in the early metal age. To use logic and reasoning we would assume that as during the Neolithic Period burials were in and among the houses, it would naturally follow that at the beginning of the succeeding period, the same method of burial would be maintained, but let us remember that there is a hiatus of approximately 400 years at Byblos, and without occupation it would hardly seem possible that the burial customs of the old inhabitants would still be surviving. We must also face the plain and simple fact that so far no metal objects have been found in any of the grotto jar burials, but a certain number of metal objects in the form of silver earrings and finger rings, and copper daggers were actually found in some of the jar burials under and between houses. Does this absence of metal in the rock grottoes actually point to a later phase? Would any folk start using metal and place metal in their tombs and then abandon the practice? In the opinion of the present writer, this is not probable.

The writer believes that a new folk settled at Byblos somewhere in the middle of the Fourth Millennium, and introduced the Chalcolithic culture on the site. This is borne out by the changes in the methods of architecture and by the introduction of new pottery forms and techniques. These new folk moved into Byblos from another site, bringing with them, among other

things, the practice of burial in jars. Burial in jars was practiced in the Late Chalcolithic Period in the Gerzean civilization of Egypt and also at Hassuna and Carchemish in Syria. (1) Is it not possible that they used the existing rock grottoes for the burial of their dead at the outset and then when these caves were full, they started burying under and around houses, which is in itself a mark of a stable and stationary culture. For example thirty five pots, twenty three skulls, and several fragments of the skulls of infants were found in one single tomb, Tomb 99 at Byblos. (2) These same folk later learnt the use of metal. Metal was first used in Egypt by the Badarians, (3) but to a very limited extent only, and then on a much larger scale by the Urukians in Mesopotamia somewhere about 3500 BC. and later spread to other parts of the Fertile Crescent, including Byblos, through trade and is now found in some of the tombs of the Chalcolithic Period, but in jar burials under and among houses only.

To examine the question further, why, may we ask, were the forms and wares of the grotto burials of a better quality? Some may argue that these were the burials of the wealthy, but why then were the poor buried with precious metal? These vessels of the grotto burials have basket handles, twin jars with one handle placed on top, and the main motif seems to be

(1) Childe: New Light on the Most Ancient East; pp. 219, 12.

(2) Dunand: Fouilles de Byblos, Vol. I, p. 434.

(3) Childe: New Light on the Most Ancient East; p. 43 et seq.

the herringbone design which was already witnessed in the Neolithic Period. This pottery I would like to call Late Chalcolithic, Phase A.

The pottery found in the virgin soil or that which was found in houses is also imaginative (Plates XXI and XXVII - XXXII), and may belong to either phase.

The pottery found under and among the houses is of a simpler and more utilitarian form but it is only natural that with the introduction of a new industry, in this case metallurgy, that we find a decline in the imagination and care in the old industry, in this case, pottery. Production of pottery in the second phase of the Late Chalcolithic, which I should like to call Phase B, must, because of the increase in population of necessity, be on a greater scale to satisfy a greater demand. The imagination now is needed for the working of metal and energy was expended in that direction at the expense of the good taste and refinement in pottery production. One must be reminded of the great progress in forms and decoration in the 1000 years of the Neolithic Age, during which time pottery was the main and most important industry, and the demand for it was less, due to the small size of the population. That bug-bear of the present day, mass production, did not, in the Neolithic Age and in the Phase A Chalcolithic come into play, but its impact was felt towards the end of the Chalcolithic Age, Phase B.

The present writer hesitates to attempt to set a definite date for the change from Phase A to B, which in any case was probably gradual and accompanied by an overlap.

CHAPTER IV.

NEW CULTURE: NEW IDEAS.

So far as we know a new culture and new ideas pertaining to the ceramic industry were introduced into Phoenicia and more particularly at Byblos at the turn of the Chalcolithic - Early Bronze Era. No published classification of the pottery of the Early Bronze Age in Phoenicia has appeared so far, but after a careful study of the forms, styles, techniques and methods of decoration of the period, and the results of the excavations at Byblos, the present writer thinks it is possible to divide the Early Bronze Age pottery, ranging from 3200 to 2200 BC.⁽¹⁾, into two major phases: Early Bronze I and Early Bronze II, each of which may again be subdivided into two sub-periods, A and B.

(2)

Mr. Dunand, in his article in the *Revue Biblique*, divides the Early Bronze Period on stratigraphic, historical, and architectural grounds into 4 parts as follows:

- phost I A
- B
- a) Stratum III: Transitional Period, 3200-3100 BC.
 - b) Stratum IV : Period of First Urban Installation, 3100-2800 BC.
 - c) Stratum V : Period of the introduction of Monumental Architecture, 2800-2700 BC.
 - d) Stratum VI : Period of Development of Monumental Architecture, 2700-2200 BC.
- p. 203 II

(1) *Revue Biblique*, LVII, 1950, pp. 583-603.

(2) Dunand: Byblos.

These four divisions fit in nicely and tally with the classification of the pottery proposed by the author. The pottery of Phase I A comes mainly from Dunand's Stratum III, I B from Stratum IV and V, Phase II A from the Lower Level of VI & IIB from the last part of Stratum VI.

In Phase I A, the pottery is either handmade or made on a slow moving wheel, with the former pre-dominating, (Plates XXXV-XLI). It consists mainly of red ware, tempered with rather large flint and quartzite grits. The pottery is either wet smoothed or burnished over a red slip. Sometimes it is painted, as in the examples of the pots discovered at Lebe'a, with a dark red criss-cross pattern, (Plate XLI, 2 and 3). At Byblos however, Mr. Dunand did not discover any painted pots from this phase of the Early Bronze Age. ⁽¹⁾ In a few cases, combing is used. The pots include jars, jugs, bowls, dippers and cooking pots.

In Phase I B, there are jars, jugs, dippers, twin-jars, bowls and cooking pots, (Plates XLII-XLIV). The ware is more finely levigated, contains smaller grits and is almost entirely made on a slow moving wheel. It is red in color and covered with an intense red slip; the vertical burnishing of the previous phase gives way to pattern burnishing, forming a criss-cross or lattice design. This appears on the outside of the jugs and jars and on the inside of the bowls. In some

(1) Dunand: Fouilles de Byblos, I, p. 329.

vessels there is a combed decoration which is deeper than in the previous period. Side by side with these, the earlier forms persist in some areas, and it seems that the better quality ware was used by the privileged classes.

Phase II A: Here we find a limited number of additional forms, quite different from those of the previous period, but in a larger quantity, (Plates XLV-XLVII). These include small jars, (Plate XLV) and zoomorphic vessels, (Plate XLVI and XLVII). Most of the new forms are painted in a variety of imaginative ways, including a criss-cross pattern, inverted palm branches, checkerboard designs, a tree like design and wavy lines. In a few vessels combing and incised lines are found combined with the painting.

Phase II B: In this phase a new type of decoration and entirely new forms make their appearance in addition to the types already in use, (Plates XLVIII-LII). The decoration embraces the combined techniques that we have witnessed in all the previous phases, namely burnishing and combing as well as painting, juxtaposed in such a striking manner as to bring a very pleasing and rather impressive effect. The various vessels are coated with an intense red slip, burnished, and almost invariably combed in horizontal lines over the burnishing so as to expose the actual color of the ware under the slip. In addition, some of the pots are painted with

white pellets, giving the surface a mottled appearance. The pottery of all the three preceding phases continues in manufacture. The forms are just as original and exotic as the method of decoration, and include slender jars or vases without handles, (Plate L, 1 and Plate LII); juglets with double or highly decorated handles, (Plate LI, 1), vessels ornamented with nodules; flared or closed bowls, (Plate XLVIII, 2 and Plate L, 3). Attention should be drawn to the cord-eye type handles of the bowl on Plate XLVIII, 2, and to the single juglet standing on a high ring-like base, (Plate LI, 3).

The pottery of the four phases will now be presented in detail and described in the following pages, as in the previous chapters.

PLATE XXXV.

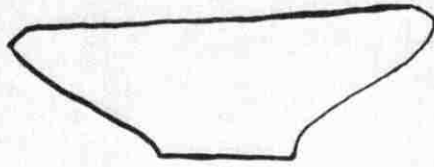
These pots are both on exhibition at the American University of Beirut Museum.

- 1- A handmade bowl of light red ware, tempered with a large amount of flint grits of various sizes. String cut base; inverted rim.

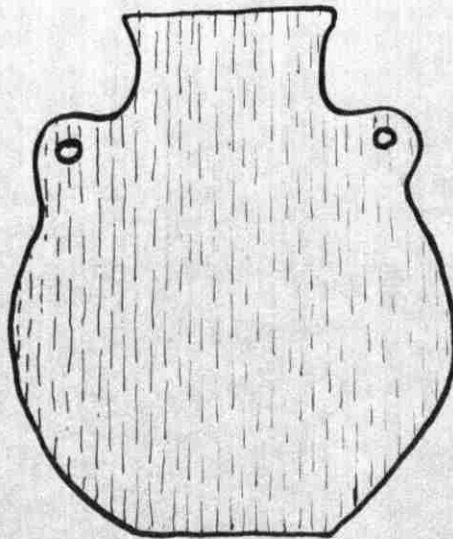
Provenance: Unknown.

- 2- A jar; partly wheel made and partly handmade; tempered with fine flint grits; it has flat base, globular body, short neck of medium width, two cord-eye handles, one on either side of the shoulder; a brown slip, highly burnished by hand.

Provenance: Unknown, stated to be Byblos.



1



2

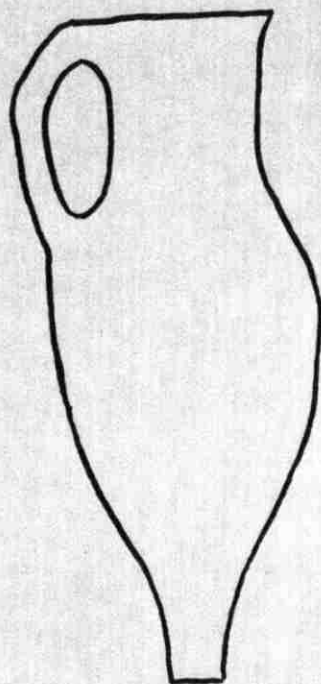
PLATE XXXVI.

These pots are all on exhibition at the American University of Beirut Museum.

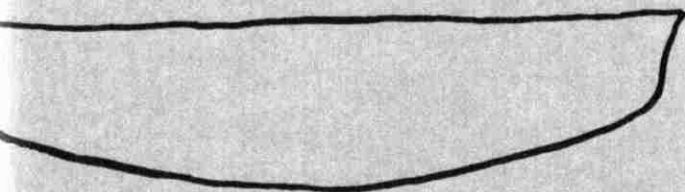
- 1- A handmade jug of red ware, tempered with small flint grits; it has a small stump base, an ovoid body, a wide neck and a flaring rim; loop handle, (flat in section), from rim to shoulder.
Provenance: Byblos.

- 2- A handmade open bowl of greenish cream ware with large flint and limestone grits; round base; carinated body; slightly everted rim.
Provenance: Byblos.

- 3- A cooking pot of buff ware, made on a slow moving wheel; it is tempered with small flint grits and has a round base, a depressed globular body, a short wide neck, and a loop handle from rim to shoulder; the rim is rolled; combed design made by wheel marks.
Provenance: Byblos.



1



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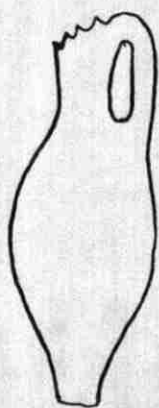


3

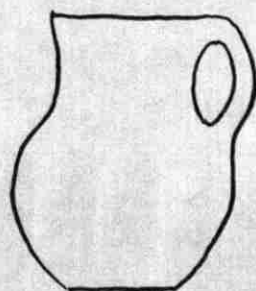
PLATE XXXVII.

All found at Byblos, now in the American University of Beirut.

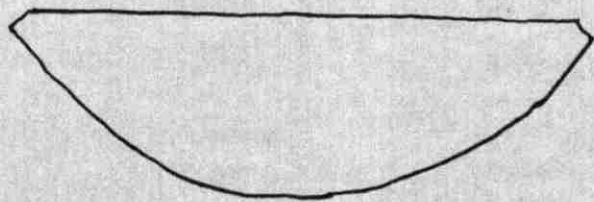
- 1- A dipper made on a slow moving wheel; light red ware; numerous small flint grits mixed with a few limestone; dark red slip; short stump base; ovoid body; relatively medium neck of medium height; slightly everted rim, mostly missing; loop handle from rim to shoulder.
- 2- A small jug made on a slow moving wheel; drab red ware with a fair amount of flint and tiny quartzite and limestone grits; small flat base; piriform body; wide neck of medium height; slightly everted rim; loop handle (flat in section) from rim to shoulder.
- 3- An open bowl of light red ware made on a slow moving wheel; flint and a few small limestone grits; wet smoothed; round base; inverted rim.



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PLATE XXXVIII.

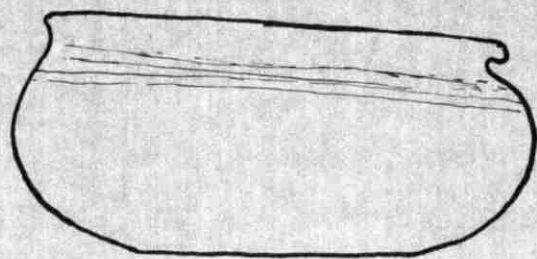
1- A handmade bowl of buff ware with a self same slip; few small flint grits; flat base; depressed globular body; neckless; everted rim; decorated with a band of combed pattern on top of shoulder.

Provenance: Byblos.

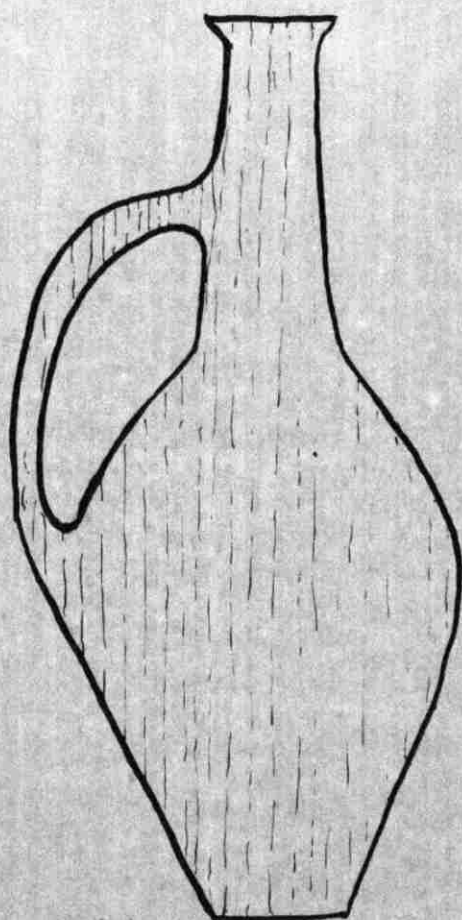
2- A juglet of buff ware, tempered with small flint grits; wheel made, small flat base; ovoid body; long narrow neck; everted rim; loop handle (flat in section) from middle of neck to middle of body; decorated with an intense red slip, highly burnished.

Provenance: Found in the urban installation under
Batiment XL, Byblos, which places it in the First Dynasty. (1)

(1) Dunand: Fouilles de Byblos, Vol. II; Atlas Plate CCVI; 18789.



1



2

PLATE XXXIX.

- 1- A potsherd showing the design of an impression of a cylinder seal.

Provenance: Found under Batiment XL and dated to the First Dynasty.

- 2- A jug of light red ware; made on a slow moving wheel; few flint grits; flat base; ovoid body; narrow neck of medium height; flared rim; loop handle rising slightly above the rim to shoulder; two vestigial handles on either side of middle of body; decorated with a dark red slip and highly burnished.

Provenance: Under Batiment XL and dated to the First
(1)
Dynasty.

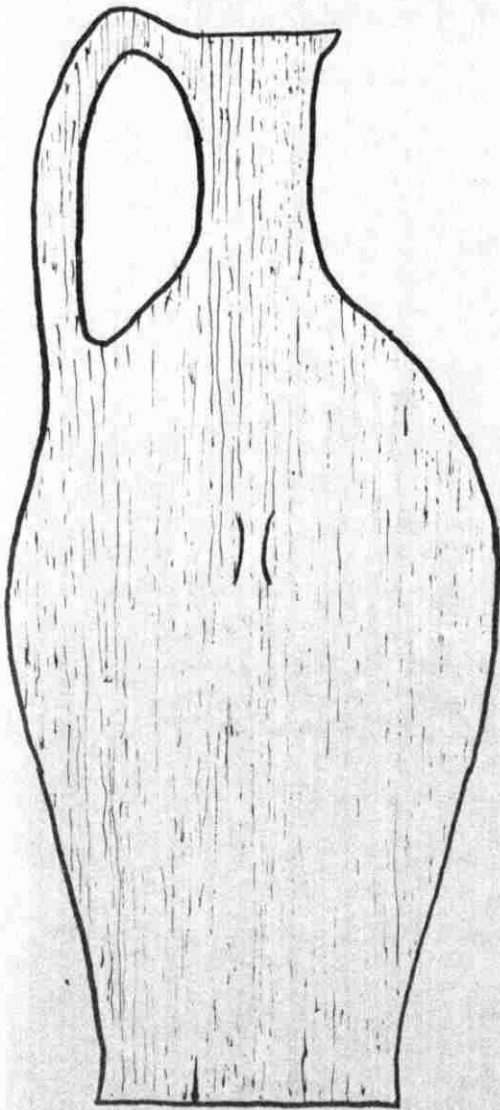
- 3- A cooking pot of light red ware; handmade; small flint and limestone grits; round base; globular body; flared rim; two cord-eye handles on either side of neck; decorated with a rouletted pattern at base of neck, beneath which there is a deeply incised line.

Provenance: Sidon; on exhibition at the American University of Beirut Museum.

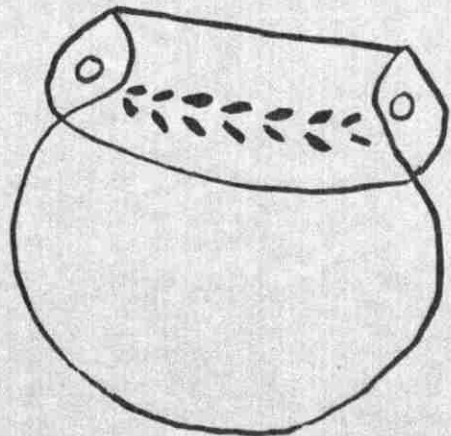
(1) Dunand: Fouilles de Byblos, Vol. II, Atlas, Plate CCVI, 18790.



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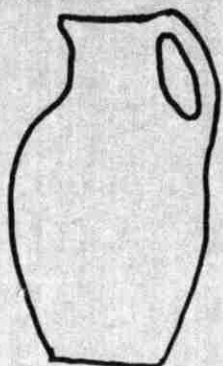
3

PLATE XL.

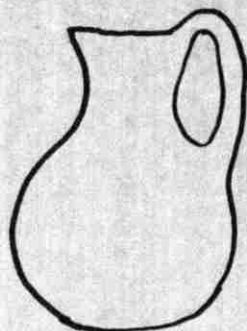
These pots were all found in Tomb 6 at Lebe'a. (1)

- 1- A handmade jug of red ware, tempered with numerous flint and some haematite grits. Flat base; ovoid body; medium neck with slightly flared rim; loop handle from rim to shoulder.
- 2- A handmade juglet of red ware with large flint and small haematite grits; wet smoothed, flat base; ovoid body; wide neck; slightly flared rim; ear handle rising above rim and dropping to shoulder.
- 3- A handmade medium jar of drab buff ware, wet smoothed; numerous haematite and flint grits; flat base; ovoid body; short wide neck; everted, flared rim; four lug handles around middle of body.
- 4- A handmade jug of buff ware; numerous flint and haematite grits; wet smoothed; flat base; globular body; narrow neck of medium height, flaring towards rim; loop handle from middle of neck to shoulder.

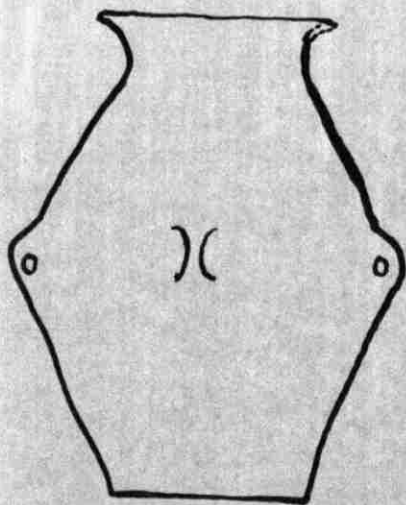
(1) Bulletin du Musée de Beyrouth; Vol. I, pp. 35-56.



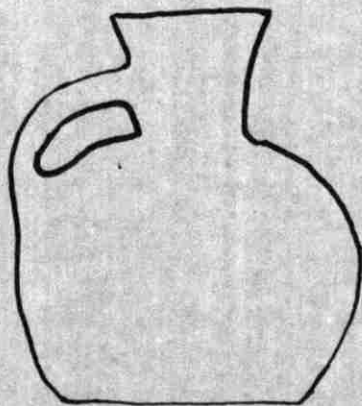
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4

scale 1:3

PLATE XLI.

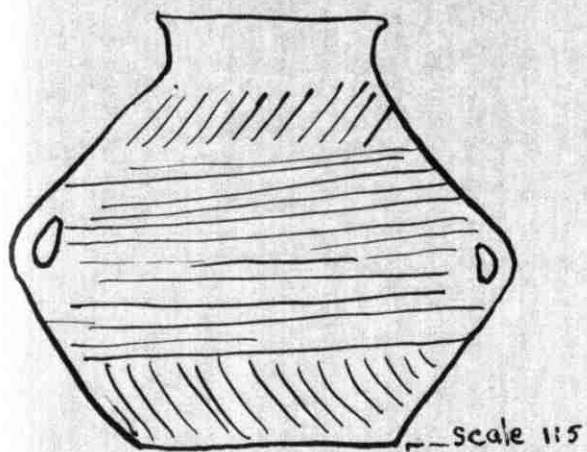
These pots were all found at Lebe'a, but include one from Achara on the Euphrates for purposes of comparison (1) only.

- 1- A handmade jar of buff ware with flint and limestone grits; wet smoothed; flat base; squat, globular body; short wide neck; everted rim; two angular loop handles on middle of body; decorated with deep, wide combing. The jar shows close similarity in form and treatment to the Chalcolithic jar from Byblos appearing on Plate XXXII, and is no doubt its direct descendant. Provenance: Lebe'a, Tomb 6.
- 2- A small jug of dark red ware; numerous flint grits; self same slip; made on a slow moving wheel; flat base; ovoid body; long narrow neck; elliptical handle from middle of neck to edge of shoulder; burnishing in a diagonal criss-cross pattern from base of neck to base of body, with a vertical painted line from shoulder to base. (2) Provenance: Achara on the Euphrates, but included here because of similarity of form to the juglet illustrated on Plate XXXVIII, 2 and the decoration of the following pot.

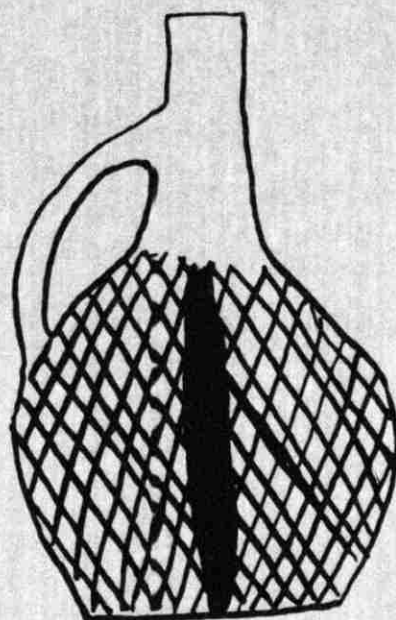
(1) Bulletin du Musée de Beyrouth, Vol. I, pp. 35-56.

(2) Bulletin du Musée de Beyrouth, Vol. I, Plate 15, D.

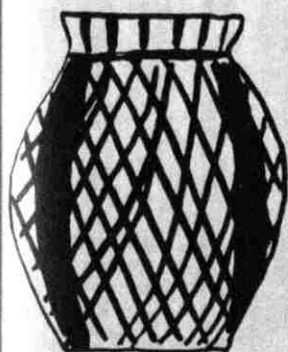
- 3- A small handmade jar of buff ware with small flint and limestone grits; flat base; ovoid body; neckless; wide flaring rim; decorated with red painted vertical lines on rim, a horizontal line around base of rim; diagonal criss-cross lines from base of rim to bottom, and four vertical bands from base of rim to bottom.
Provenance: Lebe'a Tomb 6.
- 4- A handmade juglet of buff ware; flint and haematite grits; flat base; globular body; wide flaring rim; ear handle rising slightly above rim to middle of body; self same slip; burnished.
Provenance: Lebe'a Tomb 6.
- 5- A handmade small jar of buff ware; large flint and numerous small haematite grits; globular body; wide short neck; slightly flared rim; two cord-eye handles on top of each shoulder.
Provenance: Lebe'a Tomb 6.



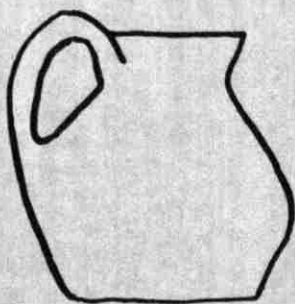
1



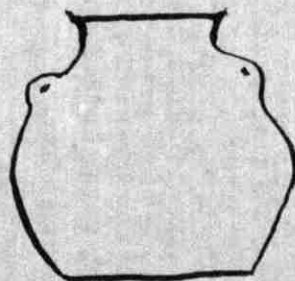
2



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PLATE XLII.

Byblos, Phase I B.

A large jar, handmade; red gritty ware; red slip; flat base; long ovoid body; wide neck; everted lipped rim; two loop handles attached to middle of body where there is a slight dent; bottom of neck decorated with a row of deep incisions; rest of body decorated in a lattice burnished pattern.

Provenance: Tomb Group at Byblos, at present in the Archaeological Museum of the American University of Beirut.

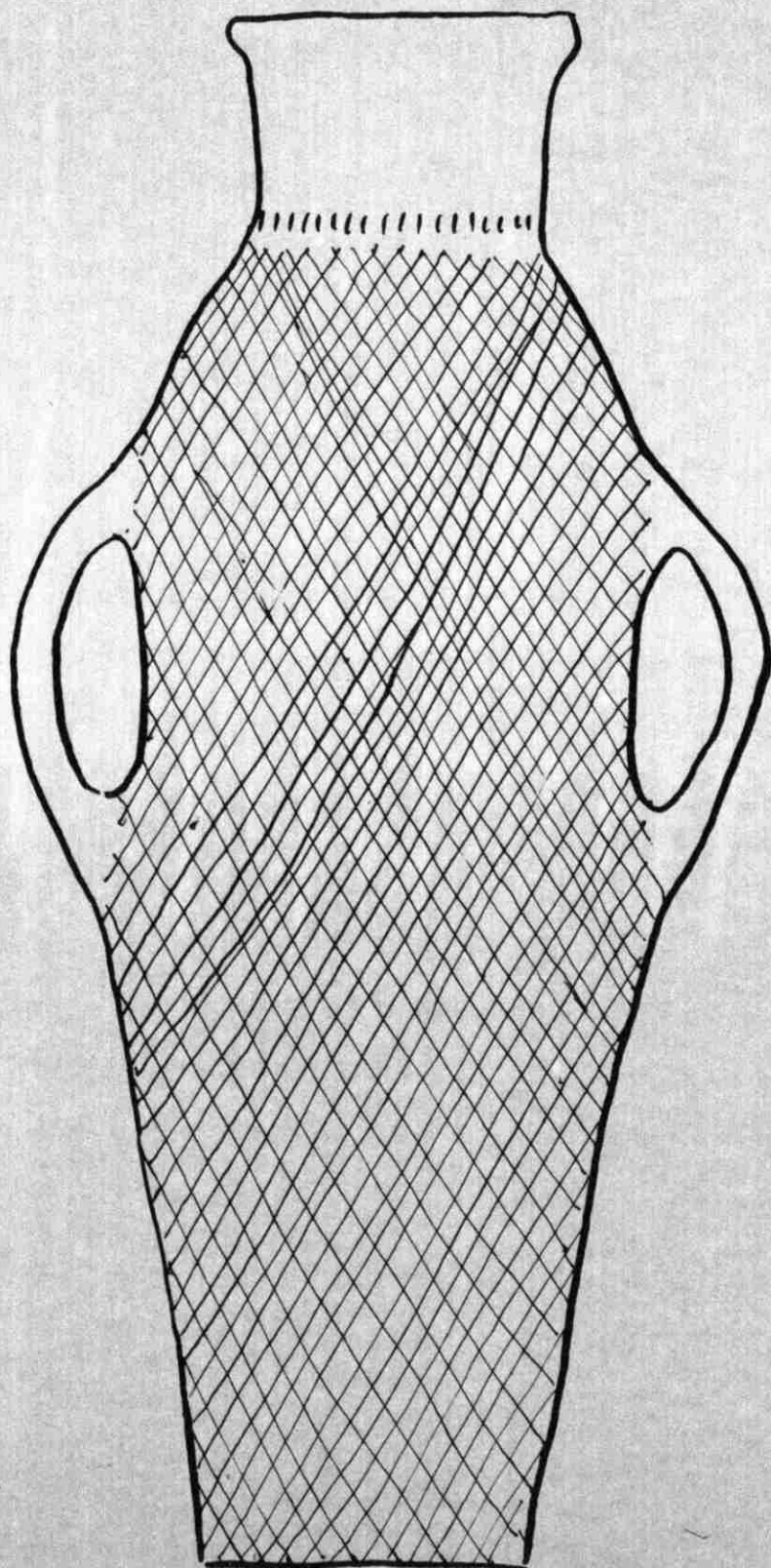
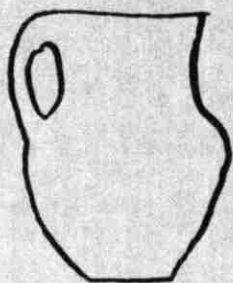


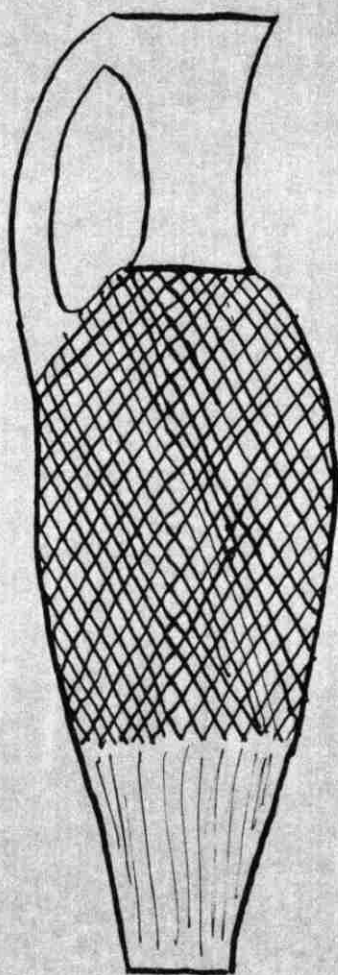
PLATE XLIII.

A Tomb Group at Byblos Showing Phase I A and I B, at present in the Archaeological Museum of the American University of Beirut.

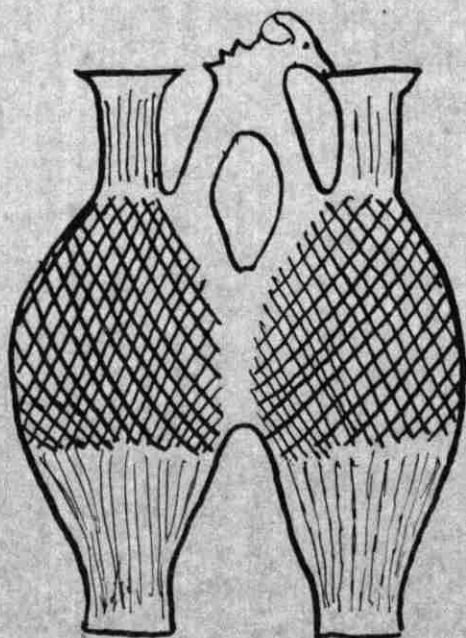
- 1- A juglet of red ware, made on a slow moving wheel; numerous flint grits; flat base; piriform body; wide neck of medium height; loop handle from rim to shoulder. Phase I A continuing into Phase I B.
- 2- A jug of red ware; numerous flint grits; made on a slow moving wheel; red slip; stump base; long ovoid body; narrow neck with a collar at the bottom; flaring rim; loop handle from rim to shoulder; decorated in a burnished lattice pattern on upper two thirds of body.
- 3- A double jar of red ware; made on a slow moving wheel and in part by hand; flint grits; red slip; each jar with a stump base; ovoid body; narrow neck; flaring rim; both jars are joined at the middle of the body and have a common handle attached at the top of the shoulder and shaped like a wish-bone surmounted by a horned quadruped with its head over the rim of one jar; other end broken. Upper two thirds of body decorated with the lattice burnished pattern.



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PLATE XLIV.

- 1- A small bowl of red ware, made on a slow moving wheel; flint grits; red slip; inside of bowl burnished in the lattice pattern.
Provenance: Tomb at Byblos, at present in Archaeological Museum of the American University of Beirut.

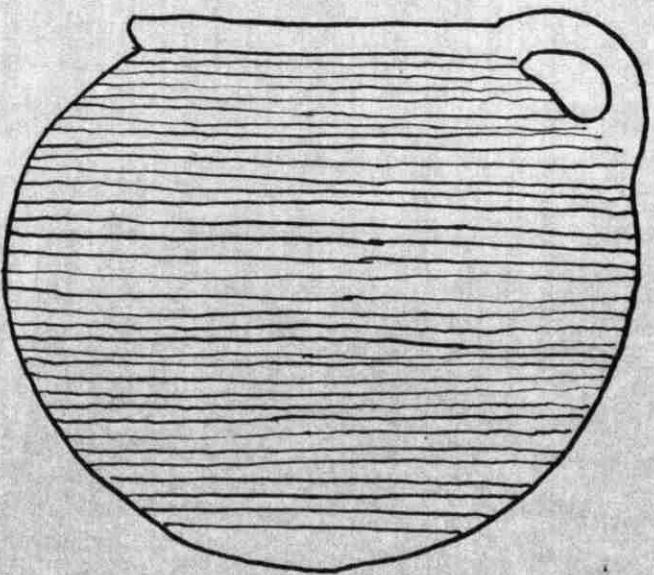
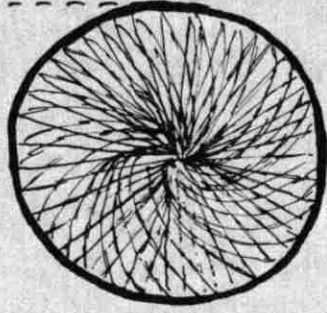
- 2- A cooking pot of red ware; made on a slow moving wheel; red ware; round base; globular body; lipped rim; loop handle from rim to shoulder; decorated with deep combing.
Provenance: Byblos.

- 3- A closed bowl of light red ware made on a slow moving wheel; flint grits; round base; everted rim; outside decorated with a combed pattern; inside of bowl a red slip, pattern burnished in the lattice design.
Provenance: Salle C-B, XXVII.

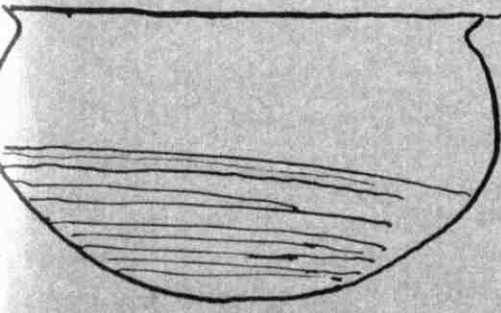
This type of pottery, according to Mr. Dunand starts slightly later than the Urban Installation of the Early Bronze Age and continues towards the middle of the same age which makes them contemporary with the first two dynasties of Egypt. Fouilles de Byblos, Vol.I, p. 371.



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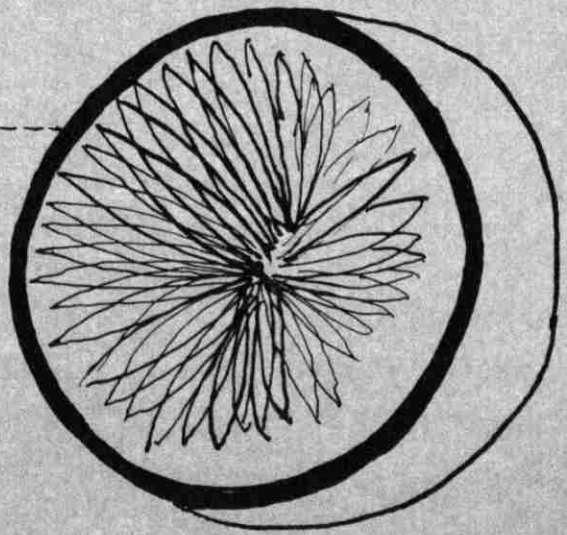


PLATE XLV.

(1)

Phase II A; Byblos.

- 1- A small jar of light red ware with a cream slip; made on a slow moving wheel; small flat base; ovoid body; wide short neck; flared rim; two large loop handles below shoulder; decorated with two horizontal bands in dark red paint; one below the neck, the other one third of the way up from the base; painted criss-cross pattern between two; lower third of body painted with vertical wavy lines.
- 2- A small jar of light red ware, made on a slow moving wheel; cream slip; small flat base; ovoid body; narrow neck; flared rim; two loop handles on the middle of the body; decorated with red painted inverted tree design from neck to base.
- 3- A small jar; made on a slow moving wheel; red ware with a cream slip; ovoid body; wide short neck; flared rim; two loop handles in middle of body; decorated with a dark red painted tree design.
- 4- A small jar; light red ware; cream slip and made on a slow moving wheel; small flat base; ovoid body; wide short neck; flared rim; two large loop handles below

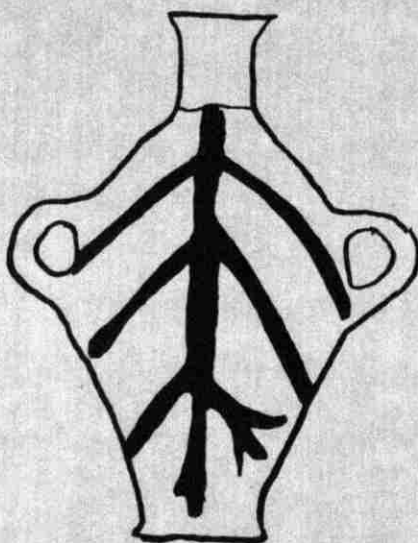
(1) Dunand: Fouilles de Byblos, Vol. I, p. 326.
These were found in a deposit in Batiment II, Salle C.

shoulder; decorated with a checker board design painted in dark red on neck and body.

- 5- A small jar made on a slow moving wheel; light red ware; cream slip; a short stump base; ovoid body; narrow neck; slightly flared rim; two large loop handles attached below shoulder; painted in two red horizontal lines just below neck and above base; between the two is a painted criss-cross design.



1



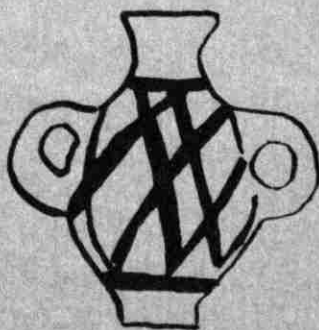
2



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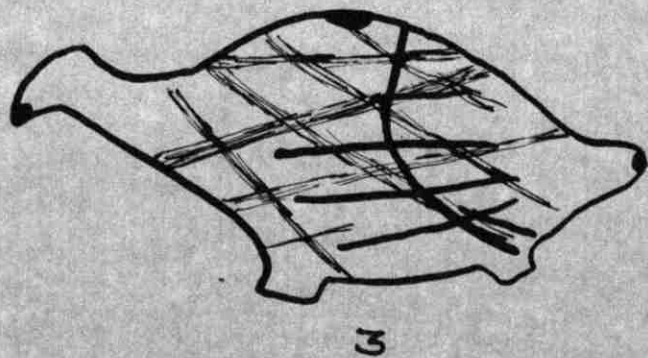
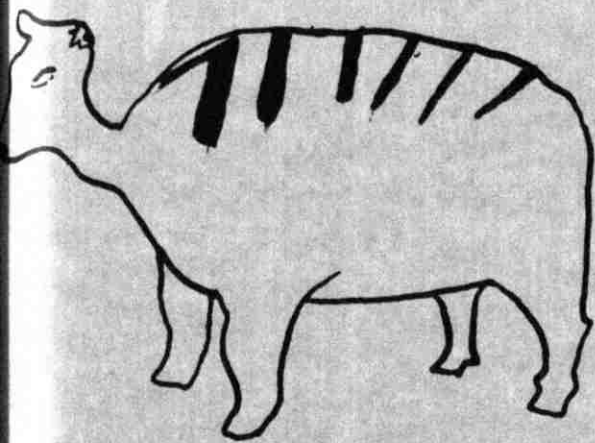
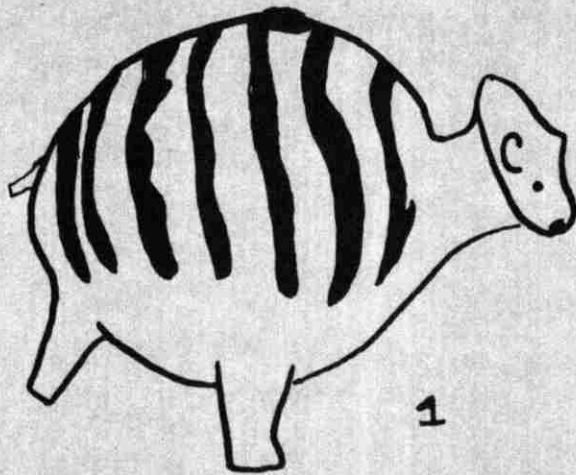
5

PLATE XLVI.
(1)

All found at Byblos, Phase II A.

- 1- A handmade bull-like zoomorphic vessel of drab ware with a buff slip; wet smoothed; fair amount of flint grits; hole in middle of back and in mouth; painted in seven dark red vertical bands.
- 2- A handmade bull-like zoomorphic vessel of buff ware; wet smoothed; very small flint and limestone grits; dark red painting in six short vertical lines over back; hole in mouth.
- 3- A handmade bird-like zoomorphic vessel of buff ware; wet smoothed; flint and limestone grits; hole in middle of back and mouth; decorated with a curved vertical incised line, crossed by four horizontal incised lines and painted in a criss-cross pattern in dark red.

(1) Dunand: Ibid.



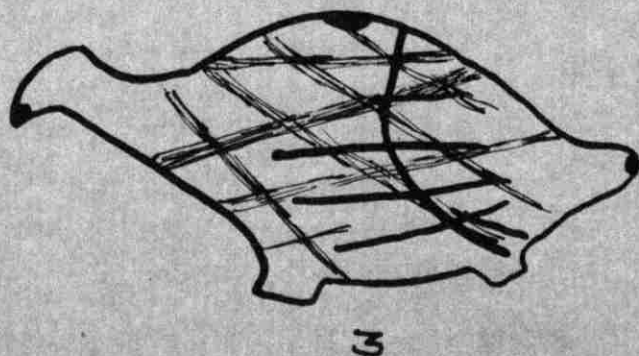
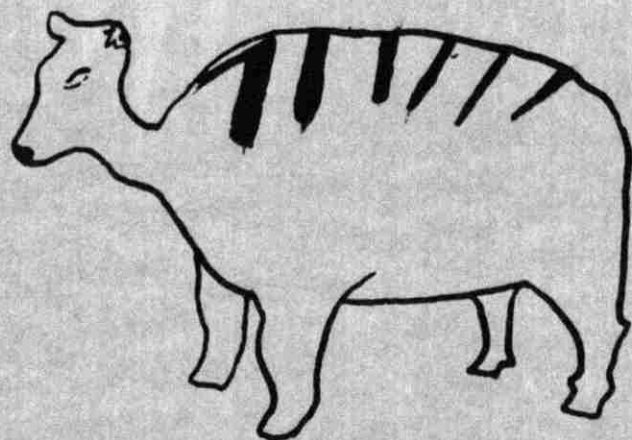
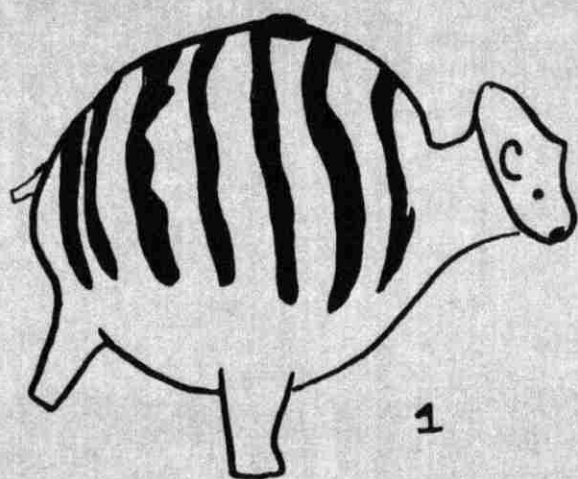


PLATE XLVII.

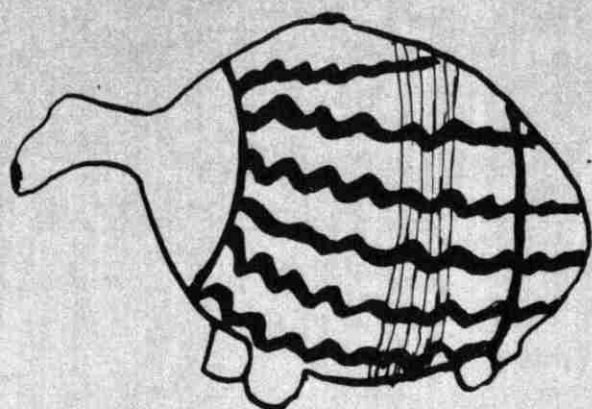
(1)

Byblos: Phase II A

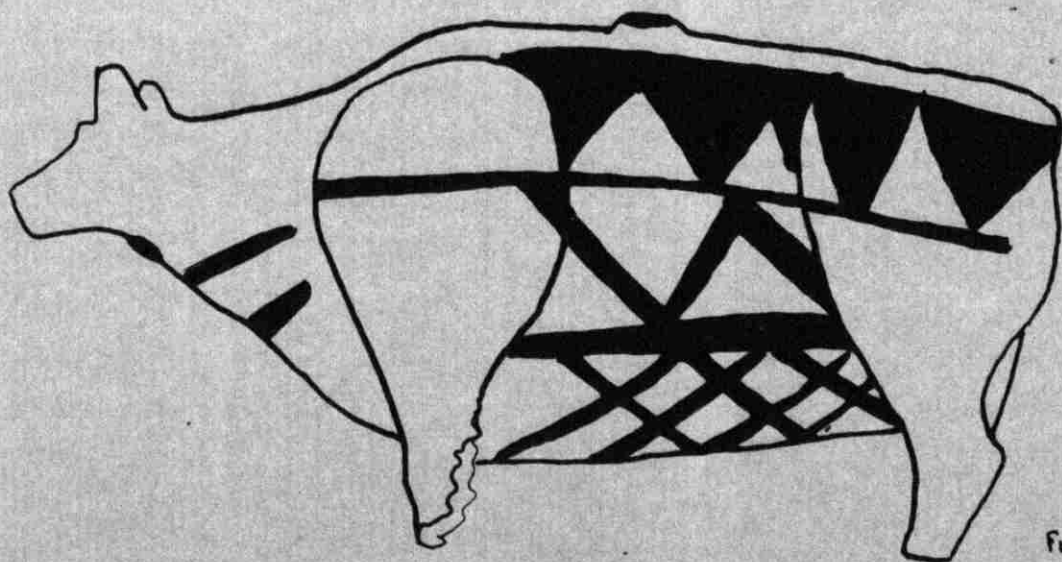
- 1- A tortoise like zoomorphic animal of orange buff ware; wet smoothed; small amount of flint and limestone grits; hole in middle of back and in mouth; partly made on a wheel; head and legs molded by hand; vertical combed band just behind middle of body; dark red painting in two curved vertical bands, one on shoulder and the other near the tail; six horizontal wavy bands from shoulder to tail end of vessel.

- 2- A bull-like zoomorphic vessel of orange buff ware; wet smoothed with small flint and limestone grits; hole in lower part of neck and hole in middle of back; front legs missing; decorated in dark red paint, consisting of two bands from fore-leg across body to almost end of hind-leg, and other lower, from fore-leg to hind-leg; above first band four and one half inverted triangles with the apex resting on top band; a zig-zag line between two legs and a criss-cross pattern below lower band; two short oblique bands on lower part of neck.

(1) Dunand: Ibid.



1



2

Full Scale

PLATE XLVIII.

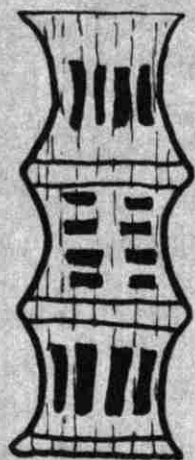
(1)

Byblos: Phase II B.

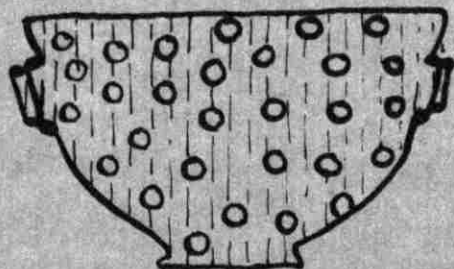
- 1- A stand of light red ware with an intense red slip that is highly burnished; consisting of a cylinder; collar at base and two others at regular intervals between the base and the top; decorated with a number of vertical slots in top and bottom thirds and horizontal slots in middle section; wheel made.

- 2- A small bowl of light red ware with an intense red slip; ring base; hemi-spherical body with four elongated cord-eye handles, two on each side; decorated with high burnishing and painted with white pellets; wheel made.

(1) Dunand: Fouilles de Byblos, Vol. II, pp. 984-997.
Found near the stairs of the Sacred Enclosure leading to the spring.



1



2

PLATE XLVIX.

(1)

Byblos: Phase II B.

A wheel made jar of buff ware with a small amount of flint and limestone grits; cream slip; round base; ovoid body; short wide neck; everted rim; loop handles from rim to shoulder; three red painted horizontal bands, one in middle of body, one on neck and one between the two; a criss-cross pattern between each pair of bands. This particular jug actually starts making its appearance in Phase II A but continues like a number of the others, into Phase II B.

(1) Dunand: Ibid.

Plate XLIX

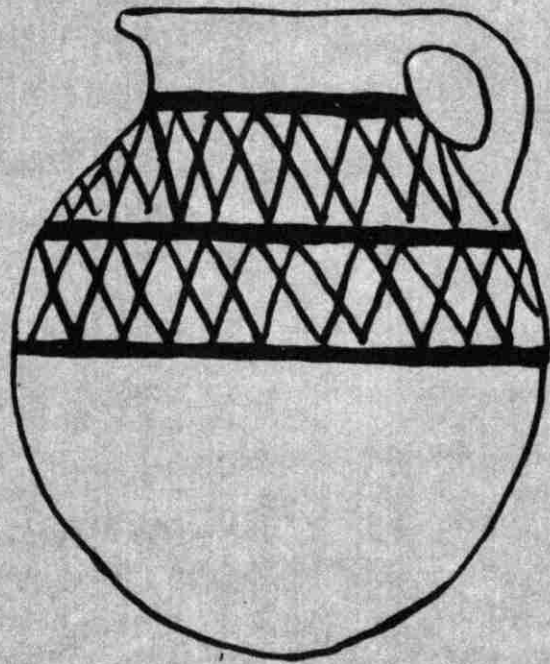


PLATE L.

(1)

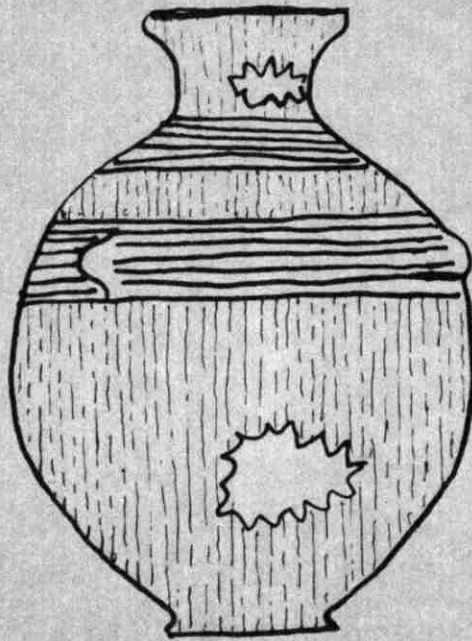
Byblos: Phase II B.

- 1- A small jar of buff ware with an intense red slip; small amount of flint and limestone grits; ring base; ovoid body; three nodules just above middle of body; short neck of medium width; flared rim; highly burnished and combed over burnishing in two horizontal bands, just below neck and other slightly lower, to show original ware; wheel made.

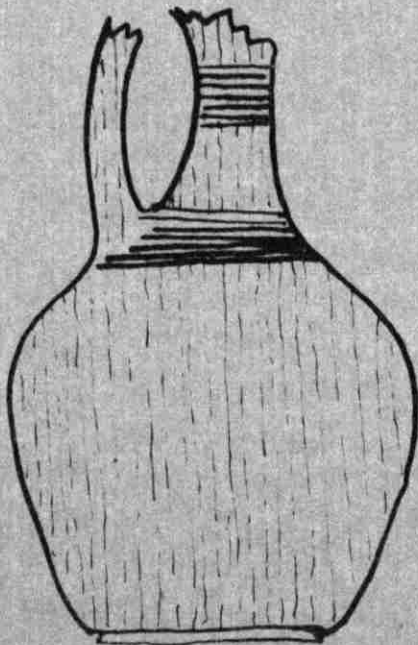
- 2- A juglet of buff ware with an intense red slip; shallow ring base; truncated piriform body; narrow neck of medium height; loop handle rising from shoulder; upper part of rim and handle missing; decorated in two combed bands one in middle of neck and one at shoulder, over and through the high burnishing on the top, to show the colour of original ware; wheel made.

- 3- A cup of orange buff ware with large flint and limestone grits; intense red slip; ring base; collared at junction of body; flared sides; highly burnished; wheel made.

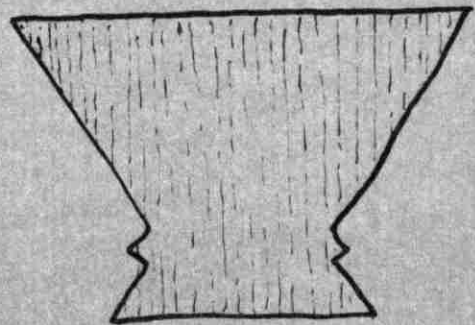
(1) Dunand: Ibid.



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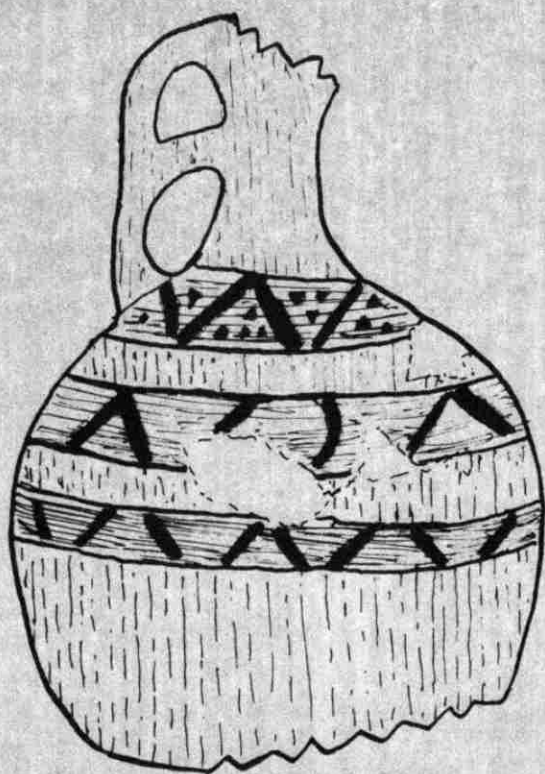
PLATE LI.

(1)

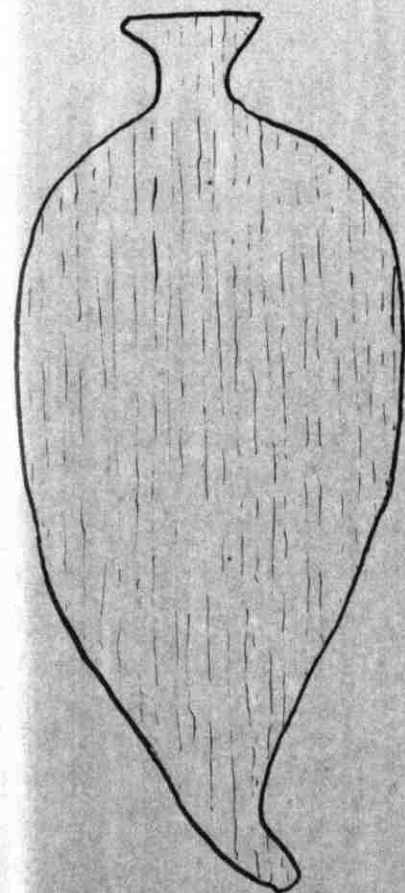
Byblos: Phase II B.

- 1- Fragmentary juglet of orange buff ware with small flint grits; wheel made; base missing; ovoid body; narrow neck of medium height; twin loop handle attached at rim, middle of neck and shoulder; intense red slip; burnished; three horizontal combed bands, one immediately below neck, one on shoulder and one along the middle of the body; the band below the neck is painted with a zig-zag and triangular dot pattern; other two bands in zig-zag pattern only.
- 2- A small jar; cucumber-shaped; of orange buff ware; tail-like base; ovoid body; short narrow neck; flanged rim; intense red slip, highly burnished; wheel made.
- 3- Composite juglet of orange buff ware; small flint grits; consisting of a juglet mounted vertically over a ring with a flat base; the juglet has an ovoid body, almost piriform; short narrow neck; loop handle attached at rim and shoulder; burnished over an intense red slip; wheel made.

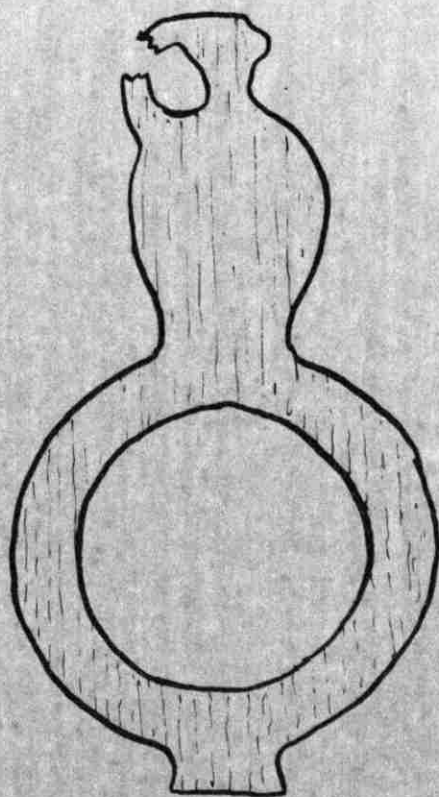
(1) Dunand: Ibid.



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PLATE LII.

(1)

Byblos: Phase II B.

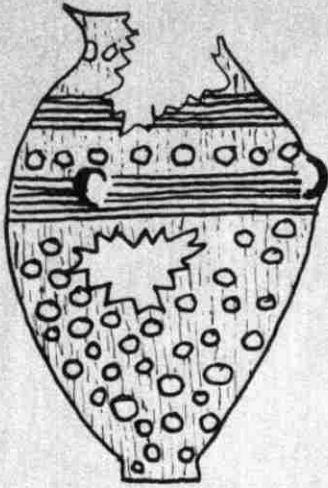
- 1- A small jar of buff ware with an intense red slip; small amount of flint and limestone grits; wheel made; ring base; ovoid body; almost neckless; flaring rim; three nodules just at widest part of body; highly burnished; two combed bands through slip to show color of original ware, one at shoulder and the other at widest part of body; painted all over with white pellets.

 - 2- A small jar of buff ware with an intense red slip; a small amount of flint and limestone grits; wheel made; ring base; ovoid body; wide neck; flared rim; three nodules on widest part of body; highly burnished; two combed bands, showing color of original ware, both horizontal, one just below neck and the other at widest part of body; painted all over with small white pellets.

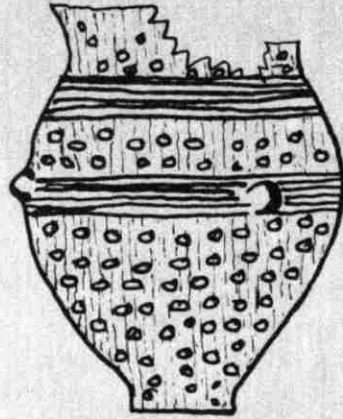
 - 3- A slender jar of buff ware with an intense red slip and a small amount of flint and limestone grits; three nodules at widest part of body; a very small ring base; ovoid body; long narrow neck; everted rim; highly burnished; two bands of combing one on shoulder and the other just above the nodules; combing again shows original color of ware; wheel made.
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(1) Dunand: Ibid.

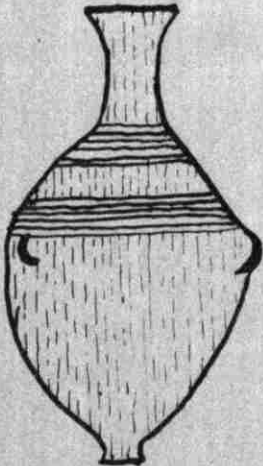
- 4- A slender jar of buff ware with an intense red slip and small limestone grits; wheel made; button base; cylindrical body; short narrow neck; caliciform rim; highly burnished; two bands of combing to show original ware, one immediately below the neck and the other a short distance below.



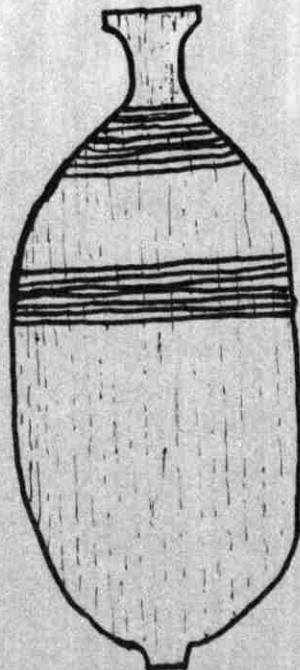
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CONCLUSION

According to M. Dunand, the dolichocephalic skull and the Mediterranean race disappear in Byblos about 3000 BC. (1) and give place to a brachycephalic race. There is much speculation as to who the latter folk were, and where they might have come from. It is certain that they could not have been an entirely primitive people, and before they settled in Byblos they must have already acquired the rudiments of civilization because they brought with them the wheel, and had the basis for a culture that in time became one of the finest Byblos had ever known. Their influence was felt in other parts of Phoenicia, for example in Lebe'a and Sidon. A possible origin of these people will be discussed in the concluding chapter of this thesis. The culture of these new folk soon fused with that of the local inhabitants and it is possible that these new comers were men who took over the women living in the country. (2)

Now let us examine the stratification that is fairly clear to us at Byblos for the Early Bronze Age, and try and establish the chronological sequence of the pottery found there. We begin with the earliest level, Stratum III, described by Mr. Dunand as the Transitional Period between the Chalcolithic

(1) Dunand: Fouilles de Byblos, Vol. I, pp. 444-449.

(2) Revue Biblique, LVII, 1950, p. 593.

and Early Bronze, and placed by the excavator between 3200 BC. and 3100 BC. by virtue of its stratigraphic position and on the strength of the discovery of the old Chalcolithic forms, side by side with new forms which now make their appearance for the first time. The new forms are more elongated than those of the previous period, contain a smaller amount of flint grits and the large limestone grits of the previous age disappear; they are made on a slow moving wheel and are fired better so that when tapped they produce a metallic ring; they are decorated with a red slip, which is vertically burnished.

The people responsible for this culture lived in rectangular houses built of brick walls over a sandstone foundation. The angles at the corners are rounded off on the outside.

There is as yet no evidence of quarrying as such, but sandstone slabs prized off from the parent rock on the mound itself were used in construction; they were set at an angle, and two adjacent courses formed a herringbone pattern. There is still no city-wall, but houses were so arranged as to form a compact unit, easy to defend.

Must I Stratum IV, or the First Urban Installation, is given the dates 3100-2800 BC. by Mr. Dunand on account of the discovery of lattice burnished pottery, the appearance of the lamp, the discovery of private houses below the earliest of the temples and immediately above the dwellings of Stratum III. The dwellings were more regular and built of well dressed sand

stone, whereas in the previous period unquarried slabs were used, set obliquely. Rooms were now grouped in an angular disposition to allow for a court. There was a great deal of construction and some of the houses were built and rebuilt two or even three times, and placed in such a way as to establish an alignment of a huge circle which took the form of a fortification. A great fire marks the end of this period.

The next Stratum V, witnessed the appearance of the first example of monumental architecture. Rebuilding started almost at once. Well cut limestone blocks were used in place of sandstone. The masonry was very large and the foundations were deep. The first temple, Batiment XL appeared, and in fact this was the earliest stone structure in the Orient. ⁽¹⁾ Here then we witness the birth of monumental architecture in Phoenicia. Mr. Dunand quite rightly points to a Mesopotamian ⁽²⁾ inspiration for the plan, the temple of Sin at Khafaje. ⁽³⁾ (Plate LIII). Presumably there is no change in pottery. Mr. Dunand dates this period 2800-2700 BC. It is of importance to point out that the posts supporting the roof do not appear in the angles but only along the side of the walls.

Phase II Stratum VI is the Period of the construction of temples and more complicated urban installation. These include

(1) Dunand: Fouilles de Byblos, Vol. I, p. 296.

(2) Revue Biblique, LVII, 1950, p. 601.

(3) Frankfort, H. The Art and Architecture of the Ancient Orient, p. 20, Fig. 10.

Batiment II and its later addition, Batiment XVIII. How techniques and new plans of construction made their appearance. A more careful laying of the courses, better bonding, better masonry and a more efficient system of roofing is evolved. Now for the first time, the posts supporting the roof are placed in the angles of the rooms as well as along the walls. This technique makes it possible to build and roof larger buildings, and to make possible the construction of a roof terrace. At this stage the painted pottery (Phase II A) mentioned above appears (Plates XLV-XLVII). It was discovered in Batiment II, Salle C. In addition, pottery similar to that found in levels III, IV and V continues in use and is found in fairly large quantities. Pottery with painted decoration and combed bands (Plates XLVIII-LII) was found in a deposit near the stairs leading from the Sacred Enclosure to the Spring, and other fragments were found scattered in the debris elsewhere.

Using the reduced chronology of Ancient History, Mr. Dunand places Batiments II and XVIII between 2700 and 2200 BC., in other words from the reign of Khasekhemui of the Second Dynasty to the end of the reign of Pepi II, on the strength of the discovery of a fragment of a diorite vessel carrying the name of Khasekhemui found on the surface and fragments of inscriptions

(1) Bulletin du Musée de Beyrouth, Vol. IV, pp. 69-84.

(2) Dunand: Fouilles de Byblos, Vol. I, pp. 326-329.

(3) Dunand: Fouilles de Byblos, Vol. II, pp. 984-997.

(4) Dunand: Fouilles de Byblos, Vol. I, Atlas, Plates LXXX, 1771, 1772, 1894, CLXVI, 5090, 4994.

with the name of Kufu and Pepi I on the floor.

Mr. Braidwood however gives a different interpretation "based on a study of the plans published and on the following (1) assumptions:

1. That the floors of the buildings in question can be assumed to lie at those levels, shown on the plans, which contain occupational architectural features such as doors, sills, sockets, column bases, and pavements.
2. That where the stone walls of the buildings in question do not show the above features, the excavation has proceeded below the floors and has exposed the foundation walls of the buildings.
3. That in rooms of the buildings in question, where the plans show no intrusion of later walls or other possibilities of contamination from above, and, where the occupational features are present, then the level of the floors in those rooms may be assumed to be intact.
4. That the latest dateable objects found below these intact floors must serve as a terminus post quem for the building."

Mr. Braidwood feels that from the published evidence he can, with some reservations, establish floor levels room by room between 25.25 and 24.30 of Batiment XL and therefore the

(1) American Journal of Semitic Languages, LVIII, 1941; pp.254-258.

cartouches of Unis of the Fifth Dynasty and Pepi II of the Sixth "must be under floors of Batiment XL rooms D, H or I." On this basis he dates Batiment II a short period before the Twelfth Dynasty and Batiment XVIII to the reign of Pepi and Batiment XL to the Fifth or early half of the Sixth Dynasty.

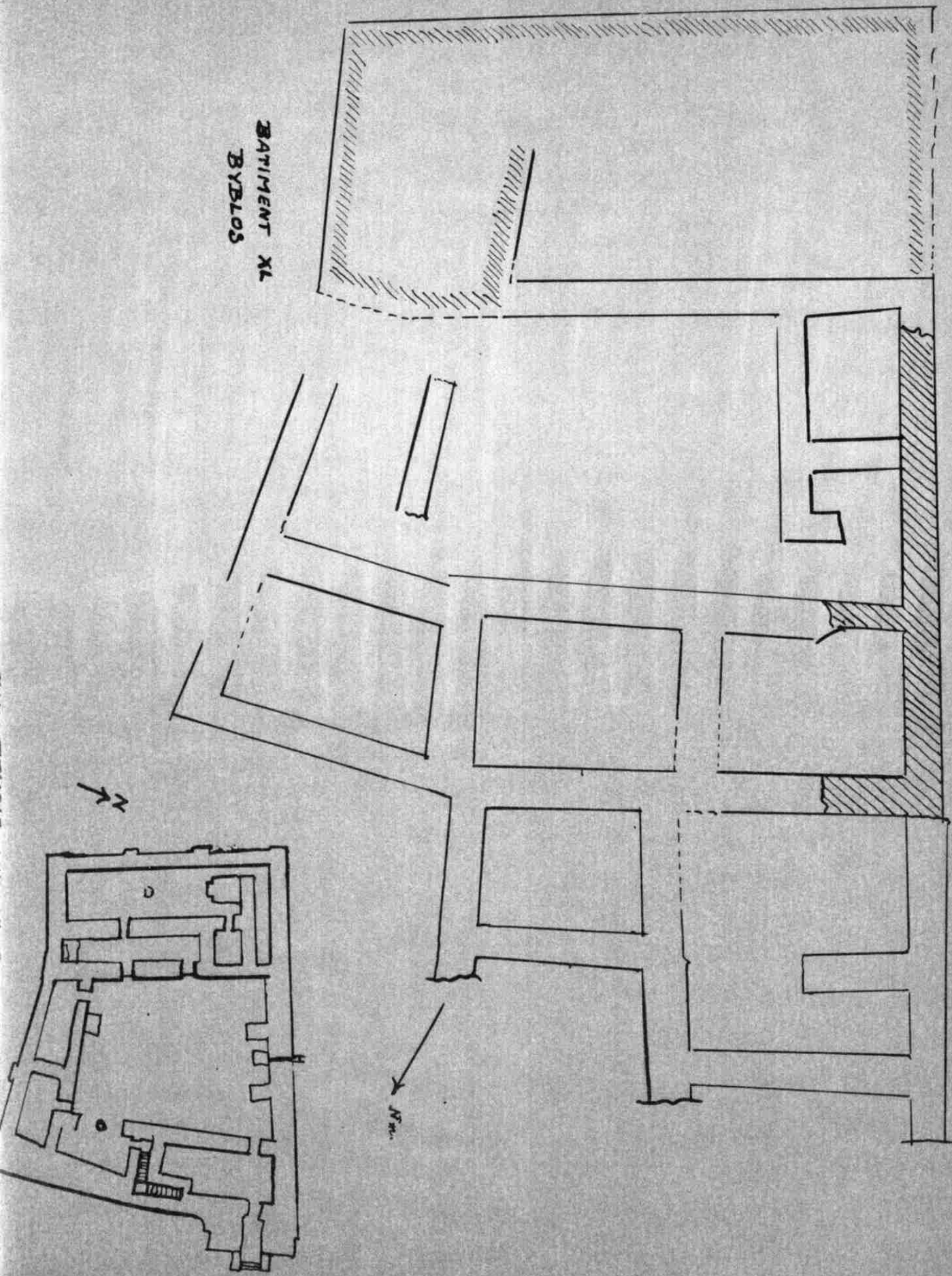
In my opinion the evidence on which Braidwood places his dating is not sufficiently conclusive, and the floor levels he established may not necessarily be those of the temples, especially in the case of Batiment II, and the present writer ventures to suggest the following interpretation.

Monumental architecture first appears in Egypt during the Third Dynasty, inspired, as has been sufficiently demonstrated by H. Frankfort in his "Birth of Civilization", by Mesopotamian Civilization.⁽¹⁾ It is true that the plan of Batiment XL resembles the Temple of Sin at Khafaje, yet there is no evidence that direct contact between Sumer and Phoenicia was established at that early date, and it is more likely that the plan found its way to Byblos through Egypt. The present writer would therefore be inclined to place Batiment XL in the Third Dynasty. Mr. Dunand says that Batiment XL was actually in ruins for some time before Batiment II was started⁽²⁾ and that Batiment II is a more grandiose structure than Batiment XL. Do we see in this progress of monumental architecture in Byblos,

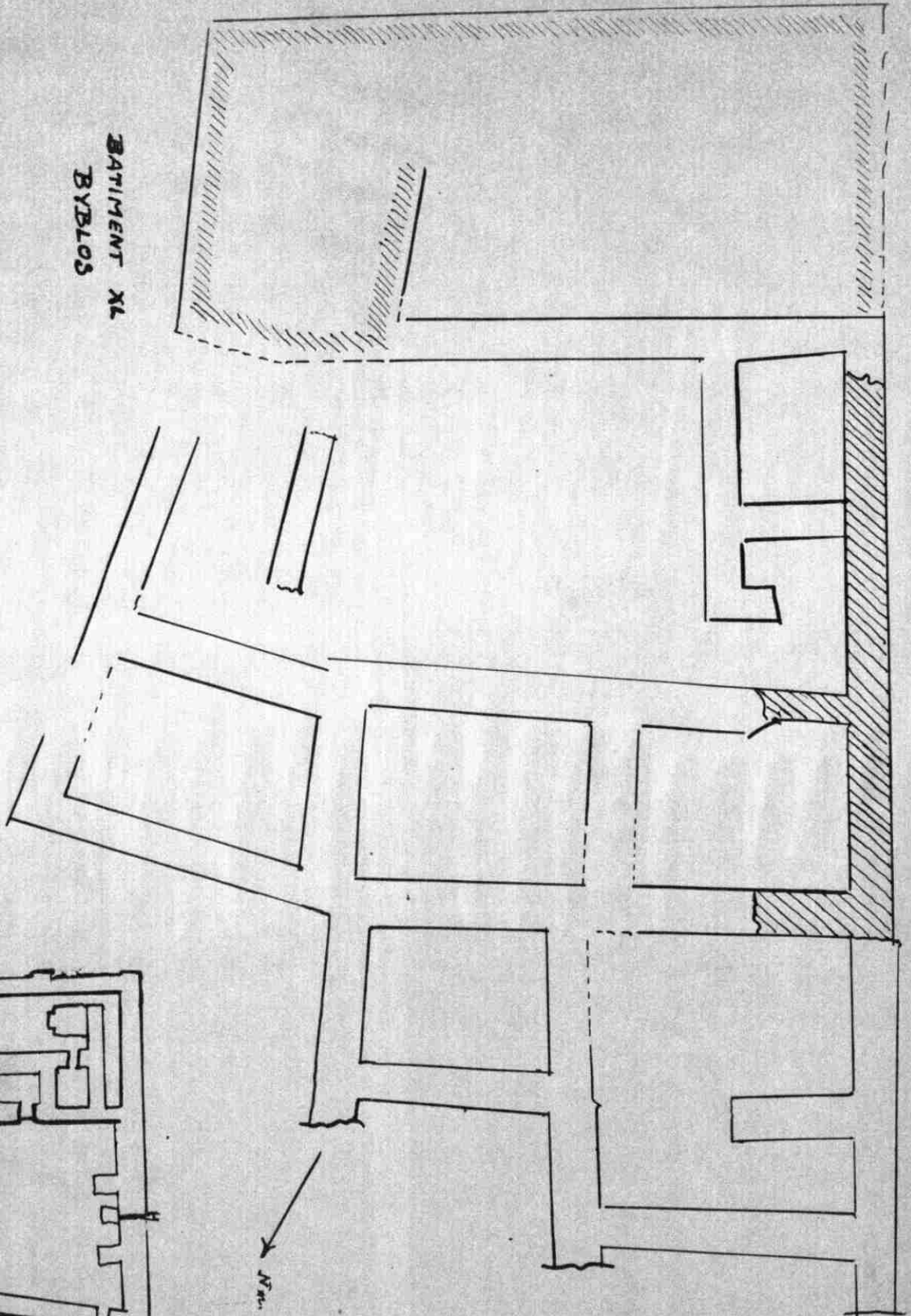
(1) Frankfort, H: Birth of Civilization in the Near East, pp.121-137.

(2) Dunand: Fouilles de Byblos, I, pp. 296-297.

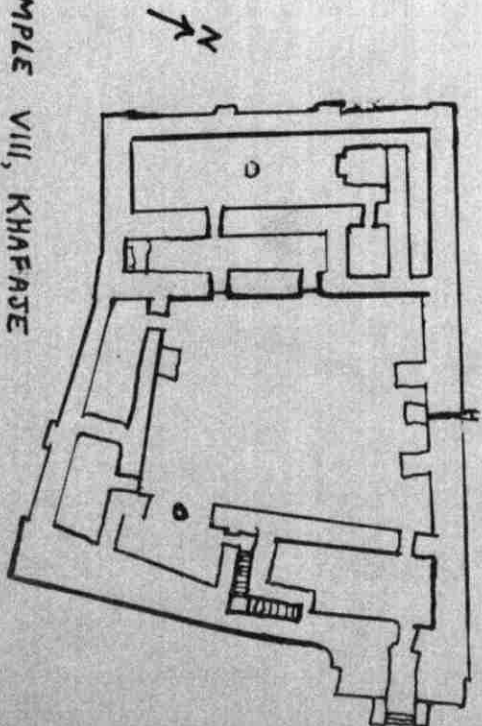
BATIMENT XL
BYBLOS



BATIMENT XL
BYBLOS



SIN TEMPLE VIII, KHAFAGE



a reflection of the grandiose structures in Egypt put up during the Pyramid Age, namely the Fourth Dynasty? Batiment XVIII could easily have been added during the Fifth Dynasty and the name of Unis perhaps supports this contention. With the excavator I agree that Batiment II had a long lease of life and may well have lasted, as the excavator maintains, throughout the Fourth and Fifth Dynasties.

Both Mr. Dunand and Mr. Gordon Childe use the greatly reduced chronology and hence their dating appears to be a bit too low. The present writer feels that the reduced chronology does not leave room under the first three dynasties for the great development which took place in Egypt in art, architecture, crafts and industries and places her faith in the chronology adopted by Edward, Steindorff, Seele and others who would place the beginning of the First Dynasty in or around 3188 BC. Of course with our present knowledge it is impossible to give precise dates for the early dynasties separately and the round numbers given for each of these is approximate and tentative. The present writer agrees with Mr. Dunand that his levels III and IV are actually contemporary with the Early Dynastic Period and would be inclined to give them the dates adopted by Mr. Dunand, 3200-2800, and I would hesitate to draw a hard and fast dividing line between Strata III and IV, therefore using the round figures given by the excavator.

Stratum V, which for reasons expressed above would fall during the Third Dynasty and the present writer would give it only one century, covering the approximate length of that dynasty. As the slightly reduced chronology has been adopted, this would tally with the dates given by Mr. Dunand, but the difference is in the number of the dynasty.

As regards Batiment II, we have already given a tentative dynastic date for the installation, which the present writer would place somewhere about 2700 BC. at the approximate beginning of the Fourth Dynasty. This was a period of intensive trade between Egypt and Byblos as we know, both from the Palermo Stone and the Turin Papyrus. The wealth accruing was, in the present writer's opinion, translated into the magnificent structure of Batiment II. Building continued to expand and it is possible that Batiment XVIII was added at the beginning of the Sixth Dynasty.

Hitherto, the Lady of Byblos was worshipped almost but not quite, exclusively. With the rise of the Fifth Dynasty, the worship of the Sun in Egypt superseded the worship of
(1)
Horus and perhaps the magnificent structure of the Temple of the Male Gods at Byblos is to be attributed to the influence of Egypt when religion crystallized. This crystallization of Egyptian faith may have influenced the definite formulation of Phoenician religion, as practiced at Byblos.

(1) Hall H.R. Ancient History of the Near East.

Towards the end of the Sixth Dynasty, a large deposit of pottery forms showing a new technique, was placed near the stairs of the Sacred Enclosure. In view of this, the two main phases of the ceramic industry at Byblos, with their sub-phases, may be classified under the following loose dates.

Phase I A; pots of this phase appear first in Level III. Vertically burnished pottery makes its appearance and according to Mr. Childe, ⁽¹⁾ this type appears both in Egypt and Syria during the First Dynasty, circa 3200 BC. Plates XXXV-XXXIX.

Somewhere during the Early Dynastic Period of Egypt, lattice burnishing appears, ⁽²⁾ (Plates XLII-XLIV), but we cannot be certain as to the exact date of its appearance. Judging by analogy with the other sites where this lattice burnishing also appears, it cannot be much later than the second half of the First or beginning of the Second Dynasties. Thus Phases IA and B, must be placed between 3200 and 2800 BC. In this phase I would like to place the pottery of Lebe'a. The similarity of some of the pots, especially the pot illustrated on Plate XLI to the Chalcolithic is very striking. These vessels are all illustrated on Plates XL and XLI.

Phase II A: New painted pottery forms appear side by side with the already existing forms. Again, by analogy with other sites, mainly in Palestine, this pottery makes its

(1) Childe: New Light on the Most Ancient East; p. 94, Fig. 53.
(2) Dunand: Fouilles de Byblos, Vol. I, pp. 368-371.

appearance at the beginning of the Twenty Seventh Century, and continues without interruption down to the end of the Early Bronze Age, around 2200 BC. (Plates XLV-XLVII). A tentative date for the beginning of this period around 2700 BC., or the beginning of the Fourth Dynasty is quite feasible.

The pottery described in this chapter as II B makes its appearance towards the end of the Early Bronze Age, with the old forms of II A continuing. A large deposit was discovered belonging to the last phase of the Sacred Enclosure, but a few examples were also discovered by Mr. Dunand elsewhere in the debris of the Temple of Baalat Gabal. For the first appearance of this type of pottery I think a plausible date would be sometime during the Sixth Dynasty. This pottery, although it differs considerably from Khirbet Kerak ware, which has not been found at Byblos, yet, the high burnishing of the latter may have influenced the pottery greatly. Mr. Dunand quite rightly described this as belonging to the end of the Early Bronze Age, from its archaeological context.

It is generally agreed that, as Miss Kenyon states, just after 2300 BC. the Old Empire of Egypt was brought to an end by an invasion of nomadic Asiatics. Egypt itself was suffering from internal trouble, and was not only unable to

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- (1) In the case of Palestine 2300 BC.
(2) See footnote, p. 98.
(3) Kenyon: Digging up Jericho, p. 208.

protect its outlying possessions, or to maintain the pax Aegyptiaca in Asia but some maintain that the Asiatics actually infiltrated into the Delta. (1) The nomads were emboldened to attack with impunity without fear of chastisement. Coming from the East, they first attacked the cities along the fringe of the desert and probably reached Byblos somewhere about 2200 BC. The Amorites, as these predatory tribes came later to be called, held sway over Palestine, Syria and Phoenicia for over three centuries, and were not cowed until the rise of the Middle Empire in Egypt under the Twelfth Dynasty. This long period of general disturbance and unrest eventually brought about the fall of the Third Dynasty of Ur, c. 2100 BC. and the later establishment of the Semitic, Amorite First Dynasty of Babylon. It is without doubt that this disturbed period affected all the great Syrian towns, including Byblos. Miss Kenyon places the end of the Early Bronze Age in Palestine about 2300 BC., and it is quite possible that these nomads did not actually reach Byblos until 50 or 100 years later.

(1) Wilson: The Burden of Egypt.

CHAPTER V.

THE SPHERES OF INFLUENCE.

Now that a representative selection of the pottery of the Neolithic, Chalcolithic and Early Bronze Age has been discussed and illustrated with an attempt made at giving a possible chronological sequence, logically gathered from the published material available, the present writer wishes to discuss the entire picture presented by the periods under study, that is to say from about 5000 BC. to 2200 BC. I would now like to compare the pottery of Phoenicia with that of other sites in the neighboring countries which might shed some light on the technical trends in Phoenicia during the various stages of the early history of the Middle East, and try and deduce some kind of geographical connection with regard to origins and influences.

We must look first to Egypt, as the influence of prime importance over Phoenicia. The influence that came about during the Third Dynasty is well attested, and has been discussed above; the question now is, how early was the impact of this Egyptian influence felt? Even though it is generally conceded that forms and decorations develop simultaneously in lands apart, there can be little doubt that the possibility of trade relations brought about some of these "coincidences". Parallels will be drawn between Egyptian, Palestinian and Ugaritic pottery and a general glance taken at a possible Mesopotamian influence as well.

First let us look at the chronology chart prepared by the present writer from the material available, (see Appendix).

The Neolithic Period: This seems to be a period to which no initial date can be fixed with any exactitude, but in Byblos we have an early ceramic industry. The pottery of Byblos has been discussed and analogies will now be drawn between the ceramic industries of other countries and attention will be drawn to the periods of Near Eastern cultures where parallels with Byblos are lacking. To look to the North, say Ras Shamra, Mr. Schaeffer describes his level V as Neolithic. He discusses the level as having numerous stone vessels, but there are no traces of perishable receptacles of the pre-pottery Neolithic Age. The potsherds found were decorated with linear patterns obtained by burnishing over a black or red slip very much like the pottery of Sakje Geuzi, Chaghar Bazar near Aleppo, and Tell el Judeideh near Antioch. Is there any analogy with the Neolithic pottery of Byblos, other than the dark brown or gray ware, Class III⁽²⁾ at Byblos which will be discussed later? There seems to be no other.

The Neolithic pottery of Cyprus, so close to the ancient Phoenician coast, is now dated at circa 5800-4700 BC. with a possible link following this date before the Chalcolithic is

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- (1) Schaeffer: Ugaritica I and Les Annales Archeologiques de Syrie; Tome VIII et IX; pp. 131-178.
(2) Revue Biblique: LVII, 1950, p. 585.

(1) introduced. Mr. Schaeffer sees an analogy between the Neolithic pottery of Ras Shamra, Cyprus and Anatolia. Mr. Dikaos' (2) analogies are similar to Mr. Schaeffer's, and are awaiting publication, however, neither sees any similarity between pottery of Neolithic Cyprus and Neolithic Phoenicia, as limited by the geographical boundaries of this Thesis. The plan of the houses of the Neolithic Period also differed. At Khirokitia they are round and in Troulli, the same narrow rectangular plan is as (3) at Byblos, except with rounded ends. According to Mr. Albright, the Neolithic Period of Palestine produced both a pre-pottery and a pottery using culture, best known in Jericho IX and the excavations of Stekelis in the Yarmuk Valley. The pottery is decorated with a distinctive incised herringbone design. Unfortunately only sherds were found and analogy of forms cannot be made. Miss Kenyon describes the pre-pottery Neolithic culture in Jericho extensively, stating that the dishes and bowls were made of stone, mostly of a soft limestone which could be polished to a high and beautiful finish. (4) New comers appeared, (5) bringing with them pottery vessels, which consisted of two main

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- (1) With the kindness of Mr. Dikaos, Director of Antiquities, Cyprus, in a discussion the present writer had with him on April 13, 1960. His dating and finds are in publication at present and will soon appear in the Swedish Expedition to Cyprus: Concluding Volume.
- (2) Schaeffer: Les Annales Archeologiques de Syrie; Tome VIII et IX.
- (3) Albright: The Archaeology of Palestine, p. 64.
- (4) Kenyon: Digging up Jericho, Chapter IV.
- (5) Kenyon: Digging up Jericho, p. 79.

classes, one class is exceedingly coarse, the clay is poorly levigated and tempered with a considerable amount of chopped straw, and it is ill-fired. The surface of the vessels is characteristically finished by smoothing with a bunch of grass, leaving a pattern of irregular striations. The forms are simple; the bowls being straight-sided with flat bases, and the jars having curved walls and cylindrical necks, usually with lug handles at the base of the neck. This coarse ware is by far the greater proportion of the finds, but in addition there is a much finer ware, comparatively well levigated and well fired, with a smooth surface and an attractive decoration. The decoration seems to be made by covering the surface with a creamy slip and on it a design in a dark red slip, applied as a rule, in diamonds or triangles, often so arranged that the underlying cream slip forms a series of chevrons in reverse. This is the pottery of the Neolithic A people of Jericho.

The successors of these Neolithic A folk, referred to as
(1)
Neolithic B by Miss Kenyon, are differentiated by introducing new forms. Instead of designs in a red burnished slip, the patterns are incised. The pottery is harder and better fired, much less straw was used in its composition, and it is much less primitive. The herringbone design was extensively used, mostly over a mat red slip or a cream slip. There are true

(1) Kenyon: Digging up Jericho,

loop handles. For the first time there is a connection with other Syrian cities and very similar decoration occurs at (1) Byblos. The resemblances between the two is not so close; forms are not identical, but the style of decoration is of sufficiently strong resemblance; additional evidence comes from the fact that at Byblos a few examples are found of the pebbles incised in anthropomorphic forms. This is important for it can bring the early pottery cultures of Palestine into relationship with the rest of Syria and the Fertile Crescent.

One of the nine categories of M. Dunand of the Neolithic pottery of Byblos, viz no 3 the dark ware, black or brown, with a highly burnished surface, is found widely spread over North Syria and is a common denominator of the Neolithic sites in this area. It is found at Ras Shamra and Mersin and appears (2) in sites stretching across into North Iraq, notably Hassuna (which is also noted for its herringbone design). Of course at Byblos the many different varieties of pottery suggest a composite population, including several groups, each developing (3) its own pottery technique. It is possible in the mind of this writer, that the folk who arrived at Jericho and who were responsible for the Neolithic B. pottery stage, left part of their group behind them at Byblos, and perhaps their origin is

(1) Kenyon: Digging up Jericho,

(2) Kenyon: Digging up Jericho, p. 89

(3) Kenyon: Digging up Jericho, p. 90

to be sought somewhere in North Iraq. There is no proof corroborating this hypothesis and this is only a conjecture; but the pottery figuring on Plate IV, 2 is most certainly very similar to the pottery of Jericho in design and ware, and the handle appearing on Plate IX, 1 is very similar to the handle illustrated on p. 87, figure 8 of Digging up Jericho. Undoubtedly just as Byblos produced a large variety of types of pottery, Ras Shamra and Palestine had their own similar types and a migrating folk would have been the carriers of these identical techniques.

In Egypt the Merimde culture, c.5000 BC. and the Badarian, c.4500 BC. seem to the present writer to have produced similar forms and employed similar methods of decoration to the pottery of Byblos. Childe states that the pottery of Merimde recalls (1) that of Hassuna, Byblos, and Palestine, mainly in the use of the herringbone pattern. Plate LIV, 3 shows the herringbone style of the Merimde culture, but it is of a much more delicate and feathery-like application than either that of Byblos or Jericho, which is almost identical with that of Byblos. Mr. Dunand sees (2) no analogy between Byblos and the Merimde or El-Amari culture, but states that there is a definite and almost identical resemblance between certain fragments of pottery found at Byblos and the scratched, rippled surface of Badarian pottery. (Cf. Plates XI,2 (3))

(1) Childe: New Light on the Most Ancient East, p. 220.

(2) Fouilles de Byblos, Vol. I, p. 449.

(3) Revue de Biblique, p. 600.

and LVIII). The pots illustrated on Plates LIV-LVI, are all from Merimde and I would like to call attention to the forms of Neolithic pottery from Byblos, illustrated on Plates IV, 1 and 2; VII, 1; and XI, 2; and to the decorations of the pots on Plate VIII, 1 and 2, from the same place. A comparison between the sherd appearing on Plate LIX, 1 shows the El-Amari sherd so strikingly identical in design with the stamped hollow reed design of Byblos, Plate X. Of course, this is only one example, but the present writer has been unable to discover other examples of this stamped ware in Egypt at this time. There seems to me to be a definite analogy between the Neolithic cultures of North Egypt, namely Merimde, El-Amari and Badari and those of Byblos which I believe must be more than a mere coincidence.

Between the end of the Neolithic Era, somewhere about 4000 BC. or earlier, and the beginning of the Chalcolithic Period, there seems to be a hiatus at Byblos. Mr. Dunand bases his conclusions for this contention on the lack or absence of any Amratian or Ubeidian influence at Byblos, coupled with the fact that there is a Badarian influence of the preceding period and a Gerzean influence in the succeeding period, and with neither Ubeidian nor Amratian influence appearing in between, it seems possible that the site was not occupied at the time. In the Late Chalcolithic Age we see in S.D. 39-63, corresponding with

the Gerzean Period in Egypt, a definite analogy with the Chalcolithic culture of Byblos. For example, the appearance of copper, well cut flint blades, arms of piriform shape, ovoid jars, twin-jars, and burial in jars in a flexed position⁽¹⁾. It can be deduced that the Chalcolithic culture of the North of Egypt has definite analogies with Byblos, but it is not possible to say at what precise moment the relationship was established. I definitely agree with Mr. Dunand that this is a sound and reasonable approach. Furthermore, the discovery at Byblos of large jars with the rudiments of a pictographic art showing on them, as well as the introduction of the cylinder seal, would also possibly be due to Gerzean influence. In order to place Gerzean influence over Byblos in proper perspective we should perhaps examine the possibility of an even earlier trade between Byblos and Egypt, viz, during the Neolithic Period. The hiatus between the end of the Neolithic Age and the Middle of the Chalcolithic Age at Byblos no doubt points to a cessation of trade between Phoenicia and Egypt at that point. With the arrival of the Gerzeans in Egypt sometime during the Middle of the Fourth Millennium, it is possible that some elements of this Semitic wave pushed on into Phoenicia and settled at Byblos just as they did in Egypt. Naturally trade relations with the

(1) Fouilles de Byblos: Vol. I, p. 449.

mother country would be resumed and within a short time, the Gerzean influence would spread into Phoenicia, and copper and pictographic art would be introduced into Byblos. The vanguard, or pioneers, who settled in Byblos most likely grew and flourished in process of time, and by the beginning of the Early Bronze Age an Egyptian colony was established to control the timber trade, slowly introducing other arts and crafts and the use of the wheel. It is generally conceded that the Urukians invented the wheel, and Mr. Meyer feels that some of the Gerzean pots have wheel marks on them, and it is within the realm of possibility that the wheel reached Phoenicia through Egypt.

Wheel made vessels from Syria (Phoenicia) of the type illustrated on Plate XXXVIII, 2 were discovered in the tombs of the kings of the First Dynasty of Egypt, a most certain proof of actual trade at that time, which most certainly was not established overnight. We do know from the Palermo stone and the Turin papyrus that a heavy and flourishing trade existed during the Third Dynasty between Byblos and Egypt and in the preceding chapter the strong influences of Egypt on this and succeeding eras have been adequately discussed.

In Ugarit, the Chalcolithic level produced no copper, and the perfect pottery of Plate LXIV, its painting, brilliant

* The use of copper, to a limited extent, was employed in Egypt as early as the Amratian Period; Childe: New Light on the Most Ancient East, p. 43.

(1) Childe: New Light on the Most Ancient East, footnote p.

(2) Childe: New Light on the Most Ancient East, p. 95, ff. 53.

(3) Contenau: La Civilisation Phénicienne, p. 35.

colors and firmness remind one of the eggshell ware of Mycenae. This same pottery is found at Tell Halaf, Carchemish, Hama, Chagar Bazar and Arpachiyah, but it never makes an appearance at Byblos.

In Palestine we find a Chalcolithic culture at Megiddo, Tuleilat el Ghassul, Tell el Far'ah, but not in Jericho. The site remains unoccupied until sometime about 3200 BC. ⁽¹⁾ There is no jar burial found at Jericho, in its place cremation was practiced, and mass burial in a single tomb consisting of a vertical shaft, sunk in the rock and opening into a chamber at the bottom. ⁽²⁾ The present writer, however, has read reports on the 1960 season of excavation at Tuleilat el Ghassul and jar burials were found there going back to the Chalcolithic Period. Also in the report on the early excavation jar burials of infants were discovered in the same site. Also it is to be noted that only a few copper daggers and a single axe-head were found in the Early Bronze Level at Jericho. ⁽³⁾

The Early Bronze Phases and the influence of Egypt on Phoenicia has been well attested, and has already been discussed in the previous chapter. The importance of the early introduction of the wheel at Byblos, a short time before its general use in the rest of Syria was responsible for the superior ceramic

(1) Kenyon: Digging up Jericho, p. 94

(2) Kenyon: Digging up Jericho, p. 95

(3) Mallon : Tuleilat el Ghassul 1; Plates 24 and 25.

industry of Byblos as compared with that of the surrounding area. Byblos, from that moment on, led and maintained its lead and kept ahead of the other sites in culture and civilization, whether they were towns or cities of the hinterland or of the coast, and its influence spread throughout Syria and Palestine. For example Lattice burnishing appeared in Megiddo soon after its introduction in Phoenicia. The reason for outpacing all other cities on the Eastern Mediterranean lay in its selection from the dawn of history, by Egypt, as the port best suited for the export of timber. Because of this, a colony of Egyptians settled in Byblos as tradesmen in order to maintain a steady and regular flow of the valuable timber, especially cedar wood, so much in demand and so necessary for the flourishing building and grandiose constructions of the Dynasties preceeding the end of the glory and the beginning of the First Intermediate Period in Egypt. This First Intermediate Period and the arrival of the Amorites brought with it the destruction of the entire city of Byblos and put a stop to the era of great wealth and prosperity it enjoyed basking in the reflected glory of Egypt. However, the threads of Egypt and Byblos intertwined again and again and it seems that no disaster, no matter how great, was ever able to sever this close relationship completely. The rupture which occurred during the Intermediate Period was only of a temporary duration and close relations were resumed soon afterwards. Periods of

disaster naturally brought about a temporary cessation of trade, but Phoenicia, and particularly Byblos, and Egypt always resumed some type of trade.

Echoes of early trade between Egypt and Byblos are perhaps reflected in the legend of Isis and Osiris. According to (1) Plutarch, Set, by a strategem induced Osiris to lie in a coffin which was promptly sealed and thrown into the sea. The coffin floated to the shores of Phoenicia and landed at Byblos where it was picked up as a tree trunk and used as a post in the palace. Isis, sister/wife of Osiris, searching for his body learnt that he was in the King's palace. She promptly went to Byblos where she made friends with the King's maid servants at Ayin-el-Malek, (2) the main water supply of the city, and thus wormed her way into the King's household, became the king's mistress and obtained the tree trunk containing her husband.

Another possible explanation for the introduction of copper, jar burials, the use of the wheel and pottery influences in Phoenicia must be taken into consideration. Did the culture of South Mesopotamia spread North and then along the head of the Fertile Crescent, making its southwards way into Phoenicia? This seems to be the definite route for the interchange of culture and ideas between Mesopotamia and Ras Shamra and the

(1) Plutarch: Moralia.

(2) This is in accordance with a suggestion made by Mr. Dunand in Fouilles de Byblos, Vol. 1, p. 364.

Northern part of Syria. In the Chalcolithic Level, Level IV⁽¹⁾ at Ugarit Mr. Schaeffer states that the pottery found there most certainly owes its development to the Hurrian culture, which they most certainly learned from the Early Sumerians and that the great culture of the Ubeidians spread from the coast of Syria to the Indus. As we have stated above, the pottery of this period of Ugarit, Phoenicia and Egypt is entirely different.

In Level IV B and C of Ugarit the pottery differs from the previous period but is no less significant as it is identical with the pottery of the upper strata of Ubeid, and very much like that of the Jemdet Nasr culture. The wheel, of Sumerian origin, does not seem to have reached Ras Shamra until the early phases of the Middle Bronze Age. This expansion of trade and borrowing between Mesopotamia and North Syria prepared the ground for the great expeditions of Sargon and Naram Sin in the second half of the Third Millennium. Already the ancient Mesopotamian legend of Gilgamish tells of his trip to the land of the cedar wood. Whether Sargon actually passed through Ras Shamra or not is not known, but if he did, and if he even possibly ventured as far as Byblos, the culture of the city was already established and could only have been slightly added to. Egyptian influence did not reach Ras Shamra until the Middle Kingdom.

(1) Annales Archeologiques de Syrie, Tome VIII et IX.

We know that the Gerzean culture of Egypt was strongly influenced by Mesopotamian civilization, and we also know that the Gerzeans came by way of the Red Sea and Wadi el Hammamat, as evidence of their route has been traced along this highway and in vain did archaeologists attempt to find a different route across the head of the Fertile Crescent and through Syria and Palestine. The fact that absence of pottery similarities between Byblos and Ras Shamra and the startling similarities between the pottery of Egypt and Byblos make it hardly credible that the Mesopotamian influence on the plan of the temple of Baalat Gabal, Batiment XL, came through any route other than Egypt. This alternative route via the Fertile Crescent, as a possible venue of introduction of culture into Phoenicia, in the opinion of the present writer, should be abandoned.

We may also consider the alternative route from the Persian Gulf across the desert through Palestine and then into Phoenicia; but this would imply that the culture of Palestine would have been well established and forging forward long before the culture of Phoenicia, and would be superior to it. This is not so. Phoenicia during the Early Bronze Age was far more civilized than Palestine throughout the entire period, let alone the fact that at that time the desert route was unsafe because of the savage nomads roaming across its steppes.

These pots are all from Merimde, found together with flint implements only, and are at present on display in the Cairo Museum.

PLATE LIV.

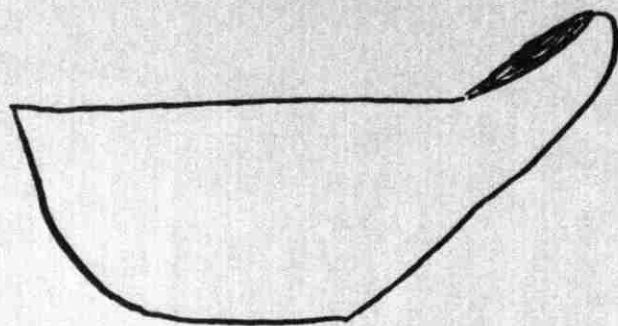
- 1- A cup of red ware with a red slip and straw grits.
(Ex. No. 57753)
- 2- A closed bowl of drab ware with straw grits.
(Ex. No. 57737)
- 3- A sherd of red ware, incised with a fine herringbone pattern; red slip.
(Ex. No. 60178)
- 4- A cooking pot of drab ware with a large amount of straw grits; small vestigial ledge-handle.
(Ex. No. 67123)

PLATE LV.

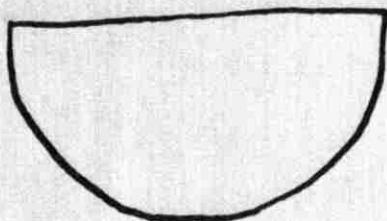
- 1- A boat shaped bowl of drab ware with straw grits; a set of three vertical incised lines dropping from rim.
(Ex. No. 57715)
- 2- A bowl of dark grey ware with an almost black slip; highly burnished.
(Ex. No. 67125)

PLATE LVI.

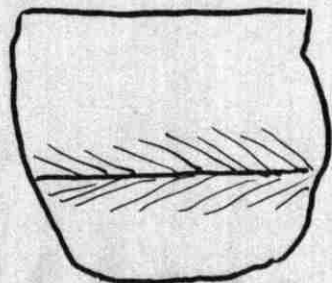
- 1- A jar of drab ware tempered with straw grits.
(Ex. No. 57712)



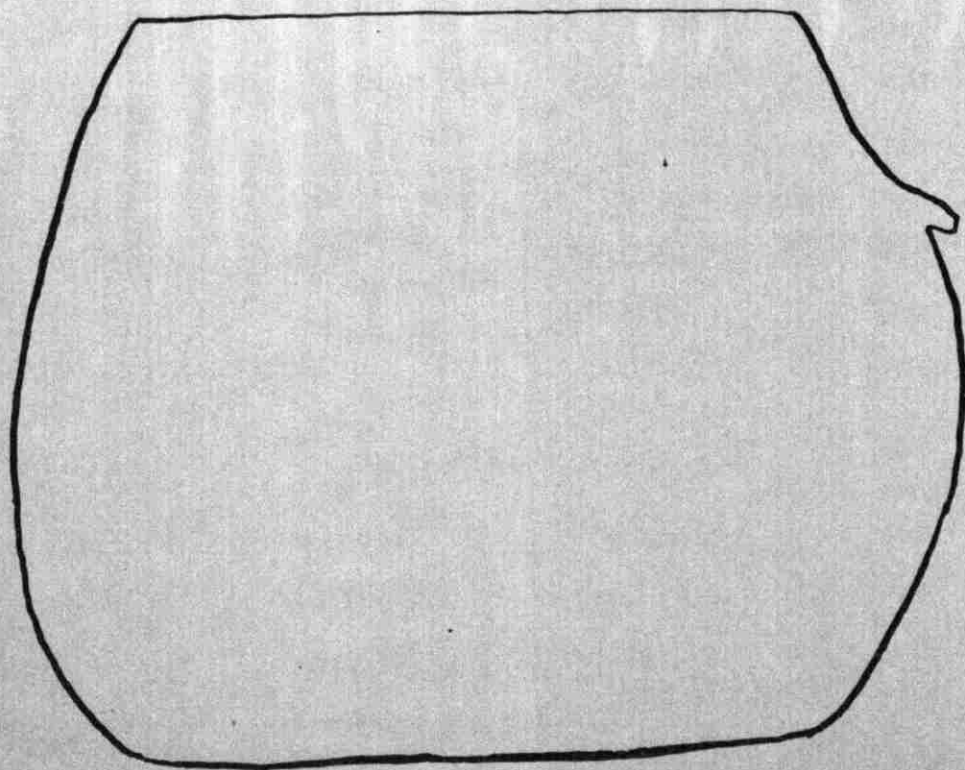
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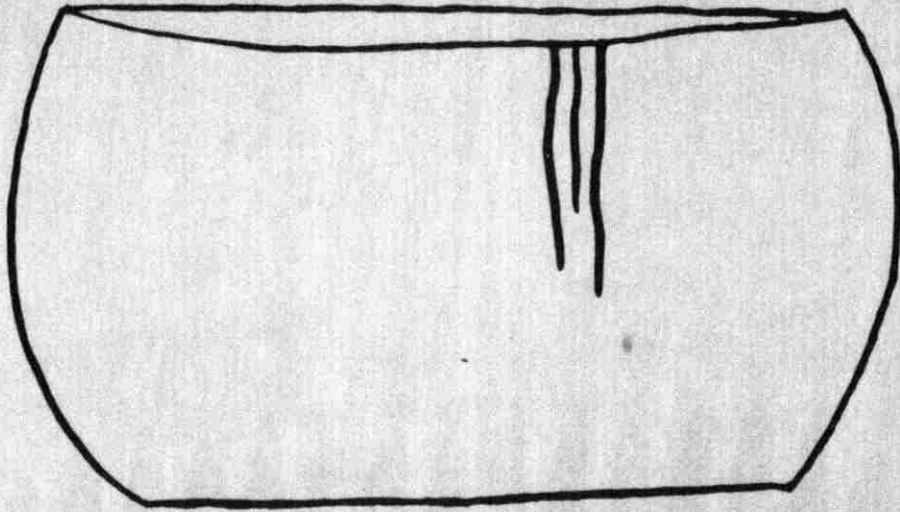
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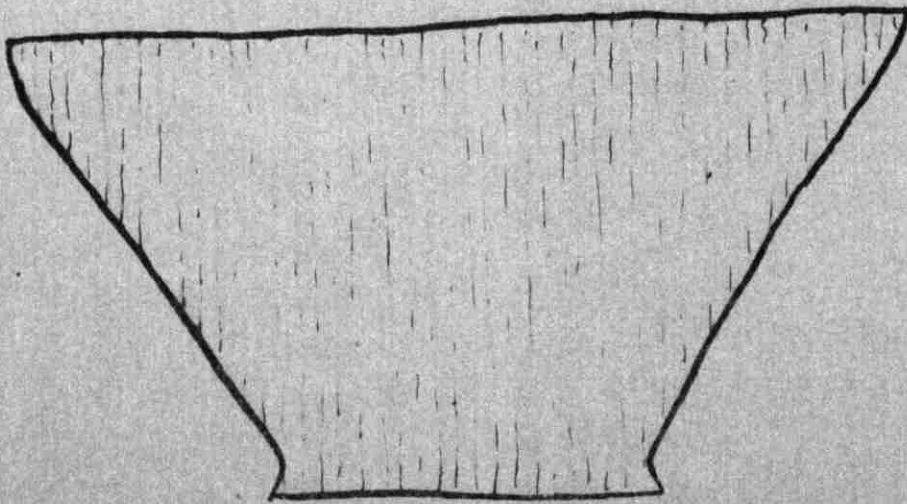
3



4



1



2

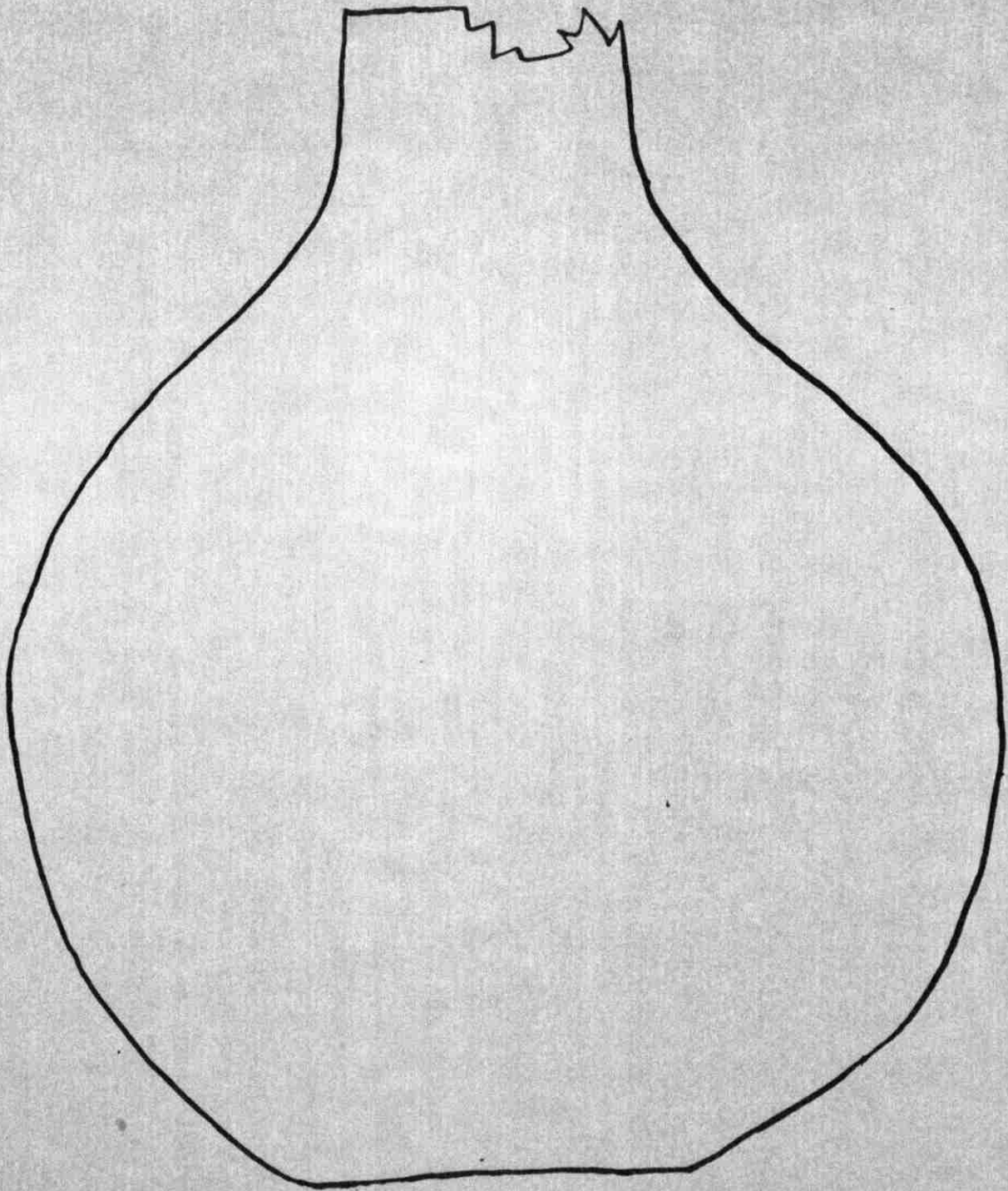
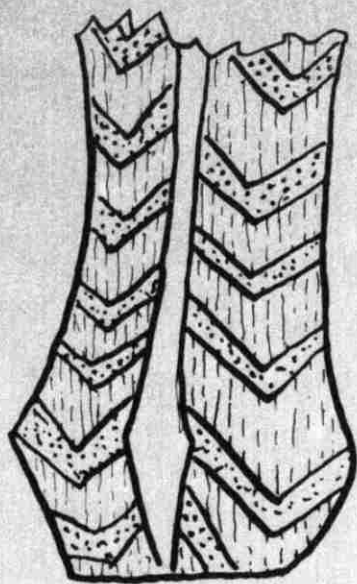


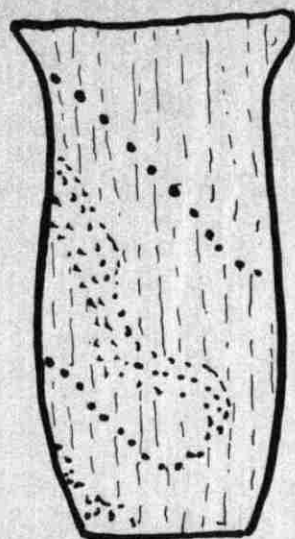
PLATE LVII.

- 1- A jar with a highly burnished red slip; incised with a pin-point design to show original buff color of ware; sometimes these incisions are filled with white pigment.
- 2- A jar of highly burnished red ware with incised dots to show original color of pot.
- 3- A goblet with a highly burnished black slip; there is grey painting in deeply incised vertical lines.

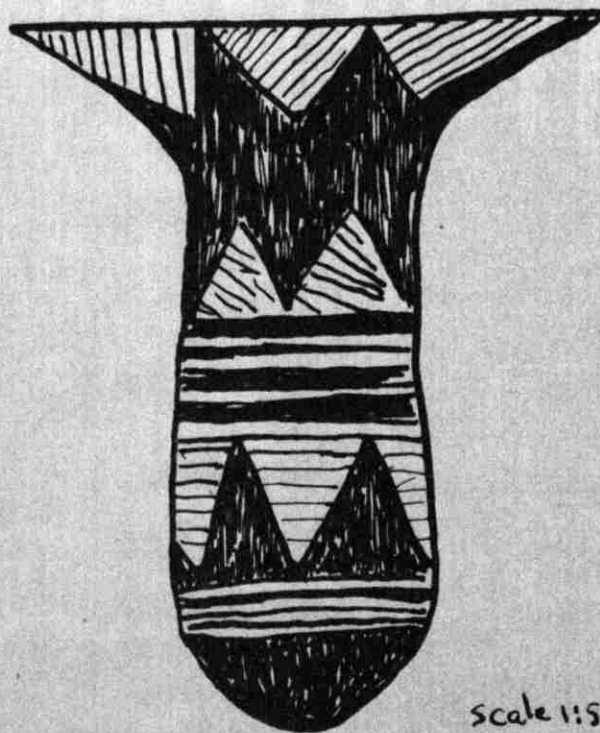
These pots are all of the Tasian Period and are on display in the Cairo Museum.



1



2



3

scale 1:5

PLATE LVIII.

This a Badarian pot on display in the Cairo Museum,
No. 53505.

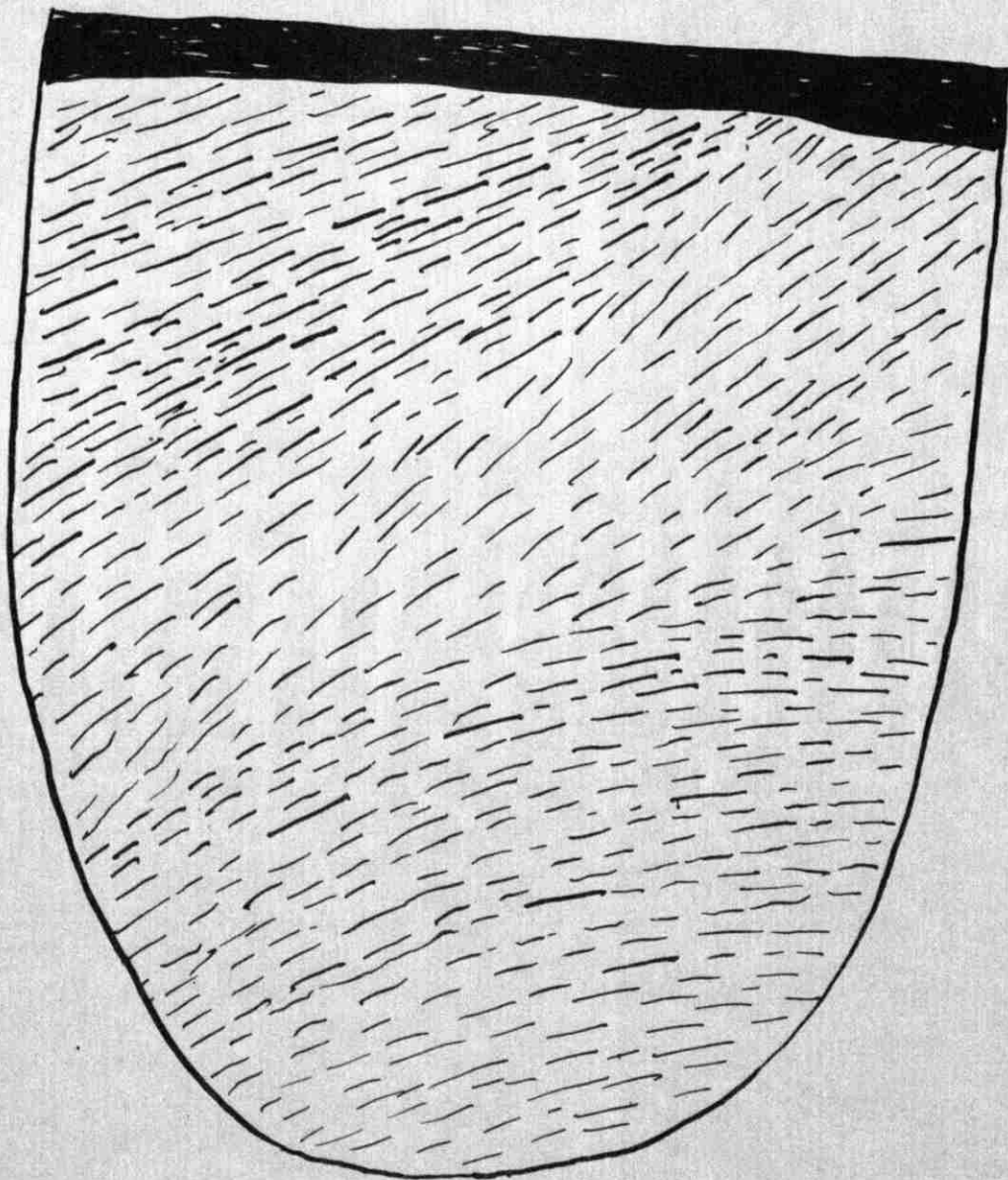
- 1- A red burnished deep bowl, black-topped; rippled surface.

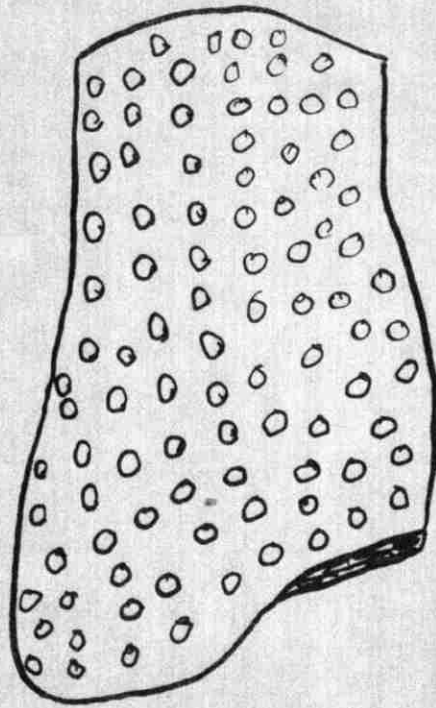
PLATE LIX.

These are Pre-Dynastic objects from Al-Umari, Naga-Hamadi;
on display at the Cairo Museum.

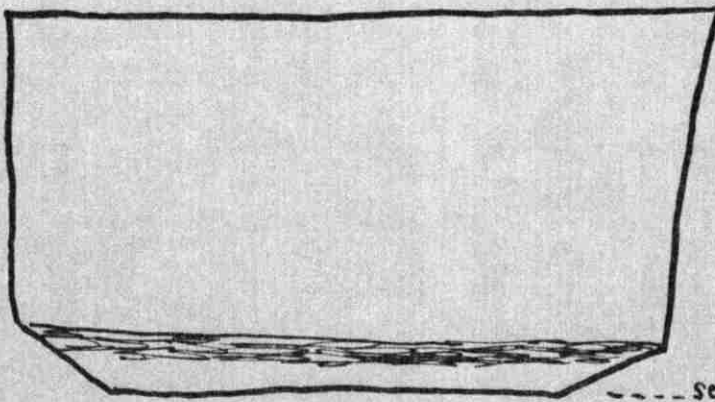
- 1- A sherd of very thick drab ware tempered with a large amount of straw; handmade and with a stamped circular design.
(No. 71500)
- 2- A handmade bowl of very thick drab ware, tempered with straw; carinated just above the base.
(No. 71474)

Plate LVIII





1



2

--- scale 1:5

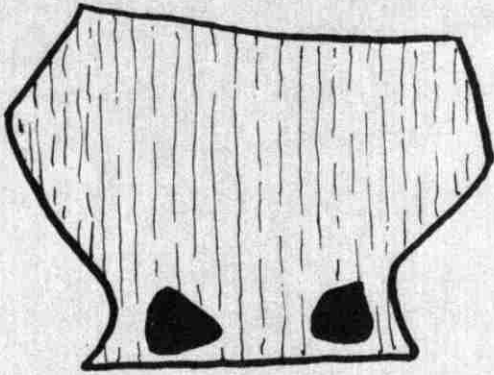
These pots are all Proto-Dynastic and on display in the Cairo Museum.

PLATE LX.

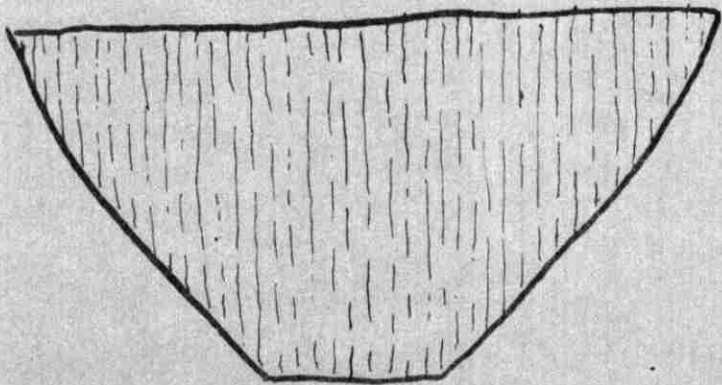
- 1- Cooking pot of burnished red ware; perforated high ring base; carinated body. (Type II)
- 2- Open bowl; highly burnished; red ware with a red slip.
- 3- A jar of fine red ware; red slip, vertically burnished; rolled rim.

PLATE LXI.

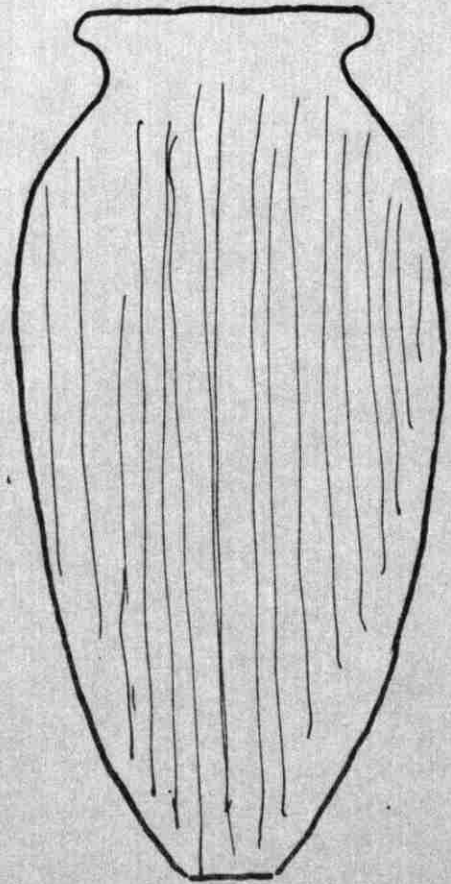
- 1- A jar of reddish buff ware with limestone grits; self-same slip; chocolate brown criss-cross painting; rolled rim.
- 2- A jar of orange ware with a large amount of flint grits; slip disappeared; painted chocolate brown pellets.



1



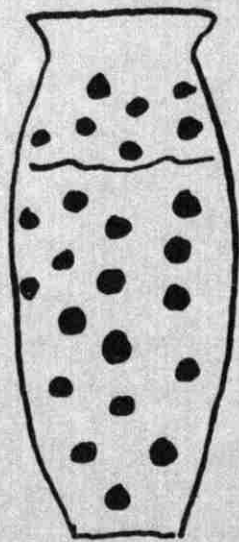
2



3



1



2

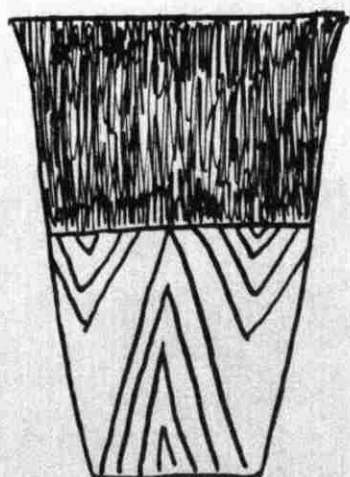
These pots are all Pre-Dynastic and are on display in the Cairo Museum.

PLATE LXII.

- 1- A jar of highly burnished black ware incised to show the original color below the slip, or filled with white pigment.
(Type I; Tasian)
- 2- A jar of polished black ware; pi-point incisions; filled with white; two holes near top of rim for hanging jar.
(Type III)
- 3- A bowl of black ware; incised dots filled with white paint.
(Type III)

PLATE LXIII.

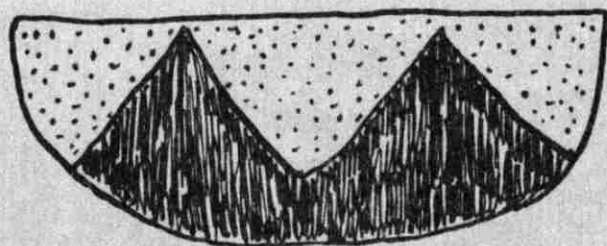
- 1- A terra cotta replica of an egg; intense red slip, highly burnished; painted with white pellets.
- 2- A jar of buff ware; buff slip; painted with chocolate brown pellets; two cord-eye handles on shoulder.
- 3- Highly burnished; intense red slip with white painting.
(Type V)



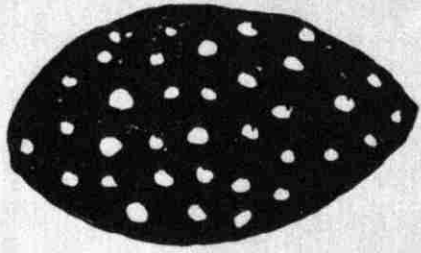
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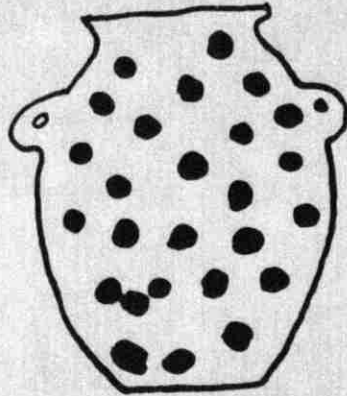
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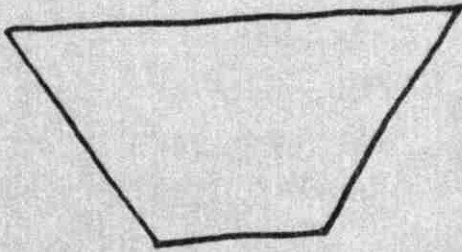
3



1



2



3

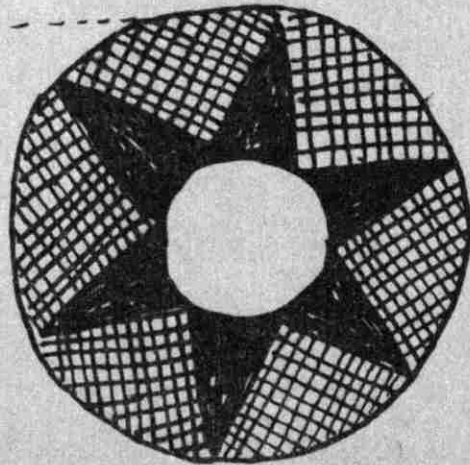
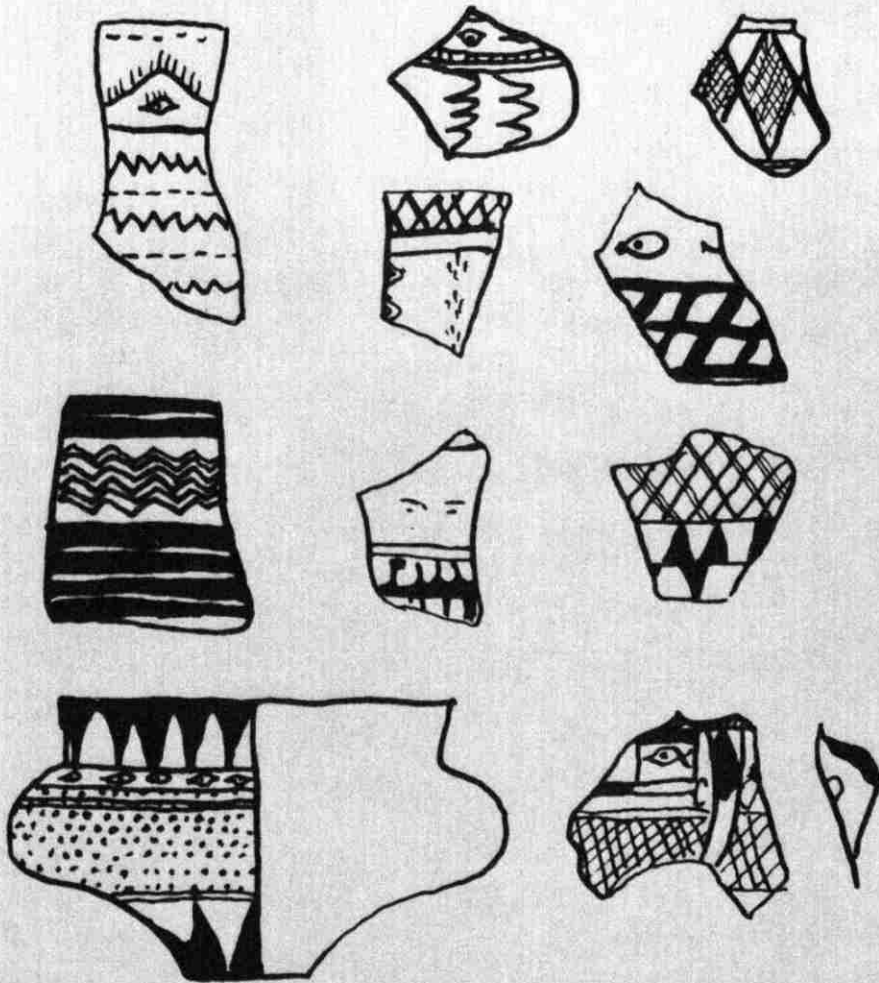


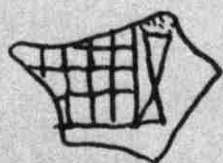
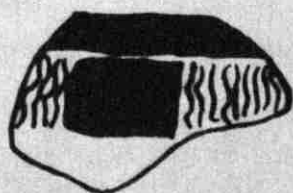
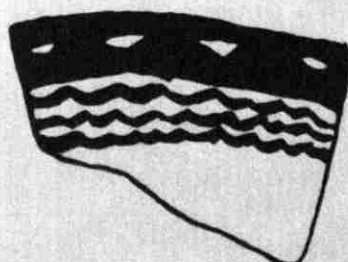
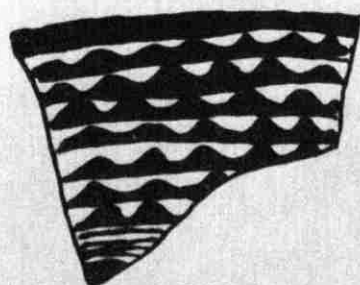
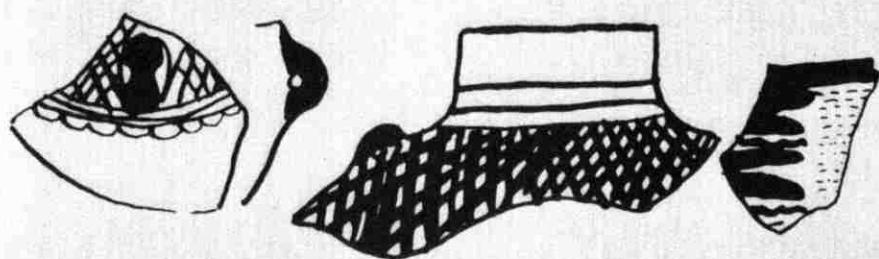
PLATE LXIV.

These sherds are all from Ras Shamra, Level IV and are illustrated in Schaeffer in Ugaritica I, Fig. 4, p. 6.

PLATE LXV.

These sherds are all from Ras Shamra, Level III and are illustrated in Schaeffer, in Ugaritica I ; Fig. 8, p. 12.





	Not a Pottery Classification. By M. Dunand.	Pottery. Mrs. Boynton.	Albright.	Jericho. Kenyon.			
B.C.	5000	Early Neolithic		Neolithic		Merimde	Jarmo.
	4900	No pre-pottery. *				Tasian	V C. V B. V A.
	4800	Middle Level Neolithic					Hassuna
	4700						Samarra
	4600						
	4500						
	4400	Last Level Neolithic *					
	4300						
	4200						
	4100						
	4000	Hiatus.	Early Chalcolithic	Hiatus		Amratian	Ubaidian
	3900						
	3800						
	3700		Middle Chalcolithic				
	3600	Chalcolithic II					
	3500						
	3400		Late Chalcolithic				
	3300						
	3200	Installation Intermediate III.					
	3100	Premiere Installation Urbaîne IV.	E.B.I.	Next Occupation Proto-Urban		Gerzean	Jemdet Nasr
	3000						
	2900						
	2800	Installation Urbaîne V	E.B.II.	Early Bronze Age.			Early Dyn.I.
	2700	Installation Urbaîne					
	2600						
	2500		E.B.III.				
	2400						
	2300		E.B.IV.				
	2200			Amorites Came.			

Notes: * Carbon 14 dating.

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