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# PRE-SARGONID TEMPLES IN THE DIYALA REGION

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# THE UNIVERSITY OF CHICAGO ORIENTAL INSTITUTE PUBLICATIONS VOLUME LVIII

# PRE-SARGONID TEMPLES IN THE DIYALA REGION

BY PINHAS DELOUGAZ AND SETON LLOYD

With chapters by Henri Frankfort and Thorkild Jacobsen



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this volume is one of a group planned to present as a whole the work of the  $\rm \mathring{o}$  driental institute's iraq expedition in the diyala region + the proposed titles are:

FOUR ANCIENT TOWNS IN THE DIYALA REGION

PRIVATE HOUSES AND GRAVES IN THE DIYALA REGION

THE TEMPLE OVAL AT KHAFĀJAH (OIP LIII)

PRE-SARGONID TEMPLES IN THE DIYALA REGION (OIP LVIII)

THE GIMILSIN TEMPLE AND THE PALACE OF THE RULERS AT TELL ASMAR (OIP XLIII)

OLD BABYLONIAN PUBLIC BUILDINGS IN THE DIYALA REGION

SCULPTURE OF THE THIRD MILLENNIUM B.C. FROM TELL ASMAR AND KHAFĀJAH (OIP XLIV)

MORE SCULPTURE FROM THE DIYALA REGION

CYLINDER SEALS FROM THE DIYALA REGION

POTTERY FROM THE DIYALA REGION

WEIGHTS FROM THE DIYALA REGION

MISCELLANEOUS OBJECTS FROM THE DIYALA REGION

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#### **PREFACE**

In the presentation of the pre-Sargonid temples of the Diyala region we have used the description of the Sin Temple at Khafajah as a paradigm. Its history is known to us through a longer stretch of time than that of any of the other temples, and several of the features which occur throughout can thus be discussed once and for all in the description of this structure. It will be seen that our historical perspective is limited by the subsoil water table at Khafajah and the comparatively late foundation date of the temples there and at Tell Asmar. Nevertheless, two general conclusions can be drawn. In the first place, our series of successive buildings shows that the Early Dynastic temples continue an earlier tradition much more strictly than we had reason to suspect and suggests for the first time the unbroken story of Mesopotamian sacred architecture. Our Old Babylonian Public Buildings will supply the continuation of this story. In the second place, a comparison of the Temple Oval of Khafajah (OIP LIII) with the material presented in this volume reveals a difference which can be explained in only one way: the oval form of the fortified temple complex must be an innovation of the Early Dynastic period, since it occurs in the one sanctuary which had no earlier antecedents.

A synchronistic table found at the end of the volume should enable the reader to keep the simultaneous developments at the various sites before him. The location of our sites and their relation to the country as a whole may be studied on the map, which is the work of Mr. Walter W. Romig and is based on the most accurate surveys available. To Mr. Romig should also be given credit for the drawing of Plates 5 B, 7, 13, and 24 B and Figure 203. These were prepared in Chicago after Mr. Hamilton D. Darby and Mr. Seton Lloyd, who are responsible for the other drawings, had finished their work.

It is but fair to state that Mr. Lloyd was prevented by his war duties from reading proofs. Miss Mary A. Chubb, secretary of the Iraq Expedition, and Mrs. Ruth S. Brookens, assistant editor at the Oriental Institute, have spent unending care on the preparation of our material for the press. To them and to Dr. T. George Allen, for the final editing of this work, the authors owe, once again, a very considerable debt of gratitude.

H. F.

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## LIST OF ABBREVIATIONS

AS	Chicago. University. Oriental Institute. Assyriological studies (Chicago, 1931——).
AS No. 11	JACOBSEN, THORKILD. The Sumerian king list (1939).
CT	British Museum. Cuneiform texts from Babylonian tablets, &c., in the British Museum (Lon-
0.70	don, 1896).
GSG	Poebel, Arno. Grundzüge der sumerischen Grammatik (Rostock, 1923).
ILN	The illustrated London news (London, 1842—; New York ed.).
JAOS	American Oriental Society. Journal (Boston etc., 1849——).
LAK	Deimel, Anton. Die Inschriften von Fara. I. Liste der archaischen Keilschriftzeichen (WVDOG XL [1922]).
MVAG	Vorderasiatisch-aegyptische Gesellschaft, Berlin. Mitteilungen (Berlin, 1896–1908; Leipzig, 1909——).
OIC	Chicago. University. Oriental Institute. Oriental Institute communications (Chicago, 1922——)
OIC No. 13	Frankfort, Henri, Jacobsen, Thorkild, and Preusser, Conrad. Tell Asmar and Khafaje. The first season's work in Eshnunna, 1930/31 (1932).
<i>OIC</i> No. 17	Frankfort, Henri. Iraq excavations of the Oriental Institute, 1932/33. Third preliminary report of the Iraq Expedition (1934).
<i>OIC</i> No. 19	Frankfort, Henri. Oriental Institute discoveries in Iraq, 1933/34. Fourth preliminary report of the Iraq Expedition (1935).
OIC No. 20	Frankfort, Henri. Progress of the work of the Oriental Institute in Iraq, 1934/35. Fifth preliminary report of the Iraq Expedition (1936).
OIP	Chicago. University. Oriental Institute. Oriental Institute publications (Chicago, 1924——).
OIP XLIII	Frankfort, Henri, Lloyd, Seton, and Jacobsen, Thorkild. The Gimilsin Temple and the Palace of the Rulers at Tell Asmar (1940).
OIP XLIV	FRANKFORT, HENRI. Sculpture of the Third Millennium B.C. from Tell Asmar and Khafājah (1939).
OIDTIII	
OIPLIII	Delougaz, Pinhas. The Temple Oval at Khafājah (1940).
OIP LIII OLZ	Delougaz, Pinhas. The Temple Oval at Khafājah (1940).  Orientalistische Literaturzeitung (Berlin, 1898–1908; Leipzig, 1909———).
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OLZ RA SAK  SAOC  SAOC No. 7  ŠL UE  UET  UET 1 UET II	Orientalistische Literaturzeitung (Berlin, 1898–1908; Leipzig, 1909——). Revue d'assyriologie et d'archéologie orientale (Paris, 1884——). Thureau-Dangin, F. Die sumerischen und akkadischen Königsinschriften (Vorderasiatische Bibliothek I 1 [Leipzig, 1907]). Chicago. University. Oriental Institute. Studies in ancient oriental civilization (Chicago, 1931——). Delougaz, P. I. Plano-convex bricks and the methods of their employment. II. The treatment of clay tablets in the field (1933). Deimel, Anton. Šumerisches Lexikon (2. Aufl.; Roma, 1930——). Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia. Ur excavations (London, 1927——). Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia. Ur excavations: texts (London, 1928——). Gadd, C. J., and Legrain, L. Royal inscriptions (1928). Burrows, Eric. Archaic texts (1935).
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I

#### THE KHAFAJAH TEMPLES

By PINHAS DELOUGAZ

#### PRELIMINARY REMARKS

#### LOCATION OF THE TEMPLES

In another volume of this series the reader will find a detailed description of Khafajah and the various mounds constituting this site. In the present volume, however, we are concerned only with Mound A, where architectural remains of a town dating to pre-Sargonid times were

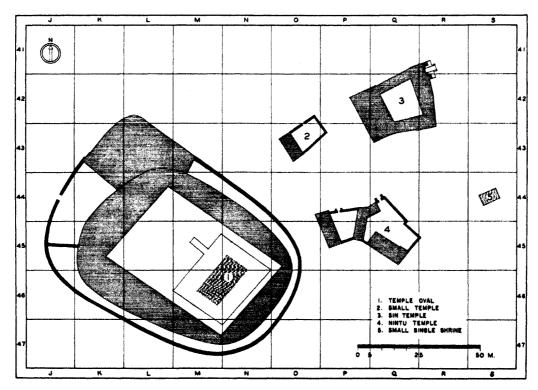


Fig. 1.—Plan Showing Locations of the Temples on Mound A at Khafajah. Scale, 1:1500

discovered near the surface. Plate 1 is a general plan of Mound A showing the portions excavated, where five groups of remains could be identified as temple ruins. They were all located in a comparatively small area in the middle of the town, toward its west side and in the vicinity of one of the town gates. The general outlines and the relative positions of these temples, which vary greatly in size and importance as well as in general plan and equipment, are shown on a larger scale in Figure 1. The largest and apparently the most important among them was the Temple Oval (1), which is fully discussed in a separate volume of the series.<sup>2</sup> The four remaining shrines, described in the present volume, were the Sin Temple (3), the Nintu

<sup>1</sup> Four Ancient Towns in the Diyala Region, to appear later.

<sup>&</sup>lt;sup>1</sup> Pinhas Delougaz, The Temple Oval at Khafājah (OIP LIII).

#### PRE-SARGONID TEMPLES

Temple (4), the Small Temple (2), and the Small Single Shrine (5). These four temples are all located within an area less than a hundred meters square, east of the Temple Oval and immediately north of the summit of Mound A.

#### DAMAGE BY ILLICIT DIGGING

Even from a single visit to the site, before excavations began, one gained the impression that buildings of some importance, rich in statuary and other valuable objects, must have existed in this area, for this was the part of the site which had suffered most at the hands of illicit diggers, who were not likely to concentrate their activities in a single area unless it proved exceptionally productive. The extensive marks of their activities explained the abundance of valuable objects of early Sumerian date which were known to be in the hands of Baghdad dealers in antiquities when our investigations began.

The first objects found here by the natives must have been very near the surface and accidentally exposed either by some digging or, more likely, by detrition of the ruins due to the action of rain and wind. However, in the last decades the local inhabitants became aware of the commercial value of such finds, and, as the news spread that the inconspicuous low-lying mounds of Khafajah were rich in antiques, the place began to attract treasure-hunters even from comparatively distant places. According to our local workmen, the most enterprising among those "strangers" were a few men from the neighborhood of Hillah, some of whom had been employed at the German excavations of Babylon. Not only did they have the advantage of being more expert in handling their finds and in estimating their relative values than were the inhabitants of the poor village of Khafajah, but also, though living farther from Baghdad, they were much more familiar with the ways of the big city, including those leading to some official and unofficial dealers in antiquities. The nearness of Baghdad made the transporting and disposal of the objects a fairly easy matter; and the fact that the Divala River lies to one side of the mounds and a network of irrigation canals to the other made it practically impossible for any regular inspection of the site to be carried out by car. In fact, not until the summer of 1930, when the Expedition had built an adequate road between Tell Asmar and Khafajah, enabling our agent to visit the sites unexpectedly, was the illicit digging finally checked.

Most of the objects that fell into the hands of the dealers have been bought for various museums, and, although even now there are still a few important objects privately owned and not available for publication, none of them is unique. Our discoveries, now exhibited at the Iraq Museum, the Oriental Institute Museum in Chicago, and the University Museum in Philadelphia, include examples of every type found by the robbers.

The damage done to the architectural remains by this treasure-hunting was, of course, very great. In view of the fact that all the building remains of this period consist merely of sundried bricks and that the art of tracing walls built of this material requires both patience and training, it is not surprising that, lacking both, our unofficial predecessors completely ruined all architectural remains in the holes made in the course of their indiscriminate burrowing. For several months after the Expedition was established, we kept on discovering more and more of these "robbers' holes," which could not at first be discerned, because of the practice of dumping the loose soil dug out from one hole into the next nearest one, until it was completely filled. In the meantime the Temple Oval had been discovered, and, since the first two seasons were mainly devoted to its excavation, it was not until the third season (1932/33) that some time could be spared for the clearing of the loose soil from the robbers' holes. This was done sporadically after heavy rainfalls when more productive work was impossible, 4 the purpose

being twofold: to ascertain the damage done by the robbers to the architectural remains and to recover such small objects as they might have missed. The extent of the robbers' activities as revealed by this investigation far exceeded our fears. Indeed, the effect was so discouraging that even at a later stage of the excavations, after we had traced some of the stumps of walls belonging to the latest Sin Temple (cf. Fig. 66), it was still considered that "the remainder of this building was so completely obliterated that its architectural . . . . arrangement will forever remain unknown." However, the very irregularity with which the robbers had conducted their digging proved rather an asset, for finally we were able to obtain sufficient evidence from the intact remains between their holes for the reconstruction of the plan of even the latest building, immediately below the surface of the mound (cf. Pl. 12). Perhaps our experience here may be of some value in reconsidering the real extent of damage done by robbers at other sites. In the writer's opinion the loss of archeological evidence by such damage is seldom irreparable, in contrast to that caused by some so-called "scientific" excavations, whose very thoroughness may result in irretrievable loss if inadequate methods or insufficiently experienced men are employed.

#### STRATIGRAPHIC TERMS

The architectural remains of the Sin Temple, the Nintu Temple, and the Small Temple in O 43 found near the surface of the mound represent only the latest stages of buildings which were founded at much earlier times. In the Sin Temple, for example, the earliest building remains were found at a depth of some 9 meters below the latest, and this accumulation of debris contained no less than ten clearly distinct strata, corresponding to the original building and nine successive rebuildings. Each such stratum, which represents a complete rebuilding of the same temple, is referred to in the following pages as a "building period," a term which applies both to the actual building remains and to the time during which the building represented by those remains was in use. Within most of the building periods there were traces of more than one occupation. The remains belonging to a single occupation of a building are designated as an "occupation level." An occupation level may include any changes in the plan of the building short of the actual rebuilding of the main walls, and, indeed, in some cases the changes observed in successive occupations within the same building period were so important as to require the drawing of separate plans. Again taking the Sin Temple as an example, we can see from the sections (Pl. 14) that no less than twenty-four such occupation levels were recorded in it. Yet it should be noted that even this number does not include all the successive floors occupied at different times, when no other changes in the building occurred. Such floors could probably be recorded by the hundred, for the thickness between each two floors shown in our sections usually contained a great number of layers, in most cases only a few millimeters apart, produced either by periodic plastering or merely as a result of the earth's having been trodden down fairly evenly. The tracing and recording of all these floors, although technically not very difficult, could naturally not be seriously considered, for the time and labor spent on such a task would have been out of all proportion to the resulting useful information, if any. It is clear from the above that each of the floors recorded in our plans and sections as belonging to a particular occupation level is, to a certain extent, an abstraction representing a considerable number of actual floors as well as the time during which they were used.

The various building periods of the temples which were completely excavated, that is, in which the earliest stratum was reached and recorded, are described in their historical sequence and are numbered accordingly (in Roman numerals); "Sin I," for example, denotes the earliest, original building of the Sin Temple, "Sin II" the first rebuilding, etc. Within each of the build-

<sup>&</sup>lt;sup>5</sup> OIC No. 17, p. 71.

#### PRE-SARGONID TEMPLES

ing periods the occupation levels are likewise marked in their true chronological order (in Arabic numerals). It should be noted that a reverse numbering was used in our preliminary reports, which had, naturally, to follow the process of excavation from the upper, later, to the lower, earlier, strata.

In our description of the Nintu Temple, of which only one of the later stages is completely recorded at present, we could not adhere to the chronological method adopted in describing the completely excavated buildings and had to be content with the less satisfactory method of describing the various stages of the building in accordance with the progress of the excavations (see p. 80). However, since one of the sanctuaries of this temple had been excavated down to its earliest phase, we were able to number its various building periods from earlier to later (I–VII). Only in private houses, the earliest strata of which have not yet been reached, did we retain the method of numbering used in the field (see Pl. 18).

#### DATING OF OBJECTS

The objects found in the temples can practically all be assigned to definite building periods or occupation levels. But, since our plan of publication provides for separate volumes for objects and for recording the architectural remains, we limit ourselves here to mentioning and illustrating only such objects as are of value in comparative dating or, either by their character or by the circumstances of their discovery, clarify the architectural functions of certain parts of the buildings. This limitation is compensated, however, by the full catalogues of objects recovered from the buildings described in this volume (pp. 136–55, 206-17, and 266–88). These provide the necessary information concerning the distribution of the finds through the different buildings at the various periods and give references to the volumes in which the various classes of objects are fully discussed and illustrated.

As for the dates of the objects enumerated in the catalogues, it should be made clear that in the present publication we are concerned merely with recording their find-spots and that their attribution to definite building periods does not automatically reveal their age. Strictly speaking, the date of an object is the date of its manufacture rather than that of its use, and obviously most objects survive some time after having been made. When the objects in question were fragile and of no intrinsic value, as is ordinary pottery, for instance, it is unlikely that they survived very long; the difference in time may then in most cases be disregarded and the objects and building remains in which they were found be considered as contemporaneous. However, more durable objects, especially those the intrinsic value of which is not in their material but in their craftsmanship, may be used for a considerable length of time. Such objects, even when found in their proper context, that is, at the occupation level at which they were last used, may often be considerably older than the stratum in which they were found and must necessarily be dated by the earliest known occurrence of identical types.<sup>7</sup>

Much rarer are objects found in building strata earlier than the date of their manufacture, for such a situation can arise only from some disturbance in the accumulated layers of building debris. To this category belong, of course, all objects found in graves and such objects as might have been purposely buried for safety or accidentally dropped while wells, trenches, graves, etc. were being dug. It is not always easy to recognize such disturbances, and, indeed, in some cases the only evidence that they have occurred is provided by the very presence of well dated objects in unmistakably earlier ruins.

4

<sup>&</sup>lt;sup>6</sup> OIC No. 19, pp. 39-54; OIC No. 20, pp. 25-35.

<sup>&</sup>lt;sup>7</sup> [This is strikingly the case at Tell Agrab, where numerous sculptured vases, seals, etc. known to be typical of an earlier period were found in the Early Dynastic buildings.—H. F.]

#### THE KHAFAJAH TEMPLES: PRELIMINARY REMARKS

5

There are, however, some cases when no such disturbances have occurred and objects which are dated on the basis of stylistic or typological studies are found in buildings independently attributed to an earlier period. Such discrepancies can be explained if one appreciates two facts: first, that buildings no less than objects may survive from one period into another (the date of a building being, by definition, the date at which it was constructed, just as the date of an object is, by definition, the date of its manufacture), and second, that, except when there is definite evidence of a sudden cultural break between two well defined eras, one must allow for an intermediate, transitional stage between any two given cultural periods. If, for convenience or simplicity, a sharp demarcation line is drawn instead, it will almost inevitably shift according to the choice of one or another set of characteristics for each of the periods in question. When the appearance of a new class of objects or a new style is taken to mark the beginning of a new cultural phase, then if such objects are found within an older building we may say that this particular building had survived from an earlier period into the new one. If, on the other hand, we choose to define the beginning of a new period so as to coincide with the erection of new buildings, and if certain objects or certain styles which are typical of this period occur in an older building, we may say that, though these characteristics are typical of the period in question, they had already made their first appearance at a somewhat earlier time. Since it is the points of view rather than the facts themselves which are different, the ensuing divergencies are also more apparent than real.

#### THE SIN TEMPLE

#### EXCAVATION

The regular excavations of the Sin Temple began during the fourth season (1933/34) after the robbers' holes had largely been cleared of the loose soil. To begin with, all the remains of brickwork immediately below the surface which had not been completely destroyed by the robbers were carefully excavated and, when necessary, examined by tracing individual bricks, a method which resulted in a surprisingly complete plan of the latest rebuilding of the temple (Sin X; see Pl. 12). A similar tracing of the brickwork of a lower stratum brought to light the less damaged remains of Sin IX (Pl. 11). In this stratum we found a large number of objects, including a statue (Kh. IV 126) bearing a dedicatory inscription on the basis of which the temple was named (see below). The following three seasons were each partly devoted to the excavation of earlier phases of the temple. The process of clearing the earlier and lower building remains was by no means continuous. The farther we penetrated below the surface of the mound, the less time we could devote each season to the excavation of the building, for after even a slight shower of rain the water would collect in the excavated rooms, making further progress impossible for some time. As a result of these inevitable delays, during which our activities had to be transferred to other parts of the site, we did not reach the earliest strata of this building until the beginning of the seventh season, that is, the last season of the Oriental Institute's expedition in the field.

During the first six seasons the excavations were conducted in a comprehensive manner, and all later remains were removed when necessary to facilitate the tracing of the earlier ones. In the last season, however, we could not follow this practice but had to gain the essential information about the extent and outline of the earliest periods of the building within the limited time at our disposal. As a result the plans obtained during this final season show more reconstruction than usual. In tracing the plan of the earliest building below an accumulation of some 8–10 meters of later remains, which we had neither the means nor the time to remove, we had to resort to tunneling, sometimes with a very small margin of safety. To make things worse, these earlier ruins were so near ground-water level (Fig. 2; cf. Fig. 3 and Pl. 14) that they were thoroughly saturated. If under these conditions we were still able to obtain positive results, the credit must largely go to some of our workmen who successfully and cheerfully carried out some very delicate wall-tracing despite the cold and utter discomfort of the damp, dark, and none too safe tunnels in which they had to work. There surely could be no better testimony not only to their technical abilities but also to their sense of duty and personal loyalty.

#### THE NAME OF THE TEMPLE

Among the more important finds recovered from the area of the robbers' holes soon after regular excavations began there (1933/34) was an inscribed statue (Kh. IV 126), the body and head of which were found separately in the second architectural stratum counting from the surface (Sin IX). The inscription incised on the shoulder of the statue<sup>8</sup> was translated at the time by Dr. Jacobsen as follows: "Urkisal, šangū-priest of Sin of Akshak, son of Nati, pašišu-priest of Sin, for protection has presented (this)." This inscription seemed clearly to identify the building in which it was found as a temple dedicated to the moon-god. A fragment of a

For photographic reproductions see OIP XLIV, Pls. 48-50. A copy of the inscription is given in our Fig. 205, No. 4.

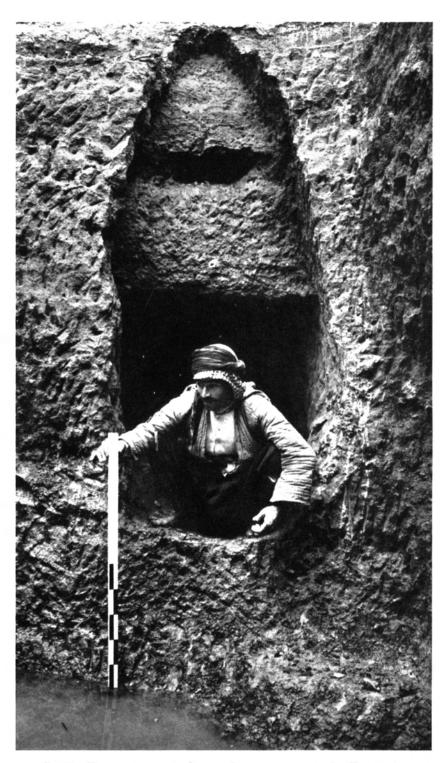


Fig. 2.—Tunnel below the Lowest Brickwork of the Sin Temple (a) The ground-water level subsequently rose through scepage to the lower levels of the temple

dedicatory inscription mentioning the same deity, previously found near the surface on the edge of the Temple Oval (Kh. III 1069), seemed to support this identification. It will be seen, however, in Dr. Jacobsen's chapter on the inscriptions that he has since revised the reading of the Urkisal inscription, replacing "for protection" with "to Ṣalam," thus reopening the question of the temple's identification. The alternative of renaming it the "Ṣalam Temple" is not adopted for two reasons: (1) because this identification also is not certain and (2) because it would undoubtedly lead to some confusion in view of the numerous references, in various publications, to this building as the Sin Temple. But, while we retain the latter familiar name, it should be made clear that it may not be correct and that the identity of the deity to whom this temple was consecrated still remains uncertain. On the other hand, the sacred character of the building itself remains in no doubt. Enough evidence to this effect is provided by the general character of its ground plan, the details of its inner arrangements, and the types of objects which were found in the various building periods. Furthermore, it seems very likely that this temple was dedicated to the same deity throughout the whole of its existence.

As we shall see, Sin Temple I was built in a comparatively early phase of what we term the "Proto-literate period," while its latest rebuilding extended well into the latest part of Early Dynastic times. The continuous existence of a temple on the same spot, presumably dedicated to the same deity throughout these archaic and until recently little known periods, is of great interest in itself, but the structural alterations and innovations in this building during the consecutive stages provide a unique example of architectural development which can serve as a basis for comparison with other sacred buildings of similar date, thus furnishing an important link between architectural traditions which seem otherwise unconnected. We shall now proceed to describe these architectural features, beginning with the earliest phase.

#### SIN TEMPLE I

#### DATING EVIDENCE

The earliest version of the Sin Temple was built on a layer of dark gray, rather porous soil which contained a large proportion of charcoal, ashes, and potsherds. Fragments of a poorly built wall only 20–30 cm. thick (c in Fig. 3) indicate that buildings existed here before the tem-

<sup>9</sup> A second problem on which this inscription has a bearing, that of the ancient name of Khafajah or the names of its various mounds, will be fully discussed in *Four Ancient Towns in the Diyala Region*.

<sup>10</sup> We introduce this term to designate those cultural phases in early Mesopotamian history in the course of which writing first appeared and developed until it reached the stage in which the phonetic principle (as rebus writing) began to be employed. Stratigraphically these cultural phases roughly correspond to Archaic Strata VII–III at Warka. In other words, we include in this term the later part of what has been called the "Uruk period" and the whole of the "Jamdat Nasr period." We retain the term "Uruk period," however, to designate the time between the 'Ubaid and Proto-literate periods, so that the periods designated by place names are now those which are purely prehistoric in character.

Though "Jamdat Nasr period" and such ensuing general terms as "Jamdat Nasr culture" are eliminated in the new scheme, there is, of course, no reason to discontinue the use of more specific terms such as "Jamdat Nasr polychrome ware" or "Jamdat Nasr cylinder seals," provided they have been clearly defined.

The considerations that led us to introduce the new term, in spite of the inconvenience which may occasionally arise out of this departure from an accepted terminology, are rooted in our concepts of the cultural phases involved. These, however, cannot profitably be discussed without going into a detailed analysis of archeological material not pertinent to this publication. For the same reason it is impossible to discuss here in detail the problem of subdividing the Proto-literate period. Suffice it to say that on the basis of the evidence at our disposal we have divided this period into four phases, a-d. It is only with the last two phases, c and d, that we are concerned in this publication. To the first of these (c) belong, as we shall see on page 123, Sin Temples I-III, to the second (d) Sin Temples IV-V. Our subdivision of the Proto-literate period is largely based on the assumption that the cultural phase represented by Sin Temples I-III follows that represented by Archaic Stratum IV at Warka without any serious gap between, or overlap of, the two. For this assumption there is at present only suggestive, not conclusive, evidence, and our subdivision should therefore be considered to some extent provisional.

ple was founded. The lowest brickwork of the temple was at about the level of +32.00 m.<sup>11</sup> (see Pl. 14 A), approximately 1 meter above ground water. Consequently, the layer of debris below the temple was thoroughly saturated, and it was impossible to determine the shape and size of the mud bricks used in the earlier fragmentary walls. Outside the temple area, however, we fortunately located some better preserved brickwork at about the same level<sup>12</sup> and were able to establish that the bricks employed  $(14-16\times26-28 \text{ cm.})$  were considerably larger than those employed in the earliest temple (cf. pp. 118-20). Important as this change in the size of the bricks may be, we depended more on the pottery and other finds for our dating. Naturally the evidence obtained from the comparatively small area which was dug to water level below the temple must be combined for this purpose with the information obtained in the larger areas excavated outside the temple.

Although great quantities of potsherds were recovered from the layer below the temple, they consisted mostly of shapeless little fragments of plain pottery without special character; but among these was also a certain proportion of burnished red and gray-to-black ware associated with the Archaic Strata XIV-IV at Warka. Small clay cones of the type found in the "peg-mosaics" at Warka, which only occasionally occurred in higher strata, seem to have been abundant at this level. Quite common also were rough handmade bowls with beveled rims, 13 fragments of which were extremely rare at higher levels. From the debris immediately below the earliest temple floor came also a unique painted potsherd (Kh. IX 49),<sup>14</sup> which is probably the upper part of a brazier or a pot stand of a not unusual type with rectangular holes cut à jour. It has been whitewashed, and on the white surface there were painted vertical lines in black and bright red. I do not know of any other specimen of pottery of a corresponding period similarly painted; but perhaps it is not too hazardous to assume that this sherd reflects a mode of painting employed in architectural decorations in the earlier phases of the Proto-literate period. <sup>15</sup> Furthermore, a clay tablet of the earliest type (Kh. V 338), bearing numerals only, was found near the Temple Oval at about the same level as the foundations of the Sin Temple.16

The available evidence seems to indicate then that the layer below the Sin Temple and above water level is to be dated to about the middle of the Proto-literate period and that the founding of the Sin Temple took place somewhat later.

#### THE PLAN OF THE EARLIEST SIN TEMPLE

No special preparations seem to have been carried out for the foundation of the building, for no traces of trenches or artificial terracing were found, and the walls were built directly on the roughly level surface of the soil. Figure 3 shows the north<sup>17</sup> end of the sanctuary area as it appeared after it had been excavated below its foundation down to water level. The thinness

- <sup>11</sup> All levels are reckoned from an arbitrary zero datum 40 meters below an arbitrarily chosen, fixed point in the excavations; for further details see *OIC* No. 13, p. 60, and *OIP* LIII 5, n. 5.
  - 12 To be published in Private Houses and Graves in the Diyala Region.
  - <sup>13</sup> See Pottery from the Diyala Region, C.002.210b.
  - <sup>14</sup> This sherd is reproduced in color in Pottery from the Diyala Region, Pl. 4.
- <sup>15</sup> For instance on top of the terrace of Temple E at Warka (*UVB* VIII [1937] 39) and in wall decoration discovered by J. E. Taylor at Abu Shahrain as long ago as 1854 (Royal Asiatic Society of Great Britain and Ireland, *Journal*, 1855, p. 408), which in the writer's opinion date from the same period.
  - 16 OIC No. 20, p. 25.
- <sup>17</sup> For purposes of convenience the walls of this temple are referred to in the text as "north," "east," "south," and "west," although in actuality they are northwest, northeast, southeast, and southwest. In descriptions of photographs, however, the actual directions from which they are taken are normally given.

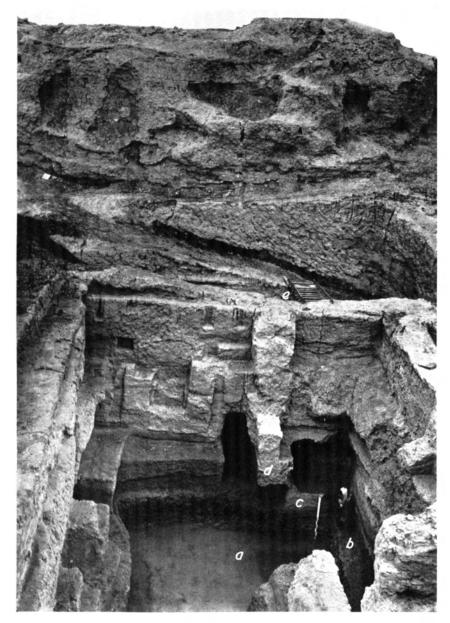


Fig. 3.—North End of the Sanctuary Area of the Sin Temple

The water that filtered in during the excavations is seen in the foreground (a). The workman sits on a layer of debris (b) below the temple; c marks a thin wall of an earlier period below the stump of the thicker temple wall (d). Ruins of the first five building periods are left standing (cf. Fig. 34), the rails (e) marking their top. Though all brickwork of the later building periods had been removed for reasons of safety, the skyline gives a general idea of the height of the accumulated ruins of this building, from water level to the modern surface of the mound, where the remains of Sin Temple X were found.

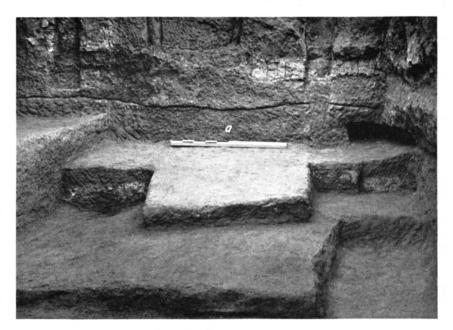


Fig. 4.—The Altar of Sin Temple I

The walls of the altar show traces of whitewash. The layer a between the meter stick and the dark line consisted of loose soil between the brickwork of the first and second periods.

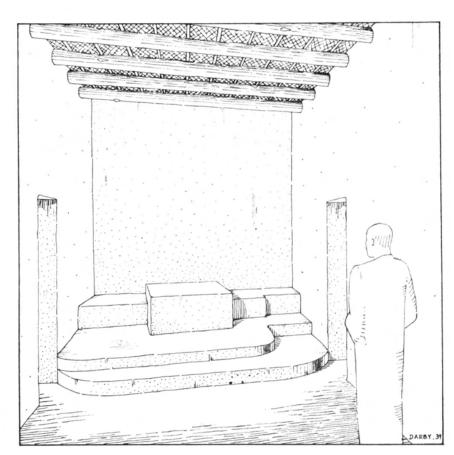


Fig. 5.—Perspective Reconstruction of the North End and Altar of the Sanctuary of Sin Temple I

of the earlier wall mentioned above (c) in comparison with the temple wall (d) is clear. The tunnels at each side of d were made in order to reach the inside corners of the building, which extended at this end beneath the brickwork of Sin II (cf. Pl. 14 B). The dark lines below d and at left of it mark the bottom of the brickwork of Sin I.

The plan of the temple (Pl. 2 A) was comparatively simple; it consisted of a large central room flanked by smaller rooms on both sides. On the whole it resembles more closely the plans of certain early temples at Warka<sup>18</sup> than some of the later plans of the Sin Temple itself. The central room, Q 42:39, which was undoubtedly the sanctuary, measured approximately  $3.00\times11.70$  m. All its doorways were cut in the long sides, while against the short north side there was a fairly elaborate structure of mud brick on a shallow platform of the same material (see Fig. 4). It is noteworthy that these features of the earliest cella of the Sin Temple, namely its oblong shape, the doorways in its long sides, and the structure against one of its narrower sides,<sup>19</sup> not only survived in the sanctuaries of the Sin Temple throughout all its successive rebuildings but were found in all other pre-Sargonid temples which we excavated in the Diyala region. Indeed, these were the typical appointments of Early Dynastic temples over a much larger area, for they were found also in temples at Assur<sup>20</sup> and Maeri,<sup>21</sup> distant some 270 and 370 kilometers respectively from Khafajah. That the same features survived in temples of much later dates is shown by their occurrence in temples at Nuzi.<sup>22</sup>

The details of the raised structure in the cella can be seen in Figure 4; in the foreground is the shallow platform which occupied the north end of the room. It can be noted that as found it did not extend across the whole width of the room but left a narrow space against the east wall; but there was no evidence to prove whether this was the original arrangement or whether part of the brickwork had been destroyed here at some later time. Above this shallow platform there were remains of a more elaborate structure, the walls of which still bore traces of whitewash. There was some indication that originally the central part (under the meter stick) stood higher than the rest of it (cf. Fig. 5). However, the characteristically worn surface of this structure, the fact that it stood to a lesser height than the ruined walls on both sides of it, and the fact that a layer of loose soil separated its surface from the brickwork of the following rebuilding indicate that it was reduced to the state in which it was found by wear and tear rather than by preparation for a rebuilding. Consequently, one may consider Figure 4 as a fairly close semblance of this structure when it was still in use.

In all subsequent rebuildings of the Sin Temple similar structures existed in the sanctuaries, always in a position directly above this earliest one (see Pl. 14 B), and, as we have already mentioned, structures of the same type were found in nearly all other shrines of a similar date. Although in most cases we were able to gain a clear idea of the details of their construction, we never found any conclusive evidence as to their use. Nevertheless, their fixed position inside the sanctuaries may justify our reference to them as "altars," in a general sense, with no specific use being implied by this name.

Figure 5 is a reconstruction of the north end of Q 42:39, showing the altar with a doorway on each side of it and part of a reed-mat ceiling. Apart from the altar there were no other characteristic structures in this sanctuary, and very few objects: some pottery and two inlaid stone

<sup>&</sup>lt;sup>18</sup> Especially the so-called "White Temple" (UVB VIII, Pls. 19-20).

<sup>&</sup>lt;sup>19</sup> All characteristic features of the "assyrisches Herdhaus"; cf. W. Andrae, Das Gotteshaus und die Urformen des Bauens im alten Orient (Berlin, 1930) p. 18.

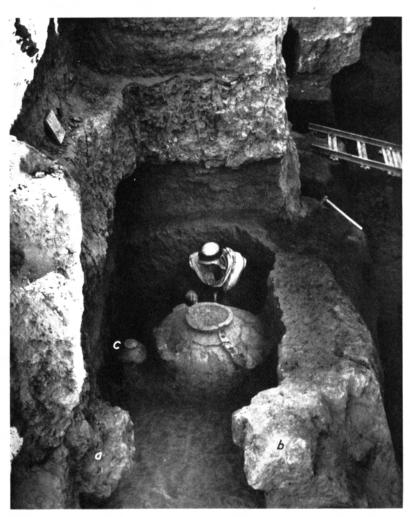
<sup>&</sup>lt;sup>20</sup> Walter Andrae, Die archaischen Ischtar-Tempel in Assur (WVDOG XXXIX [1922]) Pls. 6-7.

<sup>&</sup>lt;sup>21</sup> André Parrot, "Les fouilles de Mari," Syria XVI (1935) 12-28; see Pl. V.

n R. F. S. Starr, Nuzi I (Cambridge, Mass., 1939) 66; ibid. II (1937), Pls. 5 A and 6 A and Plan 7.



Fig. 6.—Two Stone Pendants (a and c) from Sin Temple I and a Gold Crescent (b) from Sin Temple III. Scale, 3:4 a Kh. IX 30 b Kh. VII 117 c Kh. IX 29



 $\mbox{Fig. 7.} -- \mbox{Room Q 42:47 Seen from North}$  Remains of a wall of Sin Temple II are marked a and b. Pot c is shown in Figure 8

pendants (Kh. IX 29-30, Fig. 6 a and c), which, by analogy with the gold pendant in Figure 6 b, may perhaps represent the crescent emblem (mounted on a shaft).

At the south end of the sanctuary the lowest floor was found almost immediately above the earlier debris. At the north end, however, a layer of tamped earth about 7 cm. thick separated the earlier debris from the platform on which the altar stood (Pls. 2 A and 14 B and Fig. 5). It is possible that this layer extended over the whole room as a pavement but that most of it was destroyed during the subsequent rebuilding. If so, the floor immediately above the earlier debris possibly represented no more than the surface trodden upon during the actual building, while the first occupation floor was some 7 cm. higher, that is, a continuation of the surface of the lower step appearing in Figure 5.

The narrow oblong space P 42:27 west of the sanctuary was completely filled by a solid mass of crude brick and clay in which only the face of the east wall could be traced with some difficulty but in which no traces of the inner surfaces of the west wall or of cross walls were distinguishable. We assume, therefore, that this space served as the base of a stairway leading to



Fig. 8.—Painted Pot from Q 42:47, Marked c in Figure 7. Scale, 1:5.

the top of the building. The existence of a doorway into the north part of P 42:27 indicates, however, that the stairway base did not extend its full length. Probably the height of the roof was reached short of the north end, so that the part between the end of the stairs and the wall could be roofed and serve as a small storeroom or closet.

The space on the east side of the sanctuary was occupied by three rooms, the largest of which, Q 42:47, was connected with the sanctuary only, while Q 42:42 and 43 served as passageways between the sanctuary and the small court, Q 42:44. Q 42:47 contained a very large jar and several small pots, some of them painted (Fig. 7). Of the latter, one is shown again in Figure 8.

That the buildings east of Q 42:44 were not part of the temple but probably dwelling houses is indicated by their thinner walls. In fact, Q 42:44 was probably at this time no more than an open space between the houses and the temple and only later developed gradually into an open court as a planned feature of the latter. However, even at this stage this open space already contained a round structure in front of the doorway to Q 42:42—a feature which survived into much later periods, and which, to judge by its frequent occurrence in the buildings under discussion, must have been considered an essential appointment of a temple. We found no definite evidence as to the function of such structures, but we tentatively assume that they may have been used as offering-tables. However, in this particular case the nearly symmetrical position of the structure at one end of the narrowed southern part of the "courtyard" may admittedly suggest some architectural purpose.

#### SIN TEMPLE II

The plan of the first rebuilding is shown in Plate 2 B. Although the new plan closely resembles the previous one, there can be no doubt that the temple was ruined and completely rebuilt. It is to be seen from the sections (Pl. 14) that the new walls did not exactly rest upon the walls of the original building, and in some cases they were separated by a noticeable layer of debris. By means of shifting the positions of certain walls slightly the area of the building was enlarged and the division of the available space improved. P 42:27 was made even narrower—a fact which seems to confirm the view that it was used only as a base for a stairway—



Fig. 9.—North Wall of the Sanctuary of Sin Temple II

Part of the platform can be seen at a; above it is the remaining brickwork of the altar against the doubly recessed niche, and on each side of the latter is a narrow niche.

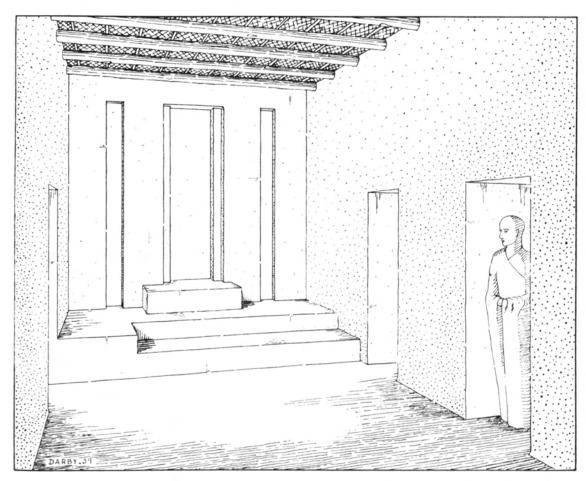


Fig. 10.—Perspective Reconstruction of the North End and Altar of the Sanctuary of Sin Temple II

while the sanctuary, Q 42:39, and the rooms east of it were enlarged. The sanctuary was also more regular in shape, and the face of its north wall, against which the altar was retained, was elaborated with a small, doubly recessed niche and two grooves (Fig. 9). Figure 10 is a restored view of the north end of the sanctuary, showing altar and niched wall.

The space east of the sanctuary, originally occupied by three rooms, was now divided into four. Of these Q 42:42 and 43 were used as passageways, while Q 42:40 and 41, which replaced Q 42:47, both retained the latter's characteristic of communicating with the sanctuary only.

In Figure 7 the stumps of the cross wall between these two rooms can be seen above Q 42:47. Against this cross wall we found in Q 42:41 a large and extremely interesting group of cylinder seals,<sup>23</sup> two of which are shown in Figure 11. The largest seal in this group (Kh. VII 260, Fig. 11 a) has a unique decoration of shell rings inlaid in the top and bottom of the cylinder; and its characteristically shaped large suspension loop is noteworthy. This loop was made of silver,

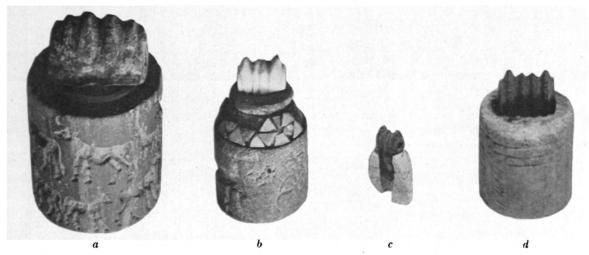


Fig. 11.—Cylinder Seals with Suspension Loops. About Actual Size a Kh. VII 260 c Kh. VII 138

d Kh. VII 70

b Kh. VII 274

but similar loops of stone or shell were found attached to several other contemporaneous seals from Khafajah (e.g. Fig. 11 b-d). There can no longer be any doubt about the function of these objects, which, when found separately, used to be described as "house amulets." Such loops were usually attached to the cylinder by means of a projecting peg which was cemented into the hole drilled at the axis of the cylinder (Fig. 11 c). The material used was a red paste, a substance which, like bitumen, was commonly employed in stone and shell mosaics also. The scene carved on the large cylinder (a) is the "byre scene," well known from seals, seal impressions, and carved stone vases. Figure 11 b is another seal from the same hoard (Kh. VII 274). Its upper end is unusually tapered and inlaid with small triangles of mother-of-pearl and jasper, a type of decoration which was commonly applied to stone vases found in a later rebuilding and which survived into much later times. The suspension loop of this seal was made of shell.

The courtyard Q 42:44 remained practically unchanged except that the round offeringtable was slightly smaller. Of this building period a larger area to the east of the court was ex-

<sup>23</sup> To be published in Cylinder Seals from the Diyala Region.

<sup>&</sup>lt;sup>24</sup> I.. Delaporte, Musée du Louvre. Catalogue des cylindres, cachets et pierres gravées de style oriental II (Paris, 1923) Pl. 63:3; UVB V (1934) Pl. 25 d; A. Moortgat, Frühe Bildkunst in Sumer (MVAG XL 3 [1935]) Pl. XXX; our Kh. V 14, Fig. 98 below.



Fig. 12.—Small Altar in Q 42:46 at the Level of Sin Temple II

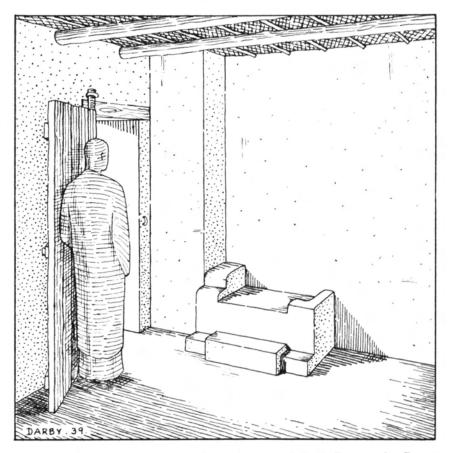


Fig. 13.—Perspective Reconstruction of the Small Altar in Q 42:46, Showing Its Position against the East Wall of the Room

cavated. The passage Q 42:45 was found to be a small alley running west-east between the houses. At its east end a doorway led to an area as yet unexcavated, while a second doorway, in its south wall, opened into Q 42:46. A shallow buttress near the right jamb of this door gave an indication that it led into a space of more than usual importance; and, indeed, in following the east wall of Q 42:46 we came upon a structure which was undoubtedly an altar (Fig. 12). It is the only altar of this period found so well preserved, and the details of its construction are invaluable in any attempt to restore less well preserved altars of similar date. Figure 13 is a perspective reconstruction of this altar showing more clearly its position in the room.

Near this altar and the doorway we found fragments of a unique pottery torso of a squatting child (Kh. VII 252), but unfortunately not a single fragment belonging to the head was found.

#### SIN TEMPLE III

The general plan of this rebuilding (Pl. 3) was in its turn very similar to the plan of Sin II. In the sanctuary, Q 42:25, the altar was once more set against the north wall, the latter being

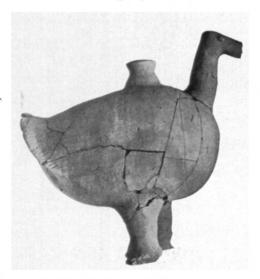


Fig. 14.—Pottery Libation Vase in the Shape of a Bird (Kh. VI 333) from Sin Temple III. Scale, 1:5.

decorated by a doubly recessed niche and grooves. A steplike structure projected from the left side and front of the altar, while the larger platform that had existed in front of it in the previous building period now disappeared. In the middle of the sanctuary, opposite the door leading into Q 42:28, a small circular hearth was introduced, to be retained through the subsequent building periods.

The long narrow room P 42:27 was no longer solidly packed, and all its four walls could be found and traced. We conclude, therefore, that this space had ceased to be used for a stairway—an inference indirectly supported by the fact that traces of another stairway were found in the open court of the building. For the somewhat unusual treatment of the southern doorway into P 42:27, with two asymmetrically placed recesses in the jambs, we can offer no adequate explanation.

The rooms east of the sanctuary—Q 42:26, 29, 28, and 27—differed but slightly from their prede-

cessors. Q 42:26, nearest the altar, yielded nearly all the important objects recovered from Sin III. They consisted mainly of seals, amulets, and pendants; however, a stone vase (Kh. VII 144) inlaid with jasper and mother-of-pearl<sup>25</sup> and a pottery libation vase in the form of a bird (Kh. VI 333, Fig. 14; cf. p. 29) also are of interest. Another noteworthy object is a small gold crescent (Kh. VII 117, Fig. 6 b)—undoubtedly the emblem of Sin. The animal amulets were of a great variety and included birds, fish, scorpions, frogs, bulls, leopards, lions, etc. The meaning to be attached to them is to me still uncertain. On the basis of the common theory that they were worn as "charms" one would expect to find a great number of them in graves and comparatively few in a communal building such as a temple; however, the fact that the opposite was observed in Khafajah may support another hypothesis, namely that they were perhaps meant to represent and replace actual temple offerings just as the image of a person represented its donor before the deity.<sup>25a</sup>

<sup>25</sup> Similar to Kh. VI 373 (Fig. 26) from Sin IV.

<sup>&</sup>lt;sup>25a</sup> Amulets were found on several occasions elsewhere, either on floors, in the filling of ruins, or in caches and foundation deposits. The closest in date to ours were found in a cache at Warka (UVB VI [1935] 13) and are discussed by Heinrich



Fig. 15.—Stairway against the North Wall of the Court of Sin Temple III

The preserved steps are marked a and b, the parapet c; d is accumulated earth between the steps and the brickwork (e) of the next building period.

The open space Q 42:38 east of these rooms now became a real court and an integral part of the temple. Against its north wall we found traces of a mud-brick stairway apparently leading to the roof (Fig. 15). The round structure was once more rebuilt, and, although placed a little nearer the middle of the court, it still remained almost opposite the doorway into Q 42:28.

The south end of the courtyard was cut off by a thin partition wall to form a small closet, Q 43:17, obviously too small to be occupied by even one person. It had no doorway, but only a small wicket cut through the partition wall. Inside the closet on a mud shelf along the inner face of this wall stood a collection of very small pottery and stone jars (Fig. 16). Their number and their position within reach of the wicket suggest that the purpose of this closet was simply

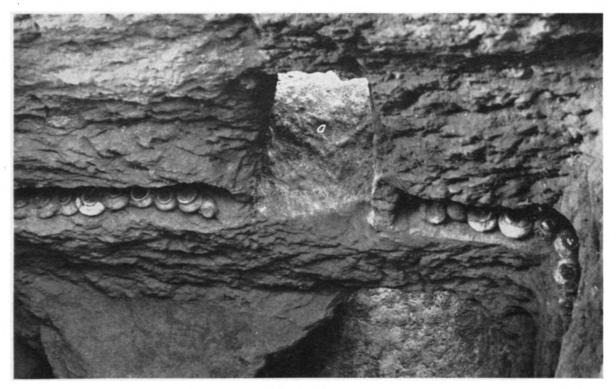


Fig. 16.—A Group of Small Jars  $in\ situ$  on a Shelf Cut into the Wall of the Small Room Q 43:17 and Accessible through a Wicket (a)

to store these jars. Their arrangement on the shelf so closely resembled a corner in an old-fashioned pharmacy that it seems justifiable to hazard a guess that they may have contained various substances (oils and herbs) which were administered by the priests as medicine.

<sup>(</sup>Kleinfunde aus den archaischen Tempelschichten in Uruk [Deutsche Forschungsgemeinschaft, "Ausgrabungen . . . . in Uruk-Warka" I (Berlin, 1936)] p. 4), who comments about the circumstances of their deposit: "Für unsern Fall besonders kennzeichnend scheint mir das von Andrae wiedergegebene, allerdings sehr späte Zitat aus einer Bauurkunde Sargons II.: Le peuple jeta ses amulettes." This phrase referring to amulets, if authentic, would indeed be illuminating. It is worth while, therefore, to trace it to its original source. Heinrich repeats it from a discussion by Andrae of a later foundation deposit at Assur (Die jüngeren Ischtar-Tempel in Assur [WVDOG LVIII (1935)] p. 56). In his turn Andrae borrows it from Perrot and Chipiez (Histoire de l'art dans l'antiquité. II. Chaldée et Assyrie [Paris, 1883] p. 332), who quote it from Oppert's pioneer translation of the gold foundation tablet from Khorsabad (at the end of the passage in lines 8–11; Oppert, Expédition scientifique en Mésopotamie ... II [Paris, 1863] 343 f. and 350). Dr. Jacobsen has been kind enough to check this passage, and his translation follows: "An abode for Ea, Sin, Shamash, Adad, and Ninurta I founded therein; Ninigiku(g), the fashioner of everything, made (lit., bore) their greatly divine forms, and they (thus represented) took up their abode on the (throne-)daises." All the theories based on Oppert's translation, with regard either to the use of amulets or to ceremonies of consecration, are, therefore, without foundation.

The space east of the courtyard was not included in the temple area of this period, and the fragmentary remains which were excavated there were of little architectural interest.

A second occupation floor was found approximately 25 cm. above the original floor, but no important changes in plan were observed and no distinction could be made between the objects belonging to these two floors.

### SIN TEMPLE IV

#### FIRST OCCUPATION

As we have seen, no special preparations had been carried out for the laying of the foundations of the original building or the two subsequent rebuildings; the builders had simply leveled the earlier ruins, filled in the spaces between the remaining low stumps of walls, and built the new walls directly upon the surface thus roughly prepared. The result was that the occupation floors in each of these earliest three building periods were only very little above the upper surface of the stumps of the earlier walls (see Pl. 14).

In the third rebuilding (Sin IV) a more elaborate method was adopted: after the remains of the previous building had been leveled in the usual manner, new walls were again built almost exactly above the ruined walls of Sin III; the new walls were, however, considerably wider than the earlier ones and not of uniform width themselves. After they had reached a height of about 1 meter, the spaces between them were solidly packed with clay, thus forming an artificial terrace which completely sealed the earlier ruins and which served as a socle for the walls of the temple proper. This is the earliest artificial terrace of this type in Khafajah (cf. p. 121, n. 79), and it is noteworthy that an identical method was used in building the artificial terrace of the Temple Oval at a considerably later period.<sup>26</sup> There is, however, a difference between them besides that of scale: whereas the foundation walls forming the "skeleton" for the terrace of the Temple Oval rested on a specially prepared sand filling,27 the foundations of Sin IV simply rested on the accumulation of earlier ruins. It is uncertain whether "purification" of the temple area, as manifested in the case of the Temple Oval, was introduced only at a later period or whether it was already practiced at the time of the building of Sin IV but was not considered necessary in this particular case, since the soil on which the new building was to be erected was known to contain the ruins of several earlier temples and no graves and therefore had no need of special purification.

The walls of the temple proper were slightly thinner than the foundation walls and were not all symmetrically placed over the latter (Pls. 4 A and 14). In Plate 4 A continuous black lines mark the foundations, whereas the black poché indicates the actual temple walls. It is to be noticed that on the east side the artificial terrace projected approximately 80 cm. from the wall above it. Since the court, Q 42:16, was not artificially raised, it remained at a lower level, and the edge of the terrace was exposed there. To give access from the court into the temple a few steps were needed, and most of these were simply cut out of the brickwork of the eastern retaining wall of the terrace. These stairs, built of mud brick, were not reinforced by more solid material such as stone, baked brick, or even bitumen and were so worn down that they seemed more like ramps. Figure 17 shows on the right the two preserved steps of the stairway which led into Q 42:13, on the left the remains of the stairway into Q 42:20. Part of the latter had been cut away in excavating the doorway to a deeper level. Originally it had continued as far up as the upper part of the pivot stone back of the left jamb of this doorway. The photograph shows also how the projecting part of the terrace between the two doorways was worn by



Fig. 17.—Stairways Leading from the Court of Sin Temple IV into Q 42:20 (Left) and Q 42:13 (right) Between them and to the right is the edge of the artificial terrace. The lowest section of a vertical pottery drain sunk from a higher level is shown at a, the circular offering-table at b.



Fig. 18.—Kilns in Court Q 42:21 of Sin Temple IV, Seen from South

Except for the introduction of the artificial terrace, the temple retained most of its earlier characteristics. In the sanctuary, Q 42:24, the altar stood once more against the north wall; the wide niche at the back of the altar now disappeared, but the two narrow grooves at the sides were retained. The altar itself became a more regular square structure with a smaller and lower square at its left (west) serving as a step. The circular hearth also reappeared but was placed rather nearer the center of the room.

The long narrow room west of the sanctuary, P 42:27, was now obviously unoccupied, for we found that the doorway into it was solidly blocked up. However, if the room itself was abandoned as needless, it is probable that the part of the roof above it still served a useful purpose. Since the room was considerably narrower than the sanctuary, its roof could be made proportionally much more solid and thus could be safely used as a small flat terrace. In blocking up this room and abandoning its use for ordinary purposes the first step was taken in the change of the temple from an earlier type, consisting of a large central, oblong sanctuary with smaller rooms flanking both its longer sides more or less symmetrically, to a later type in which the sanctuary was placed at the end of a fairly elaborate temple complex.

The four rooms east of the sanctuary—Q 42:19, 14, 13, and 20—were like the similarly placed rooms of the earlier temple and were probably used for very much the same purposes.

The court Q 42:16 also remained practically unaltered except for the two short stairways described above. The round offering-table was placed exactly opposite the stairs leading into Q 42:13 (Fig. 17 b), a small bench was built against the north wall of Q 43:17, and the long stairway against the north wall of the court, leading to the top of the building, was also rebuilt without much change.

It seems that in this period the temple area was extended farther to the east and included a second court, Q 42:21, for the latter contained two large round kilns (Fig. 18) whose use is more likely to have been connected with the temple than with private houses. They too were rebuilt several times during the various occupations of this and the following building periods. To the south of Q 42:21 we excavated a small architectural unit consisting of a smaller court, Q 42:22, and the three rooms Q 42:35–37. The plan and proportions of this unit suggest an ordinary dwelling, but the round structure in Q 42:22, a typical feature for a temple court of this period, and the small rectangular structure against the west wall of Q 42:35, not unlike an altar, may indicate that it formed part of the temple. In this connection it may be well to recall that already in Sin II an elaborate altar was found in Q 42:46.

### SECOND OCCUPATION

The gradual rising of the floors resulted in a new, distinct occupation level of Sin IV, approximately 50 cm. above the original floor in the sanctuary and adjoining rooms. Whatever small changes in plan there were took place in the courtyard and the rooms east of it (Pl. 4 B). As usual in ancient buildings the debris accumulated at a greater rate in the open courtyard than in the roofed rooms. As a result, the original difference in levels created by the construction of the artificial terrace was gradually reduced, and the stairs had to be modified accordingly (Pl. 14 A). This change and some others can be seen by a comparison of Figures 17 and 19. In the latter the edge of the artificial terrace is no longer visible, since the floor had risen to a level above it. Figure 19 shows the top edge (near the end of the meter stick) and Figure 17 the lowest section of a vertical pottery drain which was introduced in the second occupation level; it consisted of two sections, each about 70 cm. in diameter and 60 cm. high. The lower and darker of the round structures in the left foreground of Figure 19 belongs to this occupation level, while the upper one belongs to a later building period, the floor of which coincided with

# PRE-SARGONID TEMPLES

the dark line.<sup>28</sup> A more general view of the courtyard (Fig. 22) shows in the foreground a step-like structure which was added in Sin IV 2.

To the east in Q 42:21 the two round kilns were rebuilt at a higher level. Q 42:22 was more extensively excavated at this level; it was found that the round structure in it had been rebuilt in a slightly different position, that the northeast corner was occupied by a solidly built benchlike structure, and that the east wall did not join the corner of Q 42:36 as one might have ex-



Fig. 19.—Southwest Part of Courtyard Q 42:16 during the Second Occupation of Sin Temple IV

pected but ran for a certain distance parallel to it, forming a narrow corridor. In a later rebuilding this corridor was occupied by a ramp which gave access to the roofs (see p. 34), and one may assume that already at this period the corridor served a similar purpose.

# THIRD AND FOURTH OCCUPATIONS

Two more occupation levels must be attributed to this building period, in spite of the fact that the next floor in the part of the temple situated over the artificial terrace, which lay only a few centimeters above that of Sin IV 2, was obviously used during the first occupation of Sin V. The reason for this is that two floors which were found in the court between Sin IV 2 and Sin V were occupation floors, as is indicated not only by the considerable difference in their levels, but also by slight changes perceptible in the position of the round structure and in the east wall of the court. We must assume, then, that three floors in the courtyard correspond to a single floor in the main part of the temple. This conclusion is not really surprising, for we already

28 The difference in color is due to the fact that when this photograph was taken the lower structure had been recently excavated and still retained some of the ground moisture, while the upper one had been exposed long enough to dry out.



Fig. 20.—Stairs into Q 42:20, Showing Two Stages, the Later of Which, Cut Away except at Left, Was the Result of Uneven Replastering

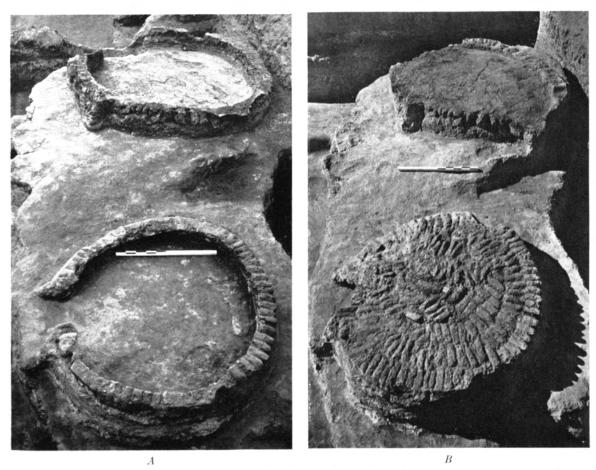


Fig. 21.—A. The Kilns in Q 42:21 Seen from Northeast. B. The Same Kilns as Rebuilt at a Later Stage, with the Burned Plaster of a Higher Floor Removed To Reveal the Way the Bricks Were Laid

have had occasion to mention the repeatedly observed fact that the floor levels rose considerably more rapidly outside the temple or in the court than in the sanctuary itself. If at a given period the temple was especially well cared for, with frequent cleaning of the floor of the sanctuary and maintenance of the walls in a good state of repair, the result would be twofold: first, that the actual floor inside the building would not noticeably rise, and second, that such a building would be preserved for a considerably longer time, during which a larger amount of debris could accumulate outside it. This must have been the case in the building under discussion. As the difference in levels between the courtyard and the sanctuary diminished, the stairs giving access to the temple became more shallow. This came about not through any change in structure but merely through the application of new coats of plaster of varying thickness to the same steps, a thinner coat being applied to the highest step and a thicker to the lowest (Fig. 20). The effect was that the lower steps became more and more shallow until the floor of the court rose sufficiently to cover them completely one after another. This was less likely a consciously adopted method than a practical outcome of the gradual rising of the floor in the courtyard.

The floors in Q 42:21 also accumulated very nearly at the same rate as the floors in the central court. The two large kilns there were being rebuilt at frequent intervals, and after each rebuilding their sizes and their relative positions were slightly different. In Figure 21 A the two kilns are seen from the northeast. It is to be noticed that their walls were built of one row of bricks laid on their long edges. The floor of each was plastered and was slightly convex in shape because of the earlier brickwork beneath it. Figure 21 B shows the next rebuilding, but with its plaster removed, revealing the brickwork of the floor of the nearer kiln. Figure 22 is a view of the whole temple from the north. It can be seen that not all the remains are of one building period, though the best connected remains belong to Sin IV.

## OBJECTS FROM SIN TEMPLE IV

Of the great number of objects yielded by this building the majority came from the sanctuary of the first occupation (Q 42:24). There was an extraordinary wealth of small objects such as pendants, amulets, and seals, as well as a large quantity of stone and pottery vessels. Of special interest is a small female statuette (Kh. VI 325, Fig. 23); for, although certainly not a specimen of monumental sculpture, it is, nevertheless, the earliest stone carving in the round of the human figure so far found in Mesopotamia.<sup>29</sup> An eyeball (Kh. VII 65) found in the same temple led us to assume that larger-scale statuary, then known only from the Early Dynastic period, already existed in the Proto-literate age. The recent discovery of a magnificent, nearly life-size head in a stratum of the latter period at Warka<sup>30</sup> not only confirms this assumption but affects to a considerable extent the views previously held concerning the development of Mesopotamian art.

The majority of the seals found at this level were rather long and slender, made of white stone (usually glazed steatite), and engraved with a variety of geometric decoration which consists of a combination of a comparatively small number of motives. Besides this more common variety, there were several of another type, engraved with summarily designed animals and sometimes a roughly sketched building (e.g. Kh. VI 161–62, 196, and 200). Seals of this second type were usually smaller and without exception of different materials, mostly varieties of limestone. There were also seals falling outside these two groups, such as Kh. VI 346 and 416.

<sup>&</sup>lt;sup>29</sup> It should be pointed out that no conclusions as to racial features can be drawn on the basis of the shape of the very prominent nose as it appears in Fig. 23, for it is considerably disfigured by the disintegration of the stone.

<sup>&</sup>lt;sup>10</sup> Deutsche Forschungsgemeinschaft, Berlin, Kurzbericht Warka XI. 1938/39, pp. 12-13 and Figs. 4-6.

Fig. 22.—General View of the Earlier Stages of the Sin Temple from the North

Courtyard Q 42:16 is readily recognized in the center; a marks Q 42:37, b, Q 43:17, c, Q 42:20, and d, the sanctuary. The extent of later rebuildings is indicated by e, f, g, and h

Finally, a cylinder seal made of bitumen and sheathed with copper (Kh. VI 194) may be mentioned, for it is probably the earliest known example of this rare type.



Fig. 23.—Small Female Statuette (Kh. VI 325) from Sin Temple IV. Actual Size



Fig. 24.—"Hut Symbols" (Kh. VI 243 and 242) from Sin Temple IV. Actual Size

The animal amulets are of special interest and will be discussed in *Miscellaneous Objects from the Diyala Region*; here we may mention only the exceptional amulet Kh. VI 230, representing a kneeling human figure.

The presence of so-called "hut symbols" (Kh. VI 242–43, Fig. 24) among the small objects from this temple is noteworthy, chiefly on account of Andrae's ingenious interpretation of this type of object.<sup>31</sup> In his publication Andrae considers a specimen from Tell Asmar (As. 32:141), dated to Early Dynastic III, as the earliest of the so-called "derivative" or "misinterpreted" type, though another, which he published as found at Tell Billa, actually comes from Tepe Gawra, probably from Stratum IX.<sup>32</sup> The example from the Sin Temple definitely proves that this type of object existed in much earlier times than Andrae anticipated.<sup>33</sup>

The pottery vessels, both plain and painted, which are of great value for comparative dating, are fully discussed and illustrated in the pottery volume of this series. An exceptional vase, obviously designed for ritual rather than ordinary domestic use, should, however, be men-



Fig. 25.—Pottery Libation Vase in the Shape of a Bull (Kh. VI 411) from Sin Temple IV. Scale, about 1:5

tioned here. This is a vase in the form of a bull (Kh. VI 411, Fig. 25), which, like the bird-vase (Kh. VI 333, Fig. 14) from Sin III, we consider to have been a libation vessel. Indeed, theriomorphic vessels, recognizable by the funnel on the back, are depicted in ritual scenes on cylinder seals and on the large alabaster vase from Warka.<sup>34</sup>

A few more objects are of special interest, among them fragments of carved vases (Kh. VI 338 and Kh. VII 46) and a group of stone bowls and a large shell "lamp" (Kh. VI 372) inlaid with mother-of-pearl and colored stone. Typical of the inlaid stone bowls is Kh. VI 373 (Fig. 26).

<sup>31</sup> Die ionische Säule, Bauform oder Symbol? ("Studien zur Bauforschung" V [Berlin, 1933]) pp. 32-34.

<sup>32</sup> E. A. Speiser, Excavations at Tepe Cawra I (Philadelphia, 1935) 99 f. and Pl. XLIV c.

<sup>&</sup>lt;sup>33</sup> Lately similar objects, some of them bearing a design of an eye or two eyes and thus referred to as idols, were found by Mallowan in early strata in Syria (*ILN*, October 15, 1938, pp. 697–700).

<sup>&</sup>lt;sup>34</sup> Frankfort, Cylinder Seals. A Documentary Essay on the Art and Religion of the Ancient Near East (London, 1939) Pl. V c; UVB VII (1936) Pl. 25 e; Ernst Heinrich, Kleinfunde aus den archaischen Tempelschichten in Uruk (Deutsche Forschungsgemeinschaft, "Ausgrabungen . . . . in Uruk-Warka" I [Berlin, 1936]) Pls. 2 and 38.

The inlaid pieces were rhomboidal or triangular and were fixed into shallow grooves either by black bituminous paste or by dark red earth, the colors of which were part of the general effect of the design.



Fig. 26.—Stone Bowl with Inlaid Decoration (Kh. VI 373) from Sin Temple IV. Scale, 2:5



Fig. 27.—Stone, Shell, and Mother-of-Pearl Inlay Stuck to a Lump of Clay Found in Front of the Altar of Sin Temple IV. Scale, 1:2

## INLAY IN ARCHITECTURAL DECORATION

In connection with the inlaid vases it may be worth while to examine a small lump of clay, found in front of the altar, the surface of which contained a number of inlay pieces fixed with bitumen (Fig. 27). That this inlay did not belong to a vase of the type mentioned above is

clear from several indications. First, the inlay pieces and the pattern they form are both larger than any of those found in the vases. Secondly, whenever such an inlaid pattern was found stuck against clay, it was always in reverse; that is, the face that was clinging to the clay was clean of bitumen, while traces of this material were usually found on the outer, exposed surface, which had originally been fixed to the stone. In addition, in all cases where a considerable number of pieces remained in their true relative positions, forming a pattern, the lumps of earth to which they were stuck invariably preserved a negative impression of the surface of the object to which the mosaic was originally fixed. In the present case, however, all these characteristics were absent. The surface of the clay, as can be seen in Figure 27, was irregular; and, though the inlay pieces seemed to have been fixed to the clay by an unusually thick layer of bitumen, no traces of this material were found on the exposed side. The only clue that may help to explain the use of this rather unusual inlaid design is its position in front of the altar, which suggests the possibility that this bit of inlay was originally fixed into a shallow groove in the plaster of the altar. This theory, incidentally, explains all the unusual features which we observed in the find. The only objection seems to be that we are hardly justified in assuming that a mode of decoration observed to have been applied only to small portable objects was used architecturally. However, in this connection one has to remember that mosaic architectural decorations, although of a somewhat different kind, are represented by painted "pegmosaics" at Warka<sup>35</sup> and by the mosaic columns and inlaid friezes from al-cUbaid.<sup>36</sup> These facts not only overcome the above mentioned objection, but make it a priori very likely that some similar kind of decoration was occasionally used in the later phases of the Proto-literate period, with which we are concerned.<sup>37</sup>

### SIN TEMPLE V

### THE PLAN

A comparison of the method used in this rebuilding with the previous one brings out a surprising fact. Whereas the builders of Sin IV were the first to introduce an artificial terrace, it seems that the builders of the next period deliberately reverted to an earlier tradition by placing the whole of the temple—the courtyard and adjoining structures as well as the sanctuary—on one level. Indeed, care was taken to obliterate any difference in level between these two parts that still remained after the fourth occupation of Sin IV, and a considerable amount of labor must have been spent in filling in and leveling Q 42:16 and the area east of it (see Pl. 14 A). On the other hand, in the sanctuary and adjoining rooms the level had been lowered as far as possible, short of actual excavation, by completely razing all the previous walls to floor level and actually reusing the latest floor of the previous building period. As a result, the surface on which Sin V was built was the most regularly leveled surface in the history of the temple.

The new walls were built without special preparations, in keeping with an older tradition; they stood almost exactly on top of the earlier ones, and, except for a very slight shifting of the whole toward the east (Pl. 14 A), the plan of this rebuilding (Pl. 5 A) shows no important alterations. In the sanctuary (Q 42:15) the outstanding innovation was the introduction of a number of narrow, doubly recessed niches which adorned not only the north wall, where the

<sup>35</sup> UVB III (1932) Pl. 1.

<sup>&</sup>lt;sup>36</sup> H. R. Hall and C. L. Woolley, Al-Ubaid (UE I [1927]) Pls. IV and XXXI-XXXV. A connection between this type of inlay and the cone mosaics was noted by the writer on another occasion (Iraq V [1938] 8).

<sup>&</sup>lt;sup>37</sup> Since this was written, an altar decorated with stone inlay imitating mosaic has been found at Tell Brak in a temple dated to the "Jamdat Nasr" period (Mallowan in *ILN*, May 20, 1939, p. 884 and facing plate).



Fig. 28.—North End of the Sanctuary  $(Q\ 42:15)$  of Sin Temple V, Showing the Altar, the Offering-Table in Front of It, and the Doubly Recessed Niches in the North and East Walls

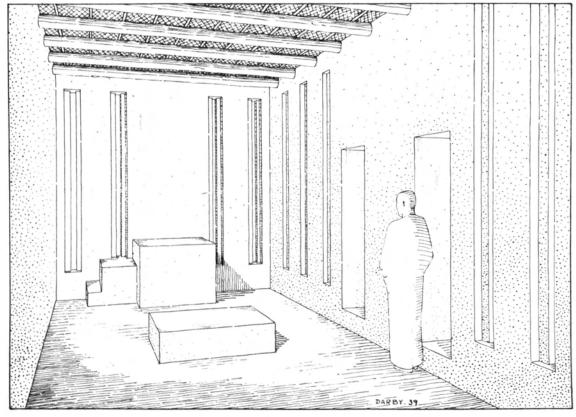


Fig. 29.—Perspective Reconstruction of the North End of the Sanctuary of Sin Temple V, with Altar and Offering-Table

altar was situated, but also part of the long east wall (Fig. 28; cf. Fig. 35). These niches were not built in the actual masonry but were merely carved in the thick mud plaster with which the walls were covered. A similar method was employed at Warka in making the shallow niches in the face of Ziggurat B of the "White Temple," and it is possible that the niches in Sin V reflect the earlier architectural tradition there represented. On the other hand, it may be that these niches are no more than an isolated local experiment, inspired perhaps by those previously existing in the north wall. Another innovation in the sanctuary was an oblong earthen offering-table measuring about  $1.00 \times 1.20$  m., placed in front of the altar opposite the doorway into Q 42:19 (Pl. 5 A and Fig. 28), which also had counterparts in earlier temples. Against its north side a cylindrical pottery vessel was partly imbedded in the mud floor. It is interesting to record that both these innovations or revivals were short-lived, for neither was found in any of the later rebuildings. Of the other features, the altar remained unchanged except for

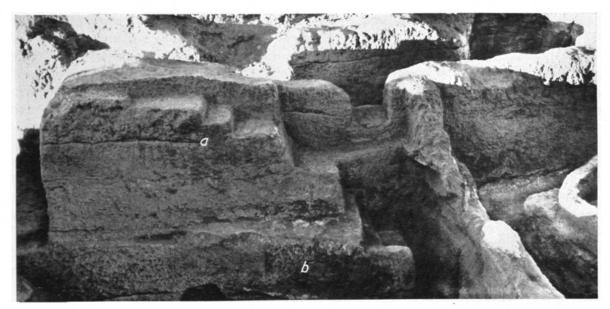


Fig. 30.—North End of Courtyard Q 42:16, Showing the Remains of the Stairway of Sin Temple V (above a). Remains of the Stairway of Sin Temple III Appear at b (cf. Fig. 15)

an additional step on the west side (Fig. 28), and the small circular hearth was retained in its former position. An unusual arrangement, observed only in this building period, was a slight difference in level between the sanctuary and the adjoining rooms, the floor in the former being 15–20 cm. below the floors of the latter, so that steps were formed at the doorsills. This arrangement is shown in Figure 29, which is a persepective reconstruction of the interior of the sanctuary as seen from the south.

The courtyard, Q 42:16, could be reached from the sanctuary through both small passage-rooms, Q 42:13 and 20. (The stairs shown in Pl. 5 A did not exist, of course, during the first occupation, when the whole building was at one level.) The courtyard was slightly altered in shape and dimensions. The east wall was rebuilt, and, although slightly thinner, it was now fairly straight. The stairway flanking the north wall was made somewhat narrower than the original one. In Figure 30 one can see above the dark line a which marks the floor level of Sin V

<sup>38</sup> UVB VIII 30.

<sup>&</sup>lt;sup>39</sup> That highly elaborate recessed niches were employed at still earlier times is proved by the excavations at Tepe Gawra (see American Schools of Oriental Research, *Bulletin* No. 66 [1937] pp. 2–9); however, there they were carried out in the actual brick masonry.

the two lowest steps of this stairway. The round structure in the middle of the court was slightly reduced in diameter, while the small room Q 43:17 was rebuilt without any noticeable changes.

The area east of Q 42:16, which was previously occupied by Q 42:21 and 22, now became a second large courtyard, Q 42:17. The north end of this court again contained two large circular kilns, somewhat larger and placed nearer together than in the previous period. The mudplastered floors as well as the actual brickwork of these structures were burned, indicating that an intense heat was reached in them. Although we have no sure evidence as to their use, the great number of typical solid-foot calices found in and around them may suggest that they were pottery kilns. However, since this kind of calix, typical only for a short period, occurred also in great numbers elsewhere (see p. 166), it may simply be coincidence that in the Sin Temple they were found in this particular spot.

The round structure which had previously existed in Q 42:22 now disappeared, but instead a square one was built against the south wall of this court. Although in dealing with a temple one is inclined to attribute a ritualistic character to all such structures resembling altars, this is probably not always justified, for some of them may have served quite ordinary secular purposes, even though it is often hard to guess what they were.

The southeast corner of this court merged into a corridor, Q 42:23, which had no doorways opening into the adjoining rooms. Instead we found that it contained a clay ramp, which may have been the worn base of a clay stairway. In either case there is no doubt that it was used to reach the roof. It is evident from the plan that at this period the east wall of Q 42:17 and Q 42:23, with a single entrance through it, formed the limit of the temple area and that the three rooms Q 42:35-37 were by now absorbed within its precincts.

Considering the possibility that the whole enlarged temple of this building period might have been placed on an artificial terrace, we excavated a small area east of the temple to ascertain if this was so; we found, however, that the floor of R 42:20, which seems to have been an open space or another large court, and the floor of the fairly large and regular room R 42:21 south of it were both even with the floors within the temple (Pl. 14 A). Because of the limited time at our disposal we could not extend the excavations in this area enough to elucidate the character of the earlier buildings in it. Outside the northern limit of the temple we were able to clear a narrow passage or alley, P 42:19 to Q 42:18, as well as the southern and part of the western contours of another contemporary building (see Pl. 5 A).

# THE STAIRS INTO Q 42:13

The presence of a short stairway of four steps which was added at some later date in the courtyard of this building against the doorway into Q 42:13 (Pl. 5A) is difficult to explain. A natural first assumption is that it was used during a second occupation of Sin V, when the floors of the sanctuary and the rooms adjoining it had risen while the floors in the rest of the building remained unaltered. In Plate 14A a conjectural second floor is shown by a broken line at approximately 35.80 m., on a level with the top of the stairs. If we accept this possibility, we must also reconstruct a second stairway in front of Q 42:20, the second passage-room between the court and the sanctuary (see Pl. 5A).

Although such a reconstruction is perfectly in keeping with the character of the previous building (Sin IV), certain points are not satisfactorily explained by it. The fact that the stairs were founded on the original floor of the court of Sin V shows not only that this floor was used simultaneously with the assumed higher floor in the sanctuary area, but also that only a comparatively short time could have elapsed between the building of Sin V and the addition of these stairs. But, as we have seen, the accumulation of debris was as a rule much faster in the

courtyard than inside the building, and it follows that if no debris could accumulate in the courtyard none could be expected in the temple proper; hence the higher level of the floor could not be a result of a natural process but must have been planned and artificial. That such a procedure was adopted shortly after special care had been taken to build the whole temple on the same level is not very likely. It is even less likely that, if the higher floors actually existed in the sanctuary and in all the rooms adjoining it, no traces whatever of these would be left and that the stairway which must have existed into Q 42:20 also would have completely disappeared. Since in excavating this part of the building we employed the same methods and the same workmen that were employed with positive results in other, much more difficult, parts of the excavations, it is very improbable that higher floors or a stairway were simply missed.

The simplest solution of this difficulty is perhaps to admit the possibility that this conjectural higher floor and the stairs into Q 42:20 never really existed and that the steps found outside Q 42:13, although very similar in appearance to the ordinary stairs which existed in Sin IV, were now built for a completely different purpose. The character of the steps themselves—their small elevation and the fact that the treads measured less than 20 cm. (not enough for a firm foothold)—seems also to bear out the notion that they were not meant for ordinary use. It is possible that they were built in order to block the entrance into Q 42:13, thus foreshadowing a practice adopted in the later rebuildings, when only one doorway gave access from the courtyard into the sanctuary. The way in which these stairs were worn down suggests that some heavy objects occasionally rested on or were dragged over them. It is possible that the partially blocked doorway into Q 42:13 served as a wicket through which the offerings brought for the temple could be passed to a priest standing in the small room behind.

### ISOMETRIC RECONSTRUCTION

Figure 31 shows a conjectural isometric reconstruction of Sin V as viewed from the southeast. In the right foreground is the open court R 42:20, with the doorway into Q 42:17. To the left of it the roof of R 42:21 can be seen, while to the right another room, not actually excavated, has been symmetrically reconstructed.

The two kilns at the north end of Q 42:17 have been reconstructed on the basis of evidence obtained from a somewhat later structure of similar character in which the dome was still partly preserved (see p. 112). Opposite the kilns at the south end of the same court are the roofs of the three rooms Q 42:35–37. The roof of Q 42:37 is slightly raised above those of the two smaller rooms to allow for clerestory lighting, thus avoiding windows in the outer wall of the court. Between R 42:21 and Q 42:37 one can see the corridor Q 42:23, with the upper part of the stairway or ramp giving access to the roof. Beyond Q 42:17 is the main temple court-yard, Q 42:16, showing against the north wall the stairway leading to the temple roof and in the center the typical round offering-table. Short stairways leading from the court into both Q 42:13 and 20 are shown, although it is possible, as we have seen, that only the more northerly existed in this period. The reconstruction, however, illustrates the typical features of this courtyard as they appeared in Sin IV also.

The height of the temple proper is reconstructed to correspond to the length of the stairway in the courtyard. The roof is flat with a slight slope toward the court and is furnished with rainspouts to drain the water through the low parapet around it. The more solid parts of this roof over the thick north wall of the building and the narrow western chamber (P 42:27) are indicated. The problem of the lighting of the sanctuary has been met by including three small windows in its narrow south wall; but another possible arrangement, namely the raising of the

roof of the sanctuary above those of the rooms flanking it to allow space for clerestory lighting in one or both of the longer walls, certainly cannot be excluded.

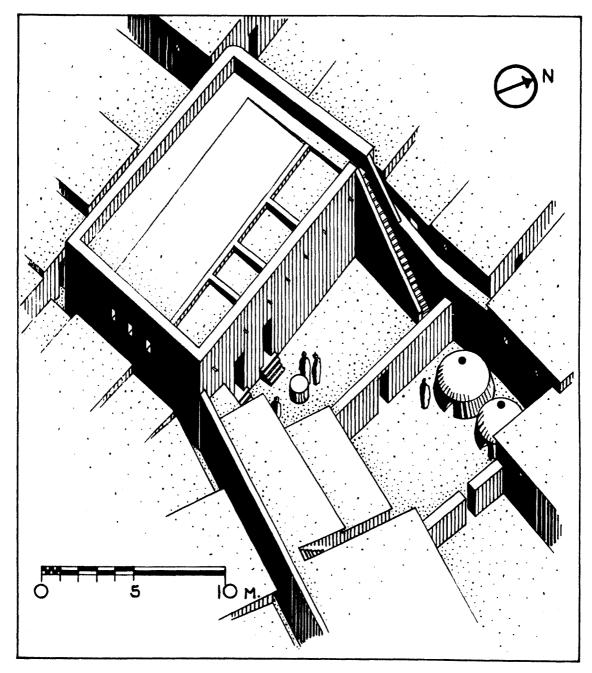


Fig. 31.—Isometric Reconstruction of Sin Temple V as Viewed from Southeast. Scale, 1:200

Except for the narrow alley north of the temple, which had been excavated, the buildings surrounding the temple in this drawing have been arbitrarily reconstructed on lines which we consider typical for contemporary private houses.



Fig. 32.—A String of Beads with an Animal Pendant at Each End (Kh. V 260)  $in\ situ$  in Room Q 42:19 of Sin Temple V

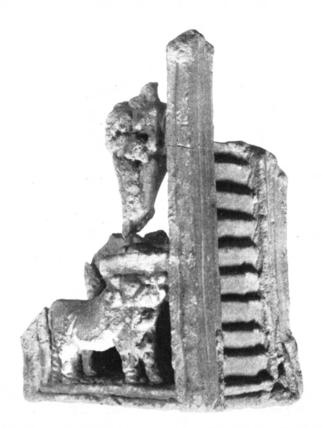


Fig. 33.—Fragment of a Carved Stone Vase (Kh. V 272) from Sin Temple V. Scale, 2:3

#### OBJECTS FROM SIN TEMPLE V

The objects found in this building were very few in comparison with those recovered from the building of the preceding period, and it is interesting to note that, while practically all the objects from Sin IV were found in the sanctuary, now they were scattered in small groups all over the temple area. In the cella itself only a very few were found, whereas the largest single group came from Q 42:19, the adjoining room nearest the altar.

In character the objects did not differ greatly from those of the previous period. They again consisted mainly of beads, pendants, animal amulets, seals, and fragments of pottery and stone vessels. Figure 32 shows a hoard of beads (Kh. V 260) found in Q 42:19, still lying in the order in which they were originally strung. Rather interesting is the occurrence of a bull amulet at each end of the string—the first concrete illustration of the manner in which these very common objects were used. A fragment of a carved stone vase (Kh. V 272, Fig. 33) representing a rather elaborate model of a building and decorated with figures of human beings and animals is also of interest.

#### RELATIVE POSITIONS OF THE ARCHITECTURAL REMAINS OF SIN TEMPLES I-V

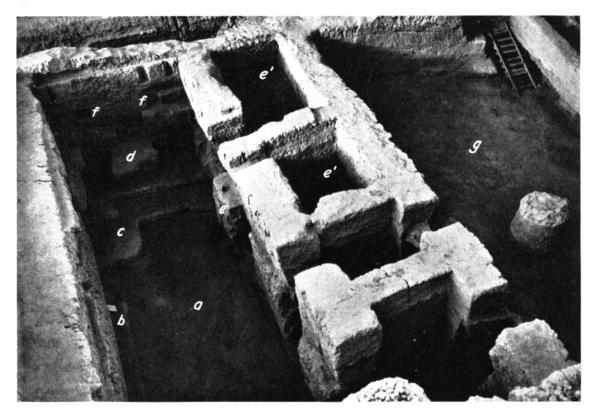
Before proceeding with the description of the following building (Sin VI), which, as we shall see (p. 123), must be attributed to Early Dynastic I, it may be well to examine Figure 34, which should help to give a clearer idea of certain details in the appearance of the earlier buildings and their stratification. The lowest surface (a) is a few centimeters below the floor of Sin II. To the left, at b, is the upper edge of some brickwork belonging to Sin I. Part of the floor of Sin II remains as a somewhat irregular step at c. Above it is the shallow platform on which the altar of Sin II is situated. This altar is not completely cleared, and its upper surface (d) marks the level of the floor of Sin III. The foundations of Sin IV can be seen (at e) projecting somewhat irregularly from the east wall of the sanctuary and again in two of the small rooms, Q 42:14 and 19 (at e'). The upper edge of the actual wall above each of these foundations is marked by a darker line representing the floor of Sin V. At the north end of the sanctuary (i.e., behind and above the altar) two wide niches can be distinguished in the wall of Sin IV (at f). Above them is the wall of Sin V, marked by four doubly recessed niches. The courtvard (q) has not been excavated to the same depth; its floor is that of the second occupation of Sin IV. Through the doorways of the two small passage-rooms one can just discern the two short stairways. The slope of the floor of the court toward the northeast is clearly visible. To the left of the modern ladder is the base of the stairway which led to the roof of the temple. Above the projection on which the ladder rests is the brickwork of Sin V.

Figure 35 gives an idea of the depth of Sin V below the surface. The floor shown there belongs to the second occupation of Sin IV, while the dark lines (a, b) against the walls and offering-table mark the level of the first occupation floor of Sin V. The meter stick marks the top of the brickwork of Sin V. Above this can be seen remains of Sin VI and VII, in which one doubly recessed niche (c) is preserved. The dark hole d shows the position of the altar of Sin VI.

Reference may also be made once again to Figure 3, which shows ruins of the first five periods.

<sup>&</sup>lt;sup>40</sup> These beads were restrung by us on the basis of this evidence and will be illustrated in this form in *Miscellaneous Objects from the Diyala Region*.

<sup>&</sup>lt;sup>41</sup> Several similarly carved stone vases were found in the Shara Temple at Tell Agrab, which is considerably later than the building period under discussion. Their close resemblance to the Khafajah fragment strongly supports the view, independently arrived at from other considerations, that those vases are not contemporaneous with the building in which they were found but survived from an earlier period.



 $Fig.~34. \\ -General~View~of~the~Sin~Temple~from~the~South,~Showing~Brickwork~of~the~First~Five~Building~Periods \\$ 



Fig. 35.—The Sanctuary of Sin Temple V Seen from the South before All Traces of Later Brickwork Had Been Removed

The accumulative effect of the changes which the Sin Temple underwent during its first five stages is illustrated by Plate 5 B, which shows the plan of Sin V superimposed on that of Sin I, the three intermediate plans having been omitted for the sake of simplicity.

### SIN TEMPLE VI

There were two significant innovations in this rebuilding: one concerned the building material, the second derived from a new architectural concept.

The problem of the building material is discussed in a later section (pp. 118-21) and need not be anticipated here. The second innovation is of more immediate interest. In the earlier periods, as we have seen, a clear distinction was made between the temple proper—the sanctuary and the rooms flanking it—and the subsidiary buildings, consisting of the courtyard and the rooms adjoining it. Study of the earlier building periods has made it clear that these secondary parts of the building were gradually added, undoubtedly for purely utilitarian purposes. With Sin IV a stage was reached when the subsidiary part had developed in both size and importance to such an extent that it was felt that the distinction should be further emphasized, and this was achieved by placing the sacred part, which still maintained all the characteristics of the earliest temple, at a higher level on an artificial terrace. In the period with which we are now concerned (Sin VI) apparently a new architectural concept was arrived at, in which the utilitarian, subsidiary rooms came to be considered as an integral part of the temple. It is manifested by surrounding the whole enlarged precinct with an inclosure wall and raising it to a higher level than the neighboring private dwellings. The new plan is compared in Plate 7 with that of Sin V, the last version of the temple built in the Proto-literate period.

In order to obtain the elevated area or terrace for the new temple, a method very similar to that used in connection with the building of Sin IV (see p. 21) was once more employed. However, owing to the enlarged area which the building now covered, only small parts of the new foundations could be placed directly on top of earlier brickwork. For the most part they had to be set on a roughly leveled surface which at certain points was higher than the earlier ruins, as can be seen in Plate  $14\ A$ .

The plan of the building is shown in Plate 6. The foundations actually traced are shown in continuous black lines, whereas the broken lines indicate reconstructed foundations. The poché represents the excavated walls, and horizontal hatching marks those which have been reconstructed. Although an unusually large portion of these walls is thus marked, a close examination will show that this does not mean that any radically different alternative is possible. It should be noticed that, except at the north side of the courtyard, the entire inner face of the inclosure wall was traced. The outer face was not completely excavated, since in order to achieve this it would have been necessary to remove enormous quantities of later brickwork and debris. On the other hand, certain parts of walls which were well within the limits of the building had completely disappeared as a result of later building activities, and only their foundations could be traced. Here the walls were restored on the basis of evidence provided by the fragmentary brickwork which remained and in accordance with the general position of the foundations.

The new inclosure wall was fairly regular and comparatively wide, especially at the north side of the temple, where a straight, thick wall was built from P 42:18 into square R 41, for a length of over 30 meters. This wall stood farther north than the thinner wall of the earlier period (cf. Pl. 7), even beyond the irregular alley of Sin V (P 42:19 to Q 42:18), thus leaving space for an additional room, P 42:17, north of the sanctuary. On the south side of the building the irregularities characteristic of the earlier periods were mostly retained, no doubt on account of the irregularly built private houses which stood near by.



Fig. 36.—The Sanctuary of Sin Temple VI Viewed from the South, with the Brickwork of the Foundations of Sin Temple VIII at a



Fig. 37.—The North End of the Sanctuary, Showing the Altar of Sin Temple VI Still Standing, While the Rest of the Room Has Been Excavated below the Floor of Sin Temple VI

Brickwork of Sin Temple V appears at c, the floor of that period at a; b marks the earth still covering the altar of Sin Temple V. The dark line across the front of the altar indicates the floor level of Sin Temple VI, while d marks the foundations of that temple and e its walls. The east wall of the sanctuary of Sin Temple VII can be distinguished at f, and g designates the foundations of Sin Temple VIII.

### PRE-SARGONID TEMPLES

The sanctuary, Q 42:11, remained practically unaltered except for a slight shifting toward the west as a result of eliminating the narrow room on that side, which had already fallen into disuse in previous periods (cf. Pls. 7 and 14 A). A greater regularity in shape and angles is noticeable in the cella, as well as in the rest of the building, but its size (about  $4 \times 12$  m.) was much the same as before. The altar, considerably larger than in the previous building (cf. Fig. 38), retained its traditional place against the north wall, most of which it covered (Fig. 36). The face of this wall was decorated by two small, doubly recessed niches, one on either

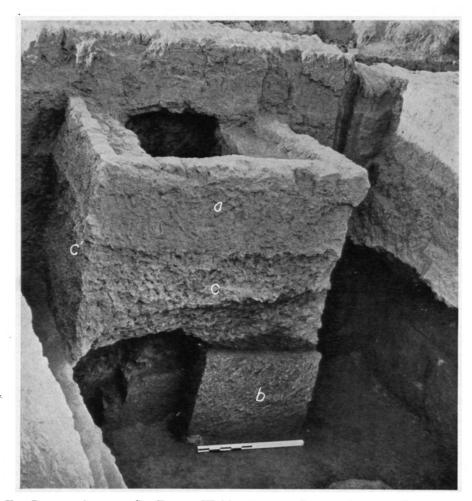


Fig. 38.—The Boxlike Altar of Sin Temple VI (a) above the Smaller Altar of Sin Temple V (b). Rough Surfaces (c, c') Show Where Its Two Projections Had Been Removed

side of the altar. The better preserved of the two can be seen in Figures 36-38. Two pottery vessels were found in situ in front of the altar at the corners (Figs. 36-37). The one at the west was cylindrical and only partially imbedded in the pavement, thus recalling the vessel found against the offering-table in the sanctuary of Sin V. The vessel on the other side was a fairly large ovoid jar and was almost completely buried, with only its mouth and rim showing. The altar itself consisted of a rectangular block measuring about  $1.80 \times 2.00$  m., of which the walls alone were built of brick (Fig. 38), while the interior was solidly packed with earth. Projections on the south and west sides can be seen in Figure 37 but had been removed for reasons of safety when the photograph used for Figure 38 was taken.

The center of the sanctuary was occupied by a mud hearth (see Fig. 36) approximately 80 cm. in diameter and more regularly circular than the hearths of earlier building periods.

Figure 37 illustrates the position of the sanctuary of Sin VI in connection with earlier ruins (cf. Pls. 7 and 14 B).

Instead of the four doorways which previously opened in the east wall of the sanctuary, there was now only one, giving access to an oblong room, Q 42:10 (ca. 2.5×10 m.), which replaced three of the smaller rooms situated east of the sanctuary in the earlier periods. Immediately opposite the doorway from the sanctuary a second doorway led from Q 42:10 into the court, turning the south end of this room into a passageway like Q 42:20 in the preceding building period. That the north end of Q 42:10 served a different purpose is indicated by two rectangular structures made of unbaked brick and by a second doorway, which gave direct access from the courtyard into that end of the room. Though no decisive evidence as to the use of this room was found, the presence of the rectangular structures may be taken as an indication that it was the first phase of an additional, subsidiary sanctuary which gradually grew in importance through the subsequent rebuildings.

In the courtyard, Q 42:9, the round offering-table was once more rebuilt, not very far from its traditional position near the doorway leading into the sanctuary, while another, similar structure was added nearer the center. At the south end of Q 42:9 the small room Q 43:17 was retained and slightly enlarged. Near by, instead of the group of three small rooms, which perhaps originated from a small private house, a series of three parallel rooms nearly equal in size and more formal in plan was now added. Of these, Q 43:18 seems to have been isolated from the others and probably communicated with the corner of the courtyard in front of the entrance into the sanctuary; a small hearth found nearly in the middle of this room was the only indication as to its use. The other two rooms, communicating by a doorway in the wall between them, were probably entered from the southeast corner of the court. A kitchen range found against the south wall of R 42:12 gives some indication as to the use of these rooms.

Into the north part of the court extended a single room, Q 42:34, with a narrow passage between it and the north inclosure wall. The passage apparently ended in a doorway which led to two more rooms, Q 42:12 and P 42:17. It is interesting to note that Q 42:34 had no direct communication with the court and could be reached only through Q 42:12. Finally, the east end of the court was occupied by two long and rather irregular rooms, R 42:13 and 19, connected by a corridor. R 42:19 served as a "gateroom" between the main entrance into the building and the courtyard, but the function of R 42:13 is less clear. No traces of a stairway leading to the top of the building were found in the courtyard of this period, so perhaps a stairway was situated in R 42:13 or in P 42:17, at the northwest corner of the building.

As already mentioned, the whole temple complex was placed on a low artificial terrace requiring a stairway from the lower town area. This stairway (R 41:5) measured approximately 3 meters in width and nearly 4.5 m. in length and was much more imposing than the small stairways of the earlier periods. The stairs were flanked by balustrades, still leaving as much as 1.50 m. for the width of the actual steps. Unfortunately very little of this stairway was left, for, as may be seen in Plate 14 A, the foundations of Sin VII penetrated to the same depth as those of the building in question, and in the course of preparation for these later foundations almost all the brickwork of Sin VI was destroyed. Fortunately, however, the base of the stairway was founded slightly below the retaining wall, and we were thus able not only to follow the outline of this base but also to discover faint traces of the lowest two steps. Their outline can be clearly seen in Figure 39, which shows also the brickwork of the later foundations above. The evidence thus obtained led us to reconstruct the stairway as shown in Plate 6. The entrance was further accentuated by two symmetrically placed towers, one on either side of the

stairs. Traces of only one of them were preserved; the second was reconstructed according to indications derived from higher levels.

The number of objects recovered from this building, even including those found in the debris between this and the following building period (Sin VII), was extremely small. They consisted of a few cylinder seals, amulets or pendants, and some pottery fragments. Fortunately, how-

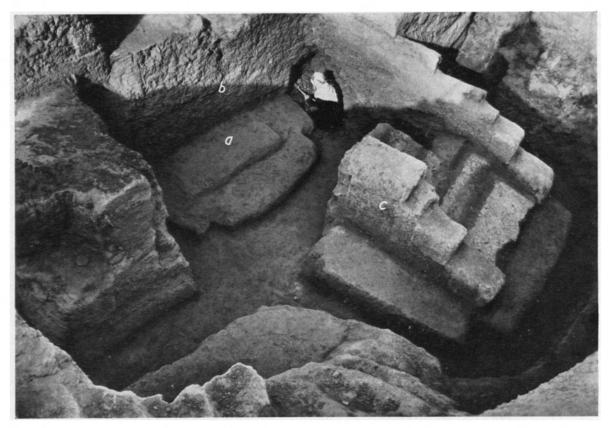


Fig. 39. Tracing the Outline of the Stairway into Sin Temple VI (a) by Cutting into the Foundations (b) of Sin Temple VII; the Remaining Brickwork of the Stairway of Sin Temple VII Is Shown at c

ever, we are not dependent upon these objects alone for dating evidence. The architectural characteristics of the temple, its building material, and the stratigraphic data from the houses and graves outside it provide sufficient material for comparative dating.

# SIN TEMPLE VII

### FIRST OCCUPATION

At the west end of the temple the walls of the new rebuilding were placed directly on the earlier brickwork, and their positions and widths were not altered (Pl. 14 A). As a result, the new plan of this part of the temple was almost an exact replica of the plan of the previous period (cf. Pls. 8 and 6). Elsewhere, however, certain notable changes occurred. On the north and east sides the outer walls were placed on thicker foundations, shown in Plate 8 by a continuous line where actually excavated and by a broken line where reconstructed. Certain parts of the walls proper also had to be reconstructed in this plan, either because the brickwork had been completely cut away by trenches dug in from a higher level for later foundations (the west wall of the courtyard) or because complete excavation was impracticable (the outer faces of the inclosure walls). They are shown in Plate 8 by horizontal hatching.

At the east end the new foundations for the outer walls were probably thickened in order to reinforce the temple area artificially elevated above the town and to improve the appearance of the main entrance and stairway. Inside the area bounded by these foundations a more careful leveling than in the previous period was now carried out. Such irregularities as the pronounced slope of the courtyard toward the east were now eliminated, and as a result the new floors at the east end of the temple were as much as 1.30 m. above those of the earlier period, while in the sanctuary the difference in level was only about 80 cm. (see Pl. 14 A). In clearing away the earth filling which had been used in leveling the site for the new building, we found that almost the whole surface of the earlier ruins had been covered with reed mats or bundles of reeds before the filling began. This practice of covering the earlier ruins with reeds or mats in preparing for a new building was not uncommon in later periods, 42 but this is the only instance where it was observed in any of the rebuildings of the Sin Temple.

Only a few minor changes were observed in the plan of the western part of the temple. The two rectangular structures in Q 42:10 were not renewed. In P 42:17 two small recesses were cut in the face of the south wall. Q 42:12 was unaltered, but it is probable that only the southern of the two doorways which previously opened into it was now retained. Since room Q 42:34, which had adjoined it in the previous building period, was not rebuilt, the passage also disappeared, and there could have been no reason to keep two doorways into this comparatively small room.

In the courtyard, Q 42:9, the changes were more pronounced. Within the area which room Q 42:34 had previously occupied a small hearth, Q 42:4, was now placed. Against the north wall of the court were two solidly built rectangular projections measuring about 1.5×2 m. and placed 3.5 m. apart. They were retained during all subsequent rebuildings. Since their brickwork was preserved to the same height as that of the outer wall, it can be assumed that they were not low structures such as offering-tables or benches, but might have stood to the same height as the walls and have been used to support the roof of a large shed built against this side of the court. Another innovation was a circular basin or pit, Q 42:33 (cf. Fig. 43 a). It measured about 2.70 m. in diameter and 90 cm. in depth. Although it was built of kiln-fired plano-convex bricks, they were not laid in the typical herringbone fashion commonly employed in other round structures, especially wells, of a similar period. This structure cannot have been a well, for it was shallow and the earlier remains beneath it were undisturbed (see Pl. 14 A). It was probably of the same type as the round basin in the court of the Temple Oval, 43 which we assume was used for ritual ablution. No indication as to the source of its water supply was found, and even its connection with the preserved part of a drain through the north wall of the court (Q 42:6) is only conjectural. This newly introduced "ablution basin" was retained in various forms throughout the subsequent rebuildings.

Only one of the two circular offering-tables which had existed in the courtyard of Sin VI, that near the middle of the court, was rebuilt, while the other, which had stood near the southern doorway in Q 42:10 almost on the same spot where the earliest of these structures was first built in Sin I, was now finally abandoned. The small room Q 43:17 also was given up.

Against the south wall of the court there were now only two rooms (Q 43:13-14) instead of the three in the previous building; they were not connected, each having a doorway opening on a different part of the court. The northwest corner of Q 43:13 was occupied by a well built circular oven, probably an elaboration of the simpler hearth that had formerly existed in Q 43:18. Another hearth (c in Fig. 43), not unlike that in R 42:12 in the previous period, was now found in the court, about 4 meters east of the circular basin. It is impossible to ascribe

<sup>&</sup>lt;sup>42</sup> See e.g. OIP XLIII 53 f.

<sup>43</sup> OIP LIII 39 f.

definite functions to these various fireplaces, but by analogy with similar modern structures one may venture a guess that the circular type, such as the one in Q 43:13, might have been a bread oven, while the other type, consisting of one or several troughlike open compartments, might have been a "kitchen range."

Of the two rooms that had formerly occupied the east side of the court only the northern, which served as a gateroom, was rebuilt (R 42:9). The southeast part of the court, R 42:10–11, was left unroofed, increasing the irregularity of its shape. On the northeast side of the court a long, low mud-brick structure, possibly a bench, was built against the west wall of R 42:9, perhaps for the use of people entering the court.

The gateroom, R 42:9, was considerably wider than the corresponding room of Sin VI (R 42:19). Unlike the latter, it had only one doorway giving access to other parts of the temple, at Q 42:5. Both this doorway and the entrance from the town were near the north end of the room, while the south end was probably reserved for some other practical use. Strictly speaking, therefore, we can apply the term "gateroom" only to the north end.

Outside R 42:9, at the east side of the temple, the foundations extended for about 2.5 m. in front of the wall, forming a small terrace, R 41:2 (Figs. 40-41), on which two towers were symmetrically placed, one on either side of the main entrance. The northern one stood at the northeast corner of the building and extended slightly beyond the face of the north wall, thus forming a "corner tower." The latter is the first occurrence in this building of an architectural feature which came into regular use at a later stage in the Early Dynastic period, to be commonly employed in Mesopotamian architecture in all later times.

The stairway ascended to a point a short distance from the entrance, roughly on a line with the faces of the towers (Fig. 40); the upper steps were cut in the brickwork of the terrace, while the lower ones projected about 3 meters in front of it. The lower part of the stairway was flanked by a peculiarly shaped parapet consisting of several steplike sections of unequal length. While their inner sides were vertical, their outer sides were rounded in curious fashion (Figs. 40–41). It should be noted that similarly shaped parapets were found above an altar in the small chapel in "House D" of the Temple Oval<sup>44</sup> and in the archaic Ishtar temple at Assur, <sup>45</sup> proving that this type of structure was not confined to the Sin Temple but was an accepted architectural feature of the time. That examples yet known are so few may be due to the fact that structures of this type are rather fragile, so that they would perish readily and would also present some difficulty in excavation. The steps between the parapets were 1.50 m. wide. The average tread was about 50 cm. and the average riser 20 cm., resulting in a gentle slope of about 20°.

It is obvious that unprotected clay stairs could not withstand wear for any length of time; these, therefore, had been coated with a thick layer of bitumen. Thanks to this protection the stairs were well preserved, although, as one may see in Figures 40–41, the bitumen was worn through, especially in the middle. It is interesting that the most obvious protective material from our point of view, namely baked brick, was not used for this purpose, although stone steps were found on more than one occasion in buildings of the Early Dynastic period. It seems that the use of kiln-baked bricks was still restricted almost exclusively to structures which had to withstand the action of water, such as wells, drains, and so on, of which the round basin Q 42:33 is the earliest example in this building.

South of the stairway and the terrace we traced the outer face of the building for about 5 meters. Here the foundations which were exposed stood to a height of 1.50 m. above the

<sup>&</sup>quot;OIP LIII 49 and Figs. 44-45 and 65.

<sup>45</sup> Andrae, Die archaischen Ischtar-Tempel in Assur, Pl. 68 b; cf. Pl. 11 b.



Fig. 40.—Stairway, Terrace, and Buttresses at the Entrance of the First Occupation Level of Sin Temple VII, Seen from East



 $Fig.~41. \\ -- The~Stairway~of~Sin~Temple~VII~1~from~Northeast, Showing~the~Peculiar~Shape~of~the~Parapet$ 

town level and projected over 1 meter from the face of the wall above. Sharp upper edges, more subject to the action of the weather, were here avoided and a slanting edge (shown by a double line in Pl. 8) used instead. Below this we found four small, regularly spaced, rectangular holes, which, to judge by later evidence, were undoubtedly only the first of a series of similar holes all along the façade of the building. In both cases, here and in the later rebuilding (Sin VIII; see p. 60), they were not placed high enough to be considered as holes left by ceiling beams, even if one accepted the improbable theory of a roofed passage outside the temple. Furthermore, no traces of decayed wood were found in any of them, although they were care-

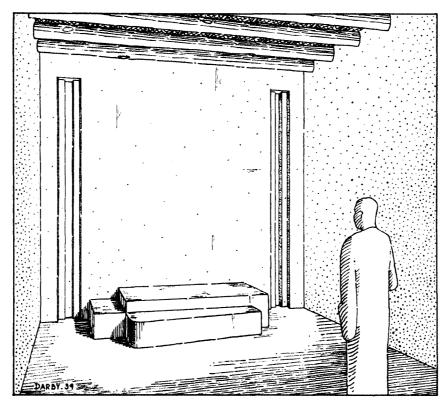


Fig. 42.—Perspective Reconstruction of the North End and Altar of the Sanctuary of the Second Occupation Level of Sin Temple VII

fully cleared with this possibility in view; consequently no satisfactory explanation as to their use can be offered on the basis of the available evidence.

North of the stairway the small terrace R 41:2 extended beyond the face of the north wall of the temple, and it seems likely that the projecting foundations here were a continuation of the foundations at the northwest corner of the temple, actually excavated for a length of over 7 meters at P 42:8, north of P 42:17; a broken line in Plate 8 shows this probable connection.

### SECOND OCCUPATION

Floors of a second occupation were found 30-50 cm. above the original floors of Sin VII. The plan of this occupation is shown in Plate 9. Even larger sections of the walls had to be reconstructed than in Plate 8, for these walls, being higher, had suffered more from the digging of the foundation trenches for the subsequent rebuilding.

The sanctuary, Q 42:11, remained practically unchanged except for a slight modification of the altar (cf. Pl. 8). Figure 42 is a perspective reconstruction of the north end of the sanctu-

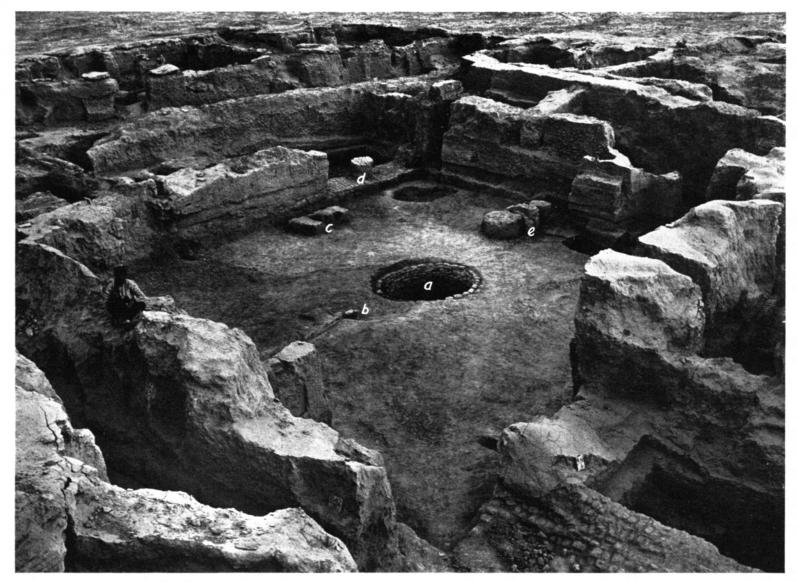


Fig. 43.—General View of Courtyard Q 42:9 from Northwest, Showing Remains of Several Periods

The brick basin of Sin Temple VII 1 is marked a; the bitumen-plastered ablution place of Sin Temple VII 2 is at b; c is a fireplace of Sin Temple VII 1; d indicates the column in the entrance to R 42:2 of Sin Temple VIII; and e marks three offering-tables near the altar Q 42:32 of the same period. In the foreground the brickwork of the courtyard wall has been destroyed by the robbers' digging.

ary and of the altar. In the temple courtyard the circular basin of baked brick, Q 42:33, was replaced by a very shallow structure of mud brick plastered with bitumen, Q 42:48. This was set a little nearer the north wall of the court and was connected by an open, bitumen-plastered channel with a pottery drain, Q 42:6, in the outer wall. The new structure was not properly a basin or tub, for it could not have held water in any practical quantity. It was merely an ablution place, the bitumen being used to prevent the floor from becoming muddy and to carry off the water, which must have been brought there in jars. In Figure 43, which is a general view of the courtyard, both the earlier, brick basin and part of the later can be distinguished, at a and b. Of the other small structures usual in temple courtyards, such as the round offering-table, the bench at the northeast side, and the fireplaces, none was found at this level. It is, of course, possible that actually none of them was used during this occupation, though it seems more likely that some were retained but were completely obliterated by the preparations for the following rebuilding.

Some noticeable changes occurred outside the temple also, especially at the northeast corner and the stairway. Comparing the plans in Plates 8 and 9, one sees that the projection of the corner tower from the north wall had disappeared, and instead the whole length of this wall outside R 42:9 was now somewhat thicker than the rest. The small terrace R 41:2 in front of the gateway underwent slight modifications; its northeast corner was no longer rounded but was rectangular, and its north side was set back a few centimeters from the rest of the foundations alongside this wall, of which some 8 meters were excavated. Sections of the foundations on the east side of the building, south of the stairway, also were excavated, and it was found that they were more regularly placed in relation to the actual walls and that there were no traces of the peculiar rectangular holes which existed in the earlier foundations.

The fact that debris accumulated more rapidly outside the building than within has been mentioned on several occasions. One of the clearest instances of this phenomenon was observed in the interval between Sin VII 1 and 2. In Plate 14 A it can be seen that, while inside the temple near the gateroom the later occupation floor was about 30 cm. above the earlier one, the corresponding later floor outside the building, in front of the stairway, was some 75 cm. above the earlier occupation; that is to say, the rising of the surface in the street near the stairway was more than twice as rapid as that inside the temple. As a result of this unequal rising of the floors the stairway gradually sloped less and consequently became shorter. The changes involved were not achieved by means of total rebuilding, but were the result of an accumulation of a great number of layers of plaster of various thicknesses, applied when necessity arose, and probably were hardly noticeable at the time. In Figure 111 the new stairway is to be seen partly covering the earlier and longer one. The parapet, although its general character was preserved, became wider and more irregular. The fact that the steps were no longer protected with bitumen indicates perhaps that less care was taken to keep the building in a good state of repair during the later part of this occupation. If so, one may assume also that during this occupation the accumulation of debris was possibly somewhat more rapid than in the preceding one. This assumption may be of some value in our attempt to estimate the relation between the length of time and the rising of floor levels of the Sin Temple (see pp. 125 ff.).

### ISOMETRIC RECONSTRUCTION

Figure 44 is an isometric reconstruction of the first occupation level of Sin Temple VII as viewed from the southeast. In the foreground are to be seen the projecting foundations

with the beveled edges and row of holes, the small terrace in front of the main entrance, and the stairway leading up to it. The main gateway is presumed to have been vaulted, while the doorways inside the building are shown with straight lintels. The gateroom (R 42:9) at the east end of the court and the sanctuary complex at its west end are restored to a height above

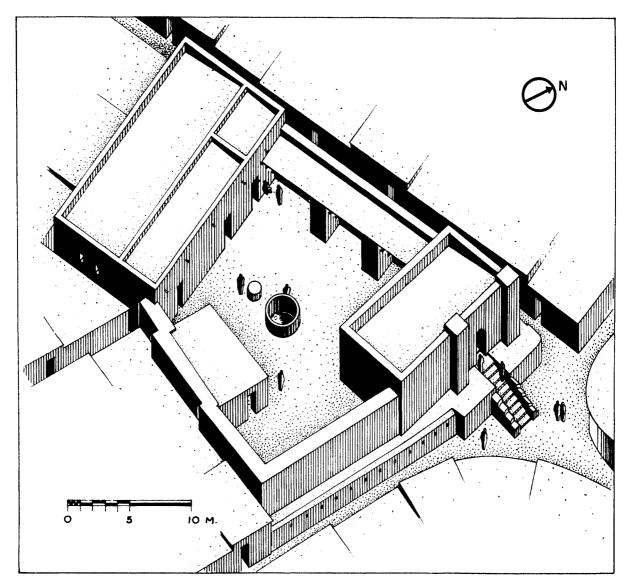


Fig. 44.—Isometric Reconstruction of Sin Temple VII during Its First Occupation, as Seen from the Southeast. Scale, 1:300

the retaining wall of the courtyard, with parapets around their roofs. The roofs of the two rooms on the south side of the court as well as of the shed along its north side are assumed to have been somewhat lower than the courtyard walls and without parapets. In the middle of the court the column-like offering-table and the round brick basin are shown. The latter is restored a little higher than actually found. The passages shown around the temple were partly excavated, whereas the restoration of the houses is entirely conjectural.

#### OBJECTS FROM SIN TEMPLE VII

The number of objects recovered from this building period was very small. The finds consisted mainly of cylinder seals, mostly of the so-called "brocade style." From the sanctuary came an interesting statuette of a servant squatting to raise a load (Kh. V 209).

### SIN TEMPLE VIII

### FIRST OCCUPATION

In preparation for this rebuilding foundations more massive than for any of the previous buildings were employed. Furthermore, while hitherto the foundations of each rebuilding usually had been constructed upon the leveled surface of earlier ruins, if not placed directly on the remaining earlier brickwork, we now find for the first time the practice of digging fairly deep trenches to accommodate the new foundations.<sup>47</sup> These trenches were dug from a level 20–40 cm. above the second occupation floor of Sin VII and were between 60 and 90 cm. deep, thus generally cutting away some of the brickwork of the earlier walls and descending very near the first occupation floor of Sin VII. In some cases, as in the east wall of Q 42:10 of Sin VII, the foundations of Sin VIII actually cut not only the brickwork of the wall but also the first floor of Sin VII, penetrating into the filling between Sin VI and VII (see Pl. 14A). This new method and the details mentioned above may indicate that when these foundations were being built none of the earlier ruins was visible and consequently that an interval of more than usual length elapsed between the last occupation of Sin VII and this newer building.

Another technical innovation introduced in this building was the use of mud bricks instead of the more usual tamped earth in the paving of the sanctuary floor. The bricks employed were of the ordinary plano-convex shape and exceptionally large, attaining  $7-10\times19\times34$  cm. The details of the construction of this pavement are shown in Figure 45; the more regularly laid bricks (a) against the left wall covered the projecting foundations. The rough surface which appears in the photograph was not, of course, used as pavement; actually it was covered by a thin layer of tamped earth which in its turn was covered by fine reddish mud plaster. No such elaborate pavements were found in the two higher floors of the same building, for they consisted merely of the usual tamped earth filling. The small pile of earth left standing in the center of Figure 45 marks the second occupation floor in this building period.

The new plan is shown in Plate 10. Once more the continuous line marks the foundations, the black poché the actual walls as found, and the horizontal hatching those parts of the walls which had to be restored. These last are due in this case entirely to the activities of the illicit diggers and are less extensive than in any of the other plans, for, on the one hand, we were still able to trace completely all the faces of the walls both inside and outside the building and,

<sup>46</sup> OIP XLIV, No. 92, Pl. 69 G.

<sup>&</sup>lt;sup>47</sup> At Warka, according to the German excavators of that site (UVB VI [1935] 15; VII [1936] 16), this method of foundation building ("Gründung in Baugruben") is confined to layer I (Early Dynastic period) while the building of walls on an artificial terrace ("Plattengründung") is characteristic of lower layers (corresponding to the Proto-literate era). Our observations at Khafajah prove, however, that various methods were used in each of these cultural periods and, therefore, that such technical distinctions cannot be entirely relied upon in dating architectural remains. In the Sin Temple, for example, the lower artificial terrace was not introduced until the third rebuilding (Sin IV), in the later part of the Proto-literate period; it survived, however, in modified forms well into the Early Dynastic period. On the other hand, the method of trench foundations introduced with the building of Sin VIII was abandoned in subsequent rebuildings. Moreover, even in Sin VIII some of the walls, especially at the west and near the entrance, seem to have been built directly upon earlier brickwork. That the trench foundations can in no way be considered as conflicting with the artificial terrace is indicated by the fact that in Sin VIII where the trench foundations were extensively employed the tradition of an artificial terrace was still maintained by keeping the difference in level between the temple complex and the secular buildings surrounding it and by retaining a few shallow steps at the main entrance.



Fig. 45.—Sanctuary Q 42:1 of Sin Temple VIII, Showing the Pavement of Large, Unbaked Plano-convex Bricks and the Altar



Fig. 46.—North End of Sanctuary Q 42:1, Showing the Altar of Sin Temple VIII Partly Covered by Brickwork of the Altar of Sin Temple IX (a) and Traces of a Robbers' Hole (b) Which Penetrated below the Floor of Sin Temple VIII

on the other hand, only a few of the robbers' holes were deep enough to cause much damage at this level.

In comparing this plan with that of the earlier building period we see that some of the walls, especially the northern and eastern outer walls of the building, were considerably thickened and that, by the elimination of some of the irregularities in the southern outer wall, the west side of the temple was lengthened by approximately 2 meters. This, as well as the thickening of the inner walls, affected to some extent the proportions of the rooms on that side.



Fig. 47.—Sanctuary Q 42:1 of the Second Occupation Level of Sin Temple VIII, Seen from North In the center foreground is the altar of Sin Temple IX. At the right is part of a robbers' hole (a); at the left b marks the clay sealing of an ancient hole with a small opening (c) dug through this sealing. A pillar-like structure beside the doorway into Q 42:2 appears at d, and a hearth can be seen at e.

The sanctuary, Q 42:1, still retaining most of its earlier characteristics, was lengthened to approximately 15 meters. The additional 3 meters were gained partly by the lengthening of the whole building and partly by extension of the north end of the sanctuary itself to cover some of the space previously occupied by P 42:17, so that only a narrow corridor, P 42:7, was left between the sanctuary and the outer wall of the building. It is possible that at this stage this narrow space was not planned as a necessary feature of the building but came about as a result of the lengthening of the sanctuary. Its use is uncertain; it might have been retained merely to save the labor and material which its blocking would have required. On the other hand, it might have been used as a base for a stairway by means of which the roof could have been reached directly from the sanctuary, in accordance with a much earlier tradition; or again it might have served as a sacristy for the officiating priest. This last function, however,

was more probably reserved for the small room Q 42:8, which connected directly with the sanctuary through a doorway opening into the narrow space east of the altar—an arrangement which closely resembles that observed in the Shara Temple at Tell Agrab (see pp. 239 f.).

The altar was considerably larger than in the previous building periods, measuring about  $2.5\times3$  m. It can be seen in Figure 46, which shows the north end of the sanctuary with its brick pavement still covered with earth and plaster and before the brickwork of the altar of Sin IX (a) had been removed. Traces of a robbers' hole which damaged most of the wall to the left of the altar and part of the floor in front of it can be distinguished at b. The sanctuary is viewed from the north in Figure 47; the floor is that of the second occupation. In the right foreground at a is the loose earth of the robbers' hole previously mentioned. On the left, near the east corner of the altar, one sees traces of a hole (b) that had been dug in from a higher level and then had been sealed by having liquid clay poured over it. A second, smaller hole (c) was cut through the clay sealing at some later time, but before the next occupation, the floor of which did not show any traces of having been disturbed. It is probable that the larger hole was dug in order to bury some of the temple furniture no longer in use, in accordance with a practice observed in more than one instance in other temples of similar date; for indeed, a large proportion of the most valuable finds of this period was produced by such caches. Here, however, we found no objects beneath the clay sealing. It appears that the person who cut the smaller hole through the clay knew exactly where the objects were laid. The size of the second hole indicates, moreover, that the deposit must have consisted of small objects, possibly of seals, amulets, or perhaps a few pieces of jewelry, which were undoubtedly more valuable at the time than the discarded pieces of sculpture found in undisturbed deposits.

Against the north jamb of the doorway leading into Q 42:2 there was a small rectangular pillar-like structure (Fig. 47 d) which might have been used in bolting the door. Of typical features which survived from earlier periods the circular hearth should be mentioned; it was somewhat smaller in diameter than the earlier hearths and was placed very nearly in the center of the room (Fig. 47e).

The length of Q 42:2 increased, as a result of the lengthening of the west end of the building, from 10 to 12 meters, while its width remained about the same as before. The main function of this room, as of Q 42:10 in the previous period, was to serve as an antechamber to the sanctuary. The two doorways leading from court to sanctuary were now placed near the middle of the room, and the third doorway at the northeast corner also was retained. At the south end of the room we found traces of two superimposed rectangular structures indistinguishable from what we have called "altars." Unfortunately one of the robbers' holes penetrating into this room had cut away not only the greater part of these structures but also much of the wall behind them. However, the very presence of this large hole, which according to some of our workmen produced a wealth of objects, is in itself an argument in favor of considering these structures as altars, for an altar and its immediate vicinity are likely to yield valuable finds. It seems clear, therefore, that this antecella was now definitely intended to serve as a second, subsidiary sanctuary.

The courtyard, Q 42:3, was much more regular in shape than that of the previous period, as a result of placing two rooms along its south and two along its east side. The north side, with its two rectangular projections, was practically unaltered. Between the projections and connected with the drain Q 42:6 there was now a small, square, bitumen-plastered ablution place which replaced the circular one that had occupied the center of the court of the previous building. Along the south wall of the court near the doorway leading into Q 43:11 there appeared for the first time an open-air altar, Q 42:32, akin to the altar in the open court of the

Temple Oval of the same period.<sup>48</sup> This altar was placed on a shallow, slightly projecting base and had a small troughlike vessel at its right corner; to the left and in front of it were three round offering-tables (e in Fig. 43), very similar to the round structures that appeared



Fig. 48.—Fragments of a Pottery Cult Wagon (Kh. IV 476) in situ

through most of the earlier periods in the temple court although noticeably smaller in diameter. Against the east wall of the court there was a small troughlike hearth in almost exactly the same position as the one which existed in the first occupation of Sin VII. The courtyard, as well as the sanctuary and room Q 42:2, produced several small finds, such as cylinder seals

<sup>48</sup> OIP LIII 40 and Fig. 37.

and amulets, but there is no doubt that our unofficial predecessors cleared out most of the objects that were to be found in the west part of the court. Fortunately, however, the robbers' holes were shallower at the east side of the building, and the large and varied collection of objects from the rooms at this end of the temple could be salvaged and recorded with all due care.

Room Q 43:11 on the south side of the building, behind the open-air altar, contained a fireplace approximately 1 meter from the doorway into the court. A miniature gold bull (Kh.



Fig. 49.—Cult Wagon Kh. IV 476 after Restoration. Scale, 1:4

IV 145) was recovered from this room. The room adjoining it, Q 42:7, was not connected with Q 43:11 but had direct access to the court through a doorway in its north wall. Several seals and amulets and fragments of carved stone vessels, as well as the two male heads Kh. IV 445 and 467 and the four female heads Kh. IV 450-53, were found scattered on the floor of this room. Near by against the east end of the building there was an irregularly shaped room, R 42:2, which occupied part of the space previously covered by R 42:10. The wide entrance into this room from the courtyard is of particular interest, for in the middle of it we found a round structure (Fig. 43d) not unlike the offering-tables so common in the court. However, this was more probably an architectural feature, namely a pillar used to divide the span over

the entrance into R 42:2. Indeed, if all the rooms around the court were roofed, such a pillar would have been needed at this wide entrance to support a crossbeam.

Against the north wall of R 42:2 stood a large pottery vat, which, according to indications at a later period (cf. pp. 69 f.), might have been used for storing liquids used for libations. This room also yielded a varied collection of objects including statuary, seals, amulets, and fragments of stone vessels; of special interest was an inscribed stone (schist?) object in the shape of a bird with a lion's head (Kh. V 68, Fig. 204). It was found in several fragments in the course of the fourth and fifth seasons, but unfortunately all these fragments when put together



Fig. 50.—Three Shallow Steps Leading into the Entrance of the First Occupation Level of Sin Temple VIII

completed only one side of the object; possibly it was split in two before one half reached this room and was further broken into smaller fragments. Another exceptional find from the same room is the strange pottery object Kh. IV 476 shown in situ in Figure 48. The pottery was of very poor quality, and the object was literally crushed into thousands of fragments. During the cleaning and restoration of this object we constantly had to reject fragments which at first sight seemed undoubtedly to belong to it (such as that on the right in Fig. 48), while, on the other hand, surprises were often forthcoming when some piece unexpectedly fitted with the rest. The result of the restoration is shown in Figure 49. In this not all the parts belong to the original. The bowl on top was taken from another vessel with a similar stem, one of the so-called "fruit stands," and therefore is not quite symmetrically fitted. Parts restored in plaster of Paris according to inferences drawn from the preserved portions appear lighter than the rest. The character and possible use of this unique object are discussed elsewhere. 49 Here it is

<sup>49</sup> OIC No. 19, pp. 42-50.

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enough to draw attention to that part of it which is undoubtedly a model of a house. The flat roof with ceiling beams protruding through the walls, the window, the doorways, and even such details as the birds perched under the eaves of the roof and the ladder against the wall, combine to provide a vivid picture of a contemporaneous building.

The small narrow space R 42:6, connected by a doorway with R 42:2, is best explained by assuming that it was the base of an L-shaped stairway situated partly here and partly in the

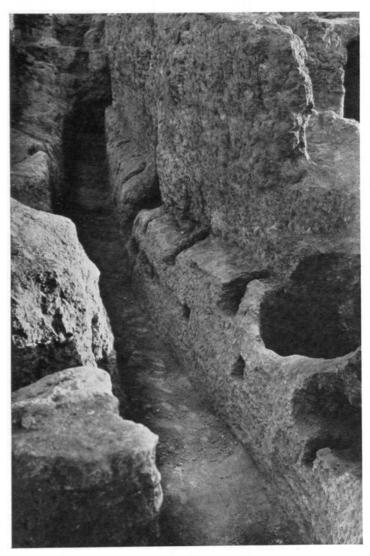


Fig. 51.—Two Rows of Square Holes in the Face of the East Wall of Sin Temple VIII

wide outer wall, which was further thickened by solidly building up the southeast corner of the gateroom, R 42:1. Except for this building up of the corner, the gateroom was little changed. Both the main entrance from the town and the doorway leading into the courtyard retained their positions at the north end of the room.

Because of the rising of the ground outside the temple, the stairway at the main entrance was now reduced to three shallow steps (Fig. 50) leading to a somewhat larger landing and into a more elaborate, doubly recessed gateway flanked by two towers. Instead of the elaborate parapet the stairs were now flanked by short walls. The brickwork in front of the northern

tower now formed a shallow recess, which was symmetrically repeated at the southern tower. The corner between the southern tower and the eastern temple wall was rounded. In this corner there was a column-like structure about 80 cm. in diameter, like those which persisted through all periods in the courtyard, but unique in being the only one of this type outside the building.

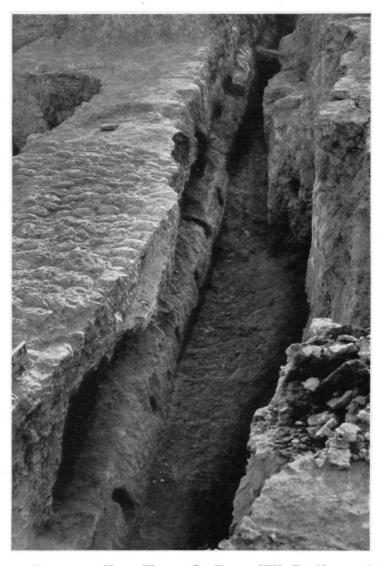


Fig. 52.—Holes in the Face of the North Wall of Sin Temple VIII. The Highest Brickwork Belongs to the North Wall of Sin Temple IX

The outer faces of the eastern and northern walls were decorated with series of small rectangular holes like those in the foundations of Sin VII (see p. 48). They measured about  $10 \times 15$  cm. and were 30-40 cm. deep (Figs. 51-52). In this case also they were placed too low for any possible connection with the roofing.

Another innovation which affected the outer face of the building was the introduction of four shallow buttresses on its west side, outside the sanctuary, and two more on the south wall.

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# SECOND AND THIRD OCCUPATIONS

Two more occupations of this building were found approximately 30 and 60 cm. respectively above the first floor. These are shown in Plate 14 and were mentioned in connection with the sanctuary (p. 52). No changes in plan could be observed within the building, and only slight changes occurred at the entrance; these are shown in an inset on Plate 10. It can be seen that finally only one step remained between the street level and the entrance. The thin wall which had replaced the parapet on each side of the entrance was retained, and in addition two thin screen walls were built asymmetrically against the north corner of the building and the south



Fig. 53.—The Entrance of the Second Occupation Level of Sin Temple VIII. The Two Screen Walls (a and b) Were Added to the Existing Brickwork at This Stage

end of the entrance, probably to protect the latter from traffic in the street, since the protection previously provided by the simple fact that it stood higher than the street was no longer effective (Fig. 53). It is noteworthy that the tops of these walls were rounded much as the parapets of the stairway of Sin VII had been.

# SIN TEMPLE IX

## THE PLAN

The plan of this rebuilding (Pl. 11) indicates to what extent the damage caused by robbers' holes was greater at this level than in Sin VIII. The restored portions (hatched) mark the parts where no traces of brickwork, however small, were left. When such traces were at all discernible, even though consisting only of the lowest course of brickwork or of a line left by

the plaster of a wall or a floor, the walls were drawn in black. It is significant that the most damaged parts, where the robbers' holes penetrated to this and even lower levels, occurred at or near those ends of rooms Q 42:1 and 2 where alters could be expected. One must not con-

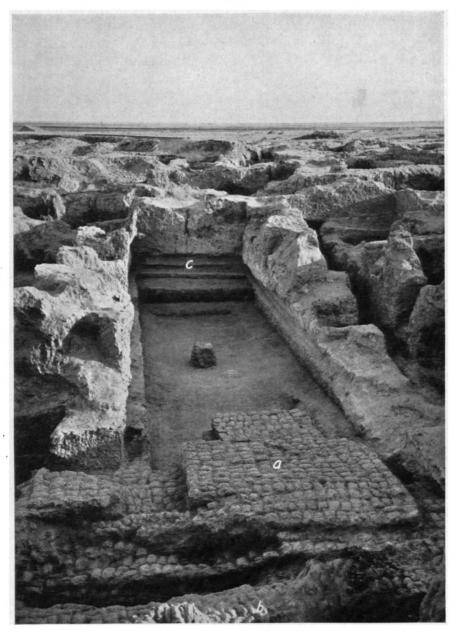


Fig. 54.—Sanctuary Q 42:1 Seen from North

In the foreground is the brickwork of the altar (a) and the north wall (b) of Sin Temple IX, the latter partly destroyed by robbers' holes. The floor is the earliest floor of Sin Temple VIII. The dark line c against the south wall marks the level of the first floor of Sin Temple IX, while the dark lines below this mark the various occupations of Sin Temple VIII.

clude, of course, that the robbers had any idea of the location of these altars beforehand, or even that they suspected their existence while actually destroying them. The situation is simply explained by the fact that the robbers must have been exceptionally successful in these particular areas, which, in view of the practice of burying objects near or within the altars,

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provides confirmation of the conclusion reached from the architectural character of the building that altars actually existed there.

It appears that the sanctuary, Q 42:1, and the rooms immediately adjoining it, P 42:7 and Q 42:8 and 2, remained practically unaltered. In the sanctuary the altar was rebuilt in its former shape and position (Figs. 54-55), and even such a trivial feature as the pillar against the southern doorway (cf. Fig. 47) was retained. No traces, however, were found of the circular hearth which was an indispensible feature of the earlier sanctuaries.

P 42:7 was widened slightly, and a regular doorway was built at its west end—a fact which seems to indicate that it now served a definite function, most likely as base of a stairway.



Fig. 55.—Detailed View of the Brickwork of the Altar of Sin Temple IX and of the North Wall of the Temple

Traces of robbers' holes are marked a, and the preserved parts of two buttresses appear at b and c

This assumption is indirectly supported by the fact that R 42:6 and the built-up corner of the gateroom, where the stairway of the previous period was presumably situated, have now disappeared (cf. Pls. 10 and 11).

Of Q 42:8 only the south wall and southeast corner were preserved, and its reconstruction is based on the plan of the earlier period. Q 42:2, however, was well preserved except for its south end, where one of the robbers' holes destroyed not only all traces of any structure that may have stood there but also most of the actual wall. However, as we have seen, the existence of the robbers' hole is in itself an argument for reconstructing an altar here.

In the courtyard, Q 42:3, the two projections from the north wall and the oblong troughlike fireplace near the east wall were obviously survivals from the earlier periods. The open-air

altar, Q 42:32, against the south wall was rebuilt in a rather more regular shape. In front of it there were at least eight offering-tables (cf. Fig. 59), among them two circular ones reminiscent of the type found through all the earlier periods, although considerably smaller in diameter (62–75 cm.). The majority of the offering-tables were square in plan, measuring about 40–50 cm. Those of the structures hatched vertically in Plate 11 were added at a later occupation of this building. Figure 56 shows a perspective reconstruction of the altar and the structures in front of it. The tops of the latter are rounded, in accordance with evidence from the Temple Oval<sup>50</sup> and similar structures in Sin X (see p. 74).

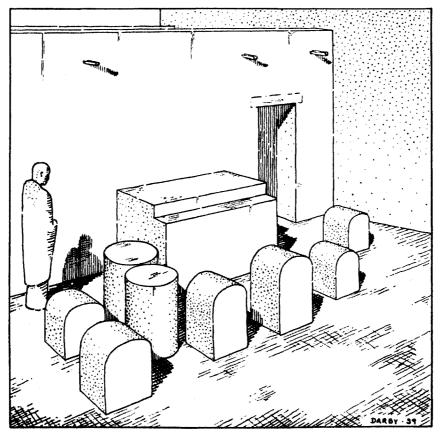


Fig. 56.—Perspective Reconstruction of the Altar (Q.42:32) and Offering-Tables in the Courtyard of Sin Temple IX

The bitumen-plastered ablution place previously situated between the two projections on the north wall was now replaced by a large, roughly square basin, Q 42:30, situated in the center of the court. It was well built of kiln-baked plano-convex bricks plastered with bitumen, with an open drain of the same material running eastward through the gateroom and east wall of the temple (Fig. 57). The abandoning of the earlier, obviously more convenient, arrangement whereby the water was drained off into the passage north of the temple was probably due to the rising of the floors in this passage to a higher level than in the court, while the street east of the temple still remained at a slightly lower level.

Five different occupation floors could be distinguished in Sin IX, but as no noticeable changes in plan accompanied them they are not separately shown. The basin in the center of

<sup>40</sup> OIP LIII 83 and Fig. 73.

the court and the drain were rebuilt at a higher level in each of these occupations (Figs. 58-59), but only two of these rebuildings, the largest and the smallest, are shown in Plate 11. The highest floor of the court showed traces of fire (Fig. 60), and on it, about 2 meters south of the square basin, we found a large number of statues, mostly badly damaged and also showing

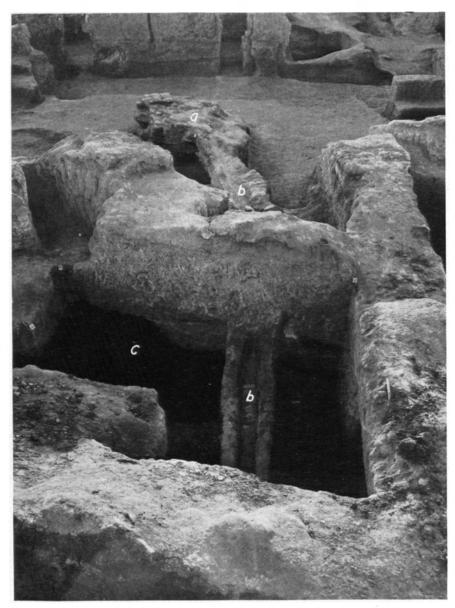


Fig. 57.—The Ablution Place (a) in the Courtyard of Sin Temple IX and the Open Drain (b) Leading from It toward the Outside of the Temple and Traversing Room R 42:1 (c), Seen from East

traces of burning (Fig. 61). After the numerous fragments had been treated and sorted out, some of them could be fitted together so as to form nearly complete statues. Even the largest statue in the group, Kh. IV 107,<sup>51</sup> was assembled in this way. Mingled with the statuary were fragments of other stone objects, of which a plain plaque of slate or schist and two limestone supports can be seen in Figure 61. Each of the supports was obviously only the lower part of

<sup>&</sup>lt;sup>51</sup> OIP XLIV, No. 18, Pls. 29, 30 C-D, 31.

an "offering-table" the upper part of which consisted of a large bowl of the same material, the whole closely resembling the very common pottery "fruit stands." Fragments of limestone bowls probably belonging to such "offering-tables" were found in P 42:7 at the back of the altar.<sup>52</sup>

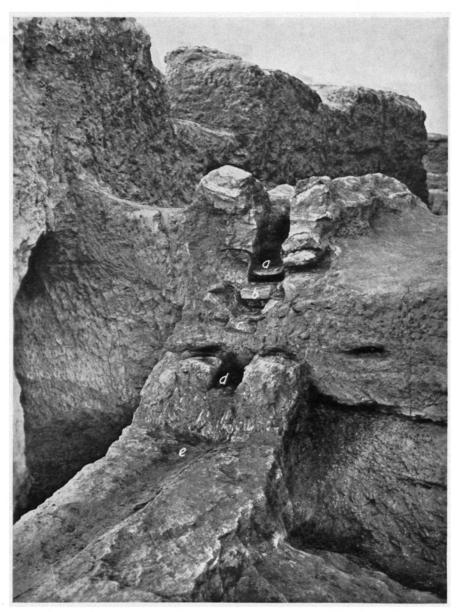


Fig. 58.—Several Stages of the Drain Running from the Courtyard of Sin Temple IX

The letters mark traces of the bitumen plastering of the channels

A much better preserved group of statuary was found in Q 42:7, the room which occupied the southeast corner of the temple. Characteristic of this room were low mud-brick benches, against the west, the south, and part of the north wall, on which a few fragments of statuary were found. However, most of the statues were lying on the floor in a fairly regular fashion

<sup>&</sup>lt;sup>52</sup> A similar limestone support complete with a bowl of the same material was found at Ur (cf. C. L. Woolley, *The Royal Cemetery [UE II (1934)] Pl. 180 c)*.

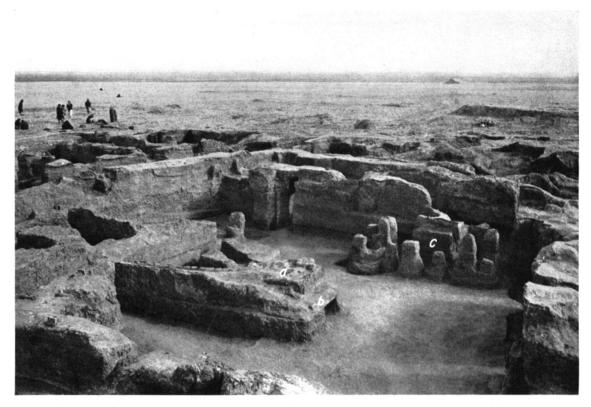


Fig. 59.—General View of the Courtyard (Q 42:3) of Sin Temple IX from the Northwest. The ablution place is seen at a, with the drain running from it toward the left; b is an earlier phase of the same structure, still covered. In front of the open-air altar (c) several offering-tables at different floor levels can be distinguished.



Fig. 60.—The Area of Courtyard Q 42:3 Seen from Northwest, Showing the Latest Occupation Floor of Sin Temple IX, Where Statues Were Found (a), the Ablution Place (b), and, in the Foreground, Traces of Numerous Robbers' Holes Which Penetrated below This Floor



Fig. 61.—A Group of Broken and Partly Burned Statuary and Other Stone Objects on the Latest Floor of the Courtyard of Sin Temple IX



Fig. 62.—A Group of Statues in situ on the Floor of Room Q 42:7 of Sin Temple IX

(Fig. 62) as if purposely arranged, and no traces of burning or of damage other than that caused by time and normal use were observed. It seems likely that this small room now served as a repository where discarded and damaged statues, more commonly buried in the sanctuary or imbedded in the brickwork of an altar, were kept. Besides statuary this room yielded an important collection of small objects. It is interesting to note that among them were several stamp seals but not a single cylinder seal. The unusually large proportion of female statues from this room is also noteworthy.

The second room which occupied the south end of the court was Q 43:11. Again, according to an old tradition, this room contained a fireplace, but now it took the shape of a large oven,



Fig. 63.—Two Fragments of a Carved Steatite Vase (Kh. IV 156). Scale, 2:5

of a type often found elsewhere in buildings of this period,<sup>53</sup> which occupied the whole east half of the room. The most important objects recovered here were a small carved steatite vase (Kh. IV 144)<sup>54</sup> and a part of a larger vase of the same material (Kh. IV 156, Fig. 63). The smaller fragment had been stolen before excavation began and was later bought by the Oriental Institute. Unfortunately the missing parts of this very interesting vase seem to have been lost by the robbers. In the brickwork of the north wall of this room, behind the open-air altar in the court, we found a beautiful and unusually well preserved bull's head cast in copper (Kh. V 154).<sup>55</sup> Its position in the brickwork makes it possible to attribute it to the previous building period, Sin VIII.

The east side of the temple also was occupied by two rooms, R 42:1 and 2; the latter contained three large pottery vats, which, together with a spouted vase of copper (Kh. IV 263),<sup>56</sup>

<sup>&</sup>lt;sup>53</sup> This type of fireplace is discussed in some detail in OIP LIII 130-33.

<sup>54</sup> OIC No. 19, Fig. 56.

<sup>55</sup> OIP XLIV, No. 184, Pl. 104.

suggest that this was a room where liquids used in libations were stored, for vases of almost identical shape are occasionally depicted in libation scenes on plaques and cylinder seals.

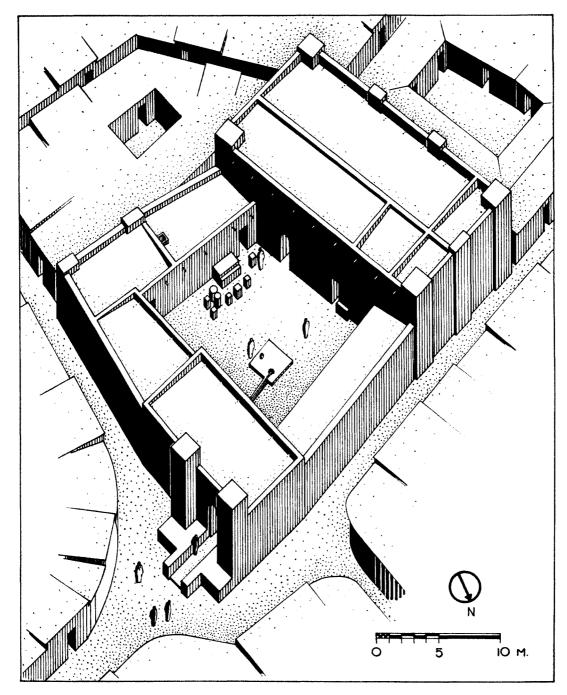


Fig. 64.—Isometric Reconstruction of Sin Temple IX as Seen from the Northeast. Scale, 1:300

Another noteworthy object from this room is the inscribed body of the statue Kh. IV 126, which provided the basis for naming the temple (see pp. 6-8). It is interesting to note that, while the body was found on the first occupation floor, the much damaged head was found in the

courtyard on a higher floor level in the hoard of statues previously mentioned. In contrast with Sin VIII, there was no space between rooms R 42:1 and 2, but a doorway connected them where previously there had been a solid mass of brickwork. There was thus no room for a stairway to the roof here. It is possible that this stairway was abolished and a doorway between the two rooms introduced in order to make more practical use of the drain in connection with the large vats.

The gateroom, R 42:1, was little altered except for the two features just mentioned, namely the open drain traversing it and the doorway leading into R 42:2. The main entrance was in precisely the same position as in the earlier buildings. There was a shallow buttress inside the room against the north jamb of the doorway to the courtyard. A pivot stone against the south side of the main entrance from the town makes it clear that the door opened toward the inside. This is the only building period for which this positive evidence for the existence of a door was found, but there can be little doubt that doors existed at the main entrance in all other periods.

At the entrance (R 41:4) the additional structures erected during the last occupation of Sin VIII were now abolished, restoring to it some of its earlier symmetry. However, it remained less imposing than the entrance of Sin VII (Figs. 40 and 44), for by now the street rose to practically the same level as the temple, and the stairway, which had gradually become shallower, had very nearly disappeared. The entrance, however, was emphasized not only by the rabbeted gateway and a tower on either side of it but also by a long approach flanked by elevated brickwork built exactly above the small projecting terraces of the earlier periods.

#### ISOMETRIC RECONSTRUCTION

Figure 64 is an isometric reconstruction of Sin IX as viewed from the northeast. In the foreground is the entrance, with its long approach through the raised brickwork and the two towers above it. The gateway itself is presumed to have been vaulted. The gateroom beyond, as well as the rooms to the left, at the east and south sides of the court, are shown roofed, with a parapet around each. An outlet for the smoke from the oven in Q 43:11 is shown above that room. The shed at the north end of the court presumably had a simpler roof and no parapet. In the courtyard can be seen the stepped altar, with the offering-tables around it, and the square bitumen-plastered basin with its open drain. Of the two doorways leading into Q 42:2, the southern one, serving as main entrance into the sanctuary, is shown as vaulted, while over the other we have restored a straight lintel; near it there is a small projection from the wall, probably an offering-table or a bench. The buttresses around the building, as well as the towers flanking the main gateway, are reconstructed to a greater height than the rest of the walls. Most of the private houses shown south and west of the temple were actually excavated at this level and therefore involve less conjecture than did those shown in the earlier reconstructions (Figs. 31 and 44).

# SIN TEMPLE X

## THE PLAN

Plate 12 shows the plan of the latest rebuilding of the temple of which any traces were preserved. Its foundations were more than 8 meters above those of the original building, and the ruined brickwork of its walls was very near the surface of the mound. No traces of later buildings were found above it, and it is indeed doubtful whether this part of the site was ever again occupied after the last rebuilding of the Sin Temple had fallen into ruins.

In comparing this new plan with the earlier ones, we see that a larger surface than ever before was now occupied by the temple. The additional area was obtained mainly by the exten-

sion of the building on the west side, where, as one may see from Plate 14 A, it extended over the ruins of private houses of earlier times. Except for a fairly regular leveling of the earlier ruins, no other preparations were carried out for the laying of the foundations. Wherever the new plan coincided with the preceding one, the new walls were founded directly on the remaining brickwork of the older ones. In the other parts of the building the new walls were built at approximately the same height, on top of the leveled surface, except for the outer west wall, which was built upon a layer of ashes that covered the ruins of the earlier private houses (Fig. 65). This layer, 20–30 cm. thick, extended beyond the house area as far as the Temple Oval (Pl. 18) and suggests that the whole of this area lay devastated for a certain length of time



FIG. 65.—Part of the West Wall of Sin Temple X, Showing a Buttress (a) above an Ash Layer (b) Which Covered the Debris of Earlier Private Houses

before the building of Sin X began. Since this layer of ashes was not observed anywhere within the limits of the earlier temple, one is inclined to believe that the temple was preserved while the surrounding houses had been burned and ruined. However, traces of burning in the court at the latest occupation of Sin IX and the hoard of statues which seem to have been hastily thrown out and purposely damaged (see p. 65) may indicate that the temple did not escape the disaster that overtook the rest of the town. If its effects were less noticeable in the temple, it may be due partly to its having been more solidly built and partly to the effacement of such signs during the rebuilding. In addition we have to bear in mind that a very considerable portion of the surface covered by the floors of the later rebuildings was cut away by the robbers' holes (cf. Fig. 60). These ruined floors are shown in broken lines in Plate 14, and the ruined brickwork is shown in horizontal hatching in Plate 12. Everything said concerning the reconstruction of the plan of Sin IX (see pp. 61 f.) applies here also.

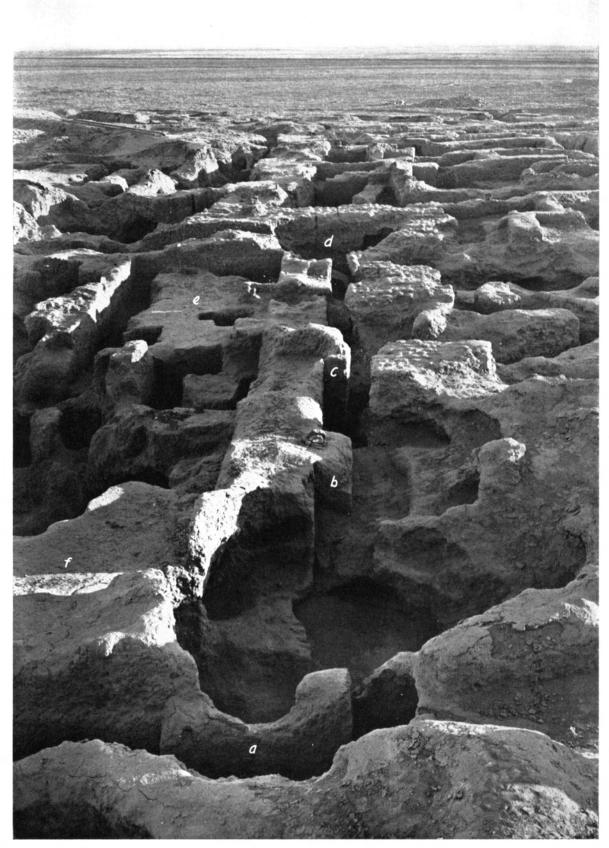


Fig. 66.—The West Wall of Sin Temple X Seen from the North after the Loose Soil from the Robbers' Holes Had Been Cleared and the Remaining Brickwork Traced

But tresses can be seen at a, b, and c. The southwest corner was found in the robbers' hole marked d. Undamaged parts of the floor of sanctuary P 42:5 appear at e and f.

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In general the new building retained the same character as the previous one. The sanctuary, Q 42:1, and room Q 42:2 adjoining it were retained without any considerable changes, and, although large parts of them were ruined by the robbers' holes, the intact portions allow us to assume that their appointments did not differ from those of the earlier sanctuaries. Accordingly we have restored altars against the north wall of Q 42:1 and against the south wall of Q42:2, in their previous positions. Q42:31 has been restored as a sacristy communicating with the sanctuary, like Q 42:8 of Sin VIII and IX. The new room at the west falling evenly into two squares, its northern and southern halves were marked P 42:5 and P 43:15 respectively. Its large size, its shape, and its position at one end of the temple convince us that it was an additional sanctuary, and an altar has therefore been restored at its north end. The three rows of rooms now formed a fairly regular rectangle measuring about 17×20 meters, the outer walls of which were decorated with shallow buttresses (Fig. 66). Curiously enough, the plan of this unit resembles the plan of the original temple, removed from it probably by several centuries. However, this resemblance was certainly not consciously planned but merely a coincidence resulting from a gradual development, the stages of which we have attempted to describe. Nor was the central room, in all probability, the most important, as it had been originally.

An important innovation in this building period was the new plan of the main entrance and its opening toward the north instead of the east. The entrance, Q 41:1, consisted of two parts: one wider, probably open to the sky, between two solid towers; the other narrower, probably vaulted, in the thickness of the brickwork, slightly recessed from the line of the outer wall. The gateway led into an oblong gateroom, R 42:17, from which a second doorway, not quite opposite it, opened into the northeast corner of the court. Traces of a third doorway were found in the southeast corner of this room, but it seems that this doorway served to communicate with the street (R 42:4) east of the temple only during the process of building and that it was solidly blocked when the temple was being used. We have assumed that the thickened brickwork of the outer wall, R 41:3, served as a base for a stairway to the top of the gate. Two sections of a tubular pottery drain within the gateway suggest that an ablution place, such as had previously existed in the center of the court, was now placed somewhere in the east part of the gateroom, although no actual traces of it were found. In the courtyard one of the projections from the north wall was preserved, and on this evidence the second one was restored. Near by a small fireplace, Q 42:5, was traced, but none of the other characteristic appointments of the earlier courts, such as the ablution place or the open-air altar, was found at this level. At the south end of the court there were three small rooms, Q 43:16 and 11 and R 42:15, the first serving as a small vestibule leading into the others, which did not have direct access to the court.

East of the court there were once more two rooms, R 42:16 and 18, distinctly different, however, from any of the rooms on this side in previous periods. R 42:18 was a somewhat irregularly oblong room measuring about  $3\times12$  meters (Fig. 67). Near its south end we found six square structures placed in two rows, two in each row being built against the western and eastern walls of the room respectively, with a third in between. The structures in themselves did not differ from some of the offering-tables found in the court of the Temple Oval or in front of the open-air altar of Sin IX. The better preserved of them showed that they did not stand more than 60-70 cm. high and that their tops were rounded (Fig. 68). Exactly the same arrangement was found in roughly contemporaneous shrines both at Tell Asmar and at Tell Agrab (see pp. 187 and 236), and, though we did not find traces of an altar against the south wall, there can be little doubt that this room was now an additional sanctuary; an altar is accordingly reconstructed in it (cf. Pl. 12). Figure 69 is a perspective reconstruction of the in-

terior of this sanctuary as viewed from the north, showing the restored altar with the double row of structures in front of it. As regards R 42:16, we found no definite indication of its use, but, since it had no direct access to the court and only one doorway into R 42:18, one must assume that it was used in some connection with this sanctuary.

With the inclusion of R 42:18, Sin Temple X contained at least four ritual chambers or sanctuaries, while the parts reserved for practical use, besides the court, were now limited to the gateroom and the three small rooms at the south end of the court, which together covered only a very small part of its area. This proportion too is more characteristic of the early stages of



Fig. 67.—The East Side of the Temple Seen from North; Brickwork of Several Occupations Can Be Distinguished

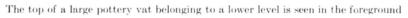
The long, narrow room formed by the uppermost brickwork is R 42:18 of Sin Temple X, against the far end of which two rows of small offering-tables (a) can be distinguished. The large pottery vats (b) are standing in room R 42:2 of Sin Temple IX, and in front of them is part of the cross wall (c) between R 42:1 and 2 of the same building period.

the temple than of the intermediate ones. It is interesting to consider whether this was due to an altered conception of the temple's function, to a change in the ritual, or to the fact that another and much larger temple, namely the Temple Oval, now existed in the town; for we know that much of the latter temple was reserved for uses connected with the economic or social role which a temple played in the life of the community.<sup>57</sup> The increased number of sanctuaries may, of course, have been due to some practical reason, such as the necessity of accommodating a larger number of worshipers. On the other hand, it may reflect a change in the character of the temple, indicating perhaps that, instead of being consecrated to a single deity, it was now a multiple temple in which several related deities were worshiped, each in his own particular chapel.

<sup>&</sup>lt;sup>67</sup> See OIP LIII, Foreword and pp. 27, 30-31, 33, 44, 57, 93.



Fig. 68.—Two Rows of Offering-Tables at the South End of Room R 42:18 of Sin Temple X; Note the Rounded Tops of a, b, and c



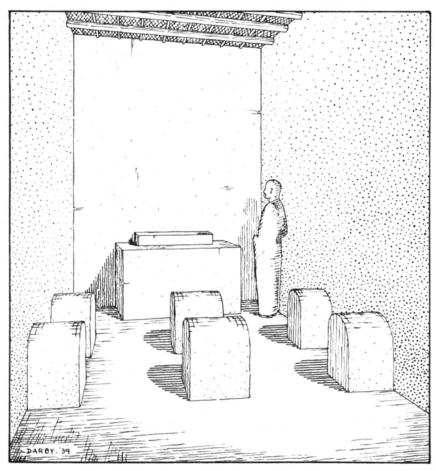


Fig. 69.—Perspective Reconstruction of the South End of Sanctuary R 42:18 of Sin Temple X, with Altar and Offering-Tables

Whatever the circumstances may have been that led to the final arrangement of this temple with its several chapels, the change was not sudden, for we have already described how new altars were added during the first occupation of Sin VIII, one in Q 42:2 and one in the court (Q 42:32). We may assume, moreover, that one of the additional sanctuaries merely replaced the open-air altar in the court. This was possibly R 42:18, since in it the arrangement of the offering-tables was somewhat similar to that in the court. Once again we observe here the effect of a new rebuilding including as planned features some of the details that had at an

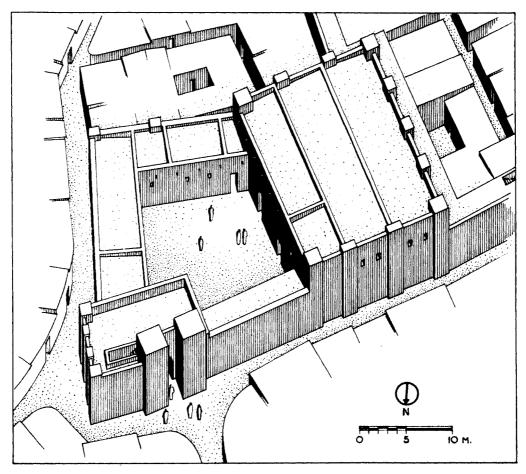


Fig. 70.—Isometric Reconstruction of Sin Temple X as Seen from the North. Scale, 1:400

earlier stage appeared in more haphazard form due to innovations in ritual or under pressure of spontaneous requirements. On account of its characteristic multiplicity of chapels the plan is comparable to the plans of the Nintu Temple, the Square Abu Temple at Tell Asmar, and the Shara Temple at Tell Agrab, each of which had more than one sanctuary. The comparison of their plans is extremely interesting, for it shows how the problems of presumably similar ritual requirements were differently solved, the final result being influenced and restricted not only by material considerations such as the area and the shape and character of the surrounding buildings, but also—and this by no means an insignificant factor—by an established local tradition persisting from earlier periods. Thus we find, somewhat paradoxically, that, although the basic architectural elements in these various temples are essentially similar, the very conservatism of the builders helps to produce a variety of architectural units which con-

# PRE-SARGONID TEMPLES

trasts with the generally more rigidly stabilized forms of later Babylonian architecture just as much as the plastic art of this age (including glyptic) contrasts with the more conventional forms of later times.

Plate 13, in which the plan of Sin X is drawn over that of Sin VI, illustrates the difference in size and in certain details of planning between the earliest and latest stages of the Sin Temple in the Early Dynastic period.

#### ISOMETRIC RECONSTRUCTION

Figure 70 is an isometric reconstruction of Sin X as viewed from the north. In the left foreground is the entrance with its two towers and vaulted gateway. Behind the left tower part of the stairway (R 41:3) leading to the roof is discernible. All the other details of this reconstruction—roofs, doorways, lighting, buttresses, and so on—are based on the same principles as were applied in the reconstructions of the earlier periods and need not again be discussed. In comparing this reconstruction with Plate 12 one can see which of the streets and houses shown outside the temple were actually excavated and which were arbitrarily restored.

### OBJECTS FROM SIN TEMPLE X

At an early stage of our investigations of the site we came to the conclusion that most of the objects from Khafajah which were illicitly excavated and later purchased by museums must be attributed to the Sin Temple (p. 2). Now we have good reason to believe that the majority of these must have derived from Sin X, while only a few, notably some of the statues, may have come from Sin IX; these objects are thus fairly well dated. The good fortune of the robbers certainly accounts for the fact that our own finds from the latest rebuilding were not very numerous, consisting chiefly of small objects such as beads, pendants, amulets, and a few cylinder seals. Among the amulets worth mentioning are those in the form of a human head, the so-called "puzu-heads" (Kh. IV 153, 164, 187), which seem to occur in Early Dynastic III levels but not earlier.

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# THE SMALLER TEMPLES AT KHAFAJAH

# THE NINTU TEMPLE<sup>58</sup>

### EXCAVATION

The first room of this temple was discovered and cleared during our third season (1932/33) as a result of the accidental finding of several pieces of statuary outside the thick wall surrounding the "walled quarter" which was found to the northeast of the Temple Oval and excavated during that season (Pl. 15; Fig. 71). For stratigraphic purposes we wanted to ascertain the levels at which various parts of the thick inclosure wall were founded. Accord-



Fig. 71.—The Southeast Inclosure Wall of the Walled Quarter and the Sounding (a) outside It Which Led to the Discovery of the Nintu Temple

ingly we chose certain spots outside this wall, more or less at random, for the excavating of small lengths of it down to the lowest courses of its brickwork. As a matter of routine, before proceeding with these soundings, the workmen were instructed to look out for brickwork and if any were found to clear it and shift their position to the edge of it before continuing with their original task. It so happened that some fallen brickwork was located in one of these spots, approximately in the middle of the southeast side of the inclosure wall, which caused the sounding to be shifted considerably from the originally chosen point and brought it directly above a pile of rather badly damaged pieces of statuary. Strangely enough, this was the only spot outside the whole length of the wall where such a find occurred, and, had it not been for

<sup>&</sup>lt;sup>58</sup> In the preliminary reports of the Iraq Expedition, published before this building was identified as a temple, the sanctuary Q 45:4 is referred to as a "sculptor's workshop." In *OIP* XLIV, which was written when the temple was only partly excavated, the sanctuary Q 45:4 is called the "Small Shrine."

<sup>59</sup> OIC No. 17, pp. 69-71.

the cleaning of the fallen brickwork, the sounding, at the spot originally intended, would have been unproductive, and consequently this room as well as the rest of the temple most probably would never have been excavated.

However, immediately these first few fragments of statuary were discovered, we decided to extend our investigation in this area, with the result that the face of a wall was soon recognized only a few centimeters away. Following this wall, we traced the inside of a rather large oblong room, Q 45:4 (Pl. 15). During the clearing of the latter several more groups of statuary, as well as maceheads and other stone implements, were found scattered on the floor. Significantly, these groups contained a great number of pieces of statuary either still unfinished or in a state of being repaired. In the same room there were also regular slabs of stone, entire or partly cut, and the combined evidence unmistakably indicated that the room was used as a sculptor's workshop.

After the free part of the room, that is, the part that was not covered by the thick inclosure wall, had been cleaned, additional time was spent in clearing the areas in front of openings in its southwest and northeast walls<sup>61</sup> which at that time were both taken to be doorways. At the southwest side, in Q 45:5, we soon reached a large rubbish heap consisting of potsherds, ashes, and occasional traces of organic matter, and it seems that here was a small open space in the town freely used as a refuse dump. On the other side, at Q 45:6, the debris was that usually associated with ruined buildings; but here as well as near the rubbish heap no objects of any value or special character were found. At that stage the excavations here were given up in favor of the pursuit of more pressing problems on other parts of the site.

Only toward the end of the activities of the Iraq Expedition in the field, in the spring of 1937, when certain odds and ends were being rounded off in view of final publications, did we return once more to this room for a renewed attempt to trace the badly damaged outer faces of its walls and to check some other details. It soon became apparent that the outer faces of all four walls were ornamented with shallow buttresses and that originally only one doorway existed, that in the northeast wall, while the opening in the southwest wall was merely an irregular breach. In the light of our discoveries during the four years since this room was first found, we now immediately recognized it as a typical shrine and inferred that the altar should be under the brickwork of the thick inclosure wall. Although we could not afford the time or the means to remove the mass of later brickwork, a short investigation by tunneling under it soon confirmed our inference (cf. Fig. 73).

The opportunity to remove this later brickwork and to excavate the surrounding area more methodically came when, in the spring of the same year, the concession to continue excavations in the Diyala region was granted to the Joint Expedition of the University Museum, Philadelphia, and the American Schools of Oriental Research then in the field under the leadership of Professor E. A. Speiser. During the short season following the transfer of the concession and a second season in the winter of 1937/38 under the new auspices, it became clear that the first excavated shrine, Q 45:4, belonged to a larger architectural unit, a temple which consisted of three sanctuaries and two intervening courtyards. Although one sanctuary (Q 45:4) was completely excavated, enabling us to number the building periods in their true chronological sequence, only the upper layers of the temple as a whole were cleared. In the following description we must, therefore, deal with the remains in the order of their excavation, beginning with Nintu VII, the latest rebuilding. Before proceeding to more detailed description of the temple, we must say a few words concerning its name.

<sup>60</sup> OIP XLIV 37 f. and Pl. 94.

<sup>61</sup> OIC No. 17, Fig. 60.





Fig. 72.—Statuette of a Cow with Attached Beard (Kh. IX 123), Perhaps the Image of Ninhursag. About Actual Size

### THE NAME OF THE TEMPLE

The identification of the temple is based on an inscription on a stone plaque (Kh. III 1207)<sup>62</sup> fragments of which were found during the third and seventh seasons in different parts of the temple area. As translated by Dr. Jacobsen the inscription reads: "To Nintu..., child of Damgalnun, has £:KU(?):A(?), child of Amaabzuda, presented (this)." A full discussion of this inscription and its peculiarities will be found on pages 290–93. Here we may point out, however, that the presence of three sanctuaries suggests that the temple might have been dedicated to more than one deity, leaving open the possibility that not only Nintu but also Damgalnun and perhaps yet another deity were worshiped there. The identification of the temple as the "Nintu Temple," therefore, may not be strictly accurate. We prefer, however, to name the whole temple after the deity to whom the plaque is dedicated rather than to leave it anonymous.

The connection of the temple with Nintu and possibly with Damgalnun, suggested by the inscription, lends added interest to one of the most significant finds which it provided, the exquisitely sculptured bearded cow (Kh. IX 123, Fig. 72) found inside the altar of one of the shrines (see p. 89). A suggestion put forward by Gadd in connection with an inscription from al-'Ubaid recording the building of a temple by Kurlil for Damgalnun, that this name could have been applied as an epithet to the mother goddess Ninhursag, amakes it possible to regard this cow as the symbol, if not the image, of Ninhursag. Such an identification is independently indicated not only by texts in which Eannatum and Entemena of Lagash and Lugalzagesi of Uruk claim to have been fed by the milk of Ninhursag but also by a realistically depicted milking scene from the Ninhursag temple at al-'Ubaid which undoubtedly represents an actual rite connected with this goddess, since otherwise its appearance in the temple friezes would be inexplicable.

# NINTU TEMPLE VII

Of the latest occupation of the temple traces were found only in sanctuary Q 45:4. However, it is probable that the rest of the temple also was occupied at the latest period but that traces of that occupation were completely obliterated when the houses of the walled quarter were being built above the temple (see Pl. 15). In plan and appointments the latest sanctuary was typical of the Early Dynastic period and did not differ from the sanctuary immediately below it (cf. Pl. 16) except for a very slight thickening of the walls. Figure 73 shows the northwest end of Q 45:4 excavated to the lowest floor of Nintu VII. In the center are the traces of a stepped altar (a), of which only a few centimeters remained; the layer c between it and the dark line is loose soil. Above this stands the thick inclosure wall (b). At the right-hand corner the manner in which this later wall cut into the northeast wall of the shrine is clearly visible. The corner between the altar and the northeast wall was paved with potsherds and plastered with bitumen.

# NINTU TEMPLE VI

Of this somewhat earlier building period more complete remains were found, extending largely under the private houses of the walled quarter. The plan of the temple at this phase is shown in Plate 16. However, though it seems certain that all the building remains shown on this plan were used simultaneously, it is clear that they were not all built at the same

<sup>62</sup> OIP XLIV, No. 201, Pl. 114.

<sup>63</sup> In Hall and Woelley, Al-Ubaid, p. 125, note 3 to B.M. 114206.

<sup>&</sup>lt;sup>64</sup> See e.g. SAK, pp. 20-27 (Eannatum), 34 f. (Entemena), and 154 f. (Lugalzagesi).

<sup>65</sup> Hall and Woolley, op. cit., pp. 91-94 and Pl. XXXI.



Fig. 73.—The Northwest End of Q 45:4, Showing the First Occupation Floor of Nintu Temple VII Remnants of the altar are seen at a, below the brickwork of the thick inclosure wall (b); c marks a layer of loose soil between them.



 $Fig.~74. \\ -Structures~in~Courty ard~Q~45:12~before~the~Entrance~into~Sanctuary~Q~45:4~of~Nintu~Temple~VI~Algorithm and the court of the court of$ 

time but represent a final stage of the building after certain parts had been gradually added to earlier ones, which continued in use. The sanctuary Q 45:4, the floor of which was found only a few centimeters below the earliest floor of Nintu VII, was no different in plan from that of the later stage described above. Slight differences could be noted only in the thickness of the walls and the treatment of the entrance. The space between the altar and the northeast

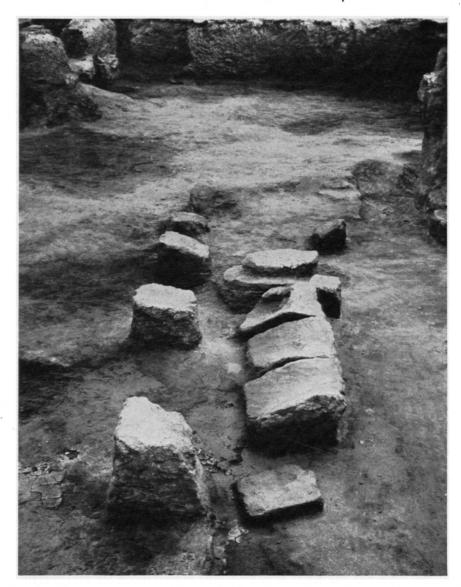


Fig. 75.—The Structures in Courtyard Q 45:12 of Nintu Temple VI Seen from Northwest

wall was unpaved. It is apparent that the walls forming the courtyard Q 45:12 were built at a time when the sanctuary already existed and that the small room Q 45:13 southeast of the sanctuary was formed, perhaps at a still later stage, by adding the thin partition wall abutting the eastern corner of Q 45:4. Its buttress was probably needed to strengthen this short wall, which was not bonded with the brickwork of the sanctuary. No objects of any character were found in this small room, and we can, therefore, offer no suggestions concerning its use.

In the courtyard, Q 45:12, we found a number of peculiarly shaped structures (Figs. 74-75), most of them rectangular in plan; they were of various sizes and irregularly spaced. By analogy

with rectangular structures found in the courtyard of the Temple Oval,<sup>66</sup> one would be inclined to take them for offering-tables; but their upper surfaces, which we were fortunately able to trace, were worn in such a manner as to suggest that at least some of them were used



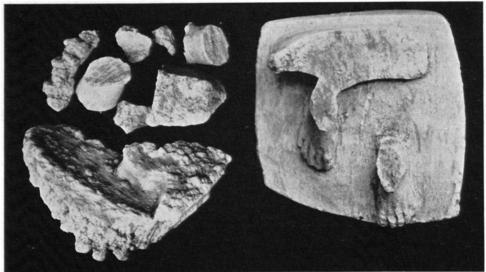


Fig. 76.—Fragments of the Small Statue Kh. VIII 45 from Nintu Temple VI, as Found. Scale, 3:4

for standing or kneeling.<sup>67</sup> An oval structure with a groove in its vertical face and a horizontal upper surface was quite different from the others and was a survival from earlier periods, in

<sup>66</sup> OIP LIII 60 and 63 and Pl. IV.

<sup>&</sup>lt;sup>67</sup> [Andrae, Die jüngeren Ischtar-Tempel in Assur (WVDOG LVIII [1935]) Pls. 45 a-b and 46 n indicate that the hierodules reclined upon brick pillars; and the shape of the pillars in the Nintu Temple courtyard recalls the designs on the lead plaques from Assur. Possibly those in the Sin Temple and the Temple Oval served the same purpose.—H. F.]

connection with which it is discussed below. The entrance into this court was from the northwest and was accentuated by a long buttress at each side. There was a shallow buttress against the northwest wall and another against the northeast wall of the court, not far from the entrance. West of the entrance there was a second small room, Q 44:15, similar to Q 45:13 at the south end of the court. The small statue Kh. VIII 45, one of the most valuable objects recovered from the temple, was found there. Figure 76 shows fragments of this statue as found, with the surface of the stone disfigured by swelling due to moisture and salts.<sup>68</sup>



Fig. 77.—Copper Group of Two Wrestlers (Kh. VIII 117) from Nintu Temple VI. Actual Size

Another outstanding find from the courtyard was a copper group of wrestlers (Kh. VIII 117, Fig. 77). This was discovered in the southwest corner (Q 45:7) among some maceheads and stone bowls. At a somewhat higher level in the same part of the court, and apparently belonging to Nintu VII, were found several more maceheads, fragments of statuary, a few cylinder seals, and other small objects.

The north end of the court is one of the points in the temple at which we penetrated into earlier layers. It was found that in the earlier stages this area was occupied by several smaller

<sup>&</sup>lt;sup>68</sup> Photographs of this statue after it had been restored and of the others found in the Nintu Temple will be published in *More Sculpture from the Diyala Region*.

rooms, but it is still uncertain whether they were part of an earlier temple or belonged to private dwellings.

The second sanctuary of the temple, P 45:51, was situated west of the court. It was a narrow oblong room, approximately 2.70×12 m., and contained an elaborate altar against its north end (Fig. 78). Unlike most other sanctuaries of a similar date, it had two doorways in its west wall. Both were emphasized by an additional thickness of brickwork, allowing for a double rabbet in each doorjamb. Except for this additional brickwork and the shallow buttresses outside the north end of the room, which probably decorated the face of the courtyard



Fig. 78.—Sanctuary P 45:51 of Nintu Temple VI Seen from South, Showing the Altar of the Second Occupation; the Later Brickwork of a Private House Is Still Left at a

wall before the sanctuary was built, the walls were not relieved by buttresses or other architectural decoration (see Pl. 16).

There are indications that this sanctuary was added at an even later stage than the walls forming Q 45:12, for below the south wall of P 45:51 we found some traces of earlier brickwork which was apparently the continuation of the southwest wall of the courtyard. White lines on the plan indicate the course of this brickwork, while the corner at which this wall met the south wall of the second courtyard (P 45:53) is indicated in horizontal hatching.

Two separate occupation floors found in this sanctuary indicate that, though it was a later addition within a single building period, it must have been used for a considerable length of time. The general plan was identical in both occupations, but the altar of the second level (Figs. 78 and 81) was somewhat less elaborate than the original one (Figs. 79–80).

No objects of any value were found on the earlier floor. On the second (higher) floor there were several fragments of damaged statuary in the corner between the altar and the east wall.



Fig. 79.—Altar of the First Occupation of Nintu Temple VI in P 45:51

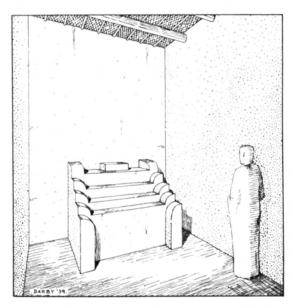


Fig. 80.—Perspective Reconstruction of the North End of Sanctuary P 45:51, with the Altar of the First Occupation of Nintu Temple VI

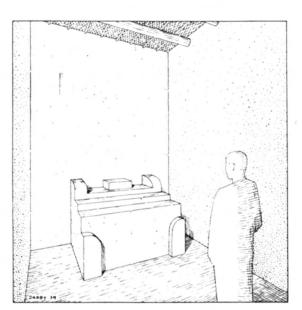


Fig. 81.—Perspective Reconstruction of the North End of Sanctuary P 45:51, with the Altar of the Second Occupation of Nintu Temple VI

However, most of the objects found in this sanctuary were imbedded in the altar itself; they include the bearded cow (Kh. IX 123, Fig. 72), a human-headed bull (Kh. IX 124), probably a furniture fitting, and several finely shaped maceheads. The cow, as previously mentioned (p. 82), may have been the image of a deity. Indeed, it is very tempting to presume that the characteristic small pedestal on top of the original altar (Figs. 79–80), as well as on top of its modified version during the second occupation (Figs. 78 and 81), was meant as a base for this or similar sculpture. It is impossible to say whether the hoard was placed inside the brickwork of the altar as an ex-voto during the building or was hidden there later, before the temple was destroyed, by cutting into the brickwork and replastering the breach. In the latter case, the objects would have to be dated to the second occupation of the sanctuary, while in the former they must be attributed to an age preceding the building of Nintu VI.

West of this sanctuary there was a trapezoidal court, P 45:53, almost symmetrically placed between P 45:51 and 52. The entrance into this court was situated in its north wall, somewhat nearer the western sanctuary, and was accentuated by two long buttresses in the same manner as the entrance into Q 45:12. To the east of the entrance, abutting the north wall of the court, there was an oval oven (cf. Fig. 83), probably originally covered with a dome, and near by there were traces of a troughlike fireplace. No traces of other typical features of a temple courtyard, such as are described elsewhere in this book, where found here. However, it is not impossible that they originally existed but, being of no value for usual utilitarian purposes and comparatively fragile, were destroyed after the temple was abandoned and before the houses above its ruins were built.

The third sanctuary of this temple, P 45:52, was slightly larger than P 45:51 and also irregular in shape. A large part of its east wall was completely ruined, but fortunately enough was preserved to indicate the presence of a doorway near the north end. On the basis of this indication it seems that this sanctuary, like P 45:51, had the rather unusual arrangement of two doorways, as reconstructed in our plan (Pl. 16).

The altar, which stood against the north wall of this room, consisted of a nearly rectangular block of mud-brick masonry with a single step in front of it (Fig. 82). But, like the more elaborate altar in P 45:51, it contained several fragments of statuary imbedded in its brickwork. Of these, a fine female head (Kh. IX 177) and a small male head of an uncommon type (Kh. IX 176) are worth mentioning. In Figure 82 the workman on the left points with his tool to the former, the larger of these heads, in situ.

In this sanctuary also two occupation levels, approximately 30 cm. apart, were found. The gypsum-plastered floor seen in Figure 82 is the earlier, and the level of the later is marked by the dark line (a) in the brickwork of the altar. It is clear from this photograph that the statues were found below the level of the second floor. They should, therefore, be ascribed to the first occupation of Nintu VI if they were hidden during this occupation, or to an earlier period if, as is probable, they were imbedded in the brickwork of the lower altar during the process of building.

On the earlier occupation floor of P 45:52, in front of the southeast corner of the altar, headless statues of a male and a female were found. Their position indicated that they were not thrown but carefully placed here; it seems strange, therefore, that a fire was built above and around them. This fire, which was strong enough to bake the clay of the floor and the plaster of the nearest part of the wall, was definitely not a part of a general conflagration, for no traces of such were found elsewhere in the room at this level. Its sole purpose seems to have been the destruction of these statues—a fact for which we can offer no adequate explanation. The stone of the male statue was actually reduced to powder; but fortunately the female statue



Fig. 82.—The Altar in Sanctuary P 45:52 of Nintu Temple VI

The dark line (a) marks the level of the second occupation floor; on the earlier floor the gypsum plaster can be distinguished.

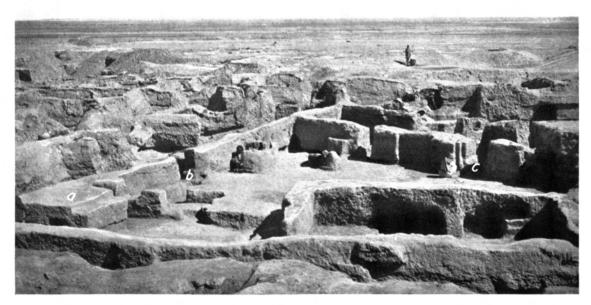


Fig. 83.—General View of Nintu Temple VI from the West

In the foreground is sanctuary P 45:52, with the altar (a) at the extreme left. In the courtyard one man is clearing the oven near the main entrance (b), while the second is tracing the second doorway into sanctuary P 45:51 (c).

(Kh. IX 178), which is among the finest of this period, was less damaged, probably partly because of some accidental protection and partly because of the better quality of the stone.

The outer faces of the walls of the third sanctuary were relieved with shallow buttresses in the usual fashion. However, these were smaller and less well spaced than those of Q 45:4.

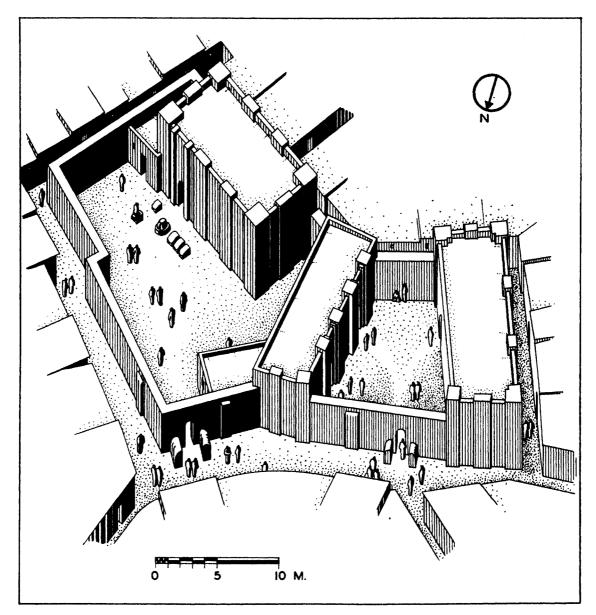


Fig. 84.—Isometric Reconstruction of Nintu Temple VI as Viewed from the North. Scale, 1:300

On the whole this room was inferior in both plan and construction to the first sanctuary—a fact which may indicate that it was an addition of no great importance. Figure 83 is a general view of the western part of the temple from the west. To the left of the courtyard wall the remaining brickwork of the private houses at a higher level is clearly visible.

#### ISOMETRIC RECONSTRUCTION

Figure 84 is an isometric reconstruction of Nintu VI as viewed from the north. The grouping of the private houses and the shape of the passages round the temple are largely conjectural. The entrances into the two courts are seen in the foreground; the long buttresses flanking them are presumed to have been rounded like the parapet flanking the stairway into Sin VII (cf. Figs. 40-41). In the courtyard Q 45:12 a few of the structures are shown. The sanctuary Q 45:4 is restored to a greater height than the small room Q 45:13 at the back of it and the courtyard wall. The two sanctuaries that flank the second courtyard are restored to a lesser height than Q 45:4 on account of the lesser thickness of their walls. The doorways leading into the sanctuaries are assumed to have been vaulted, while those leading into the subsidiary rooms (only that leading into Q 45:13 is visible) are presumed to have had horizontal lintels. All the roofs are reconstructed flat in accordance with views expressed elsewhere<sup>69</sup> and with similar reconstructions of other temples at Khafajah. All other details are self-evident and need not be further discussed here.

#### NINTU TEMPLE V

As we have previously mentioned, only the last two building periods of this temple were completely excavated. Our information about the earlier stages is restricted to the sanctuary first discovered and its immediate surroundings, which were excavated to a greater depth. The connection between this sanctuary and the other parts of the temple in the earlier periods is still unknown; and, indeed, at the present stage of the excavations it is impossible even to say whether in its earlier forms the temple extended over the same area as in its later versions.

In the following pages we shall concern ourselves with the deeper ruins of the first sanctuary as they gradually appeared in the course of our excavations below Nintu VI. In the first stage of these deeper excavations we found that both long walls of Q 45:4 rested on what seemed to be broader foundations (Fig. 85). A closer examination of these revealed that in some respects they were different from other foundations employed at the same period. One may remember that in the foregoing descriptions of the Sin Temple two types of foundations were mentioned. Those of the first type were built in trenches dug from the surface and their characteristics were that their brickwork was not very regular, that they completely or partly disregarded the earlier ruins below the surface, and that their brickwork usually followed the shape of the trench (normally narrower at the bottom, and consequently sloping outward). In addition the face of such brickwork was never plastered. Foundations of the second type were built directly upon the leveled surface of earlier ruins; they were usually more regular in shape and were commonly used in the construction of the low artificial terraces on which some of the temples were built (see p. 21). The foundations of Sin IV and those of Temple Oval I are representative of this type. Now, as Figure 85 shows, the foundations with which we are concerned were not of the second type, for they rested not on accumulated debris but directly on the floor of an earlier period. It is also clear that they differed from the first type, since they do not seem to have been built in trenches dug from above, and no damage was done to the earlier brickwork or floors (note in Fig. 85 the way in which the builders avoided damaging the altar). In addition this brickwork, although irregular, sloped inward and was not only plastered but even whitewashed—features that never occurred in normal foundations in a trench. In point of fact, these foundations consisted of an additional thickness of brickwork erected alongside the walls of Nintu V and built directly upon the floor of that period. That this additional brickwork could not have been of any practical use in Nintu V is indicated by the facts that it covered a

# THE KHAFAJAH TEMPLES: THE SMALLER TEMPLES

large part of the room, blocked the doorway, and stopped at a height immediately below the floor of Nintu VI. It must have been built, then, in preparation for this later rebuilding and

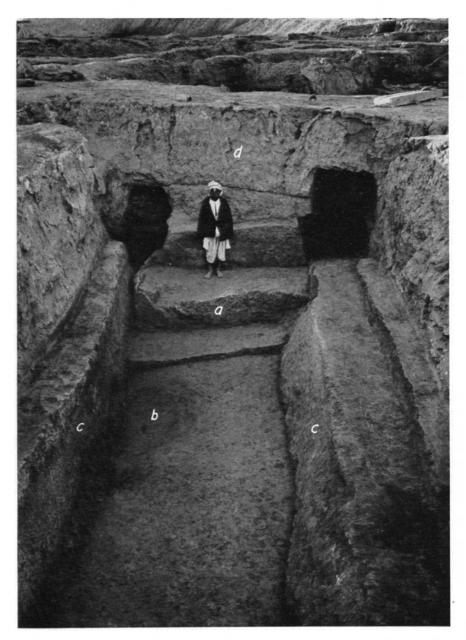


Fig. 85.—The Partly Cleared Floor of the Sanctuary of Nintu Temple V

The letter a marks the altar, b a depression in front of the altar, and c the foundations of Nintu Temple VI. The tops of these foundations mark the floor level of Nintu Temple VI. The dark line at the level of the workman's head corresponds to the latest floor level of this sanctuary in Nintu Temple VII. Above it is the inclosure wall of the fortified quarter (d). In the tunnels beneath that wall the face of the northwest wall of the sanctuary was found.

thus must be considered as foundations of some sort. Its existence, however, rendered us a great service by eliminating any possible doubt concerning the stratigraphic evidence in con-

nection with a hoard of statuary which was found hidden below the surface of the floor of Nintu V.

In Figure 85 a depression (b) can be seen in the floor in front of the altar, against the south-west wall of the sanctuary, and it is clear that this depression continued under the foundation. Indeed, after removing the additional brickwork we found the same irregularity in the floor extending to the southwest wall of the earlier cella. The explanation that offers itself for this depression in the floor is that it was caused by the pressure of the strip of brickwork against the southwest wall and the weight of the clay filling abutting it. This could have occurred only

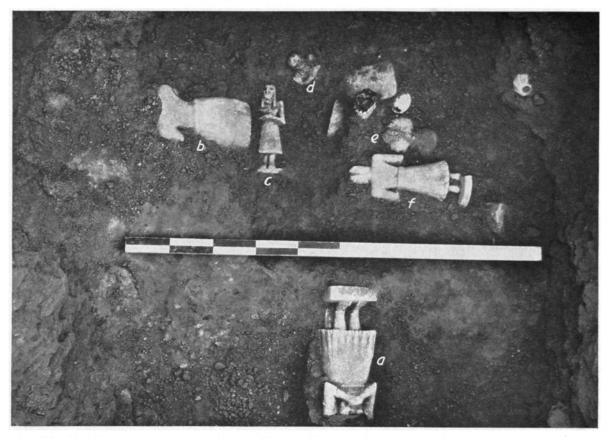


Fig. 86.—The Upper Layer of the Hoard of Statues Found in Front of the Altar in Sanctuary Q 45:4 of Nintu Temple V

The statues which can be identified are: a, Kh. VIII 258; b, Kh. VIII 259; c, Kh. VIII 261; d, Kh. VIII 262; e, Kh. VIII 264; f, Kh. VIII 263. Besides these, several less clearly recognizable fragments and two maceheads are seen.

if this additional brickwork was built not long after the hole had been dug and filled and before the filling had had time to get compressed and hardened by the normal use of the floor. When this depression in the floor was first noticed, its position in the sanctuary, considered in the light of our previous experience, was taken as an indication that it might have served as a depository for some discarded cult objects. This interpretation was soon confirmed when further clearing of this hole revealed one of the largest groups of Sumerian sculpture ever found in one cache. Figure 86 shows some of the statues in situ; others were hidden below this upper layer. In Figure 86 the statues Kh. VIII 258–59 and 261–64 can be identified, while among the others not seen in the photograph but coming from the same hoard Kh. VIII 260, 265, and 272 are worth mentioning.<sup>70</sup>

<sup>70</sup> All the statues from this cache will be published in More Sculpture from the Diyala Region.

# THE KHAFAJAH TEMPLES: THE SMALLER TEMPLES

The stratigraphic value of the brickwork lies in the fact that in sealing this group of statues it supplies definite proof that they were hidden before Nintu VI was built and eliminates the possibility that any of them were dug in from a later level. This is of some importance, for among the statues of this hoard, representing a considerable variety of style and craftsmanship, there is at least one (Kh. VIII 272) which approaches the later style of Early Dynastic sculpture exemplified by Figure 76<sup>71</sup>—a style which was first known only from a later phase of this period than that to which the sanctuary in question must be attributed. The transition toward this later style is thus proved to have set in already at the period of Nintu V, which is more closely defined below (p. 125).



Fig. 87.—The Altar in Sanctuary Q 45:4 of Nintu Temple V, with a Bitumen-lined Groove (to the right of the meter stick) Ending in a Steplike Surface

In the left foreground is the edge of the hole in which the hoard of statues shown in Figure 86 was discovered

Figure 87 shows the altar of this shrine completely cleared. The hole in the left foreground is the one produced by excavation of the hoard. This photograph shows the northwest end of the sanctuary as it must have appeared toward the end of the occupation after the hole for hiding the statuary was dug but not yet covered; it may be seen that the altar was considerably worn, probably as a result of long use. The bitumen-plastered groove to the right of the meter stick and the steplike bitumen-plastered surface in front of it were most likely connected with a libation rite (cf. p. 233 below).

A roughly square bitumen-plastered structure at the other end of the room might have been another libation place or could have served for ablution purposes. Whatever its function, it was a survival of a similar structure of an earlier period (see below).

In the courtyard another oval structure was found directly below the later one (Fig. 88). Near by a similarly shaped contrivance was obtained by the rather ingenious use of sherds of

<sup>71</sup> See OIP XLIV 28-30.

a large pottery vat as facing of a mud structure (Fig. 89). This device abutted against one of the square structures with slanting top (below the meter stick).

# NINTU TEMPLE IV (Q 45:8)

The next earlier stage of the cella did not differ in shape or appointments from the later rebuilding. The altar, again situated against the northwest wall, consisted of a rectangular

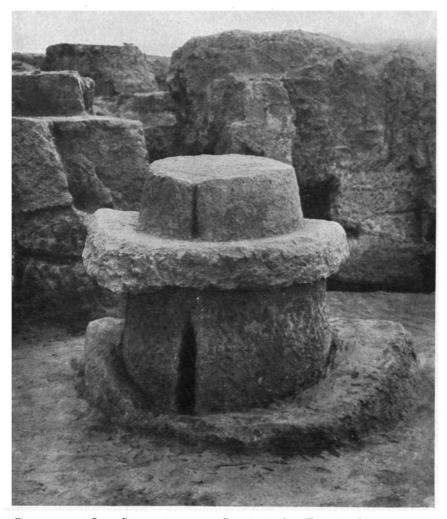


FIG. 88.—Two Phases of an Oval Structure with a Groove in One End, the Lower Standing on the Floor of Nintu Temple V and the Upper Belonging to Nintu Temple VI

"box" built of mud bricks and packed with clay and mud-brick fragments (Fig. 90). At a later occupation of the same building period some brickwork was added in front of the altar (to the right of the meter stick in Fig. 90), with the effect of lengthening the whole structure. On top of this additional brickwork were traces of what seemed to be a circular pedestal (a)—the only one of its kind in all the temples excavated.

At the southeast end, opposite the entrance, there was a bitumen-plastered rectangular surface (Figs. 91–92). It resembled that of Nintu V, traces of which are still left in Figure 91, but had a basin-like depression in the middle, was surrounded by a lower edge plastered with

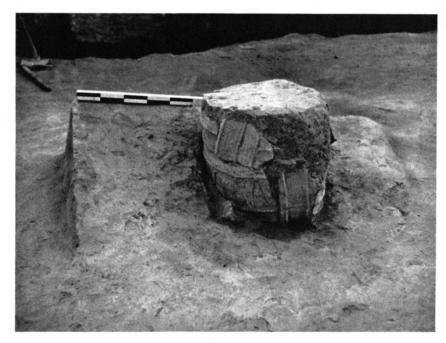


Fig. 89.—An Oval Earthen Structure Faced with Sherds of a Large Pottery Vat in the Courtyard of Nintu Temple V. Next to It Is a Square Structure with Sloping Top



Fig. 90.—The Boxlike Altar of Nintu Temple IV with Additional Brickwork in Front of It and Traces of a Circular Pedestal (a) on Top of the Latter

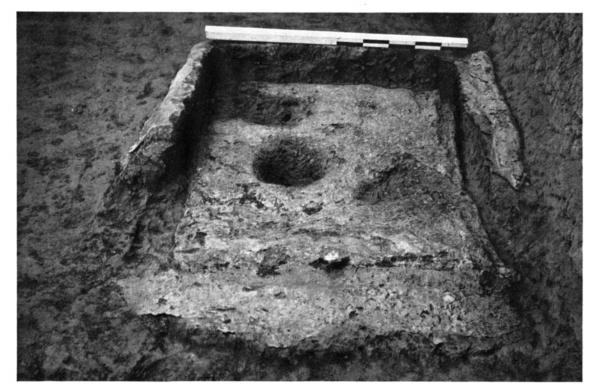


Fig. 91.—Bitumen-lined Ablution Place in the Sanctuary of Nintu Temple IV, with Traces of a Similar Structure of the Following Period

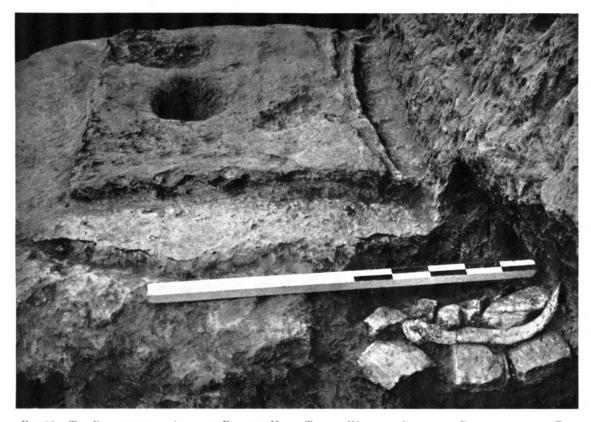


Fig. 92.—The Bitumen-Lined Ablution Place of Nintu Temple IV, with a Basin-like Depression and a Channel along the Wall. In the Foreground and Slightly below the Floor of This Structure Is a Large Horn Laid on Fragments of Baked Plano-convex Bricks

bitumen, and had a shallow channel at one end, against the wall. The channel is clear in Figure 92, where the later remains have been removed. A few centimeters from this ablution place and slightly below the surface of the floor we found a large horn, nearly half a meter long, carefully laid on a foundation of a few broken burned bricks and fragments of stone (Fig. 92). This arrangement undoubtedly had some ritual significance.

Two earlier occupation floors of this building period were found only a few centimeters apart; these were not noticeably different from the later occupation. The bitumen-plastered ablution place was introduced during the second of these occupations.

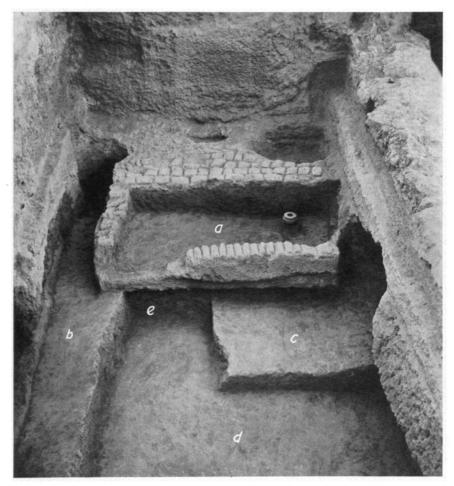


Fig. 93.—Sanctuary Remains of Nintu Temples II and III

The boxlike altar of Nintu Temple III, in which was found a steatite vase, is seen at a; b is part of the floor of the same period on top of the wall of Nintu Temple II; c is the altar, d the floor, and e the northwest wall of Nintu Temple II.

## NINTU TEMPLE III (Q 45:9)

The sanctuary of this building period was somewhat shorter and wider than the one just described. This can be noticed in Figure 93, where the brickwork back of the altar (a) marks the line of the northwest wall of the sanctuary, and the small tunnel to the right of it shows that its floor extended below the brickwork of Nintu IV. The altar was of the "box" type with walls built of unbaked plano-convex bricks, while the space between them was solidly packed with clay. After this packing had been removed a greenish stone vase (Kh. IX 19) was found

standing inside the "box," near its right side (Fig. 93). The brickwork of the outer wall near by and the clay packing immediately above this vase had not been disturbed, and it therefore seems certain that the vase was deposited here at the time the altar was built. By analogy one may perhaps infer that the objects discovered within the altars of the later shrines of this temple (see p. 89) were likewise deposited during the building of those altars and so should be attributed to somewhat earlier dates than the shrines in which they were actually found.

The court in front of the sanctuary of this period was considerably smaller than Q 45:12; a general view from the southeast is shown in Figure 94. To the left is the superimposed brick-



Fig. 94.—General View of the Courtyard of Nintu Temple III from Southeast

work of several periods in the northeast wall of the sanctuary. Next to it there are four consecutive stages of the peculiar oval structure with a vertical groove. A workman is standing against the northwest wall of the court, back of which are several small rooms whose connection with the temple is doubtful. To the right some of the later brickwork is still left standing; the tunnel (a) underneath it was made in order to trace the north corner of the court. In front of this tunnel and near the northeast wall a small rectangular structure can be seen. Two thin partition walls abutting at a corner of this structure cut off the north corner of the court, forming a small compartment. It is unlikely that these thin walls stood to any considerable height, and for their explanation we may have to turn to very similar arrangements still commonly used in the peasant households of Mesopotamia to hold fodder. It is possible that this ancient structure was used for exactly the same purpose.

Near the west corner of this court (near b in Fig. 94) we found a large pottery disk approximately 80 cm. in diameter and over 6 cm. thick (Fig. 95). In the center it had a circular depression and a perforation approximately 3 cm. in diameter, undoubtedly for fixing a wooden axle. Its surface was dotted by a series of smaller holes less than a centimeter in diameter, most of which did not seem to pierce the whole thickness of the disk. The only explanation I can offer for this object is that it is a potter's wheel of a type revolving together with its axle. The small holes might have been used to keep the clay from sliding off or possibly as sockets for wooden sticks used to support parts of the larger vessels during the process of manufacture.

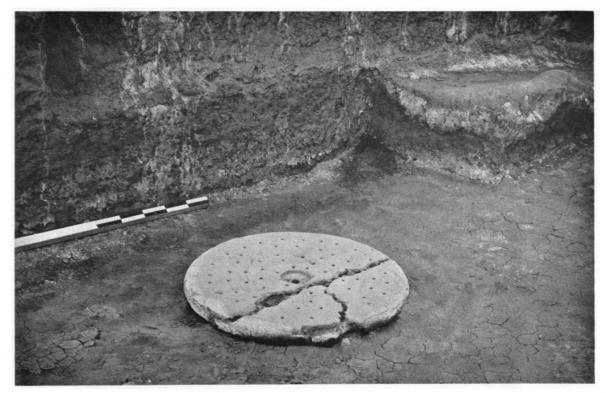


Fig. 95.—Large Pottery Disk in the West Corner of the Courtyard of Nintu Temple III

# NINTU TEMPLE II (Q 45:10)

The brickwork of the southwest wall of this earlier sanctuary (b in Fig. 93) was immediately below the floor of Q 45:9. The face of the earlier wall was farther to the northeast than that of the wall above it, and the two were not parallel but at a slight angle (cf. d and e in Fig. 96). In fact, the whole room was a little differently oriented and lay farther to the northeast than the one above it. As a result, its northeast wall could be traced only by cutting into the later brickwork above. This sanctuary was even shorter than Q 45:9, and in Figure 93 its west corner can be discerned (at e) below, and only a few centimeters back of, the face of the altar belonging to the later rebuilding. The altar of the earlier sanctuary (c), seen below and to the right of the altar (a) of Nintu III, was a roughly rectangular structure placed in an unusual position against the north corner of the room, leaving a wider space between it and the southwest wall. Only a few centimeters of its height were preserved, and no details of any special interest were observed in its structure.

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# NINTU TEMPLE I (Q 45:11)

The earliest stage of this sanctuary was reached below Q 45:10 some 6 meters below the surface of the mound. This was an even smaller and less imposing room, with thin and poorly

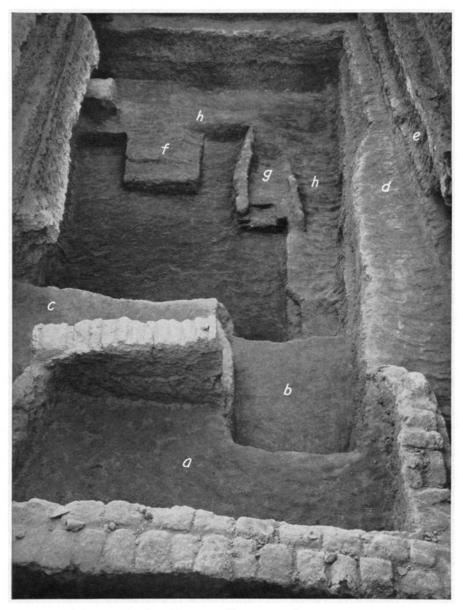


Fig. 96.—View of the Sanctuary in Q 45 from the Northwest, Showing Remains of Nintu Temples I-III

In the foreground is the altar (a) of Nintu Temple III, partly cut away to reveal the floor (b) of the preceding period. The altar of Nintu Temple II appears at c. The angle between the walls of Nintu Temples II (d) and III (e) is clearly visible. In the background the floor, the altar (f), the fireplace (g), and the southeast and southwest walls (h) of Nintu Temple I can be seen.

built walls; were it not for its position under the later sanctuaries and for the presence of an altar in it, it would hardly have been considered of any special importance. The altar, a small, roughly square structure, was placed against the southeast wall of the room, in contrast with all later rebuildings, in which the altar was invariably situated against the northwest wall.

This may serve to support the impression we have gained from other excavated buildings of this period that no great importance was attached to the exact orientation of the temples and that it was a matter to be determined by practical rather than by ritual considerations. The

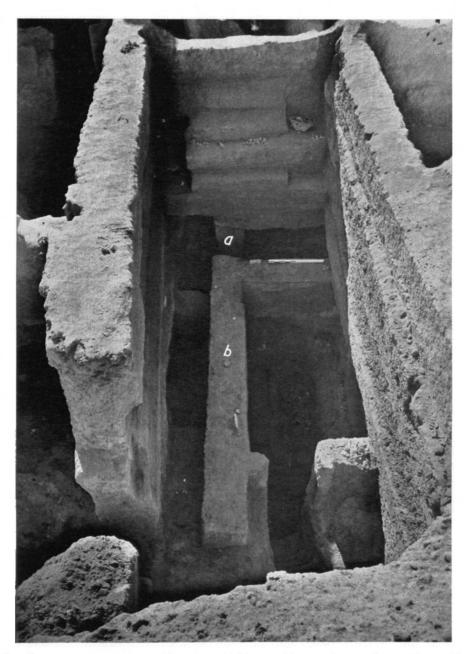


Fig. 97.—The Sanctuary of the Small Temple in O 43, with Thinner Walls (a and b) of a Private House below It, Seen from North

only permanent feature in this little shrine besides the altar was an oblong troughlike fireplace near the altar against the southwest wall. Both these features can be seen in Figure 96, which shows the remains of the earliest three periods as seen from the northwest.

Further sounding below the floor of Q 45:11 revealed nothing but accumulated debris with no traces of brickwork in it, and it seems fairly certain that this is the very earliest stage of this

sanctuary, which later was included in the larger Temple of Nintu. The masonry of these earliest walls was very poor and apparently consisted of somewhat irregularly shaped mud bricks, nearer in character to the plano-convex bricks of the Early Dynastic period than to the regular prismatic bricks ("Riemchen") of the Proto-literate period.

# THE SMALL TEMPLE IN O 43

Approximately halfway between the Temple Oval and the Sin Temple, in the midst of private houses, there was another temple, located in square O 43 (see Fig. 1 and Pl. 17). Far more modest in size and equipment than either of the major temples, it is, nevertheless, of





FIG. 98.—CARVED STONE VASE (KH. V 14) FROM THE SANCTUARY OF THE SMALL TEMPLE IN O 43. SCALE, 1:2

considerable interest both architecturally and as one of the features which lend a definite character to the town as a whole.

Nine or possibly ten building periods must be distinguished in it, and in some of these more than one occupation level was observed. The various building periods are shown in section in Plate 18, where they are brought into connection with the layers of private houses in their immediate vicinity as well as with the corresponding building periods of the Temple Oval and the Sin Temple. It is to be seen from the section that the earliest version of this small temple was founded at approximately the level of 35.30 m.; that is, it was built long before the Temple Oval came into existence and was roughly contemporaneous with Houses 11. In view of the differences in level between the floors in the houses and in the Sin Temple, it is likely that it was built somewhat later than Sin V.

Some of the walls of this shrine rested almost directly upon the ruined walls of an earlier building (Pl. 18 and Fig. 97). These earlier walls were fairly regularly built of small rectangular bricks, typical of the earlier phases of the Sin Temple (cf. pp. 118–21), and were considerably

thinner than the walls of the temple above them. The temple walls were built of planoconvex bricks, somewhat irregular in the lowest level and becoming normal in the subsequent rebuildings. We were able to excavate only a small part of the earlier ruins but enough to establish the fact that, although the walls were parallel to the walls of the temple (Fig. 97), the earlier building was of a completely different character.



Fig. 99.—Bird-shaped Libation Vase (Kh. V 173) from the Sanctuary of the Small Temple in O 43. Scale, 1:3

The ninth building period of the shrine was founded at approximately 40.00 m. The layer of ashes which covered its ruins extended also over the private houses, reaching both the Temple Oval and the Sin Temple, and indicates that destruction of this small temple coincided with the ruining of the first Temple Oval and of Sin IX. However, while those two important temples were again rebuilt on an even larger scale, this small shrine was renewed only to be soon abandoned. Just as the southeast side of the walled quarter and its inclosure wall covered the larger part of the Nintu Temple, so did the brickwork of the inclosure wall at the northwest side of the walled quarter cover part of the latest phase of O 43:11.

The deity to whom this temple was consecrated unfortunately remains anonymous, for no inscription nor any other objects which could have served for his identification were found. Indeed, the total number of objects recovered from all the levels of this temple was very

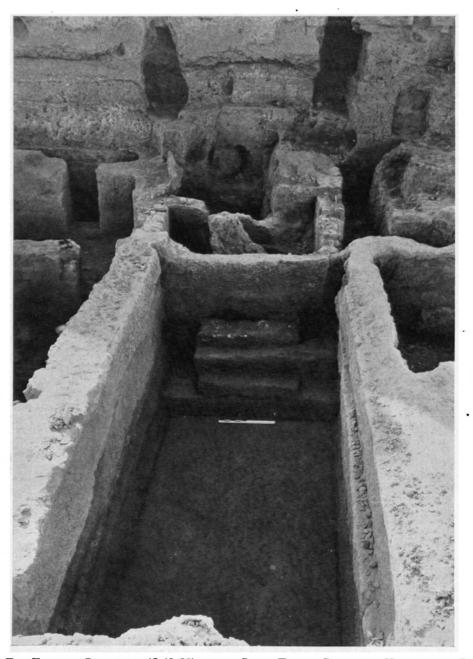


Fig. 100.—The Earliest Sanctuary (O 43:35) of the Small Temple Seen from North, with Brickwork of Later Periods above Its Altar and Walls

limited (see pp. 151 f.), and, except for a green stone vase carved in low relief (Kh. V 14, Fig. 98) and a painted pottery libation vase in the form of a bird (Kh. V 173, Fig. 99), 72 none of them was of any special interest or suggested any connection with a temple.

<sup>72</sup> Shown in color in Pottery from the Diyala Region, Pl. 7.

#### FIRST BUILDING PERIOD

The earliest version of this temple (Pl. 17 A) consisted of only one room, O 43:35, which did not noticeably differ in its size or in the thickness of its walls from some of the other rooms near by. However, in contrast with most of the latter, it was fairly regularly shaped, and its oblong proportions, the doorway in one of its longer walls near one end, and a mud-brick altar against the short wall at the other end are all characteristic of a shrine of this period (cf. p. 12). The depth at which this earliest shrine was found prevented us from excavating the area north and west of it. But by analogy with the plans of somewhat higher levels it seems certain that at this period too it was no more than a single room among the ordinary private dwellings, with nothing in its exterior appearance to distinguish it from any of the latter.

The altar projected only about 40 cm. from the face of the wall; it consisted of a platform which extended the whole width of the room and a narrower low pedestal on top of it (Fig. 100). The meter stick marks the floor; back of it is the altar, above which is the brickwork of the altar of the second building period. The doorway giving access into the cella was in no manner accentuated, and O 43:46, from which it opened, cannot be considered as a part of the temple, for it was probably no more than an open space serving as a passageway not only into the shrine but also into the rooms south and east of it.

#### SECOND BUILDING PERIOD

The plan of the first rebuilding of this temple is shown in Plate 17 B. It is to be noticed that the new sanctuary, O 43:21, was considerably lengthened, from approximately 7.5 to nearly 9.5 m., though the width remained practically unaltered. The additional length was obtained by shifting both the north<sup>73</sup> and the south wall. The new altar, as may be seen in Figure 100, was placed directly on top of the earlier one. It was again a stepped structure; the lower platform extended the whole width of the room and projected nearly 90 cm. from the face of the wall, while the narrower pedestal on top of it projected only 30 cm. The latter had a rough pavement of unworked pebbles. The photograph does not show the true shape of this altar but only its relative position, for the left end of the lower part had been removed to permit the tracing of the altar of the first building period and the southeast corner of the room.

The sanctuary was now approached indirectly through a special vestibule, O 43:28, instead of directly from an open space. This vestibule, although less than 2 meters wide, contained a circular offering-table, in common with most temple courtyards of this period. Its north end could not be further excavated without removing great quantities of debris and brickwork above it, and it is, therefore, not clear whether it had a doorway there or was simply the dead end of an alley.

# THIRD BUILDING PERIOD

No noticeable changes were carried out in the main plan during this rebuilding (Pl. 17 C). However, the altar, instead of having a wide platform and a narrower pedestal, was now a rectangular structure approximately  $1.20 \times 2.00$  m., in which three unequally deep steps could be distinguished. Another innovation was a circular hearth near the entrance to the sanctuary, placed in the same relative position as similar hearths in some sanctuaries of the Sin Temple. The vestibule, O 43:28, and the circular offering-table in it remained unaltered; and at this level, too, we were still unable to establish how the vestibule communicated with the surrounding buildings.

<sup>&</sup>lt;sup>73</sup> Here also the walls are referred to as "north," "east," "south," and "west," instead of "northwest," "northeast," "southeast," and "southwest"; cf. p. 9, n. 17.

#### FOURTH BUILDING PERIOD

The plan of this building (Pl. 17 D) is almost an exact replica of the previous one, and even the slight shifting of the walls that usually occurred with each rebuilding was not now noticeable. In point of fact, if it were not for some indications obtained outside this building, one would be inclined to consider this as a secondary occupation at a higher level during the same building period. The altar, however, was slightly changed and consisted of only two steps instead of three. No traces of a circular hearth were found on the corresponding floor level, but it is possible that these were removed during a later rebuilding.

#### FIFTH BUILDING PERIOD

The noticeable changes in the plan of the fifth building period (Pl. 17 E) were the disproportionate thickening of the east and possibly of the north wall and the unusual shape of the altar. The latter consisted once more of a lower and an upper part, but their arrangement was not symmetrical; while the lower, wider part abutted against the east and south walls, the upper and narrower was shifted toward the southwest corner, leaving a nichelike space at the southeast corner, where a deep, narrow groove was cut in the brickwork of the wall.

No traces of a hearth inside the sanctuary nor of a circular offering-table in the vestibule (O 43:28) were found. At this level we were finally able to ascertain that there was a doorway into O 43:28 from the north; hence a similar arrangement may have existed in the earlier periods as well.

#### SIXTH BUILDING PERIOD

The most far-reaching changes during the existence of this small temple occurred in its sixth building period. It is noteworthy that these changes affected not only this building but also the private houses near by. Indeed, it is clear that they were part of a great building program which was intended to improve the planning of large parts of the town and the most important items of which were the seventh rebuilding of the Sin Temple (Sin VIII) and the initial building of the Temple Oval.

The new plan of the Small Temple is given in Plate 17 F. It now included an additional area, previously allotted to private houses, and consisted of a court (O 43:16) flanked by the sanctuary (O 43:21) on one side and by O 43:17 on the other. To judge by this plan, room P 43:24, adjoining O 43:17, might also have been part of the temple, especially as in a later period an altar was actually found in it. However, at that same period a doorway was found in its east wall (see Pl. 17 H), and we therefore restored a doorway in the same position in the earlier period with which we are now concerned.

The walls of the sanctuary were thicker than in any of the previous periods and rested on specially built, thicker foundations, an innovation which occurred also in the contemporaneous rebuilding of the Sin Temple (Sin VIII; see p. 52). By analogy with the latter, it is possible that the foundations for the Small Temple also were dug from a higher level; and, indeed, as one may see in the section (Pl. 18), in at least one case the brickwork descended below that of the previous period. However, this type of foundation was used only for the sanctuary, while the court and room O 43:17 were built directly on the leveled surface of the earlier ruins.

No doorway leading into the sanctuary was actually found, for part of the east wall had been destroyed down to foundation level during the next rebuilding; but we may be justified in restoring the doorway in the same position as it occupied in both earlier and later periods.

The altar was once more a symmetrical structure, consisting of a low platform extending the whole width of the room, a pedestal of the same width on top of it, and a narrower steplike structure in front of the latter. In the courtyard two characteristic circular offering-tables were built near the entrance into the sanctuary. The entrance into the courtyard has been restored in the north wall on the basis of evidence obtained from a later building period. Room O 43:17, although its character and use could not be ascertained, was a part of the temple unit, for it could be approached only from the courtyard.

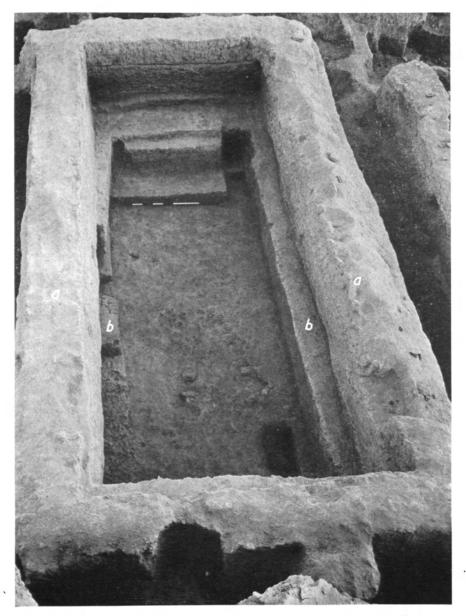


Fig. 101.—Brickwork of the Seventh Building Period (a) of the Small Temple in O 43 above That of the Sixth Building Period (b)

At this period an unobstructed passageway existed around the north, west, and south sides of the temple, and only the narrower east side abutted against the private houses. A circular structure and an elaborate oven in O 43:13, which were usual temple appointments, may indicate that this space too was reserved for ritual use in connection with the temple and possibly could be reached through a doorway in the south wall of the courtyard.

## SEVENTH BUILDING PERIOD

Except for a few minor changes, the plan of the first rebuilding of the enlarged temple (Pl. 17 G) was identical with the previous one. The walls of the sanctuary (O 43:11) were now somewhat thinner, thus slightly affecting its size (Fig. 101). Although the brickwork of these walls was preserved to a height of approximately 80 cm., no traces of entrances from the town

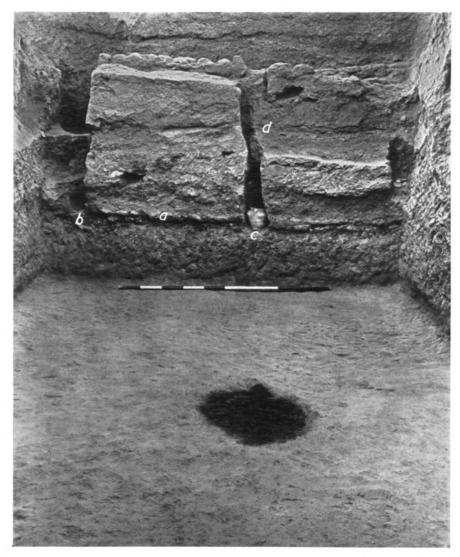


Fig. 102.—South End of Sanctuary O 43:11, Showing a Circular Hearth on the Floor of the Seventh Building Period and the Altar of the Eighth Building Period

The dark line (a) below the altar marks the level of the floor of the eighth building period, in which two pots (b and c) beside the altar were partially imbedded; d marks the level of the ninth building period.

into the court or from the latter into the sanctuary were found. It seems likely that these two main entrances were carefully blocked up by regular brickwork in preparation for the next rebuilding, while the less important doorway into O 43:17 was simply packed with earth and could, therefore, be traced without great difficulty. Another astonishing fact was that no traces of an altar remained on the floor belonging to this building period, although traces of a circular hearth on this same floor (Fig. 102) definitely prove that it was actually used. The

altar shown on the plan is restored on the basis of the altar found in the next rebuilding. The courtyard contained only one circular offering-table instead of two, and in room O 43:17 we found traces of a very regular, circular oven or kiln more than 2 meters in diameter. No traces of a kiln were now found in the open space O 43:13 south of the temple, although this space could still be reached by the passage around the building, even if no doorway existed in the south wall of the courtyard. Outside the north wall of the sanctuary there was a semicircular buttress approximately 1 meter in diameter (cf. Fig. 101), which was presumably built to strengthen this wall.

#### EIGHTH BUILDING PERIOD

The walls of the eighth building period (Pl. 17 H) were, in their turn, thinner than those of the preceding period, the walls of the sanctuary and the courtyard now being of equal thickness. The north and south walls of the sanctuary were both strengthened, the former by a rectangular buttress which replaced the semicircular buttress of the previous period and the latter by additional brickwork forming an abutment. The altar of this period was not symmetrical. At each side of its steplike projection there was a spouted pottery vessel partly let into the floor (Fig. 102) in a manner similar to that observed in other contemporaneous sanctuaries.<sup>74</sup>

The courtyard now extended over the area previously occupied by O 43:17 and contained four circular offering-tables of different diameters (50–90 cm.). Its north corner was occupied by a small rectangular ablution place, and a pottery drain through the north wall probably served to drain off the waste water from it. The small room P 43:24, abutting the east wall of the court, also contained two altars against its north and west walls, but the presence of the doorway in the east wall of that room clearly indicates that it must be considered as a private chapel in one of the houses rather than a part of the temple under discussion.

The shape of the open space O 43:7 and 13 south of the temple had now been modified, and it partly covered the space previously occupied by room O 43:57. The presence of a rectangular oven, a circular offering-table, and a benchlike structure against the east side once more suggests its connection with the temple.

At least three occupation floors could be distinguished in this building period, and these are shown in the section (Pl. 18); but, as no noticeable changes occurred in the building itself, they have not been shown on separate plans.

# LATEST BUILDING PERIODS

Although the general plan of the ninth building period (Pl. 17 I) closely followed the lines of the earlier ones, there were certain interesting innovations in detail. The most important of these, which affects the character of the sanctuary, is the opening of a second doorway, in its west wall, opposite the doorway leading into the courtyard. This new doorway gave access to the narrow passage O 43:15, and by this means the space south of the temple was put within easier reach. This space contained an elaborate horseshoe-shaped kiln (O 43:12) and a vertical drain (in O 43:13), while the bench and offering-table which previously existed in it had now disappeared.

The altar in the sanctuary (O 43:11) was rebuilt above the altar of the previous period without any noteworthy change (Fig. 102), but no vessels similar to those which had stood beside the previous altar were found. A small circular hearth approximately 50 cm. in diameter was found in front of it near the west wall. Figure 103 shows the excavation of this shrine. The workman in the foreground is clearing away loose soil that had accumulated on top of a

 $<sup>^{74}</sup>$  Cf. p. 42 and Figs. 36-37 and OIP LIII 40 and Fig. 38.

higher floor of this room below the ash layer shown in the section (Pl. 18), while the second workman is clearing some fallen brickwork which lay directly on the floor. On this floor the carved stone vase Kh. V 14 (Fig. 98) was found, but there can be no doubt that it has to be dated to a considerably earlier period. Farther back stands the south wall (a) with the altar (b) before it. It is worth noting that now for the first time during the existence of this shrine the corners are accentuated by brickwork projecting slightly to form shallow buttresses or corner towers.



Fig. 103.—Sanctuary of the Ninth Building Period of the Small Temple in O 43

In the court a partition wall appeared once more, so that its east end, O 43:17, again formed a second, smaller court as in the seventh building period. Part of this wall was ruined by one of the many robbers' holes in this area and is restored in our plan. The main entrance into the temple was now presumably through this smaller court, for no doorway was found in the north wall of O 43:16. The southwest corner of the latter was occupied by a well built circular oven, the dome of which was still partly preserved; this is shown in Figure 104, with some of the plaster and mortar cleared off the mud bricks.

Of the latest phase (X) of this building only the ruined west and south walls remained. These were slightly thinner than the earlier walls. Their position in relation to the ruins of the houses about them is shown in Plate 18. It is to be noted that the doorway in the west wall was still retained and that the small corner towers were slightly more pronounced than at the level where they were first introduced.

# THE SMALL SINGLE SHRINE IN S 44

The smallest of the pre-Sargonid shrines so far discovered at Khafajah was located in square S 44 (see Fig. 1) immediately below the present surface of the mound (Figs. 105–7).

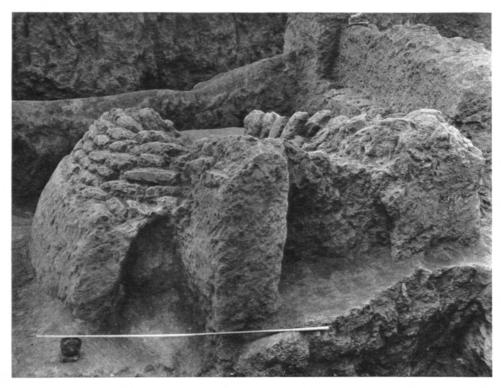


Fig. 104.—Remains of a Domed Oven in Courtyard O 43:16 of the Ninth Building Period of the Small Temple

Vessels found in the houses and burials in this area, of types somewhat later than those from the ruins at the same level farther west, indicate that this shrine should be dated to the second part of the Third Early Dynastic period (III b), a time from which no other sanctuaries of any of the temples described above survived. Although the southeast wall was largely destroyed and the other walls also had suffered damage both from later diggings and from being exposed to the elements, nevertheless there was enough left of it to enable us to restore its plan without difficulty (Fig. 105). Its long walls were each decorated by four, and its short walls by three, narrowly spaced shallow buttresses, the ones at the ends of the walls meeting to form corner towers. The single doorway giving access to the shrine was situated between the first and second buttresses to the west along the northwest wall; each jamb was further accentuated by an additional recess in the actual brickwork of the wall, which, together with the buttress,

<sup>&</sup>lt;sup>75</sup> To be distinguished from the modern robbers' holes; they must have occurred in much earlier times, for they left no noticeable traces on the surface of the mound.

gave an effect of double rabbeting. Inside the room a rectangular altar was placed against the northeast wall; and in front of it, but slightly off the main axis of the room, there was a circular offering-table approximately 80 cm. in diameter.

It still remains uncertain whether this shrine was an architectural unit in itself or a part of a more elaborate temple. The latter possibility cannot be excluded simply because of the self-

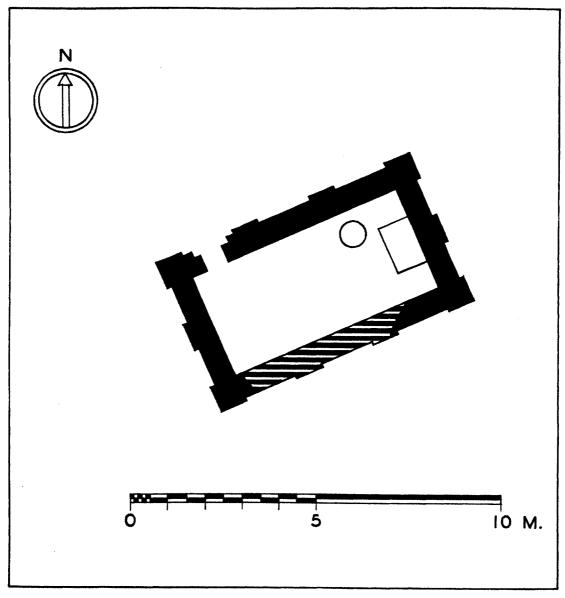


Fig. 105.—Plan of the Small Single Shrine in S 44. Scale, 1:100

contained form of the plan, for we observed in other instances that such an apparently isolated shrine could be included in a larger architectural unit by the building of a few additional walls forming a courtyard (see pp. 82-84, 87). But, if this was the case, no traces of such walls were preserved in the small area to which our investigation was limited. Likewise we found no traces of any earlier version of this shrine or even of earlier brickwork immediately below its

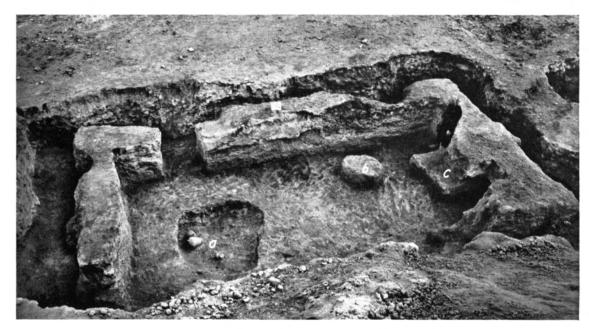


Fig. 106.—The Small Single Shrine in S 44 Seen from Southeast Remains of a grave which had been dug in from a higher level are marked a; b is a circular offering-table; c is the altar

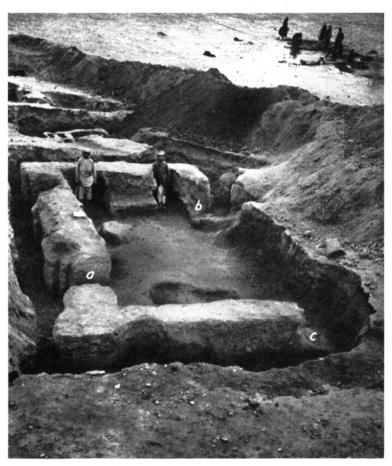


Fig. 107.—The Small Single Shrine in S 44 Seen from West The doubly recessed doorway appears at a; the southeast wall between b and c is ruined

#### PRE-SARGONID TEMPLES

walls. However, in view of the summary character of our investigation here, it is clear that these negative indications are not conclusive, for it is possible either that a layer of debris separated the walls of this shrine from those of an earlier similar building or that an earlier building was of a slightly different plan. In order to settle this question a much more thorough investigation than the one we could afford to carry out would have to be undertaken. There is, however, one unusual feature here which may indirectly support our first impression of this room as an isolated shrine, namely the presence of the circular offering-table near the altar. The usual place for this type of structure in all other temples was, as we have seen, the temple courtyard, and in none of them was it found inside the sanctuary; its presence in the sanctuary in this instance may, therefore, indicate that the usual space for it was not available and consequently that this little shrine had no subsidiary room near it.

No objects of any interest were found within the shrine or in its immediate vicinity. The pottery jars seen in front of the doorway in Figure 106 do not belong to this building but were dug in from a higher level, probably with a burial. This fact is indicated by the manner in which part of the floor near by had been irregularly scooped out. That no traces of a skeleton were found with the jars is not at all astonishing, for either the diggings that were responsible for the destruction of the southeast wall or the proximity of the exposed surface of the mound may account for the disintegration and disappearance of the bones. That the three vessels were preserved is due to the fact that they were originally placed in the lower part of the grave.

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# COMPARATIVE STRATIFICATION AND DATING

In the foregoing pages we have described independently the architecural remains of four pre-Sargonid temples at Khafajah. It now remains to correlate the distinct building periods of the different temples and to envisage the manner in which these building periods can be dated. Perhaps the simplest way is to adopt the Sin Temple as a "scale" for comparison, since its long series of consecutive rebuildings, ranging from near water level to the surface of Mound A, contained ruins contemporary with those found in the other temples. By establishing the chronology of the building periods of the Sin Temple, we reduce the problem of dating the other remains simply to that of establishing their stratigraphic relations to it.

## STRATIGRAPHY OF THE SIN TEMPLE

The relations between the superimposed building remains of the Sin Temple are illustrated in the schematic sections (Pl. 14). However, owing to the fact that on the whole the later rebuildings covered somewhat larger areas than the earlier ones, some of the actual brickwork of all periods could be left standing at the southwest corner of the temple without hampering the excavation; Figure 108, showing this corner viewed from the northeast, may help the reader to visualize more concretely the stratification illustrated in the schematic sections.

The workman in the lowest part of the ruins is squatting on the layer of dark soil (a) between the earliest temple walls and water level. Part of this layer, in front of him, had been excavated to water level, which is marked by the lower end of the meter stick. Behind him is brickwork of the wall of Sin I, in which is the doorway (b) leading into P 42:27. Left of this doorway the second workman is kneeling above the brickwork of Sin I, at the floor level of Sin II. The dark line c below the wall on which he kneels marks the level of the lowest brickwork of Sin I. The top of the brickwork of Sin II is marked by the position of his pick. From this point to about the level of his head is the brickwork of Sin III. This can also be followed as a lighter band above the dark surface of the moist brickwork of Sin I and II and below the dark line and the rough surface of the brickwork belonging to the foundations of Sin IV. At d the floor of Sin IV is partly preserved above these foundations, and the actual brickwork of Sin IV can be distinguished above this floor up to the dark line e which marks the masonry and floor level of Sin V. The third workman, in the corner, is squatting above this, where the foundations of Sin VI had been set back (see Pl. 14 A). In front of him is the slightly projecting brickwork (f) of the foundations of Sin VI; close examination will reveal that the bricks here are plano-convex and laid in typical fashion. The space above his head and up to the step in the wall shows ruins of Sin VI and VII. The loose soil g above the brickwork of Sin VII hides the face of the wall of Sin VIII on that side, but some of it is still left standing to the right of the corner. From the earliest building up to this level the numerous marks left by the different floors are clearly visible against the walls. The fourth man, seen at the top left, is sitting above the brickwork of Sin IX. Finally, the man at the top right, against the skyline, shows with his pick the remains of Sin X at the inner southwest corner of P 43:15 (h).

The earliest temple (Sin I) was founded, as we have seen on pages 8-9, on a layer of debris resulting from an earlier occupation of the site which should be dated to about the middle of the Proto-literate period. On the other hand, the latest version (Sin X) was still wholly built of plano-convex bricks, which, with the objects and pottery found in it or in its immediate vicinity, indicate that it still belongs to the Early Dynastic period. We have now to consider

whether the ten superimposed building periods can be divided into smaller groups which in their turn might be assigned to definite cultural periods within these date limits.

The building remains can be grouped from different points of view. One may attempt to date each stratum by the objects it contained, then group together the building periods which contained objects most closely related in character or style. On the other hand, it is possible to adopt architectural characteristics as a guide. Since in this volume we are concerned chiefly with the architectural aspects of the buildings, we naturally adopted the latter approach, while the former can serve as an independent criterion by which to verify our conclusions, with the reservations discussed on pages 4-5.

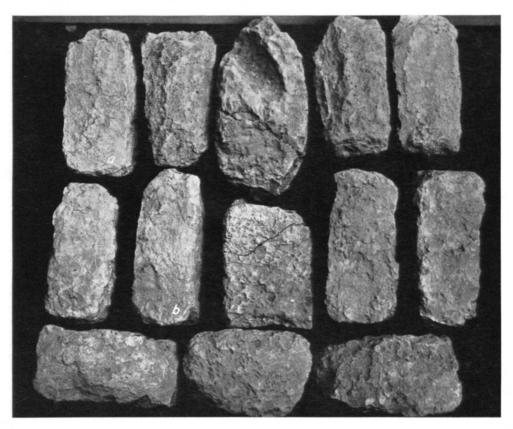


Fig. 109.—Unbaked Bricks from Sin Temples IV-V. Bricks a and b Show Traces of Having Been Made in Open Molds

# THE BUILDING MATERIAL

Before proceeding to examine the architecture with the purpose of grouping together the related building periods, we must devote some space to the building material employed in the various phases; for, although unbaked clay was universally used in Mesopotamia through all its early history, the forms into which the clay was shaped and the methods of masonry employed varied at different periods and, on the whole, can be relied upon for a rough dating of the building remains in which they occur.

The building material used for the earliest Sin Temple and, with some slight variations, through the subsequent four rebuildings (Sin II-V) consisted generally of small, flat, unbaked bricks of nearly equal width and thickness, measuring on the average 21-23 cm. in length and from  $9\times9$  to  $9\times11$  cm. in section. The majority of these may possibly come under the term

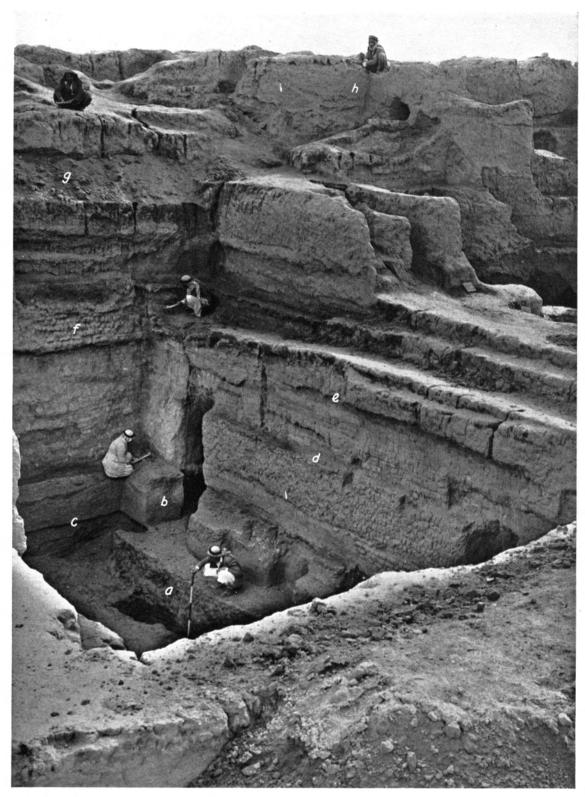


Fig. 108.—The Southwest Corner of the Sin Temple, Showing the Accumulation of Debris from Water Level to the Latest Rebuilding (Sin Temple X)

"Riemchen" introduced by the German excavators of Warka. However, closer observation makes it clear that they were by no means standardized in either shape or size, and often considerable variations occurred, especially in the brickwork of the later two rebuildings (Sin IV-V). Even if we were inclined to adopt such elaborate terms as "plankonvexe Riemchen" or "Riemchennaheflachziegel," which the excavators of Warka finally felt obliged to introduce, there would still remain a great number of unnamed individual varieties. However, the problem of describing and naming all the varieties is of little importance, since it is less the exact shape or the exact measurements of a limited number of individual bricks than their general



Fig. 110.—South Wall of the Sanctuary, Showing Brickwork of Sin Temple III (a) and of the Foundations of Sin Temple IV (b)

type, the technique and mode of manufacture, and especially the methods of actual masonry which are of some value for archeological purposes.

Figure 109 shows a selection of brick specimens, including some of the less regular types, from Sin IV and V. It is noteworthy that some of the bricks show traces of having been made in an open mold, in contrast with bricks of a similar type from the Archaic Shrine at Tell Asmar, which, as Mr. Lloyd observed, were hand-fashioned (see pp. 170 f.).

Figure 110 shows part of the south wall of the sanctuary after the plaster had been removed and the individual bricks had been traced by following the thin lines of mortar between them. The meter stick lies on the projecting wall of Sin I, not yet excavated (cf. Pl. 14 B), while the dark layer above it is the loose soil which still covered the face of the wall of Sin II. The first five rows of fairly regular brickwork above the dark layer belong to the wall of Sin III. The still higher and less regular brickwork projecting slightly over the wall of Sin III belongs to the foundations of Sin IV. The dark patch marks where some of this overhanging brickwork

had been cut away for reasons of safety. This photograph gives a fairly accurate idea of the shape and size of the bricks as well as the methods employed in bricklaying. It can be seen that the face of the wall is formed preponderantly of headers with only a few stretchers spaced irregularly among them. It is interesting to compare this with Figures 127–28, showing the brickwork of Archaic Shrine III at Tell Asmar, where the alternation of headers and stretchers was much more regular.

Although no masonry consisting of baked bricks of this type has as yet been discovered, it is certain that the art of brick-firing was already known when this type of brick was in use. This is proved by many scattered single bricks and fragmentary structures of baked brick which were found in contemporaneous strata at various sites. These baked bricks also are comparatively small, of about the same length as the unbaked "Riemchen" but rectangular in section  $(5-7\times9-12 \text{ cm.})$ . The scarcity of baked bricks is undoubtedly due to the fact that the use of this comparatively expensive material was limited to ornamentation or to waterproofing. Indeed, even in Early Dynastic times the use of baked bricks was confined almost entirely to the latter purpose.

In the later five rebuildings (Sin VI-X) plano-convex bricks were exclusively used. Since the characteristics of these bricks and the methods of their employment have been discussed in a previous publication<sup>77</sup> and additional details observed have been mentioned in the description of the ruins, it is unnecessary to return to this subject here.

On the basis of the building material alone we may, therefore, divide the ten building periods into two major groups, of which the later five, using plano-convex bricks, are of the Early Dynastic period, while the earlier five, built mostly of typical small prismatic bricks ("Riemchen"), are to be assigned to the Proto-literate period.<sup>78</sup> It remains to examine more closely each of the building periods within these two groups and see whether they cannot be subdivided into smaller groups on the basis of other purely architectural characteristics.

## GROUPING OF THE BUILDING PERIODS ACCORDING TO ARCHITECTURAL AFFINITIES

From the plans of the first three building periods (Pls. 2–3) and the sections illustrating the stratification of the ruins (Pl. 14) it is clear that the first two rebuildings (Sin II–III) were not greatly different from the original building. The general plan was very nearly the same, the walls were of similar thickness, and in all three building periods the sanctuary was at the same level as the open space or court in front of it. Such minor changes and innovations as occurred seem to have originated from practical considerations rather than from new conceptions of a temple as a whole. In any case, they are not important enough to justify the making of any serious distinction among these three buildings or attributing them to different cultural phases.

The first innovation that seems to reflect a new general concept is found in Sin IV. Here for the first time the foundations were considerably thicker than the walls themselves and were imbedded in a clay packing so as to form an artificial terrace or socle.<sup>79</sup> The latter naturally

<sup>&</sup>lt;sup>76</sup> For instance, some of the so-called "Tonplatten" used around mosaic panels at Warka (*UVB* VII [1936] 13 and Pl. 17) are not essentially different from small bricks either in form or in manner of use. A small painted brick, even nearer to the "Riemchen" type, found by the writer at al-'Ubaid (*Iraq* V [1938] Pl. IV 4) represents another use of baked brick in ornamentation.

 $<sup>^{76</sup>a}$  A pavement of baked bricks  $(6 \times 10 \times 24 \text{ cm.})$  laid in asphalt, found in a contemporary court below the ziggurat at Warka (UVB VII 11), may be an example of such use.

<sup>77</sup> SAOC No. 7.

<sup>&</sup>lt;sup>78</sup> See p. 8, n. 10.

<sup>&</sup>lt;sup>79</sup> If it were not for the earlier temples at Warka situated on a proper ziggurat, one might be inclined to interpret the appearance of such a low artificial terrace as a forerunner of the high temple platform and the latter, in its turn, as an

brought about the appearance of steps leading into the sanctuary. Another change occurring in this building period was the blocking off of the narrow space west of the sanctuary, thus placing the latter at the end of the larger architectural unit, in contrast with the earlier periods, when the sanctuary was the central room of the temple. The court, although now obviously considered as a part of the temple, was still left outside the artificial terrace—an arrangement which reflects an earlier conception, namely that only the sanctuary and the rooms flanking it constitute the temple proper.

Most of the walls as well as other architectural features of Sin V were built directly over those of Sin IV (cf. Pl. 14). Consequently the general plans of these two building periods so closely resemble each other (Pls. 4 and 5 A) that, in spite of certain differences, such as the careful leveling of the ruins before the building of Sin V, the placing of the floors of the main part of the temple and the courtyard again at the same level, and the introduction of niches to decorate the interior of the sanctuary in Sin V, there seems to be no doubt that they belong to the same cultural phase.

Sin VI, the earliest in the second group of five rebuildings, characterized by the use of plano-convex bricks, differed from Sin V not only in its building material (see p. 121) but also in other respects. The most important change, which derived undoubtedly from a new conception of a temple, was the placing of the whole building complex, including the courtyard, on a large artificial terrace to which a rather elaborate stairway gave access from the town at R 41:5. Other significant changes, besides the enlargement of the temple area, were the complete disappearance of the remnants of the room west of the sanctuary and the replacing of the series of small rooms east of it by two larger rooms, only one of which communicated with the sanctuary. All these changes are far-reaching (cf. Pl. 7); yet the general plan and position of the temple, the plan and appointments of the sanctuary, and even such small details as the round offering-tables in the court provide strong links between this building period and the preceding one. The continuity of tradition demonstrated here is of major importance in disproving the theory of a complete cultural break between the Early Dynastic and preceding cultural periods.<sup>80</sup>

The plan of Sin VII follows so closely that of Sin VI, especially at the western, more important, side of the temple, that there is no justification for assigning them to different groups.

With the building of Sin VIII important innovations were again introduced. In addition to noticeable variations in plan and to the shifting of the walls of the sanctuary and the adjoining rooms, a new method of constructing foundations was adopted. For the first time the foundations were laid below the surface of the ground in trenches dug especially for this purpose (see Pls. 10 and 14). These changes are important enough to warrant the attribution of this rebuilding to a new period in the history of the town; and, indeed, the information obtained from other areas in the town confirms this view, for this rebuilding coincides with the building of the great Temple Oval<sup>81</sup> and the replanning of the private houses between the two temples. <sup>82</sup>

early form of the ziggurat. It seems, however, that a distinction should be made between the artificial low terrace or socle, on the one hand, and the high temple platforms and the ziggurats proper, on the other. Since the former is known to have existed simultaneously with the latter types of artificial elevations and, in some cases, as in the Temple Oval at Khafajah, even within the same building, its underlying idea may, indeed, have been completely different. Whether such distinction should be made also between temple platforms and ziggurats proper is much less certain, for no platforms contemporaneous with proper ziggurats are so far known. It is possible, therefore, to assume that these two forms express the same idea and that purely architectural considerations dictated the preference for one or the other at a given place and time. See also p. 311.

<sup>80</sup> As maintained, for example, by V. Christian, Altertumskunde des Zweistromlandes I (Leipzig. 1940) 175.

<sup>81</sup> See OIP LIII 138-39.

<sup>82</sup> See p. 108 and Private Houses and Graves in the Diyala Region.

Sin IX is undoubtedly a reconstruction necessitated by normal wear and tear of Sin VIII rather than by any external causes. Its plan closely follows that of Sin VIII, and in all respects the changes that occur in this building period may be considered as developments of those observed within Sin VIII. The two building periods, therefore, belong to one group.

Sin X differs considerably from Sin IX in many respects. Several of the innovations, such as the enlarged temple area and the placing of the main entrance at the north instead of the east side of the building, indicate that the changes were not confined to the temple alone but must have affected the private houses also. The layer of ashes found below the west wall of Sin X and extending not only under the houses between the Sin Temple and the Temple Oval but also below the first rebuilding of the latter (see Pl. 18) certainly indicates that at least this part of the town was ruined and perhaps for a time deserted before the rebuildings took place. We are, therefore, justified in assigning the latest rebuilding of the Sin Temple to a still different stage in the history of the town.

In accordance with their architectural characteristics the ten building periods of the Sin Temple fall, consequently, into five groups: (a) Sin I-III, (b) Sin IV-V, (c) Sin VI-VII, (d) Sin VIII-IX, and (e) Sin X. Of these, as we have seen, a and b belong to the Proto-literate, c, d, and e to the Early Dynastic period. The architectural history of the Sin Temple bears out, therefore, the subdivision of the Early Dynastic period into three and the Proto-literate into at least two distinct phases. Tentatively, we may designate these cultural phases, beginning with the latest, thus: "Early Dynastic III," "Early Dynastic II," "Early Dynastic I," "Protoliterate d," and "Proto-literate c"83 (cf. p. 8, n. 10). There remains the question whether this subdivision is supported by the stratigraphic evidence provided by other excavated architectural remains and by the objects and inscriptions found therein. Since a thorough examination of this question is beyond the scope of this volume, we can only state that in our opinion this is indeed the case. In fact, not only is there a general agreement in the principles of such a differentiation, but the definition of the corresponding cultural phases arrived at from the study of other architectural remains and from the stylistic or typological characteristics of various classes of objects<sup>84</sup> so closely coincides with the subdivision outlined above as to leave no doubt concerning its validity in a more general context. One should remember, however, that according to our definition (p. 5) the date of a building indicates the period in which it was constructed, and that there is the possibility that some of these buildings survived from one cultural period into another. Indeed, the study of the various classes of objects led us to conclude that Sin V survived from the latest phase of the Proto-literate period into Early Dynastic I and that Sin IX survived from Early Dynastic II into Early Dynastic III.

Having thus established the relative chronology of the various phases of the Sin Temple, we can now consider the stratigraphic relations between it and the architectural remains of the other temples.

## CORRELATION AND DATING OF THE SMALLER TEMPLES

Of all the architectural remains of the smaller temples only those of the Small Temple in O 43 can be directly related to the corresponding building periods of the Sin Temple through the floors of the private houses situated between them (Pl. 18). We must therefore first estab-

<sup>&</sup>lt;sup>83</sup> As we have stated in the definition of the Proto-literate period (p. 8, n. 10), its subdivision is still somewhat tentative. To indicate this we use letters to mark the subdivisions of this period, in contrast to the numbers used for the well established subdivisions of the Early Dynastic period.

<sup>&</sup>lt;sup>84</sup> Pottery and cylinder seals are the main sources of information concerning the earlier phases, while sculpture and to some extent inscriptions also can be relied upon in the differentiation of the later phases.

lish the relationship between the building remains of the Sin Temple and those of the private houses west of it, in its immediate vicinity. However, since there was no entrance into the Sin Temple from the west, the floors of the private houses abutting this side were not directly related to the actual floors inside the temple, and a slight element of uncertainty is thereby introduced. This arises from the fact, mentioned on several occasions, that the floors in the temple area and in the houses were not rising at the same rate; while normally the levels were rising more rapidly in houses than in the temple, the building of artificial terraces or even the leveling of the more substantial ruins of the temple periodically brought the temple floors to a higher level than those in the houses. It is not impossible, therefore, that certain floor levels in the house area which we assume were contemporaneous with certain occupation levels of the Sin Temple were, in reality, a little earlier or later. However, if, instead of attempting to relate precisely all occupation floors inside and outside the temple, we limit ourselves to the more general problem of correlating the longer periods within the Sin Temple, as defined above, with the contemporary house levels, the possibility of error is so greatly reduced as to be practically eliminated.

An examination of Plate 18 shows that no building remains of private houses contemporaneous with Sin I-III were found in its vicinity. The only house remains which can be attributed to this phase are fragmentary walls at O 43:40 which are not directly related to the area near the temple and which can only serve as an indication that private houses existed on the site at that time. 85 Only at the level of Sin IV did we find more regular remains of houses (Houses 12) in this area. Although their floors, as for instance in P 42:50, are somewhat lower than the floors in the temple itself, the fact that the temple was now founded on an artificial terrace makes it possible to assume that the lower floors in the houses were not necessarily earlier but could be contemporaneous with or even somewhat later than the floors of Sin IV. Houses 12 and possibly 11 are, therefore, contemporaneous with the second group of remains of the Sin Temple (IV-V). In fact, considering that the height of the artificial terrace was then approximately 1 meter, we may assume that Houses 10 and perhaps also the second occupation of Houses 11 were later than Sin V, most likely belonging to a time when Sin V was ruined but Sin VI was not yet built. Since there were indications that Sin V, though built in the latest phase of the Proto-literate period, continued in use in the early part of Early Dynastic I (cf. p. 123), we have to assign Houses 10 and the second occupation of Houses 11 to the latter period, even if they antedate the building of Sin VI. The following three rebuildings (Houses 9, 8, and 7) were clearly contemporaneous with Sin VI and VII and belong to Early Dynastic I.

The thorough replanning of private dwellings observed in Houses 6 was contemporaneous with the building of Sin VIII and the first Temple Oval. This stratum of private houses and the three following it (Houses 5, 4, and 3) were contemporaneous with Sin VIII and IX and represent Early Dynastic II and perhaps the beginning of Early Dynastic III (cf. p. 123).

A layer of ashes which covers the ruins of Houses 3 was apparently the result of a disaster which overtook this part of the town near the beginning of Early Dynastic III; and Houses 2 and 1 above it, which correspond to Sin X and the later rebuildings of the Temple Oval, represent the first new buildings in Early Dynastic III.

The first building period of the Small Temple (O 43:35) corresponds to Houses 11 and is therefore contemporaneous, as we have seen, with Sin V or perhaps belongs to an intermediate stage between Sin V and VI; that is, it should be dated to the end of the Proto-literate or the

<sup>&</sup>lt;sup>85</sup> The existence of houses at still earlier times is proved by fragmentary building remains in P 42:28 and O 43:50 (Pl. 18).

beginning of the Early Dynastic period. The following four rebuildings (II-V), which correspond to Houses 10-7 respectively, should be dated to Early Dynastic I. The considerable change in plan introduced with the fifth rebuilding of the Small Temple (VI), when a regular court was added to the sanctuary O 43:21 (cf. Pl. 17 F), reflects the same vigorous building activity the results of which were the construction of the earliest Temple Oval, the thorough rebuilding of the Sin Temple in the form of Sin VIII, and the complete replanning of the houses in the area between them. This and the following two rebuildings of this Small Temple, which correspond to Houses 6, 5, and 4 respectively, belong to Early Dynastic II. The last two rebuildings of this shrine belong to Early Dynastic III.

The correlation of the different phases of the Nintu Temple and the Sin Temple is more difficult, for only Nintu VI is completely excavated, while the lower strata in the area between the Sin Temple and the sanctuary Q 45:4 are still unexplored. We can, therefore, establish with certainty only the relation of Nintu VI and VII to the Sin Temple and offer no more than a tentative approximation as to the relation of the earlier building remains.

Plate 15 shows that the larger part of the Nintu Temple was covered by private houses of the walled quarter (Houses 1 and, in part, 2). We may therefore assume that the temple was ruined in the catastrophe represented by the ash layer (seen in Pl. 18) and was never again rebuilt. Since the upper walls of the Nintu Temple are comparable in thickness to those of the Sin Temple, we may assume that the latest remains, namely Nintu VII and VI, roughly correspond to Sin IX and VIII, that is, are both to be dated to Early Dynastic II (cf. p. 123), but that Nintu VII, like Sin IX, survived into Early Dynastic III. The thick foundations of Nintu VI, covering a large part of the earlier sanctuary, seem to be of the same general character as those of Sin VIII and of Small Temple VI (below O 43:21; see p. 108), although they differ from these in certain details of construction (see pp. 92 f.). This fact also supports the dating of Nintu VI to Early Dynastic II. On this assumption, the five earlier stages of this temple could be attributed to earlier periods; but since most of the sculpture from Nintu V belongs to the same style as the hoard from the Square Temple at Tell Asmar, Nintu V probably also belongs to Early Dynastic II. The walls of the first four stages of the Nintu Temple are considerably thinner than the walls of the Sin Temple and resemble more those of the Small Temple. Since at least four of the earlier stages of the Small Temple fall within Early Dynastic I, the first four stages of the Nintu sanctuary may also be attributed to that period.

The Small Single Shrine in S 44, though not related by actual excavations to any of the previously described temples, can definitely be dated to Early Dynastic III, since it was still built of unbaked plano-convex bricks. However, the type of pottery found in trenches in its immediate vicinity seems to indicate that, although it was found at a lower part of the mound, it is of a somewhat later phase of the Early Dynastic period than the remains of houses which were found at the summit of Mound A. Most probably it should be dated to the second rather than the first half of Early Dynastic III.

The stratigraphic relationships and comparative dating described above are presented in a more concise manner in the table at the end of this volume.

# TENTATIVE ESTIMATES OF LENGTH AND OF ABSOLUTE DATES OF THE EARLY DYNASTIC AND PROTO-LITERATE PERIODS

For lack of adequate historical material the absolute dating of the cultural periods to which the temples described in this volume belong and even estimates of their duration are still highly controversial matters. It is tempting, therefore, to utilize any indication provided by the ruins themselves which can be interpreted as bearing upon this problem. At least in one point



Fig. 111.—Main Entrance into Sin Temple VII, Showing Remains of the First (a) and Second (b) Occupations

in the excavations, near the entrance to Sin VII, we believe we have found such an indication. An examination of Figure 111 will lead us to this point. The floor in the foreground and on both sides of the stairs is that of Sin VII 1, to which the lower three steps, covered with bitumen, and the lower parts of the walls (a) also belong. The steps of the second occupation and the corresponding walls are marked b, and the dark lines between walls a and b mark the levels of floors which had been removed. It is to be noticed that the faces of the walls of the second occupation on both sides of the stairway project slightly over the faces of the walls of the first occupation. Just as in the case of the stairway (p. 50), this additional thickness was



Fig. 112.—Successive Layers of Mud Plaster on the Outer Wall near the Stairway of Sin Temple VII Accumulated during the Second Occupation of This Building Period

the result not of a rebuilding but of an accumulation of many layers of mud plaster on the face of the original wall. The latter can be discerned as an unbroken surface at c, where part of the later plaster had been removed (cf. Fig. 112). Whereas frequent replastering of stairs was necessary in order to adjust them to the unequally rising levels of town and temple, no such necessity existed in the case of vertical walls. Indeed, it appeared during the excavations that there was no perceptible relationship between the two. On the other hand, one can easily explain the replastering of the walls as part of the necessary routine for the upkeep of any adobe building; in fact, annual replastering of the roofs and exposed walls of buildings of this type at the end of each summer in preparation for the winter rains is still a very common annual routine in the Near East. A detailed view of the part marked c in Figure 111 is given in Figure 112. The original face of the wall appears at a, while b marks the face of the wall of the second occupation. In between we found no less than sixteen layers of mud plaster; and,

if we assume that the annual routine of plastering was regularly kept, it follows that it took at least sixteen years to add this thickness to the wall.

To determine the rise in floor level corresponding to this increase in wall thickness, we must turn once more to the outside of the temple as shown in Figure 111. The dark line d marks the level of the floor of the second occupation when the plastering began, since the first layer was applied only from this line upward. The last and uppermost layer stops short of the somewhat higher line e, which marks a corresponding floor level. It follows that in sixteen years the level rose from d to e—approximately 12 cm.

Having thus determined the relationship between time and the rise of levels at one point we may attempt to utilize it as a basis for conclusions of a more general character. It should be realized, however, that no precise results can be expected, for, obviously, there can be no general answer to the problem of the rate at which debris accumulated. Indeed, even in normal circumstances—that is, when the rising of levels results only from the normal use of buildings, from their deterioration due to normal wear and tear, and from subsequent rebuildings—the rate of accumulation depends on innumerable factors, such as the locality of ruins, their age, position within the town, and orientation, function of the original building, etc. Consequently an observation concerning this problem made at one particular point cannot be indiscriminately applied to other buildings. But, even when applying such evidence to only one building where conditions did not greatly vary, no very precise results can be expected. Even if our basic assumptions are sound—that is, if the layers of plaster represent a similar number of years and if the accumulations were more or less uniform—the calculated results cannot be considered as precise, since they are affected by possible errors in measurement of the two initial quantities, namely the 16 years and the 12 cm. of debris.86 Moreover, as we shall see, it is possible to approach the problem from various standpoints, leading to different results. With these reservations in mind we may proceed with our calculations.

The simplest application of the established relation is to use it for estimating the length of the whole building period in question, namely the duration of Sin VII. In dealing with this building period alone one may be justified in assuming that at a given spot, near the entrance, the rate of debris accumulation was fairly uniform.<sup>87</sup> Under this assumption, since a layer of about 75 cm. accumulated here between the lowest floors of the first and second occupations, the length of the first occupation would have been  $\frac{16}{12} \times 75 = 100$  years. Adding 16 years for the duration of the second occupation, in accordance with our interpretation of the primary evidence, we obtain a total of 116 years for the whole of Sin VII. Before proceeding with further generalizations, we should recall that during the same time the rises in other parts of the temple were different, amounting to only about 35 cm. in the middle of the court and 55 cm. in the sanctuary.

Inasmuch as the spot in front of the temple near the stairway was well protected and little affected by building activities, we may further assume that the rate of accumulation of debris here did not greatly vary in the different building periods and, on the basis of this assumption, estimate the duration of time covered by the five preserved rebuildings of the Early Dynastic period (Sin VI-X). The height of accumulated debris from the floor in front of Sin VI to the highest preserved floor outside Sin X was about 5.50 m.; resorting to the simple calculation, we

<sup>&</sup>lt;sup>36</sup> Ten per cent for the total error in either direction, though not very likely, is possible, and therefore all figures arrived at should be presented thus: number of years  $\pm 10\%$  of same. For this degree of accuracy a unit of ten years is quite sufficient, and we shall accordingly round off the numbers derived from the calculations to the nearest ten.

<sup>&</sup>lt;sup>87</sup> In reality there is some ground for assuming that the accumulation of debris was somewhat faster in the second occupation than in the first (see p. 50), which would mean that the duration of Sin VII 1 might have been somewhat more than that calculated below.

find  $\frac{16}{12} \times 550 = 730$  years. 87a In this calculation we assume not only that the floors were rising uniformly during the different occupations but also that the accumulation of debris between building periods went on at the same rate. It is, however, more likely that the rise of level between the last floor of one building period and the earliest floor of the next went on at a faster rate than when the building was actually in use. We therefore have to consider the result arrived at as a maximum, if the method itself is sound. An opposite alternative is to disregard completely the layers accumulated between building periods and to apply the same calculation to the total height accumulated during the occupations only. Consulting Plate 14 A, we see that two noticeable gaps occur, one between the last occupation of Sin VII and the first occupation of Sin VIII and the other between the last floor of Sin IX and the first of Sin X. As far as Sin VI is concerned, it seems probable that the floors here rose gradually until they reached the level of Sin VII 1. The accumulation during occupations, then, amounts to about 3.50 m. out of the total accumulation of 6 meters; consequently we may figure the time as  $\frac{16}{12} \times 350 = 470$  years. Since we now have allowed no time at all for the 2 meters of accumulation between rebuildings, we must consider this number of years as a minimum for this method of calculation.

We may attempt to check the results obtained by this direct method in several other ways, considering each result independently on its own merits.

First, let us take the case of the sanctuary, where the rise must have been fairly regular. Here the accumulation during the 116 years of Sin VII<sup>88</sup> was 55 cm. The whole accumulation from the first floor of Sin VI to the third floor of Sin X was approximately 4 meters; and the same simple calculation gives us  $^{16}_{55} \times 400 = 840$  years. Here again we assumed that the whole of the accumulation was due to a natural process, although it is clear that in reality some of it was due to building activities. The time obtained is consequently exaggerated. In order to be able to judge the extent of this exaggeration we shall once more adopt the opposite procedure, basing our calculations on only the accumulated rising of floors within each of the building periods and disregarding the layers between them. This can be more easily achieved in the court, where the distinction between the floors used in each building and the layers between building periods is more readily made. By adding up the various layers accumulated during occupations and allowing the same accumulation for Sin VI as for Sin VII we obtain a total "natural" rise of about 2.15 m. Since here the accumulation corresponding to the 100 years of Sin VII 188 was 35 cm., it follows that the time involved would be  $\frac{100}{35} \times 215 = 610$  years.

The problem permits still another approach, which likewise can be considered in various ways. We may take the duration calculated for Sin VII (116 years) as typical for all building periods and, multiplying it by 5, obtain 580 years for the duration of Sin VI-X. On the other hand, one may consider the 16 years of the second occupation of Sin VII as typical for all occupation floors and, multiplying this by 14, the total number of floors (1 in Sin VI, 2 in Sin VII, 3 in Sin VIII, 5 in Sin IX, 3 in Sin X), obtain about 220 years as a result. This number must be considered as a gross underestimate, for Sin VII 2 was but a secondary occupation

<sup>&</sup>lt;sup>87a</sup> The sign  $\doteq$  means "is approximately equal to."

<sup>&</sup>lt;sup>88</sup> In the sanctuary we were unable to distinguish between the accumulations of debris during the first and second occupations. We therefore assume that the layer between the earliest and the latest floor represents the total accumulation during this building period, while the thin layer between the floors of Sin VII 2 and VIII 1 (Pl. 14 A) is the result of the leveling of the ruins. In the courtyard, on the other hand, we attribute the accumulation between the floors marked VII 1 and VII 2 to the first occupation only. The reason for this is that the bitumen-plastered ablution place (Q 42:48) was found on the floor of the second occupation, and it is likely that the layer of debris between floors VII 2 and VIII 1 represents not only the debris accumulated by the leveling of the ruins but also that accumulated during the second occupation.

which left no impression whatsoever on the level of the main area inside the temple. Obviously a much longer time must be allowed for each of the *original* occupations of the five building periods, even if we assume that the *secondary* occupations of each of them were not longer than this particular one. Taking the period of 100 years previously arrived at for the first occupation of Sin VII as typical for an original occupation and 16 years for each of the nine secondary occupations, we arrive at a still different number:  $5 \times 100 + 9 \times 16$ , that is, about 640 years. Now let us tabulate in order of magnitude the various results arrived at:

		*************************	1	
Estimate	Years Calculated*	Error Allowed	Range (in years)	Comments
a	220	±20	200-240	Grossly underestimated Apparently underestimated
h	470	+50	420-520	
c	580	±60	520-640	Possible
d	610	±60	550-670	Possible
e	640	±60	580-700	Possible
f	730	+70	660-800	Apparently overestimated
g	840	$\pm 80$	760-920	Clearly overestimated

DURATION OF SIN TEMPLES VI-X

The range of each estimate is represented graphically in Figure 113 by a horizontal linear segment the length and position of which are determined by the abscissas corresponding to the

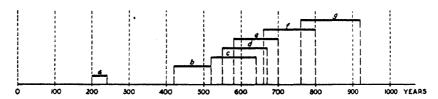


Fig. 113.—Diagram Representing Estimates of Duration of Sin Temples VI-X

limits of the range. It is to be seen that for certain intervals these segments overlap. The distribution of these segments over the time axis, which is divided by centuries, shows the number of possibilities falling within each century as follows:

Duration of Sin VI-X in Centuries	Number of Possibilities
Less than 2	0
2-3	1
3-4	0
4-5	
5-6	4
6-7	4
7-8	
8-9	
9–10	
More than 10	

This brings out even more clearly that the range of 200-240 years (a) is isolated from all the other possibilities, not coinciding even in part with any of them. This and the exaggerated estimate (g) at the other extreme may be eliminated as not sufficiently reliable.

The five remaining estimates, b-f, are again graphically represented in Figure 114 on the same principle as in Figure 113. The overlapping parts of the various ranges are represented by

<sup>\*</sup> It may be noted, by the way, that the arithmetical mean of the numbers in the second column is approximately 580 or, if we eliminate the two extreme numbers as not sufficiently reliable, about 610.

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proportionate lengths of horizontal bands. Taking now ten years as a unit, we find the distribution of possibilities in various time intervals is as follows:

Time Interval (years)	Number of Possibilities
Under 420	 . 0
420-550	 . 1
550-580	 2
580-640	 3
640-660	 2
660-670	 . 3
670-700	 2
700-800	 1
Over 800	 . 0

It is to be seen that, although the number of possibilities increases and decreases symmetrically between 420 and 800 years, their disposition within this range is not entirely symmetrical, indicating that the probable duration is rather nearer 600 than 650 years.<sup>89</sup> In round figures six centuries can, therefore, be accepted as probably a close estimate of the time between the

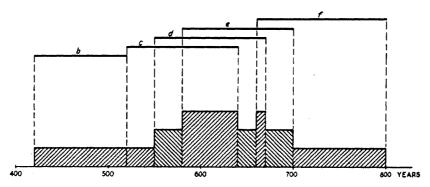


Fig. 114.—Diagram Correlating Usable Estimates of Duration of Sin Temples VI-X

building of Sin VI and the third occupation of Sin X. Taking into consideration the two later occupations of Sin X, traces of which were found at the west end of the ruins, we estimate the total duration of Sin VI-X at about 650 years. Dividing this period proportionately to the thickness of the debris accumulated during the different phases of the temple, we obtain: 250 years for Sin VI and VII, 220 years for Sin VIIII and IX, 180 years for Sin X.

The length of time represented by the earlier ruins (Sin I-V) can be estimated on somewhat similar principles. Again two different methods can be adopted. First, we may assume that the accumulation of debris outside the earlier temples, in a position relatively similar to that where the original observations were made, was at approximately the same rate as in the later temples. Such a position is the courtyard northeast of the sanctuary near the stairways leading to the top of the artificial terrace in the last two rebuildings of this group, Sin IV and V. Here the layer of debris between the lowest floors of Sin I and Sin V in Q 42:16 is approximately 3.40 m. However, it should be noted that the slope of the second and third floors of Sin IV (see Pl. 14 A) clearly indicates that at least part of this accumulation is due to building

<sup>&</sup>lt;sup>59</sup> The appearance of the graph depends, of course, on the margin of error allowed. It may be noted that a slight increase of the latter (from 10% to 12%) would lengthen ranges c and f sufficiently to overlap at about 650, producing, at this point, a peak of four coinciding possibilities. On the other hand, even a lesser decrease of the allowed error would shorten ranges d and f enough to eliminate the peak between 660 and 670. In both cases the range of three coinciding possibilities between 580 and 640 would hardly be affected.

activities. On account of this we may consider the "natural" accumulation as approximately 3 meters. Resorting to the simple formula previously used we obtain  $\frac{16}{12} \times 300 = 400$  years for this accumulation. On the other hand, we may assume that the accumulation of debris within the sanctuaries of the earlier five and the later five building periods was at approximately the same rate, apart from the heightening of the ground produced by the building of the artificial terraces. The total accumulation between the lowest floor of Sin I and the assumed later floor of Sin V is approximately 3.60 m., of which about 1 meter is the height of the artificial terrace of Sin IV. The remaining 2.60 m. may be regarded as of the same character as the accumulation of 4 meters between the first floor of Sin VI and the third floor of Sin X. Since our previous calculations gave approximately six centuries as the duration of the later five building periods, we have  $\frac{600}{400} \times 260 = 390$  years.

The results are close enough to deserve attention, and we may accept four centuries as the approximate duration of the first five building periods; or, allowing again about 10 per cent as a possible margin of error in each direction  $(400\pm40)$ , from 360 to 440 years. The two major phases of this total length can be estimated on the basis of the relative thickness of their debris (excluding the height of the artificial terrace of Sin IV) as 225 years for Sin I–III and 175 years for Sin IV–V. We may now attempt to employ these results in estimating the lengths of the cultural periods during which the various phases of the Sin Temple existed.

Sin I was built, as we have seen, at about the middle of the Proto-literate period. On the other hand, there is archeological evidence (see p. 123) that Sin V survived into the earlier part of Early Dynastic I; the length of the last two phases (c and d) of the Proto-literate period, represented by Sin I-V, would then be somewhat under four centuries. The estimate of the total length of this period depends upon the estimate of its earlier two phases, to which our evidence does not extend.

The Early Dynastic period is represented by the later five rebuildings (Sin VI-X), the first of which (Sin VI) belongs to the early part of Early Dynastic I and cannot be very far removed from the beginning of this period, since there is no perceptible break in cultural tradition between this building and Sin V, which survived from the preceding period. At the other end, even the highest preserved floor of Sin X certainly does not represent the end of Early Dynastic III. This is clearly demonstrated by the comparative stratigraphy of the Sin Temple and the Temple Oval. The building of Temple Oval II and Sin X must have been very nearly contemporaneous, but while no later traces than the fifth occupation of Sin X were preserved (see Pl. 18), there existed above Temple Oval II an entire new rebuilding (III) of the same temple complex which still must be attributed to the Early Dynastic period on account of its building material (plano-convex bricks) and the character of finds associated with it. 90 Though it is likely that Temple Oval III survived beyond the Early Dynastic period, we must allow some time for its existence in the Early Dynastic period after the latest preserved occupation of the Sin Temple. The duration represented by Sin VI-X must therefore be augmented at both ends to cover the whole of the Early Dynastic period. In view of these circumstances, a total addition of about a century does not seem exaggerated. We obtain thus approximately 750 years for the total length of the Early Dynastic period.

While this is considerably longer than some other estimates, the writer can see no serious objections to it from archeological considerations. Moreover, in his Sumerian King List Dr. Thorkild Jacobsen comes to the conclusion that 350 years must be allowed for Early Dynastic III alone. In This estimate, arrived at by Jacobsen independently and on an entirely different

<sup>90</sup> See OIC No. 20, Chronological Table, and OIP LIII 106.

<sup>91</sup> AS No. 11 (1939) Table II.

basis, certainly also implies that the whole of the Early Dynastic period must have been considerably longer than was hitherto generally thought. Our conclusions may, to some extent, be tested by correlating them with those of Jacobsen and by examining whether the results of such a correlation are supported or contradicted by facts known from the excavations. Furthermore, by establishing such a correlation we extend considerably farther into the past the chronology derived from the King List, to cover the earlier buildings and cultural periods with which we are concerned in this discussion.

Since no royal inscriptions of the Early Dynastic age were found at Khafajah, we have no direct means of connecting any of our buildings with rulers named in the King List; but a fairly close indirect connection is provided by the Ninhursag temple at al-'Ubaid, which, on the one hand, is dated by inscriptions to Aannepada, second king of the First Dynasty of Ur, 92 and, on the other hand, shows very close affinities with the Temple Oval at Khafajah. 93 However, since three phases of the Temple Oval at Khafajah are known, we have to consider to which of these the temple platform at al-'Ubaid is most closely related. Architecturally, the use of kiln-baked bricks for the revetment of the platform, the close spacing of the buttresses, and the general use of flat bonding instead of bricklaying in herringbone fashion are all features characteristic of the later part of the period in which plano-convex bricks were in use<sup>94</sup> and do not commonly occur in the earlier stages of the Temple Oval. Stylistically, some of the objects recovered in front of the al-'Ubaid platform are also more akin to similar objects of the latest stage of the Early Dynastic period than to those from its earlier phase. We may, then, relate the temple platform at al-'Ubaid to Temple Oval III at Khafajah and consequently tentatively date the later occupation of Temple Oval II to the beginning of the First Dynasty of Ur. Since the stratigraphic and chronological relations between the Temple Oval and the Sin Temple are known, we thus obtain a hypothetical connection between the buildings under discussion and the King List.

The buildings are correlated graphically in Figure 115 against a vertical time scale. For simplicity's sake a precise length in years is assigned to each group of building periods, though we must remember that each figure is affected by positive and negative margins of error, the influence of which is discussed on page 135. In Jacobsen's proposed chronology Early Dynastic III extends from 3050 to 2700 B.C. <sup>95</sup> Within this period Mesannepada and Aannepada reigned at Ur some 80 years, between 2850 and 2770 B.C. or, in the lower chronology based on Sidney Smith, between 2575 and 2495 B.C. <sup>95</sup> In allowing 75 years for the existence of Temple Oval III in the Early Dynastic period we must date its building to about 2775 (or 2500); that is, indeed, within Aannepada's reign. From this point backward we assign years as follows (see pp. 131 f.): to Sin X, 180 years; to Sin VIII–IX, 220 years; to Sin VI-VII, 250 years; to Sin IVI-VI, 175 years; to Sin I-III, 225 years.

<sup>&</sup>lt;sup>22</sup> Though neither the foundation tablet nor the gold bead bearing the name of this king was in situ (cf. Hall and Woolley, Al-Ubaid, pp. 79 f.), there is no conclusive evidence to disprove the accepted view that the tablet refers to the building the ruins of which were excavated.

 $<sup>^{93}</sup>$  It was this view that led the writer to his search for and discovery of the oval around the temple platform at al- $^{\circ}$ Ubaid (cf.  $Iraq \ V \ 2$ ); it seems, then, to be fairly well substantiated.

<sup>94</sup> Cf. SAOC No. 7, p. 29.

<sup>&</sup>lt;sup>95</sup> The length of this period does not depend upon the absolute chronology adopted. If a lower date for Hammurabi, which seems substantiated by recent evidence, is adopted, all absolute dates given in this table have to be correspondingly lowered. This amounts only to shifting the scale of time in relation to our chart. For instance, if we accept the lowest date yet offered for Hammurabi, Sidney Smith's 1792–1750 (see his *Alalakh and Chronology* [London, 1940] p. 29), we shall have to shift the scale of time by 275 years, as in the extreme left of Fig. 115, and Early Dynastic III will extend from 2775 to 2425 B.C. Dr. Jacobsen informs me that he himself now inclines toward a lower chronology not signally different from those advocated by Smith and Albright.

Next we can try to establish the approximate lengths of Early Dynastic I and II and of the last two phases of the Proto-literate period ("Jamdat Nasr"). By definition the beginning of Early Dynastic II coincides with the building of Sin VIII, which falls, in our chart (Fig. 115), at 3175 B.C. (or 2900 B.C. according to the lower chronology); thus we obtain an approximate length of only 125 years for Early Dynastic II. Early Dynastic I is represented by the whole length of Sin VI and VII and an additional 25 years allowed for the survival of Sin V into the

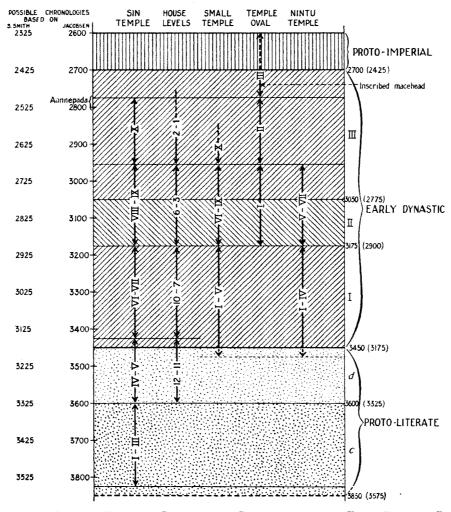


Fig. 115.—Diagram Showing Tentative Dates of the Proto-Literate and Early Dynastic Periods and of Buildings at Khafajah Belonging to Those Periods

Early Dynastic period; its total length thus amounts to 275 years, and it begins at about 3450 (or 3175) B.C. Deducting the 25 years of assumed survival of Sin V into Early Dynastic I from the 175 years represented by Sin IV and V, we obtain 150 years for the latest phase of the Proto-literate period, while Proto-literate c is represented by at least the 225 years of Sin I–III. The arbitrary allowance of 25 years between the beginning of this phase and the founding of the Sin Temple would bring the beginning of Proto-literate c to about 3850 (or 3575) B.C. Since the remains below the Sin Temple suggest contemporaneity with the Warka Archaic Strata V or IV, we may perhaps allow, as a very rough estimate, three more centuries for the

first two phases of the Proto-literate period, which would bring its beginning to about 4150 (or 3875) B.c.

By using the stratigraphic relations between the Sin Temple and other buildings on Mound A we can include in this chart some of the other architectural remains shown in the table at the end of the volume. In the case of the Temple Oval we allow the same length for Oval III as for Oval II. If that is correct, Oval III would have survived through the Proto-imperial period, into the first years of Sargon's reign, <sup>96</sup> an assumption which seems to be supported by the fact that we found Rimush inscriptions immediately above the ruins of Oval III. <sup>97</sup>

We may now see how the rather unexpected results concerning the comparative lengths of the subdivisions of the Proto-literate and Early Dynastic periods tally with facts known from the excavations. According to Figure 115 the whole of Temple Oval II and the whole of Sin X fall approximately in the middle of Early Dynastic III, while Temple Oval I and Sin IX survived about 90 years into Early Dynastic III. The style of statuary found in Sin IX<sup>98</sup> and the inscriptions found there and in Nintu VII seem to support this view. An inscribed macehead dated by Dr. Jacobsen approximately to the time of Eannatum<sup>99</sup> is placed in our chart at 2740 (or 2465), about the middle of his reign. This date falls within the period indicated for Temple Oval III, where, indeed, the macehead was found.

It remains to be seen to what extent an allowance of about 10 per cent for error in each direction in each of the represented periods will affect the general results. Taking Early Dynastic III as fixed and within it the date of 2500 B.c.—according to the lower chronology—as a point of departure, the error allowance would bring the building of Sin X and Temple Oval II to  $2680\pm20$ , that is, still well within Early Dynastic III. Similarly, the beginning of Early Dynastic II would fall at  $2900\pm40$ , that of Early Dynastic I at  $3175\pm70$ , that of Protoliterate c ("Jamdat Nasr") at  $3575\pm100$ , and that of Proto-literate a at  $3875\pm140$ . It is evident that the relative lengths of the various cultural periods would remain practically unaffected by such errors and that even the absolute dates would fluctuate between comparatively narrow limits.

To emphasize once more that our results cannot be regarded in terms of precise dates we may summarize them as follows: If we accept the end of the 25th century B.C. as the approximate date of the end of the Early Dynastic period, we may date the beginning of Early Dynastic III to the first half of the 28th century B.C.; the beginning of Early Dynastic II to between the middle of the 30th and the middle of the 29th century B.C.; the beginning of Early Dynastic I to between the middle of the 33d and the end of the 32d century B.C.; the beginning of the Proto-literate period to between the end of the 41st and the middle of the 38th century B.C.; and in it the beginning of the "Jamdat Nasr" phase to between the beginning of the 37th and the beginning of the 35th century B.C.

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95 Cf. AS No. 11, Table II.
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<sup>97</sup> See OIP LIII 106.

<sup>98</sup> See p. 123 above and OIP XLIV 7.

<sup>99</sup> See OIP LIII 148 f.

<sup>&</sup>lt;sup>100</sup> The 10% margin of error allowed in each direction (see p. 128, n. 86) is, of course, to some extent arbitrary. However, if the principles of our method are fundamentally correct, such a margin is considered to be fairly adequate. If, on the contrary, the principles are erroneous, no larger margin of error will improve the results.

#### CATALOGUE OF OBJECTS FOUND IN THE KHAFAJAH TEMPLES

#### OBJECTS FROM THE SIN TEMPLE GROUPED BY PERIODS AND LOCI

#### BELOW SIN TEMPLE I

Locus	Field No.	Designation	See
Q 42	Kh. IX 235	painted sherd	Pioi
Q 42:39	Kh. IX 49	painted sherd	P
		SIN TEMPLE I	
Q 42	Kh. IX 5-6	flints set in bitumen	M
	7	model boat	M
		A. 633.263 <sup>102</sup>	P
		C. 414.253	p
Q 42:39	Kh. IX 29-30	crescent pendants	Fig. 6 and M
•		B. 413.253	р
		C. 4953 (painted)	P
Q 42:47	Kh. VII 275	cylinder seal	$\mathbf{C}$
•		C. 494.253	Figs. 7-8 and P
		C. 495.253	P
		SIN TEMPLE II	
Q 42	Kh. VIII 270	cylinder seal with loop	e
Q 42:39	Kh. VII 206~8	cylinder seals	$\mathbf{c}$
•	209	seal pendant	C
	210	double stone vessel	M
	212	spacer	M
	213	pendant	M
	214-15	beads	M
	216	amulet	M
	225	cylinder seal	С
	227	long bead	m
	228	game piece	m
	<b>2</b> 31–33	cylinder seals	C.
	234	animal amulet	M
	235	pendant	M
	236	spacer	M
	237	bird amulet	M
	<b>238</b> –39	pendants	M
	246	cylinder seal	C
		B. 041.500	p
		C. 041.500	P
Q 42:40	Kh. VII 276-79	cylinder seals	$\mathbf{C}$
	282	cylinder seal	$\mathbf{C}$
		C. 200.200	$\mathbf{P}$

<sup>101</sup> A letter here indicates the volume in which the object has been or will be published, a capital showing that it is illustrated and a lower-case letter meaning that it is merely catalogued. "C" and "c" stand for Cylinder Seals from the Diyala Region; "M" and "m," for Miscellaneous Objects from the Diyala Region; "MS" and "ms," for More Sculpture from the Diyala Region; "P" and "p," for Pottery from the Diyala Region; and "S," for Sculpture of the Third Millennium B.C. from Tell Asmar and Khafājah (OIP XLIV). Figure numbers refer to figures in the present volume.

 $<sup>^{102}</sup>$  These symbols indicate the forms of vessels, as described in the pottery volume, and replace field numbers.

# THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS

Locus	Field No.	Designation	See
Q 42:41	Kh. VII 255-59 260	cylinder seals cylinder seal	C Even 11 and C
	261-70	cylinder seals	Fig. 11 and C C
	271	cylinder seal	
	272-73	cylinder seals	$^{ m c}_{ m C}$
	274	cylinder seal	Fig. 11 and C
Q 42:44	Kh. VII 254	pendant	m
Q 42:45	Kh. VII 252	pottery boy	M
·		1 V	
		SIN TEMPLE III	
Q 42	Kh. IX 1-3	fish amulets	M
•	4	animal amulet	m
	11	cylinder seal	$\mathbf{c}$
	12	seal loop	c
	15	beetle amulet	M
	201-2	stone bowls	m
Q 42:25	Kh. VII 185	sherd of pink-line ware	P
Q 42:26	Kh. VI 332	shell lamp	m
	333	pottery bird-vase (C. 95—)	Fig. 14 and P
	Kh. VII 84	miniature pot of frit	m
	85-88	long beads	m
	89	pin	m
	90-91	cylinder seals	C
	92	pendant	M
	93-95	cylinder seals	$\mathbf{C}$
	96 97–99	conical object cylinder seals	m C
	100	saw blade	M
	101-3	long beads	m
	104	animal head amulet	M
	105-6	pendants	M
	117	gold crescent	Fig. 6 and M
	118	boar amulet	M
	119	bull amulet	M
	120	fragment of bird amulet	M
	121	pendant	M
	122	bull amulet	M
	123	flat pendant	M
	124-25	cylinder seals	$\mathbf{C}$
	127	cylinder seal	C
	128	cylinder and loop	C
	132	bead hoard	M
	133	scorpion amulet	M
	134	lion amulet	M
	135	bull amulet	M
	136 137	swan amulet flying-bird amulet	M M
	138	cylinder seal	Fig. 11 and C
	139	cylinder seal	C rig. 11 and C
	141	weight(?)	m
	142	knob	m
	143	spindle whorl	m
	144	inlaid bowl	M
	154-57	cylinder seals	C
	158	game piece	m

Locus	Field No.	Designation	See
Q 42:26	Kh. VII 159	animal amulet	M
<b>4</b>	160	fish amulet	M
	161-62	pendants	M
	163	long bead	M
	164	pendant	M
	165	shell	m
	166	spacer	M
	169	spouted stone vessel	M
	170-71	stone bowls	m
	179	stone bowl fragment	m
	182	cylinder seal	c
	183-84	cylinder seals	Č
	217	stone vessel fragment	m
	218	long bead	m
	219-20	pendants	M
	221-23	cylinder seals	C
	224	stone bowl	M
	249	bird amulet	M
		B. 041.500	P
		B. 041.500	p
	•	B. 085.200	p
		B. 415.253	P
		B. 493.253	P
		B. 546.242	P
		C. 305.400	P
		C. 413.253a	P
		C. 413.253 <i>b</i>	P
		C. 414.253	P
		C. 414.253	p
		C. 494.253	p
		C. 4953 (two; painted)	P
		C. 603.253a	P
		C. 603.253b	$\dot{\mathbf{P}}$
		C. 603.270	P
		C. 634.253	P
		C. 634.373	$\dot{ m P}$
		C. 634.373	p
		C. 634.453	P P
		C. 702.253	$\hat{\mathbf{P}}$
Q 42:28	Kh. VII 18	pearl bead	m
<b>4</b>	19	seal pendant	$\ddot{\mathbf{C}}$
	20	cylinder seal	$\tilde{\mathbf{c}}$
Q 42:38		C. 494.273	$\ddot{\mathbf{p}}$
Q 43:17	Kh. VII 187	macehead	m
•	188	stamp seal	M
	189	pendant fragment	M
	190	cylinder seal	C
	191	cylinder seal fragment	c
	192	leopard amulet	M
	193	animal amulet	M
	194	fish amulet	M
	195	bird amulet	M
	196	pendant	M
	197	bird amulet	M
	198	pendant	M
	199	ring pendant	M
		O F	

Locus	Field No.	Designation	See
Q 43:17	Kh. VII 200-201	pendants	M
	202-4	frog amulets	M
	205	pin	m
	229	fish amulet	M
		SIN TEMPLE III OR IV	
Q 42	Kh. VIII 47-48	cylinder seals	C
	49	mouse amulet	M
	50	spatulate pendant	. M
	52	conical pendant lion amulet	M M
	53 54	non amulet pendant	M M
	55	dog amulet	M
	57	frog amulet	M
	58	lion amulet	M
	59	pendant	M
	60	spatulate pendant	M
	62	claw amulet	$\mathbf{M}$
	63	cylinder seal	$\mathbf{C}$
	65	game piece	m
	67	3 long beads	M
Q 42:24		C. 455.253	P
		C. 603.253a	P
		SIN TEMPLE IV	
Q 42:16	Kh. VII 45	stone bird-vase	M
-	46	carved vase fragments	m
	48	carved vase fragments	M
	49	flying-bird amulet	M
	50	3 buttons	M
	51	pendant fragment	M
	52-53	animal amulet fragments	M
	54	fly amulet	M
	55 50	seal loop	c M
	56 57	fly amulet fragment frog amulet fragment	M
	57 58	fish amulet	M
	59	tortoise amulet	M
	60	cylinder seal	C
	61	bead	M
	62	pendant	M
	63	ring pendant	M
	64	bead	M
	65	eyeball	M
	80	bird amulet fragment	M
	81	ring pendant	M
	82	fish amulet	M
	83	claw amulet	M
	130-31	sherds of pink-line ware	P
	168	figurine fragment	m
		E. 204.010	p
Q 42:19	Kh. V 302-3	double fish amulets	M
	304	pendant	M
	305	fish amulet	M M
	306	pelican amulet	M

# 140

Locus	Field No.	Designation	See
Q 42:19	Kh. V 307-8	cylinder seals	C
	344	cylinder seal	C
0.40.04	348	cylinder seal	C
Q 42:24	Kh. V 340-41	cylinder seals	$\mathbf{c}$
	343	cylinder seal	$\mathbf{c}$
	347	cylinder seal	$\mathbf{C}$
	350	cylinder seal	$\mathbf{c}$
	352	cylinder seal	$\mathbf{C}$
•	Kh. VI 1-3	cylinder seals	$\mathbf{C}$
	4	pendant	M
	5	animal amulet	M
	6a-b	ring pendants	M
	7	claw amulet	M
	8	seal loop	C
ı	9-10	pendants	M
	11	bead	M
	12	inlay	M
	13a-h	necklaces	M
	13j	necklace	M
	14	cylinder seal	C
	15	animal amulet fragment	M
	16	cylinder seal	C
	21	animal amulet	M
	159-93	cylinder seals	$\mathbf{c}$
	194	cylinder seal	c
	195-200	cylinder seals	C
	202-14	cylinder seals	C
	216-19	cylinder seals	$\mathbf{C}$
	220-21	animal amulets	M
	222	bird amulet	M
	223-24	long pendants	M
	225-28	leopard amulets	M
	229	miniature stone vase	M
	230	human amulet	<u>M</u>
	231	game piece	M
	232	small bull's head	M
	233	claw amulet	M
	234	animal amulet	M
	235	bead with animal heads	M
	236 237-41	animal amulet	M
		pendants	M
	242-43	hut symbols	Fig. 24 and M
	244-48 249	animal amulets ram amulet	M
	250-52		M
	253-54	animal amulets bird amulets	M
	255		M
	256	seal loop	C
	257-58	pendant fish amulets	M
	257-38 259	nsn amulets bird(?) amulet	M
	260-62		M
	263	pendants tortoise amulet	M
	264-69	fish amulets	M
	204-09 270-72	nsn amulets animal amulets	M
	273-75		M
	276-77	dog amulets long beads	M
	410-11	iong beaus	M

Locus	Field No.	Designation	See
Q 42:24	Kh. VI 278	pendant	M
	279	animal amulet	M
	280-81	fish amulets	$\mathbf{M}$
	282	animal amulet	M
	283	long bead	$\mathbf{M}$
	284	stone jar	m
	285-90	stone bowls	M
	291	fish amulet	$\mathbf{M}$
	292	bird amulet	M
	293	long pendant	$\mathbf{M}$
	294	pendant	m
	295	frog amulet	M
	296	pendant	M
	297	frog amulet	M
	298-300	fish amulets	M
	301	pendant	M
	302-4	bird amulets	M
	305	animal amulet	m
	306-7	seal loops	$\mathbf{C}$
	308	pendant	M
	309	cylinder seal	C
	310	flat stone bowl	M
	311-12	palettes	M
	313-15	stone bowls	$\mathbf{M}$
	316-17	multiple stone vessels	M
	318-19	stone troughs	M
	320	stone jar	m
	321	stone tumbler fragment	M
	322	stone pot with lugs	M
	324	stone pot with handle and lugs	M
	325	female statuette	Fig. 23 and MS
	326	stone pot with handle and lugs	M
	327	stone jar	m
	338	carved vase	M
	340-70	cylinder seals	C
	372	shell lamp	M
	373	stone bowl with inlay	Fig. 26 and M
	374	stone cup with inlay	M
	375	inlaid lid	M
	376	double stone vessel	M
	377	stone bowl fragment	m
	378-79	maceheads	m
	380	clay knob covered with bitumen	m
	381-82	cylinder seals	$\overline{\mathbf{C}}$
	383	seal loop	$ar{\mathbf{c}}$
	384	cylinder seal	Č
	385	animal amulet	M
	386	fish amulet	M
	387	bird amulet	M
	388-89	cylinder seals	$\ddot{\mathbf{c}}$
	390	animal amulet	M
	391-409	strings of beads	m
	411	pottery bull-vase (C. 96—)	Fig. 25 and P
	412	sherd with bears	M M
	413-50	cylinder seals	C
	454	stone jar fragment	M
	***		

Locus	Field No.	Designation	See
Q 42:24	Kh. VI 455	cylinder fragment	c 2.5
	466	inlaid vase	M
	467	fayence bowl	m
	468	inlaid bowl	m M
	Kh. VII 2	long bead	M
	3	long pendant	M C
	4	cylinder seal	M
	5	bull amulet	
	6	fish amulet	M M
	140	triple stone vase	M P
		B. 516.273	P P
4	Kh. VII 240	C. 654.222	-
dump	241	cylinder seal animal amulet	e M
	241		W
		SIN TEMPLE V	
Q <b>42</b> :13	Kh. V 123	cylinder seal	$\mathbf{C}$
	210	cylinder seal	$\mathbf{C}$
Q 42:14	Kh. V 265	cylinder seal	$\mathbf{C}$
	269	cylinder seal	$\mathbf{C}$
		B. 071.500	$\mathbf{p}$
Q 42:15	Kh. V 194	miniature frit pot	M
	255	cylinder seal	e
	297	female figurine	M
	362	bull's head	M
		shoulder of large vase with monochrome decoration	P
		fragment of shoulder and rim of vase with monochrome decoration	P
		fragment of shoulder and rim of polychrome vase	P
		C. 202.200	p
Q 42:16	Kh. VII 108	pendant	M
Q 42:17	Kh. V 358	female figurine fragment	M
•	Kh. VII 1	cylinder seal	$\mathbf{C}$
		C. 533.313	P
		C. 533.313	p
Q 42:19	Kh. V 259	cylinder seal	Ċ
•	260	2 animal amulets and beads	Fig. 32 and M
	261-62	necklaces	M
	263	fish amulet	$\mathbf{M}$
	264	cylinder seal	C
	267	decorated miniature bowl of frit	M
	272	carved vase	Fig. 33 and M
	337	cylinder seal	$\mathbf{C}$
	339	cylinder seal	$\mathbf{C}$
	345	stamp seal	m
	346	cylinder seal	C
	351	cylinder seal	c
	353	cylinder seal	C
		fragment of polychrome theriomorphic vase (C. 96)	P
		knoblike polychrome fragment	P
R 42	Kh. V 257	female figurine fragment	M
in wall	Kh. VII 247	bull amulet	m
	248	cylinder seal	C
		-	

		SIN TEMPLE VI	
Locus	Field No.	Designation	See
Q'42:9	Kh. V 139	cylinder seal	$\mathbf{C}$
Q 42:11		C. 202.200	p
•		C. 545.320	p
R 42		C. 357.010	p
		SIN TEMPLES VI-VII	
0.49.0	IZL Wins ne	cylinder seals	$\mathbf{C}$
Q 42:9	Kh. V 175-76	·	C
0.40.11	191	cylinder seal	-
Q 42:11	Kh. V 140	bitumen cylinder seal covered with copper	c C
	143	cylinder seal animal amulet	M
	145		
	146	imitation shell	m
	147	animal amulet	M
0.40.40	209	statuette	$\mathbf{s}$
Q 42:12	Kh. V 142	cylinder seal	C
R 42:9	Kh. V 170	cylinder seal	C
		SIN TEMPLE VII	
Q 42:11	Kh. V 209	statuette	$\mathbf{s}$
Q 42:12	Kh. IV 184	cylinder seal	$\mathbf{C}$
•	188	leopard amulet	$\mathbf{M}$
R 42:9	Kh. V 149	cylinder seal	$\mathbf{C}$
	160	two black burnished sherds	P
R 42:10	Kh. V 189-90	cylinder seals	$\mathbf{C}$
		SIN TEMPLE VIII	
P 42:7	Kh. IV 56	pendant	M
1 42.7	Kn. IV 50 57	animal amulet	M
		animal amulet	
0.49.1	491 Kh. IV 50	bull amulet	m M
Q 42:1		double stone vessel	M
	$\begin{array}{c} 51 \\ 72 \end{array}$		
		pupil of statue eye	m
	73-75	beads	$f m \ M$
	76	pendant	
	210	two beads	m
	487	animal amulet	m
	489-90	pendants	M
	493	animal amulet	M
	494	female figurine fragment	m
0.40.0	496	claw amulet	m
Q 42:2	Kh. IV 305	statue feet	ms
	306	statue fragment	ms
	307	statue fragment	S
	308	statue feet	$\mathbf{s}$
	309-10	statue feet	ms
	311	statue fragment	ms
	312	face fragment	S
	313	inlay figure	M
	314	double stone vessel	M
	315	stone vase	$\mathbf{M}$
	317	three long beads	M
	Kh. V 93	spindle whorl	M
Q 42:3	Kh. V 71	fly amulet	M

Locus	Field No.	Designation	e
Q 42:3	Kh. V 95	cylinder seal	See C
Q 22.0	99-100	cylinder seals	$\ddot{\mathbf{c}}$
	101	bird amulet	M
	102	animal stamp seal	M
	103-4	fish amulets	M
	105	copper figurine	M
	106	cylinder seal	Č
	116a	animal amulet	M
	119	cylinder seal	C
Q 42:5	Kh. IV 455	animal amulet	M
	Kh. V 94	animal figurine	M
Q 42:6	Kh. IV 181	large bead	M
Q 42:7	Kh. IV 436	group of shells	m
•	437	stamp seal	M
	439	clay horn	m
	440	bull amulet	M
	441	pig amulet	M
	442	leopard amulet	M
	443	lion amulet	M
	444	male head	ms
	445	male head	s
	446	boar amulet	m
	447	animal stamp seal	M
	448	mouse amulet	m
	449	male head	ms
	450-53	female heads	ŝ
	454	statuette fragment	ms
	467	male head	S
	468	carved vessel	M
	469	lipped stone vessel	M
	470-71	stone tumblers	M
	472	double stone vessel	M
	Kh. V 85	stamp seal	M
	86	bird amulet	M
	Kh. VI 30	eylinder seal	C
R 41:2	Kh. V 184	pronged copper object	M
R 42:2	Kh. IV 321	seated statue	$\mathbf{s}$
	329	stone sherd	M
	330	human figurine	m
	333	cylinder seal	C
	340	copper cup	m
	344	stone animal vessel	M
	345	ax	M
	346-47	female heads	$\mathbf{s}$
	348	female head	ms
	349	female head	$\mathbf{s}$
	351-52	female heads	$\mathbf{s}$
	354	two seated figures	s
	355	statue fragment	ms
	356	statue fragment	S
	357	statue fragment	ms
	358	female statue	MS
	359	female statue	S
	363	statue fragment	ms
	364	female statue	s
	375	pendant	m

# THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS Field No. Designation See Wh. 1V 280

Locus	Field No.	Designation	See
R 42:2	Kh. IV 389	plaque fragment	S
10 12.2	390	stone vase	M
	391	basket-like clay vessel	P
	392	plaque fragment	s
	393	stone fragment decorated with relief	$\mathbf{M}$
	418	female head	Š
	419	flying-bird amulet	m
	476	cult wagon (C. 99—)	Figs. 48-49 and
	110	cuit wagon (C. Do . )	M and P
	Kh. V 68	inscribed lion-headed bird	Fig. 204 and M
	1211, 1 00	E. 205.310	p
R 42:4	Kh. IV 334	cylinder seal	C
10 12.1	374	bone spoon	m
	Kh. V 78	two seated figures	š
	24	two scaled lightes	
		SIN TEMPLES VIII-IX	
Q 43:11	Kh. IV 145	gold bull pendant	m
	146	nine gold beads	m
		SIN TEMPLE IX	
P 42:7	Kh. IV 59-59a	stone bowl fragments	$\mathbf{M}$
Q 42	Kh. VIII 51	cylinder seal	$\mathbf{C}$
Q 42:2	Kh. IV 53	male head	$\mathbf{s}$
	63	three beads	m
	67	statue fragment	ms
Q 42:3	Kh. IV 94	inlay figure	M
	9596	stone stands	M
	97	statue fragment	ms
	98-100	head fragments	ms
	101-5	statue fragments	ms
	106–7	statues	$\mathbf{S}$
	108-9	statue fragments	ms
	110	seated statue	$\mathbf{s}$
	111-12	statues	MS
	113-14	statue fragments	ms
	115-16	statue fragments	$\mathbf{S}$
	117-19	statue fragments	ms
	120-22	statue feet	ms
	123-25	statue feet	S
	126 (head)	male statue, inscribed	s
	127	multiple stone vessel	M
	128	ram figurine	M
	130	bird amulet	M
	134	statuette	ms
	136	carved double vessel	M
	152	female head	$\mathbf{s}$
	157	female head	ms
	161	dog figurine	m
	207	statuette back of head	ms
	215		ms
	233 234	statue fragment	ms
		statue feet	ms ម
	237 (head) 262	male statue female statue	S S
	262 264	male head	MS
	2072	male nead	MIN

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Locus Q 42:3	Field No. Kh. IV 265-66	Designation female heads	See
Q 42.3	267		S
	268	multiple stone vessel	M
	Kh. V 154 <sup>103</sup>	female head	s s
	Kn. v 154-**	copper bull's head	
0.49.4	Kh. IV 65	B. 067.700	p M
Q 42:4	69	carved vessel fragment	M
	80	carved bowl fragment	M
	83	statue arm animal amulet	ms M
			. M
	129	head fragment female head	S
	131	male bust	S
0.40.7	151 V. IV 107 00		S
Q 42:5	Kh. IV 185-86	copper rings	m
Q 42:7	Kh. IV 179 212	animal amulet male head	m e
	212 214	female head	$\mathbf{s}$
	214 216	female head	$rac{\mathbf{s}}{\mathbf{s}}$
		female bust	
	220		ms
	237 (body) 239	male statue	S
	239 240	plaque fragment female statue	$rac{\mathbf{s}}{\mathbf{s}}$
	241		
	242	statue fragment inscribed statue	ms S
	242 243	male statue	s S
	243 244	female statue	
	244 245	female statue	ms
	246 246	female statue	S
	240 247	female statue	ms e
	247 248	male statue	$rac{\mathbf{s}}{\mathbf{s}}$
	246 249	male bust	s S
	250	female statue	S
	251	male statue	S
	252-53	female statues	s
	252~55 254	ram amulet	M
	255~56	animal amulets	M
	257	lion's head amulet	M
	258~59	mouse amulets	M
	260 260	calf amulet	M
	261	male statue	S
	276	ram figurine	M
	277 277	stone bird-vase	M
	278	calf amulet	M
	279	pig amulet	M
	280	ram	s
	281	claw amulet	M
	282	claw(?) amulet	M
	283	stamp seal	M
	284	animal stamp seal	M
	285	animal stamp sear	M
	28689	female heads	S
	290-91	female heads	ms
	292-94	female heads	S
	295	male statue	S
	297	male head	ms
	₩¢.	made nead	1115

103 In wall.

THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS

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#### Locus Field No. Designation Kh. IV 298-99 Q 42:7 male heads $\mathbf{S}$ $\mathbf{S}$ 300afemale statue 301 statue fragment ms 302 - 3female statues S 304 statuette ms 331 base of stone vase m 332 animal stamp seal M 360 - 62statue fragments ms 365-66 female heads $\mathbf{s}$ pierced stone M 367 A. 402.200 p C. 025.200 р Q 43:11 Kh. IV 66 female head $\mathbf{S}$ 132 carved vessel fragment $\mathbf{M}$ 133 plaque fragment $\mathbf{S}$ 143 small statue ms 144 carved cup M carved vase fragment Fig. 63 and M 156 R 42:1 Kh. IV 323 male head $\mathbf{s}$ $\mathbf{S}$ 466 female head R 42:2 Kh. IV 126 (body) male statue, inscribed $\mathbf{s}$ 171 long bead $\mathbf{M}$ 173 large bead M 174 ram amulet M eyeball 175 m stone stand 180 M 189 stone jar m 192 statue fragment ms 193 animal amulet m 200 inscribed statue arm ms 208 ram amulet M 209 puzu head M 211 inlay figure M 263spouted copper vessel M **2**69 male head $\mathbf{s}$ 272 statue fragment ms 273 plaque $\mathbf{S}$ 274 plaque fragment $_{\rm ms}$ 300bfemale head $\mathbf{S}$ female heads $\mathbf{S}$ 341-42 cylinder seal C 381 Kh. V 278 stone bowl fragments m E. 205.310 (two) p E. 225.310 p R 42:4 Kh. IV 335 female head $\mathbf{S}$ 337 8 beads $\mathbf{m}$ SIN TEMPLES IX-X Q 42:5 Kh. IV 138 pottery rattle $\mathbf{m}$ R 42:3 Kh. IV 187 double puzu head M SIN TEMPLE X Q 42:5 Kh. IV 137 P gray incised and stippled sherd R 41:1 Kh. IV 320 calf amulet M

cylinder seal

C

Locus	Field No.	Designation	See
R 42:3	Kh. IV 158	large bead	M
	170	female head fragment	ms
	201	gold bead	m
	202	ring pendant	M
	223	beads	M
	225	bead	M
	226	animal amulet	M
	227	incised stone	m
	228	Imdugud fragment	M
	229	lion amulet	m
	230	pendant	m
	238	gold ribbon	m
	339	mirror	m
R 42:4	Kh. IV 326	ram's head	m
R 42:15	Kh. IV 147	bull amulet	M
	148	lamb amulet	M
	153	puzu head	M
	154-55	bull amulets	$\mathbf{M}$
	160	stone stand fragment	m
	164	puzu head	M
	165 19596	bead	M M
	195~96	long beads	
	197	pronged copper object pendant	m M
	203	pendant bead	m
R 42:17	Kh. IV 385	amulet	M
11 74.17	386	silver ring	M
	<b>3</b> 00	A. 014.703	P
R 42:18	Kh. IV 218	cylinder seal	ė
	219	long bead	M
	376	fragment of copper ax blade	m
	377	copper spearhead(?)	m
	378	copper pin	m
	387	gold ring	m
	388	12 beads	m
R 43:2		B. 514.570	P
		B. 756.521	p
		UNCERTAIN LEVEL <sup>104</sup>	
Q 42	Kh. VII 7	calf amulet	М
Q 42	8-9	cylinder seals	C
		•	
Oı	BJECTS FROM THE NI:	NTU TEMPLE GROUPED BY PERIODS A	nd Loci
		NINTU TEMPLE III	
Q 45:9 (in altar)	Kh. IX 19	stone vase with rim	M
		NINTU TEMPLE IV	
Q 45:7	Kh. IX 239	clay sickle fragment	m
		NINTU TEMPLE V	
Q 45:4	Kh. VIII 115 (head)	male statue	MS
	245	macehead	m
	247-48	maceheads	m
104 Probably Sin	IV.		

# THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS

	DI 11 17		0
Locus Q 45:4	Field No. Kh. VIII 252	Designation macehead	See M
Q 10.1	254	macehead	m
	258	male statue fragment	Fig. 86 and MS
	259	male statue	Fig. 86 and MS
	260	cross-legged statue	MS
	261	male statue	Fig. 86 and MS
	262	male statue fragment	Fig. 86 and MS
	263-64	male statues	Fig. 86 and MS
	265	male statue fragment	MS
	267 <i>a</i> -b	plaque fragments	MS
	268	small copper bull	$\mathbf{M}$
	272	male statue	$\mathbf{MS}$
	275	male statue fragment	MS
	277	macehead	$\mathbf{m}$
	278	stone hammer	m
Q 45:12	Kh. VIII 273	stone vessel pedestal	m
		NINTU TEMPLE VI	
P 45:51	Kh. IX 56	bull's head	MS
	57	mouse amulet	$\mathbf{M}$
	62	head	MS
	63	male head	MS
	68	male statue	MS
	117	female statue	MS
	118-21	maceheads	m
	122	hemispherical macehead	m
	123	bearded cow	Fig. 72 and MS
	124	human-headed bull protoma	MS
	174	male statue fragment	MS
P 45:52	Kh. IX 175-76	male heads	MS
	177	female head	MS
	178	headless female statue	MS
	179	headless male statue	$\mathbf{m}\mathbf{s}$
	195	female head	MS
Q 44:15	Kh. VIII 45	male statue	Fig. 76 and MS
	97	male head	MS
Q 45	Kh. IX 214	spearhead	M
Q 45:4	Kh. VII 153	carved macehead	M
	Kh. VIII 1-4	maceheads	m
	5 (half)	male statue	MS
	6 (half)	male statue fragment	MS
	9	macehead	m
	10	stone pot	m
	11	stone hammer	m
	12	macehead	m
	13-14	male heads	MS
	15	male head fragment	ms
	16	cylinder seal	c G
	17	cylinder seal	C
	18	mother-of-pearl ring fragment	M
	22	macehead	m
	23	staff head	m
	24	knob	m
	25	male head	MS
	26	relief fragment	MS

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Locus	Field No.	Designation	See
Q 45:4	Kh. VIII 27	macehead	m
	34-35	weights	m
0.45.5	240	body of animal	MS
Q 45:7	Kh. VIII 117	copper wrestlers	Fig. 77 and MS
	233	2 stone bowls	m
	234-38	maceheads	m
0.48.40	244	macehead	m
Q 45:12	Kh. VIII 5 (half)	male statue	MS
	6 (half)	male statue fragment	MS
	7	male statue, inscribed	MS
	8	male statue	MS
	41	spindle whorl	m
	44	double-edged flint blade	m
	46	double stone pot fragment	m
	114	male statue	MS
	115 (body)	male statue	MS
	116	male statue	MS
	119	spouted copper bowl	M
	120-34	maceheads	$\mathbf{m}$
	135	decorated macehead	$\mathbf{M}$
	136-59	maceheads	m
	160	male statue	MS
	161	rosette inlay	m
	183	relief fragment	MS
	191	cylinder seal	$\mathbf{C}$
	256	macehead	m
	Kh. IX 10	cylinder seal	$\mathbf{C}$
	13	cylinder seal	$\mathbf{C}$
	80-82	maceheads	m
		B. 001.200a (two)	p
		B. 416.371	P
		NINTU TEMPLE VII	
P 45:3 (beneath) P 45:6 and 12	Kh. IX 75	plaque fragment	MS
(beneath)	Kh. III 1207	fragment of inscribed plaque105	$\mathbf{s}$
Q 45 (surface)	Kh. I 71	sherd with impressed decoration	P
• . (		В. 002.200	p
		B. 675.220	p p
Q 45	Kh. IX 51	shell macehead	M M
•	<b>52</b>	stone hammer-ax	M
	53	macehead	m
	54	stone hammer	M
Q 45:4	Kh. III 820	macehead	m
	906	plaque fragment	S and MS
	907	duck weight	m
	908	stone hammer	M
	911-14	statue fragments	ms
	915	worked stone	M
	916-17	statue fragments	ms
	918	statue fragment	S
	919	statue fragment	ms
	920	seated statue	S
			₩.

 $<sup>^{106}</sup>$  Other fragments of this plaque were found in the seventh season, mostly in Q 45:3.

P

Locus         Field No.         Designation         See           Q 45:4         Kh. III 923         male statue         S           947         stone hammer         M           948         macehead fragment         m           959         plaque fragment         MS           971         male head         S           1000         female statue         S           1001         statue fragment         S           1002         male statue, headless         S	S
947         stone hammer         M           948         macehead fragment         m           959         plaque fragment         MS           971         male head         S           1000         female statue         S           1001         statue fragment         S	3
948         macehead fragment         m           959         plaque fragment         MS           971         male head         S           1000         female statue         S           1001         statue fragment         S	5
959         plaque fragment         MS           971         male head         S           1000         female statue         S           .         1001         statue fragment         S	
971         male head         S           1000         female statue         S           .         1001         statue fragment         S	
1000 female statue S 1001 statue fragment S	
. 1001 statue fragment S	
O CONTRACTOR OF THE CONTRACTOR	
1002 male statue, headless S	
the state of the s	
male statue fragments ms	
1004 unfinished head S	
1005 plaque fragment ms	
1006-8 statue fragments S	
1009 plaque fragment S	
1010 macehead m	
1011 carved macehead M	
male head S	
1013 animal supporting cup M	
1014 half perforated macehead m	
1015 plaque fragment S a	and MS
1017 male head S	
1018 back of head S	
1019 male head S	
1020 part of face ms	
1021 male head S	
1022 torso ms	
1023 animal head M	
1054 cylinder seal C	
1055 fragment of animal stamp seal m	
Q 45:7 Kh. VIII 196 macehead m	
198 blade m	
202 statue fragment MS	3
203 cylinder seal C	
204 bull's head MS	3
205 relief fragment ms	
206 statue fragment ms	
207-12 maceheads m	
221 statue fragment MS	i
222 cylinder seal C	,
223 bird amulet M	
228 bone chisel m	
230 cylinder seal c	
C. 504.367 P	
Q 45:12 Kh. VIII 19 male head fragment Ms	3
Q 2012W AND THAT AV HORE HEAVE HAGHERY	,

# Objects from the Small Temple in O 43 Grouped by Periods and Loci

#### SMALL TEMPLE I

shoulder and rim of large polychrome vase

		SMALL TEMPLE III	
O 43:21	Kh. V 211	bead	m
	212	cylinder seal	c
	213-14	beads	m
	215	stamp seal	M
	216	bead	m

O 43:35

Locus	Field No.	Designation	See
O 43:21	Kh. V 217	animal amulet	M
	218-19	beads	m
	220	animal amulet	M
	221	bird amulet	$\mathbf{M}$
	222-24	animal amulets	M
	225-27	shells	$\mathbf{m}$
	228	pendant	M
	229	mother-of-pearl ornaments	m
	230	shell	$\mathbf{m}$
	231-32	pebbles	nı
		SMALL TEMPLE VI	
O 43:16		B. $664.520c$	P
		C. 234.000	P
O 43:21	Kh. V 173	pottery bird-vase (C. 95)	Fig. 99 and P
		SMALL TEMPLE VIII	
0 43:11	Kh. V 19	weight	m
0 10.11	22	stamp seal	M
		C. 404.362 (two)	P
O 43:16		B, 025,210	P
O 43:17	Kh. V 96	stamp seal	M
0 10	120	pig amulet	M
	121a	pronged copper object	m
		SMALL TEMPLE IX	
O 43:11	Kh. V 14	sculptured bowl	Fig. 98 and M
		B. 002.200b (five)	p
		C. 032.304	P
O 43:16		E. 303.010	P

# THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS

# OBJECTS IN ORDER OF FIELD NUMBERS WITH INDICATION OF LOCI AND PERIODS

Field No.	Locus	Temple and Period	Field No.	Locus	Temple and Period
Kh. I 71	Q 45	Nintu VII	Kh. IV 180	R 42:2	Sin IX
Kh. III 820	Q 45:4	Nintu VII	181	Q 42:6	Sin VIII
906-8	Q 45:4	Nintu VII	184	Q 42:12	Sin VII
911-20	Q 45:4	Nintu VII	185-86	Q 42:5	Sin IX
923	Q 45:4	Nintu VII	187	R 42:3	Sin IX-X
947-48	Q 45:4	Nintu VII	188	Q 42:12	Sin VII
959	Q 45:4	Nintu VII	189	R 42:2	Sin IX
971	Q 45:4	Nintu VII	192-93	R 42:2	Sin IX
1000-1015	Q 45:4	Nintu VII	195-98	R 42:15	Sin X
1017-23	Q 45:4	Nintu VII	200	R 42:2	Sin IX
1054-55	Q 45:4	Nintu VII	201-2	R 42:3	Sin X
1207	P 45:6 and 12		203	R 42:15	$\mathbf{Sin} \ \mathbf{X}$
Kh. IV 50-51	Q 42:1	Sin VIII	207	Q 42:3	Sin IX
53	Q 42:2	Sin IX	208-9	R 42:2	Sin IX
56-57	P 42:7	Sin VIII	210	Q 42:1	Sin VIII
59-59a	P 42:7	Sin IX	211	R 42:2	Sin IX
63	Q 42:2	Sin IX	212	Q 42:7	Sin IX
65	Q 42:4	Sin IX	214	Q 42:7	Sin IX
66	Q 43:11	Sin IX	215	Q 42:3	Sin IX
67	Q 42:2	Sin IX	216	Q 42:7	Sin IX
69	Q 42:4	Sin IX	218-19	R 42:18	Sin X
72-76	Q 42:1	Sin VIII	220	Q 42:7	Sin IX
80	Q 42:4	Sin IX	223	R 42:3	Sin X
83	Q 42:4	Sin IX	225-30	R 42:3	Sin X
94-125	Q 42:3	Sin IX	233-34	Q 42:3	Sin IX
126	Q 42:3 and	Sin IX	237	Q 42:3 and 7	Sin IX
	R 42:2		238	R 42:3	$\mathbf{Sin} \ \mathbf{X}$
127-28	Q 42:3	Sin IX	239-61	Q 42:7	Sin IX
129	Q 42:4	Sin IX	262	Q 42:3	Sin IX
130	Q 42:3	Sin IX	263	R 42:2	Sin IX
131	Q 42:4	Sin IX	264-68	Q 42:3	Sin IX
132-33	Q 43:11	Sin IX	269	R 42:2	Sin IX
134	Q 42:3	Sin IX	272-74	R 42:2	Sin IX
136	Q 42:3	Sin IX	276-95	Q 42:7	Sin IX
137	Q 42:5	Sin X	297-99	Q 42:7	Sin IX
138	Q 42:5	Sin IX-X	300a	Q 42:7	Sin IX
143-44	Q 43:11	Sin IX	300b	R 42:2	Sin IX
145-46	Q 43:11	Sin VIII-IX	301-4	Q 42:7	Sin IX
147-48	R 42:15	Sin X	305-15	Q 42:2	Sin VIII
151	Q 42:4	Sin IX	317	Q 42:2	Sin VIII
152	Q 42:3	Sin IX	320	R 41:1	$\operatorname{Sin} \mathbf{X}$
153-55	R 42:15	Sin X	321	R 42:2	Sin VIII
156	Q 43:11	Sin IX	323	R 42:1	Sin IX
157	Q 42:3	Sin IX	326	R 42:4	$\operatorname{Sin} \mathbf{X}$
158	R 42:3	Sin X	329-30	R 42:2	Sin VIII
160	R 42:15	Sin X	331-32	Q 42:7	Sin IX
161	Q 42:3	Sin IX	333	R 42:2	Sin VIII
164-65	R 42:15	Sin X	334	R 42:4	Sin VIII
170	R 42:3	Sin X	335	R 42:4	Sin IX
171	R 42:2	Sin IX	337	R 42:4	Sin IX
173-75	R 42:2	Sin IX .	339	R 42:3	Sin X
179	Q 42:7	Sin IX	340	R 42:2	Sin VIII

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Field No.	Locus	Temple and Period	Field No.	Locus	Temple and Period
Kh. IV 341-42	R 42:2	Sin IX	Kh. V 175-76	Q 42:9	Sin VI-VII
344-49	R 42:2	Sin VIII	184	R 41:2	Sin VIII
351-52	R 42:2	Sin VIII	189-90	R 42:10	Sin VII
354-59	R 42:2	Sin VIII	191	Q 42:9	Sin VI-VII
360-62	Q 42:7	Sin IX	194	Q 42:15	Sin V
363-64	R 42:2	Sin VIII	209	Q 42:11	Sin VI-VII
365-67	Q 42:7	Sin IX	210	Q 42:13	Sin V
370	R 41:1	Sin X	211-32	O 43:21	Small Temple III
374	R 42:4	Sin VIII	255	Q 42:15	Sin V
375	R 42:4	Sin VIII	257	R 42	Sin V
376–78	R 42:18	Sin X	259-64	Q 42:19	Sin V
381	R 42:16	Sin IX	265	-	
385-86	R 42.2 R 42:17	Sin X	267	Q 42:14	Sin V
	R 42:17	Sin X	267 269	Q 42:19	Sin V
387-88				Q 42:14	Sin V
389~93	R 42:2	Sin VIII	272	Q 42:19	Sin V
418–19	R 42:2	Sin VIII	278	R 42:2	Sin IX
436-37	Q 42:7	Sin VIII	297	Q 42:15	Sin V
439-54	Q 42:7	Sin VIII	302-8	Q 42:19	Sin IV
455 466	Q 42:5	Sin VIII	337	Q 42:19	Sin V
466	R 42:1	Sin IX	339	Q 42:19	Sin V
467-72	Q 42:7	Sin VIII	340-41	Q 42:24	Sin IV
476	R 42:2	Sin VIII	343	Q 42:24	Sin IV
487	Q 42:1	Sin VIII	344	Q 42:19	Sin IV
489-90	Q 42:1	Sin VIII	345-46	Q 42:19	Sin V
491	P 42:7	Sin VIII	347	Q 42:24	Sin IV
49394	Q 42:1	Sin VIII	348	Q 42:19	Sin IV
496	Q 42:1	Sin VIII	350	Q 42:24	Sin IV
Kh. V 14	O 43:11	Small Temple IX	351	Q 42:19	Sin V
19	O 43:11	Small Temple VIII	352	Q 42:24	Sin IV
22	O 43:11	Small Temple VIII	353	Q 42:19	Sin V
35	uncertain	Sin IX	358	Q 42:17	Sin V
68	R 42:2	Sin VIII	362	Q 42:15	Sin V
71	Q 42:3	Sin VIII	Kh. VI 1~16	Q 42:24	Sin IV
78	R 42:4	Sin VIII	21	Q 42:24	Sin IV
<b>85</b> –86	Q 42:7	Sin VIII	30	Q 42:7	Sin VIII
93	Q 42:2	Sin VIII	159-200	Q 42:24	Sin IV
94	Q42:5	Sin VIII	202-14	Q 42:24	Sin IV
95	Q 42:3	Sin VIII	216-322	Q 42:24	Sin IV
96	O 43:17	Small Temple VIII	324-27	Q 42:24	Sin IV
99-106	Q 42:3	Sin VIII	332-33	Q 42:26	Sin III
116a	Q 42:3	Sin VIII	338	Q 42:24	Sin IV
119	Q 42:3	Sin VIII	340-70	Q 42:24	Sin IV
120	O 43:17	Small Temple VIII	372-409	Q 42:24	Sin IV
121a	O 43:17	Small Temple VIII	411-50	Q 42:24	Sin IV
123	Q 42:13	Sin V	454-55	Q 42:24	Sin IV
139	Q 42:9	Sin VI	466-68	Q 42:24	Sin IV
140	Q 42:11	Sin VI-VII	Kh. VII 1	Q 42:17	Sin V
142	Q 42:12	Sin VI-VII	2-6	Q 42:24	Sin IV
143	Q 42:11	Sin VI-VII	7-9	Q 42	Sin Temple
145-47	Q 42:11	Sin VI-VII	18-20	Q 42:28	Sin III
149	R 42:9	Sin VII	45-46	Q 42:16	Sin IV
154	Q 42:3	Sin IX	48-65	Q 42:16	Sin IV
160	R 42:9	Sin VII	80-83	Q 42:16	Sin IV
170	R 42:9	Sin VI-VII	84-106	Q 42:26	Sin III
173	O 43:21	Small Temple VI	108	Q 42:16	Sin V

# THE KHAFAJAH TEMPLES: CATALOGUE OF OBJECTS

Field No.         Locus         Temple and Period         Field No.         Locus         Temple and Period           Kh. VII 117-25         Q 42:26         Sin III         Kh. VIII 116         Q 45:12         Nintu VI           127-28         Q 42:26         Sin III         117         Q 45:7         Nintu VI           130-31         Q 42:16         Sin IV         119-61         Q 45:12         Nintu VI           132-39         Q 42:26         Sin III         183         Q 45:12         Nintu VI           140         Q 42:24         Sin IV         191         Q 45:12         Nintu VI           141-44         Q 42:26         Sin III         196         Q 45:7         Nintu VII	riod
127-28       Q 42:26       Sin III       117       Q 45:7       Nintu VI         130-31       Q 42:16       Sin IV       119-61       Q 45:12       Nintu VI         132-39       Q 42:26       Sin III       183       Q 45:12       Nintu VI         140       Q 42:24       Sin IV       191       Q 45:12       Nintu VI	
130-31       Q 42:16       Sin IV       119-61       Q 45:12       Nintu VI         132-39       Q 42:26       Sin III       183       Q 45:12       Nintu VI         140       Q 42:24       Sin IV       191       Q 45:12       Nintu VI	
132–39 Q 42:26 Sin III 183 Q 45:12 Nintu VI 140 Q 42:24 Sin IV 191 Q 45:12 Nintu VI	
140 Q 42:24 Sin IV 191 Q 45:12 Nintu VI	
153 Q 45:4 Nintu VI 198 Q 45:7 Nintu VII	
153 Q 45.7 Nintu VI 154-66 Q 42:26 Sin III 202-12 Q 45:7 Nintu VII	
168 Q 42:16 Sin IV 221-23 Q 45:7 Nintu VII	
169-71 Q 42:26 Sin III 228 Q 45:7 Nintu VII	
179 Q 42:26 Sin III 230 Q 45:7 Nintu VII	
182-84 Q 42:26 Sin III 233-38 Q 45:7 Nintu VI	
185 Q 42:25 Sin III 240 Q 45:4 Nintu VI	
187-205 Q 43:17 Sin III 244 Q 45:7 Nintu VI	
206-10 Q 42:39 Sin II 245 Q 45:4 Nintu V	
212-16 Q 42:39 Sin II 247-48 Q 45:4 Nintu V	
217-24 Q 42:26 Sin III 252 Q 45:4 Nintu V	
225 Q 42:39 Sin II 254 Q 45:4 Nintu V	
227-28 Q 42:39 Sin II 256 Q 45:12 Nintu VI	
229 Q 43:17 Sin III 258-65 Q 45:4 Nintu V	
231-39 Q 42:39 Sin II 267a-b Q 45:4 Nintu V	
240-41 dump Sin IV 268 Q 45:4 Nintu V	
246 Q 42:39 Sin II 270 Q 42 Sin II	
247–48 in wall Sin V 272 Q 45:4 Nintu V	
249 Q 42:26 Sin III 273 Q 45:12 Nintu V	
252 Q 42:45 Sin II 275 Q 45:4 Nintu V	
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254 Q 42:44 Sin II 277-78 Q 45:4 Nintu V 255-74 Q 42:41 Sin II Kh. IX 1-4 Q 42 Sin III	
275 Q 42:47 Sin I 5-7 Q 42 Sin I	
276-79 Q 42:40 Sin II 10 Q 45:12 Nintu VI	
282 Q 42:40 Sin II 11-12 Q 42 Sin III	
Kh. VIII 1-4 Q 45:4 Nintu VI 13 Q 45:12 Nintu VI	
5-6 Q 45:4 and 12 Nintu VI 15 Q 42 Sin III	
7-8 Q 45:12 Nintu VI 19 Q 45:9 Nintu III	
9–18 Q 45:4 Nintu VI 29–30 Q 42:39 Sin I	
19 Q 45:12 Nintu VII 49 Q 42:39 Below Sin I	
22-27 Q 45:4 Nintu VI 51-54 Q 45 Nintu VII	
34-35 Q 45:4 Nintu VI 56-57 P 45:51 Nintu VI	
41 Q 45:12 Nintu VI 62-63 P 45:51 Nintu VI	
02 00 1 10.01	
4" O.44.1" NU.4.1.311	
46 () 45-12 Vintu VI	
47-50 O 42 Sin III or IV	
51 O 42 Sin IX 80-82 Q 45:12 Nintu VI	
52-55 Q 42 Sin III or IV 117-24 P 45:51 Nintu VI	
57-60 O 42 Sin III or IV 174 P 45:51 Nintu VI	
62-63 Q 42 Sin III or IV 175-79 P 45:52 Nintu VI	
65 Q 42 Sin III or IV 195 P 45:52 Nintu V1	
67 Q 42 Sin III or IV 201–2 Q 42 Sin III	
97 Q 44:15 Nintu VI 214 Q 45 Nintu VI	
114 Q 45:12 Nintu VI 235 Q 42 Below Sin I	
115 Q 45:4 and 12 Nintu V and VI 239 Q 45:7 Nintu IV	

#### II

#### THE ABU TEMPLE AT TELL ASMAR

By SETON LLOYD

#### **EXCAVATION**

The position of the Abu Temple in the northern group of buildings at Tell Asmar can be seen in Figure 116, where the temple is marked A. The first indications of its existence were discovered December 21, 1932, during the second season's excavation on the site of the Northern Palace. The angle between the main palace building and the south wing containing the women's quarters was found to inclose a group of somewhat poorly built outhouses. But the little hill directly west of these appeared at once to have a character of its own. When the surface was first investigated, it was some time before the presence of definite walls could be detected. Later, after a thin gypsum pavement had been found at a depth of a few centimeters and very carefully traced, a small building gradually began to take shape. A series of small buttresses appeared on the south face of the outer wall, and a projecting structure at the west end suggested some sort of altar or offering-table; these characteristics, combined with the nature of the objects which began to appear, soon enabled us to identify the building as a temple.

The walls directly beneath the surface were dated to the Akkadian period by a cylinder seal found on the floor near the entrance. The crown of the little hill was composed of a shapeless mass of large flat bricks of the Larsa type, evidently the remains of a later structure founded directly upon these Akkadian ruins and now, save for this small remnant, entirely lost owing to the denudation of the tell. As the season progressed we penetrated deeper and traced earlier versions of the same building. Four separate plans were thus produced, three of which represented periodic rebuildings of the temple, the fourth the original foundation of the building (Pl. 23). The earliest of these, which was reached toward the end of the season, was much the most complete and well preserved, its walls standing everywhere over 1.5 m. high and its altar at the west end remarkably intact. This earliest level seemed to be contemporaneous with the Early Dynastic building beneath the Northern Palace where we found the inscribed copper bowl which gave us the name of our temple (cf. p. 159). This bowl, and the other objects found with it, resemble closely vessels from the "royal cemetery" at Ur, which is also to be dated to the end of Early Dynastic III.

It was not until the beginning of the next season that, in penetrating beneath the floor of this building, we detected the presence of an earlier temple of an entirely different plan and oriented at a slightly different angle. This was found to cover a considerably larger area than that already excavated; it became known as the "Square Temple" because of its general shape (Pl. 22 and Fig. 133). It was necessary to remove completely the walls of the Single-Shrine Temple above in order to excavate this building effectively, and also in three places to cut into the walls of a poorly built and irregularly planned intermediate building of which the remains were insufficient to merit much attention. After this, wall-tracing proceeded apace, and objects of a character associated as before with temple buildings began to appear in considerable quantities. The building contained three separate shrines, each with a rectangular altar at

<sup>&</sup>lt;sup>1</sup> Formerly called the "Akkadian palace."

one end, and the areas around these altars were the richest in finds. The most sensational of these came to light in the second shrine excavated, a room situated in the northwest corner of the building. This consisted of a hoard of sculptured figures, in a remarkable state of preservation, which had been buried beneath the floor in the recess north of the altar (see pp. 189-91). A certain amount of sculpture in a very fragmentary condition had been found during the



Royal Air Force Official

Fig. 116.—Air Photograph of Tell Asmar

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The Abu Temple appears at A, southwest of the Northern Palace; in the center are private houses; the buildings at the bottom of the picture are just north of the Gimilsin Temple and the Palace of the Rulers.

previous season scattered about the Single-Shrine Temple. This had been attributed to a period contemporary with the "royal cemetery" at Ur, but the twelve statues which we now discovered in the Square Temple were carved in a new archaic style which at the time had no parallel among the finds from other sites and suggested a clearly defined line between two subdivisions of the Early Dynastic period, represented by these successive versions of the same temple. Cylinder seals clinched the question of date, and the Square Temple must be assigned to Early Dynastic II.

The new plan was soon complete except for the outer face of the west wall, which for the moment we could investigate only by tunneling. In a later season, however, a larger area to the west was cleared, and several compartments of an adjoining building were added to the plan. For the moment we confined ourselves to penetrating deeper and were able to trace an earlier version of the same temple, covering a somewhat smaller area and boasting only a single shrine and altar. Beneath this there was another complete change of plan, and before the season ended we had succeeded in clearing and surveying the latest levels of an Archaic Shrine, the predecessor of the Square Temple yet differing so markedly from it in plan and in the character of the objects which it contained that a third subdivision of the Early Dynastic period was obviously suggested. Work on this archaic building was continued at the beginning of the following season (November, 1934) in the hope of eventually reaching the earliest level at which a shrine of any sort existed upon this site or, if possible, virgin soil. Both these things we contrived to do.

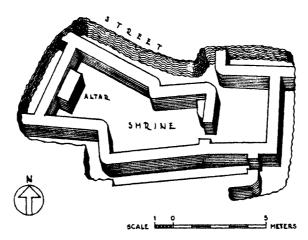


Fig. 117.—Projected Plan of the Earliest Shrine of the Abu Temple. Scale, 1:200

There were four principal building periods in the Archaic Shrine (Pls.  $19\,B$ –21), containing comparatively few objects but all characterized by a fairly homogeneous series of pottery shapes and painted ornament, most of which did not survive into the later periods now associated with the Square and Single-Shrine Temples. A change also occurred in the brickwork. Up till now the bricks had remained consistently plano-convex in shape and conformed to an established system of wall construction. But in the earlier versions of the Archaic Shrine the shapes of the bricks began to alter, the convexity on one side disappearing and a more regular rectangular prism becoming the general rule. The method of laying also began to change. But even in the earliest foundation of the Archaic Shrine the change was not yet quite complete.

At all stages the Archaic Shrine was an irregularly shaped building consisting of a sanctuary flanked to the south by one or more subsidiary chambers and entered at the northwest through a fairly large forecourt. The earliest shrine of all, which we found beneath it, was a much more elementary and primitive affair (Pl. 19 A and Fig. 117), a single curiously shaped compartment with an altar at one end, apparently fitted into a cramped space among several other buildings. The brickwork was now definitely of the prismatic ("Riemchen") type, as can be seen in the foundation of the altar (see Fig. 119); and this fact, combined with certain other

indications, enabled us to attribute this earliest foundation to the later days of the Protoliterate period.<sup>4</sup>

The shrine of that period was entered at the northeast through a small square vestibule. Here at the very end of the season (February, 1935) two shafts were sunk. No walls were encountered beneath the earliest pavement level of the shrine, but after a further 3 meters of occupational debris we reached what appeared to be virgin sand. This proved to be at the same level as that at which similar sand was finally struck in square D 15 in the deep sounding which we called the "Bird-Vase Pit" (Fig. 116 B), where it continued with no signs of occupation to a further depth of 5 meters, at which point the seepage water level was reached. This concluded the excavation of the succession of buildings to which, soon after their discovery, the name "Abu Temple" was given, based on the inscribed dedication of a fine "ritual service" of copper utensils discovered a few meters away in a secular building beneath the Northern Palace.<sup>5</sup>

The successive rebuildings of the temple fall naturally into three groups, expressed by the names Archaic Shrine, Square Temple, and Single-Shrine Temple, while the Earliest Shrine is the modest beginning of the place of worship of the fertility god at Eshnunna. The objects found in the ruins<sup>6</sup> assign the Earliest Shrine to the Proto-literate period and the Archaic Shrine to the First, the Square Temple to the Second, and the Single-Shrine Temple in its first phase to the Third Early Dynastic period. The next phase of the Single-Shrine Temple is Proto-imperial<sup>7</sup> in date, the third Proto-imperial or Akkadian; and with the fourth phase, definitely belonging to the age of Sargon of Akkad, the life of the shrine comes to a close.

#### THE EARLIEST SHRINE

There is no obvious explanation of the irregular shape of the sanctuary (D 17:34) at this earliest period and the varying angles at which the walls were built (Pl. 19 A and Fig. 117). One can only suppose that it was fitted into a restricted space among other buildings. It will be noticed, however, that the same tendency toward a changing orientation in the northwest part of the building survives in the Archaic Shrine up to its last reconstruction (Pls. 19 B-21 A). The shape suggests that the cella may possibly at some time have been divided into two compartments; and the otherwise meaningless mass of brickwork which can be seen at a in Figure 118 running from wall to wall at the narrowest point, but occurring only beneath the earliest pavement on which there were any traces of an altar, bears out this suggestion. The altar was a simple affair placed roughly in the center of the northwest wall. It seemed to have served the same purpose during two successive periods of occupation whose pavement levels were about 30 cm. apart. Figure 119 shows the portion between these two pavement levels stripped of its plaster, exposing the brickwork. The small rectangular bricks were laid flat, so that they appear as stretchers on the face of the wall. Furthermore, they were not made in a wooden mold but were merely roughly shaped with the hands, so that their dimensions are by no means constant.

The two occupation levels recorded in Plate 19 A (the changes in the later one by broken

<sup>&#</sup>x27;[Since Mr. Lloyd was engaged in war work while this volume was in press, he could not be consulted as to the introduction of the term "Proto-literate" into his chapters in place of "Jamdat Nasr."—H. F.]

<sup>&</sup>lt;sup>5</sup> See Private Houses and Graves in the Diyala Region for a description of the find-spot. The inscription is translated on our p. 298.

<sup>&</sup>lt;sup>6</sup> Cf. OIC No. 20, pp. 35-61.

<sup>&</sup>lt;sup>7</sup> [This term, borrowed from AS No. 11, Table II, covers the period from Entemena to Lugalzagesi, in other words, what has hitherto been considered the very end of the Early Dynastic period. Discussion of the remains belonging to the Proto-imperial period will be found in *Private Houses and Graves in the Diyala Region* and in *Pottery from the Diyala Region*.—H. F.]

lines) are those mentioned above. The only problem which arises is whether there could not have been an entrance from the south, since the long narrow passage on that side leads at the west end into a court, and since in the center of the court was what we had come to recognize as a circular offering-table. This suggests a tradition continuous with Archaic Shrines I and II.

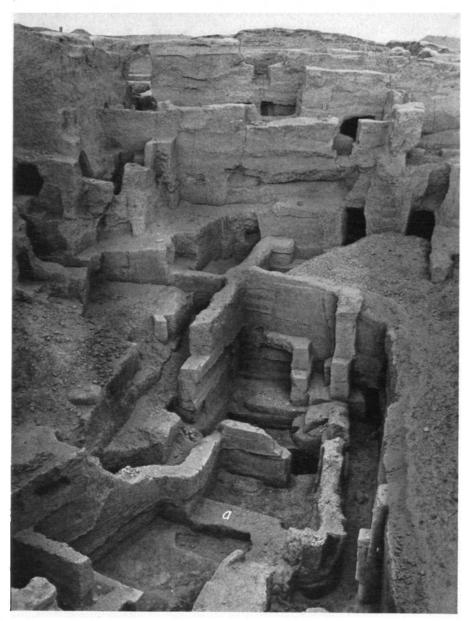


Fig. 118.—The Earliest Shrine of the Abu Temple, Seen from West The "cross wall" (a) occurred below the earliest pavement on which an altar was found

We may therefore perhaps include in the shrine structure the passage and the courtyard with the offering-table. No significance, however, can be attributed to the resetting of the east wall of the vestibule in the second period of occupation. A characteristic feature of the plan is the rounded corners, in some cases, for instance at the northwest entrance to the vestibule, necessitated by the restricted space.

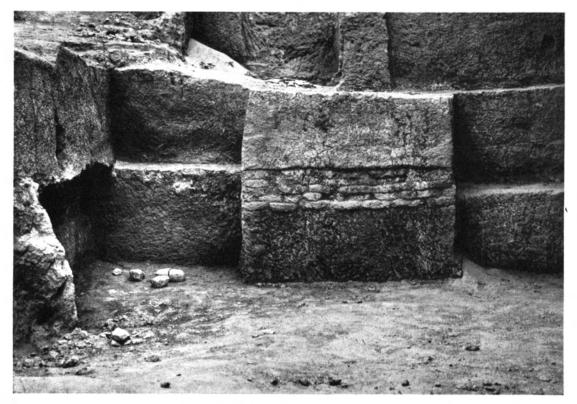


Fig. 119.—Altar in the Earliest Shrine of the Abu Temple

The plaster has been removed between the first and second floor levels in order to show the bonding of the bricks; the earth below the bricks is not part of the altar.



Fig. 120.—Courtyard D 17:35 West of Archaic Shrine II, Seen from Southwest

In the foreground is a structure of baked plano-convex bricks; in the background two kilns can be seen beyond the remains of two piers (a, b).

#### THE ARCHAIC SHRINE

At least nine distinct periods of occupation could be detected in the architectural remains of this building, each involving some change of plan. For convenience only five of these have been separately recorded (Pls. 19 B-21), with the intermediate modifications—which are sometimes very slight—indicated by broken lines. It will be noted that the area over which the excavations extend is naturally greater at the higher levels.

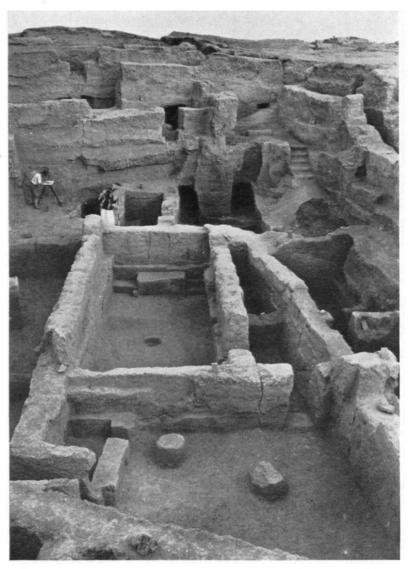


Fig. 121.—Archaic Shrine III Seen from West

Archaic Shrine I already embodied all the principal features which persisted through successive stages. One entered the forecourt D 17:16 at the northwest corner through a tiny vestibule flanked by a slightly larger room, perhaps for a porter. At the south end was a circular offering-table about 30 cm. high, near which a doorway led through a small lobby, D 17:14, to the shrine itself, D 17:10. This was a long rectangular room measuring  $9\times3.5$  m., with a floor of tamped earth and, in the center, a roughly circular hearth—merely a shallow depres-

sion in the floor—full of ashes. At the east end there was an altar, in this case hardly more than a broad shelf with a raised step in front of it and a rather higher step on either side. A similar altar, with the various steps which seemed to be necessary accessories to it, occurred at every rebuilding. At times it was difficult to distinguish between its true top surface and that produced by the process of leveling for a reoccupation, as this took place continually, and one altar was built upon another (cf. Fig. 126). Adjoining the altar to the south a second doorway led into a small room, D 17:26, which probably was a kind of sacristy. There was a suggestion that this had been accessible from the south, but the doorway was uncertain.

The only changes at the secondary occupation of Archaic Shrine I were a slight resetting of the north wall and a change in the entrance.

Archaic Shrine II (Pl. 20 A) had very little to distinguish it from its predecessor. The occupation level had risen almost exactly 1 meter, and evidently only partial rebuilding was needed. There was a slight change of plan at the entrance, where the vestibule and adjoining chamber had disappeared; and a curious rectangular recess appeared in the west wall of the forecourt, D 17:16. There were a circular offering-table, in almost precisely the same place as before, and a hearth in the center of the cella. The altar (shown in broken lines in Pl.  $20 \ A$ )<sup>8</sup> again had a step in front and one on each side. At the second occupation of Archaic Shrine II the altar and the step in front of it were somewhat more imposing, while the step on the south side was missing.

West of the building was an open courtyard, D 17:35, belonging to some adjoining building; we traced it only to the level of the second occupation in the shrine (see Pl. 24 A). In this courtyard (Fig. 120) appeared a circular structure of kiln-baked bricks of a notably planoconvex shape and, as usual with this type, made in a mold. The walls in general were of sundried bricks, which at this period were still handmade, without traces of a mold's having been used, and of a fairly regular prismatic form. It is understandable, however, that bricks which were to be kiln-baked for a special purpose would be conveniently made to a standard size and pattern by the more efficient process, already known and later to become universal. The structure appears in the foreground of Figure 120; the brick-maker's thumb- or fingermark, which usually appears on plano-convex bricks, can easily be seen. At the north side of this courtyard an area had evidently been roofed over, for the stumps of three piers which would have supported the beams remained. Behind these and in a position which would have been protected by such a roof, we uncovered the remains of two small kilns (Fig. 120). In both cases only the lower story (presumably where the fire was made) survived; small "wings" projecting from the sides of one kiln and two bricks standing upright in its center suggested some sort of primitive vault, foreshadowing the quite elaborate structures of this type devised at later periods.9

Archaic Shrine III embodied a number of new features (Pl. 20 B) and merits a more detailed examination, as this was one of the most important occupation periods. The general layout can be seen in a series of photographs from various angles (Figs. 121–23). It will be noticed that at this depth we were able to excavate several rooms in adjoining buildings; and from certain of these we were lucky enough to obtain a large quantity of pottery, either painted (e.g., Fig. 124) or ornamented with incised decoration, which was found to have strongly defined characteristics typical of the period through which the Archaic Shrine existed. Later this enabled us to define that period as the first in a series of three clearly marked subdivisions of the Early Dynastic period.

<sup>&</sup>lt;sup>8</sup> Note that in Pl. 20 A, in contrast to the usual convention, it is the secondary occupation which is indicated by hatching, since the court to the west was not excavated below that level.

Of. OIP XLIII 50-52 and Pls. X-XI; OIP LIII 130-33.



Fig. 122.—Cella of Archaic Shrine III Seen from North



Fig. 123.—Archaic Shrine III Seen from East

The whole unit was now completely rebuilt, though the arrangement of the plan remained substantially the same. The entrance was still from the northwest, and we were able by tunneling to establish the fact that the doorway to the temple building occurred at the end of a wide lane or cul-de-sac, D 16:31, curving in from a northwesterly direction. A quantity of painted pottery was found littered about in the neighborhood of the temple entrance. From this lane a doorway led eastward into two intercommunicating rooms, both of which we were able partially to excavate.

At the entrance to the temple there was a return to the arrangement of Archaic Shrine I—a tiny vestibule with a porter's small room adjoining (Figs. 121 and 123). There were two circular offering-tables placed at random in the forecourt, one rather larger than the other (Fig. 121). The doorway leading from here into the small lobby, D 17:14, had a pivot stone at this floor level, suggesting that the shrine and the two smaller rooms flanking it could be

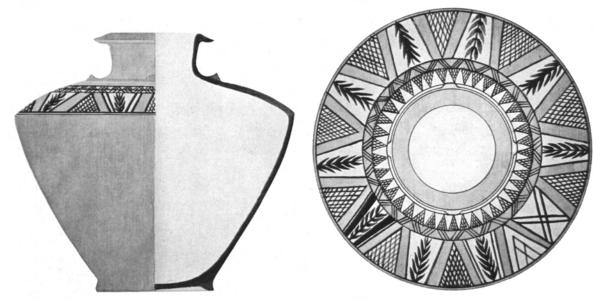


Fig. 124.—"Scarlet-Ware" Vase (As. 34:147) from a Room Adjoining Archaic Shrine III

shut off from the rest of the building. The first of these rooms contained a few poor beads and amulets and fragments of a pot with a single lug. The shrine itself, which can be well seen in Figures 121–23, had the usual tamped earth floor, sloping down slightly toward the northwest corner, where some pottery fragments can be seen in Figure 123. The hearth in the center appears in Figure 121 also, as does the altar. This was one of the rare instances where the top surface of the altar retained its original plaster and could therefore be relied upon. It is interesting to note that in Figure 126 the top of this altar can already be seen (at a) projecting beyond that built on top of it for Archaic Shrine IV. The altar sloped downward toward the northwest corner, where a chase occurred so that surplus liquid from libations could run down into a pottery jar placed there for the purpose. Actually in this case two such jars remained almost intact, one above the other, from successive stages of occupation. The altar had no step in front, but there were two on the south side and one on the north. The ledge which appears behind the altar in Figures 121–22 is due merely to the resetting of the wall at a secondary occupation. The only notable find in the sanctuary at this level was the well preserved end of an antler which had been sawn off.

D 17:26, which as before was a narrow room approached through a doorway beside the

altar, gave some indication at this level of the purpose for which it was used. The floor was littered with fragments of a particular kind of earthenware cup known as a "solid-foot calix" (Fig. 125). There was hardly an unbroken one among them, and since the fragments numbered somewhat more than 660 we have been tempted to conclude that each cup was deliberately broken in the course of some ritual proceeding in the shrine and the fragments de-

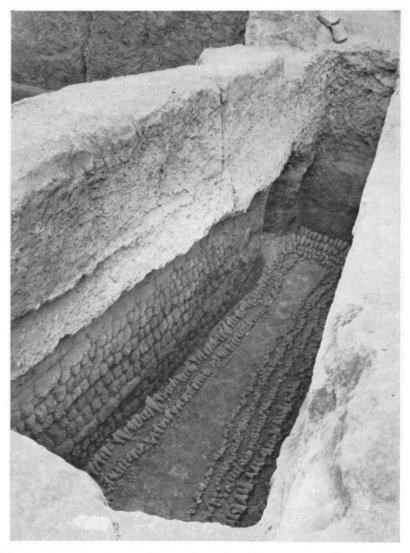


Fig. 125.—Broken Pottery Calices Laid Out in Room D 17:26 of Archaic Shrine III, Where They Were Found

posited in the small adjoining room. It should be remembered that the statues of the gods and some of the worshipers found in the Square Temple are holding drinking-vessels. It is hard to think of any other explanation.

East of the temple we excavated two rooms of an adjoining building and part of a third. All three contained fragments of pottery with one form or another of incised ornament. E 17:31 had a shallow step in the center and two quadrant-shaped "seats" in the corners. A doorway led from it into a larger room, E 17:30, divided down the center by a low curb. Its only other feature was the remains of a circular earthenware cistern in the northeast cor-

ner. A doorway in the south wall led to a third room, E 17:32. Of the four rooms south of the temple, one, D 17:29, had no apparent doorway at this level, yet, together with its neighbor D 17:27, it produced great quantities of painted and incised pottery. D 17:15 and 30 were intercommunicating, but little was found in them. Painted pottery and several stone vessels came from rooms to the west, D 17:31-32.

The secondary occupation of Archaic Shrine III was marked by some changes of plan (indicated by broken lines in Pl. 20 B), notably in the western half of the building. The vestibule and porter's room disappeared, but the east half of the forecourt was divided off into two compartments, the northern and smaller of which had a projection in its south wall which might have been a tiny altar or offering-table. It occurred almost directly above one of the circular offering-tables of the previous occupation. One now passed through two successive lobbies in going from the forecourt to the shrine. The north wall of the shrine itself was also a little reset. In positions adjoining the doorway by which one entered from D 17:14 were two low circular offering-tables measuring 90 and 60 cm, respectively in diameter. These can be seen in Figure 126, where the altar connected with Archaic Shrine IV is still standing and a workman is clearing down to the pavement belonging to the secondary occupation of Archaic Shrine III. A trench has been cut round the circular offering-table in the foreground, in order to ascertain whether it dated from the primary occupation or had a prototype in the same situation. Neither proved to be the case. Other changes took place in rooms outside the building, such as D 17:30 and 31, both of which were divided by new walls into separate parts; and a doorway appeared between D 17:27 and 29. No reason for these changes is apparent.

Archaic Shrine IV (Pl. 21 A) again seems to have involved a complete rebuilding. An area directly in front of the entrance doorway was walled off, and against its west wall was a miniature altar such as occurred in the shrine itself. It measured about 1×.50 m. and had a shallow step in front of it (see Fig. 130 d). This was perhaps a place for making a preliminary offering before entering the temple. From it one passed straight into the forecourt, D 17:16. The remainder of the building still consisted of a shrine with two flanking compartments (D 17:14 and 26), one a vestibule. The altar (Fig. 126) appeared to be divided by a vertical face into two successive shelves, the one about 30 cm. above the other. It had a step on the south side; this stopped a little short of the south wall, leaving a narrow recess. Near the corner between the altar and the step a very small earthenware jar was set into the plaster, presumably for the purpose of catching the surplus from libations. It should be noted in connection with Figure 126 that the small projection on the right of the altar, upon which this jar is apparently standing, is actually the corner of an earlier altar (see p. 165). The resetting of the north and south walls of the shrine and the shape of the new altar at the second occupation of this building are indicated by broken lines on the plan (Pl. 21 A). At this time there was no doorway from the shrine to the former D 17:26, and there did not appear to be any wall separating the latter from D 17:14. The two must therefore have formed one room.

Three rooms (E 16:45-46 and D 17:11) and parts of two others belonging to an adjoining building were excavated east and northeast of the temple. The largest of these, E 16:45, contained in the northeast corner the remains of a fairly large baking-oven protected by a short screen wall. E 16:46 produced a quantity of the elaborately incised pottery so typical of the period, including the upper half of a large and very fine jar with a double incised handle projecting on the shoulder (As. 33:723).

Archaic Shrine IV C shows a considerable change of plan, recorded separately in Plate 21 B. The forecourt was now divided into three separate vestibules, and it was therefore necessary to pass through four smaller rooms before reaching the shrine. The function of none of these

rooms was in any way indicated; in fact, the walls dividing them were traced only with the greatest difficulty, being of a very poor consistency and standing only a few centimeters high. The final vestibule before the shrine, D 17:14, had at its east end a rough pavement composed

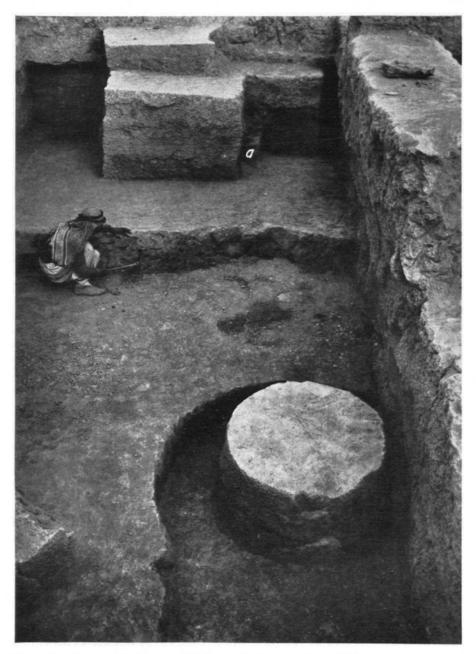


Fig. 126.—Remains of Periods III B and IV A in the Cella of the Archaic Shrine

The offering-tables in the foreground and the floor which the workman is cleaning belong to the secondary occupation of Archaic Shrine III. The higher floor and the altar belong to Archaic Shrine IV, and a corner of the Period III altar emerges at a.

partly of kiln-baked plano-convex bricks and partly of broken sherds from some very large pottery vessel. It is possible that this formed the foundation of an ablution place such as we found in the succeeding phase of this sanctuary, the Square Temple, for baked bricks were not

Fig. 127.—Exposed Brickwork of Archaic Shrines III (a) and IV (b); in Background, Brickwork of the Square Temple (c)

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used at this time except where water had to pass. In the shrine the altar was roughly square, its front flush with that of a wide step on the south side. Both were covered with a thin coat of white gypsum plaster. In the angle between the step and the east wall of the room a few sherds of an alabaster vessel were found. Similar sherds discovered at floor level when the step was removed suggested that to begin with no step had existed.

Features of other rooms excavated outside the actual building at this level can be seen in Plate 21 B. A large new room at the west was entered by a doorway adjoining the main entrance to the temple. A second doorway, almost opposite, was furnished with a pivot stone. South of the building a long corridor marked D 17:15 may have been divided into separate compartments by cross walls or approached from the south, since here again there were wall-



Fig. 128.—Exposed Brickwork in Doorjamb and West Wall of Archaic Shrine III

tracing difficulties. An irregularly shaped room at the southwest had some sort of hearth built into one corner. Other rooms to the east and northeast were almost the same as during the previous occupation. In the northeast corner of D 17:11 a doorway with a pivot stone still in place led to E 16:45, which still had a baking-oven in one corner.

This was the last phase of the Archaic Shrine. When its ruins were leveled and a new building erected, the plan had changed completely, and the form of the Square Temple was already foreshadowed.

In the course of excavating, Archaic Shrine IV was reached without any notable change occurring in the shape and size of the bricks used. Typical bricks from this shrine average  $22 \times 11 \times 5.5$  cm. They have the usual plano-convex shape with the brickmaker's distinctive mark, consisting of indentations made with the thumb or two fingers on the convex side; and the mark of a wooden mold can be seen at least on the two longer sides. When Archaic Shrine III was reached, however, the walls were found to be built for the most part with

bricks of another type, made entirely by hand (Figs. 127-28). They still showed signs of having one or more flattened sides, but a closer examination of these made it clear that they were caused by the bricks' being struck against a flat surface in the course of shaping them and not by the use of a mold. Their average dimensions were  $24 \times 8 \times 5$ -8 cm., and their appearance was somewhat shapeless and irregular. The bonding also differed. In the foreground



Fig. 129.—East End of the Cella, Showing, in Left Foreground, a Typical Method of Bonding in Archaic Shrine II.

of Figure 127 (at a) the prismatic bricks of Archaic Shrine III can be seen laid in superimposed courses of headers varied occasionally with a single course of stretchers, the bricks laid on edge in both cases. In Figure 127 above this bonding is that of the next later shrine (b), where the bricks are plano-convex (cf. Fig. 147). The headers which appear on the face of the wall can be seen leaning against one another like a shelf of books, and the stretcher courses which occasionally appear are laid flat rather than on edge. This type of bonding can be seen again

in a wall of the Square Temple (Fig. 127 c).<sup>10</sup> The prismatic bricks of Archaic Shrine III are shown again in Figure 128, where, at the left, the treatment of a doorjamb can be seen.

In Archaic Shrine II the bricks averaged 2 cm. shorter and were rather better and more regularly made. A typical method of bonding appears in the foreground of Figure 129. In this case the wall was some 63 cm. thick, and each course consisted of a double row of headers and a single one of stretchers, all laid on edge, the stretcher course alternating first on one side of the wall and then on the other. A few bricks in Archaic Shrine I, fortuitously hardened by burning and therefore making more accurate measurement possible, were  $20 \times 8 \times 8$  cm.

The bricks which appear in Figure 119 forming the foundation of the altar in the Earliest Shrine measured  $20 \times 5 \times 9-10$  cm. and were gauged at three courses to 18 cm. These may be compared with bricks extracted from the earliest wall found in the sounding known as the "Bird-Vase Pit" (see p. 159), which were fairly regularly made and measured  $22 \times 5 \times 9$  cm.

### THE SQUARE TEMPLE

The Square Temple proper had an irregularly planned and less pretentious predecessor, the main outlines of whose plan we were able to trace only with the greatest difficulty, since its walls nowhere remained standing much more than 30 cm., and their ruins were considerably cut into by the foundations of the later building. The earlier plan is indicated by broken lines in Plate 22. Some important elements of the Square Temple were already embodied in this building. The principal shrine was newly oriented to face north, instead of west as the Archaic Shrine had done. The limits of the building are not altogether certain, but the north and west walls of the shrine D 17:8 seemed to make a corner. It can be seen in Figure 130, where a workman following the outside face of the former in a tunnel has just broken through into a similar tunnel made by following that of the latter. This means that the building comprised the shrine, D 17:8, a central court, D 17:7, and various smaller rooms to the east and south, some of which we were unable to excavate completely. It excludes the compartment north of the main entrance, where there must have been merely a lane or walled approach. Almost in the middle of the central court was a low circular offering-table of the type already noted in the Archaic Shrine. The entrance from the central court into the shrine was dignified by two small flanking buttresses. The altar in this shrine was hard to dissociate from a later one in which its remains were incorporated. Each seems to have had in the northeast corner a sort of bitumen-lined chase for drawing off surplus libations. In Figure 131 the lower of these appears to be cut about 15 cm. deep into a projecting shelf. This is in fact the corner of the earlier altar projecting from beneath the later one. It seems certain that the circular bitumen trough which appears in this picture belongs to this period and was the ultimate receptacle for the libation waste. Its level exactly corresponded to that at which the walls of the building were founded. The principal occupation level of the Square Temple proper occurs about level with the workman's elbow. No satisfactory photograph of this stage in the excavation could be taken, since the plan of this predecessor of the Square Temple was mainly pieced together from stumps of walls, much cut into by later foundations, noted on our plan while we were engaged in the task of penetrating through the floor of the Square Temple itself and discovering the Archaic Shrine. One such fragment can be seen still standing on top of the altar of the latest Archaic Shrine in the middle background of Figure 132.

Consideration of this preceding plan offers some clue to certain irregularities in the shape of the Square Temple proper. One must suppose that a complete rebuilding now took place, and

<sup>&</sup>lt;sup>10</sup> Only the coherent piece of brickwork at c should be considered. The patches on either side are the work of pupil wall-tracers.

### THE ABU TEMPLE AT TELL ASMAR

it will be observed that the new temple covered almost the whole area of the old one and was in addition extended northward to include two new rooms, D 17:9 and E 16:40. The new plan thus became roughly square in shape, but with a setback in the northeast corner which

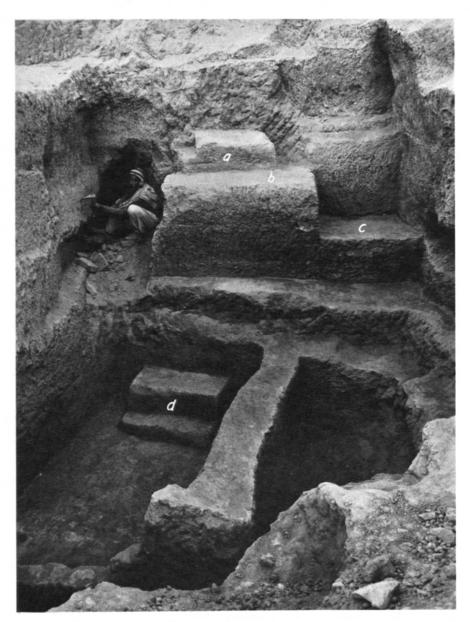


Fig. 130.—Remains of Three Rebuildings of the Abu Temple

In the foreground is the altar (d) of the small sanctuary near the entrance to Archaic Shrine IV. The workman is tracing the outside wall of the building preceding the Square Temple. The floor of Shrine II of the Square Temple is marked b; upon this is a small pedestal (a) found beneath the altar of Shrine II; at the level marked c was found the hoard of statues below the floor of Shrine II.

must have been contrived in order to avoid interfering with some adjoining building (Pl. 22 and Fig. 133). At the base of these new walls, a few centimeters above the actual foundations (see Pl. 24 A), was a kind of rounded  $kis\bar{u}$  or abutment. It is not by any means clear whether this served the purpose of protecting or strengthening the walls; but it is interesting to note

that on the west side it stopped dead level with the north wall of the old building and did not appear again until the southwest corner of the new building was reached. This may mean that the west wall of the old shrine D 17:8 remained partially preserved when the reconstruction took place and was incorporated in the new building. The outer face of the west



Fig. 131.—Altar in the Sanctuary of the Temple Preceding the Square Temple below Altar in Shrine I of the Square Temple

Note the bitumen-lined slot in each and the bitumen-lined trough

wall was mainly traced by tunneling, and the point where the  $kis\bar{u}$  stopped can clearly be seen in Figure 134. Various rooms in adjoining buildings, including D 17:13, part of which appears in Figure 134, were traced on this side of the temple but produced no objects of particular interest except some fragments of a pot ornamented with a design of snakes in low relief. It was noted that the north wall of D 17:13, with a doorway in it, was bonded with the

outer wall of the temple and founded at the same level; the  $kis\bar{u}$  must therefore be secondary. The  $kis\bar{u}$  can be seen again in Figure 135, rounding the northeast corner of the building.

The main entrance to the building was from the north through one of the two new rooms on that side of the building, E 16:40, which had the function of an entrance vestibule. It is

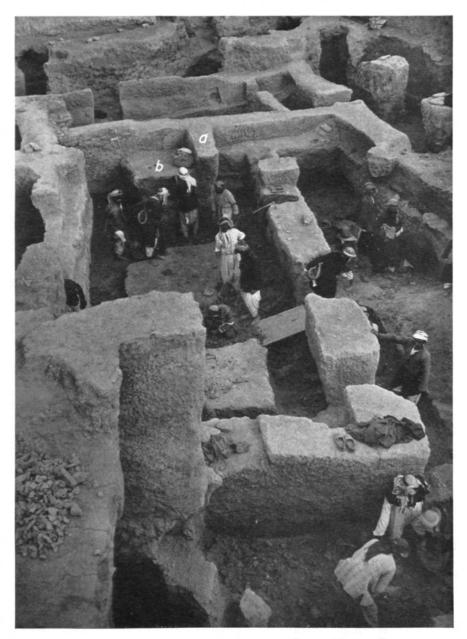


Fig. 132.—Fragmentary Wall (a) of the Predecessor of the Square Temple Standing above Altar (b) of the Latest Archaic Shrine

regrettable that the intrusion of a later rubbish pit was responsible for the destruction of the actual doorway, so that we have no indication of its architectural treatment. The vestibule, however, had two interesting features. One was a stout screen wall shielding the entrance to the central court and probably obscuring the direct view into it of anyone approaching from the outside. The other was a ramp or staircase which occupied the east side of the room and

was fairly certainly constructed as a means of access to a flat roof above. Its actual surface was not preserved, but the two inner faces can be seen on either side of the kneeling workman in Figure 136. Much of the structure itself has been cut away in the difficult process of tracing the actual walls of the room. On the left in this photograph the intrusive rubbish pit can be seen. Lying tilted in the angle between the inner face of the ramp and the floor was a large fragment of a slate plaque recessed to take inlay. The fact that almost all the remaining

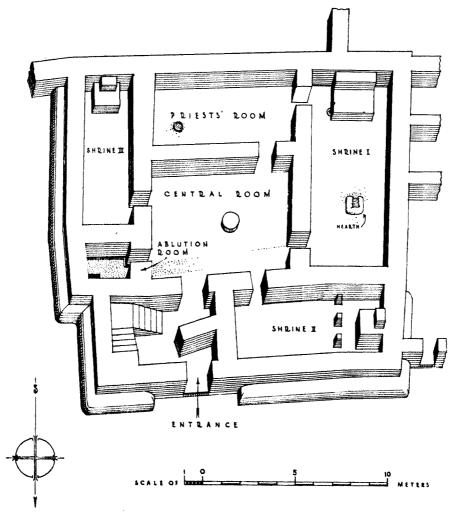


Fig. 133.—Projected Plan of the Square Abu Temple. Scale, 1:200

pieces of this plaque were found scattered about the other rooms of the temple at the main occupation level suggests that the ramp was, at all events, a contemporary structure.

The central room, D 17:7, which one entered on passing through the south doorway of the vestibule, was almost square in shape and, like every other room in the building, paved only with tamped earth. There was absolutely no indication that it had been open to the sky.

It will be well at this point to distinguish between the various successive occupations of the Square Temple, of which there were at least three (cf. Pl. 24 A). There was a pavement at 31.80 m., level with the bottom of the foundations of the inner walls (the outer walls were founded one stage deeper); but this seems likely only to have been used by the builders at the

time when the foundations of the walls were being laid. It probably represents the surface to which the site was leveled before rebuilding began. In other words: the tamped earth which we observed as "pavement" was not really an architectural feature at all but the accidental result of the coming and going of the builders at this level.

The next, at 32.30 m., was the main and probably the earliest genuine occupation level. Twenty centimeters higher there was a secondary occupation which did not involve a change

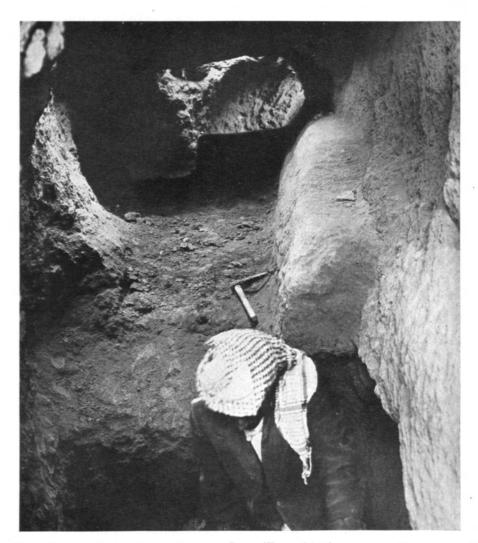


Fig. 134.—West Wall of Square Temple, Showing Point Where  $kis\bar{u}$  Stops and, in Background, North Wall of D 17:13

of plan, and at 33.00 m. there was a pavement level corresponding to a rebuilding of which insufficient traces were left to make a plan. We may for convenience refer to the latter three occupations as Levels I, II, and III.

At Level I in the central court various objects were found. In the southeast corner amongst a quantity of broken pottery was a fairly large fragment of a limestone plaque carved with figures in relief (As. 33:102). There were also the broken remains of a circular earthenware water cistern; the discovery among these of an inlaid eye, almost life-size, of some statue (As. 33:309) created considerable excitement. On the left as one entered the central court

# PRE-SARGONID TEMPLES

was a doorway leading to a small, almost square room, D 17:5, evidently used by worshipers for preliminary ablutions. Figure 137 gives some idea of the character of this room. It will be seen that there was some confusion in tracing the walls owing to the intrusion of foundations

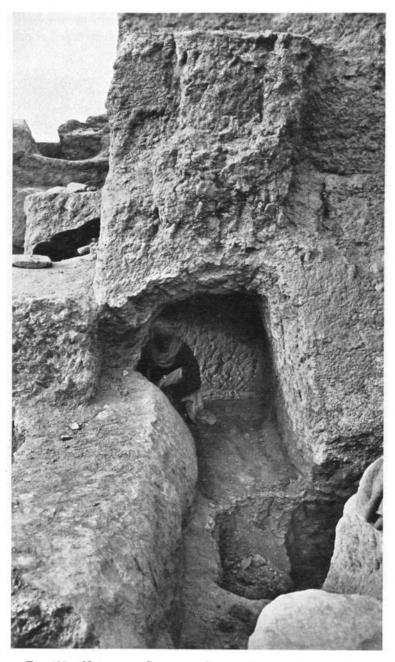


Fig. 135.—Northeast Corner of Square Temple, Showing  $kis\bar{u}$ 

from a later building and that as a consequence the masonry of the west wall, including the jambs of the doorway, was cut away, leaving only its outline in the bitumen with which room and threshold alike were paved. The bitumen was laid upon a foundation of kiln-baked planoconvex bricks about three courses deep and was turned up at the edges against a row of similar bricks above pavement level, constituting a sort of curb. The whole pavement sloped

toward the northeast corner, where the bitumen turned downward at a sharp angle to form a rectangular sink about  $90 \times 60$  cm. in size and 50 cm. deep. This was filled with broken fragments of baked bricks, and an almost intact earthenware pot-stand or brazier with two holes pierced in the sides lay amongst them (Fig. 138). Later, when the sink was cleared of its contents, it was found to be coated all over with bitumen and to have no outlet at the bottom and no sort of drain beneath (Fig. 139). Presumably, therefore, only small quantities of liquid were used at a time. The broken bricks and the pot-stand had evidently been thrown in after the sink was completed. A larger pot-stand was discovered in the filling of this room at a



Fig. 136.—Entrance Vestibule (E 16:40) of the Square Temple, Seen from Southwest

The kneeling workman is cleaning the inner faces of a ramp or staircase. In center foreground is the end of the screen wall; at left, a large rubbish pit which destroyed the entrance.

somewhat higher level. The level of the bitumen pavement in the threshold of the doorway was exactly 32.30 m., which established a satisfactory datum for the principal occupation (I). It was later found that a thin layer of this bitumen had been laid to form a rough pathway across the central court from the door of the ablution room to that of the largest shrine, D 17:8.

In addition to the vestibule and the ablution room, four other rooms were grouped around the central court (see Fig. 133). Three of them had altars at one end and could be identified as shrines. These may be discussed in the order in which they were excavated; they have been numbered accordingly as Shrines I, II, and III. The fourth room, D 17:6, was entered from the central court but had also a doorway giving access to the altar end of Shrine I. At the east end of this room and away from the doorway were a much used baking-oven and frag-

ments of a large earthenware storage jar with horizontal flutings. Another part of the floor bore clear traces of a reed mat which had covered it. These being the only indications of domesticity found in the building, we have suggested that this room was used and perhaps lived in by the priests.

A great many more important objects were found in this room, mostly at the west end near and in the doorway to Shrine I. Some of these came to light when its north wall was first

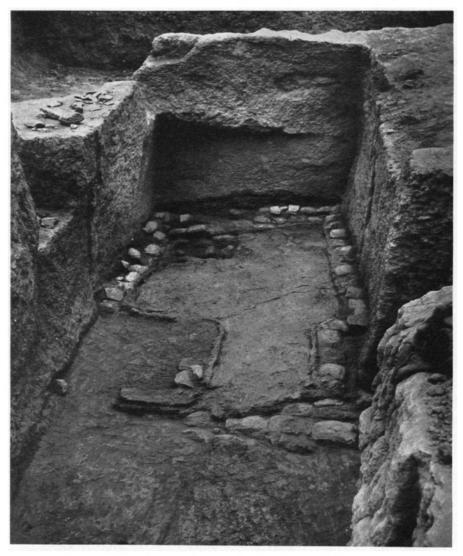


Fig. 137.—Ablution Room D 17:5 in the Square Temple, Seen from West

discovered beneath the floor of the later Single-Shrine Temple and gave us a foretaste of the richness of the earlier building. Objects from this room included fragments of sculpture (As. 33:280 and 306–7), broken pieces of various veined marble and alabaster bowls, and what appeared to be a broken sikkatu<sup>10a</sup> of translucent green stone (As. 33:293). There were also a finely cut amulet representing Imdugud (As. 33:294, Fig. 140) and a hoard of beads and ornaments which seemed to be slightly recessed into the face of the south wall and may therefore have been intentionally hidden (As. 33:50–55).

<sup>10</sup>a Cf. Andrae, Farbige Keramik aus Assur (Berlin, 1923) pp. 28-34.

Shrine I (D 17:8), which appears to the left in Figure 141, was the largest of the three shrines. The altar and the neighboring wall faces were comparatively easy to trace, since the surfaces of the mud plaster and in some places the floor as well were covered with a greenish white coating which might have been paint, its consistency recalling that of gypsum mixed with mud. The altar itself was situated at the south wall and rather west of the center, possibly on account of its proximity to the doorway leading to D 17:6. It projected 1.80 m.,



Fig. 138.—Sink in Corner of Ablution Room D 17:5

leaving a space 80 cm. wide between its west face and the wall. It was here that we found a great variety of valuable objects including many which were obviously of cult significance and had evidently fallen from the altar above. There were a number of large beads, some of them made of translucent stone (As. 33:243–46 and 457), many loose fragments of fine mother-of-pearl inlay (As. 33:256a-c), carved amulets (As. 33:242 and 263), stamp seals (As. 33:241, 260–62, and 455), and some cylinder seals (As. 33:248, 254, 270, and 454). Some of the beads, amulets, and stamp seals are shown in Figure 142. Mingled with them were also bones of fish, small animals, and birds (As. 33:266 and 458). All these apparently belonged to Level I and had remained buried during the subsequent occupation, for at Level II the altar and the wall had been replastered. This later layer of plaster projected over the hoard of objects and had

to be partially cut away in order to extract them. The last find in this corner was made at a point level with the foundations of the walls. This was a finely made bronze mirror (As. 33:461). It is a temptation to think that this was the shrine of a mother goddess and that mirror and ornaments alike were dedicated to or were accounterments of her statue.

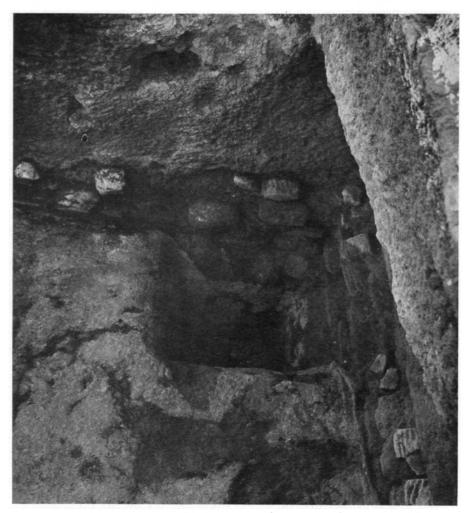


Fig. 139.—Sink in Corner of Room D 17:5 after Clearing



Fig. 140.—Bone Figure of Imdugud (As. 33:294) from the Square Temple. Actual Size

The only authentic top surface to the altar which we were able to detect and clean was divided into two separate shelves by a vertical wall 34 cm. high. The projection of the upper shelf was 60 cm., and it extended the complete width of the altar. It will be seen in Figure 141 that a small portion on the east side was unintentionally broken away in the process of exca-

vating. The lower shelf was 76 cm. above the principal pavement level (I). It seems likely that the same altar was reutilized at Level II and merely replastered, in which case it would have been of a less imposing height. The bitumen-lined slot in the east face, already mentioned (p. 172) as having probably been intended for carrying off surplus liquid from libations, was set back about 40 cm. (Fig. 131). Two small limestone statues (As. 33:209-10), a weight(?) embellished with two rams' heads (As. 33:213), and various maceheads (As. 33:211-12) were all found in the vicinity of the top shelf of this altar at an early stage in the excavations when it had not yet been identified as such. At a much later stage, when the masonry

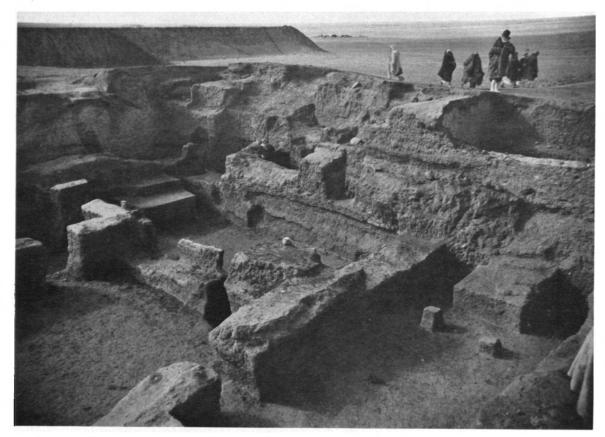


Fig. 141.—View from Northeast Showing Courtyard, Shrine I, and Shrine II of the Square Temple

of the altar was being removed in order to trace earlier walls beneath, it was found to consist merely of walls 50 cm. thick inclosing a roughly square cavity. From this cavity came sherds of crystal (As. 33:657 and 684) and stone (As. 33:655) bowls, some cylinder seals (As. 33:663, 666, 677, and 698-99), a stone bird-vase (As. 33:682, Fig. 143), an unbroken stone beaker (As. 33:705), and a goddess figurine (As. 33:686). The latter seems to be a coarse, local imitation of the type represented by As. 33:292 (Fig. 144), also from Shrine I.

At a point in the center of the floor about 1 meter from the altar there appeared the crushed fragments of a number of rather large pottery vessels, including two varieties of pot-stand or brazier pierced with rectangular or triangular holes like tiny windows. These can be seen in the process of excavation in Figure 145; doubtless, from their position in front of the altar, they had some ritual function. Farther north, but still in the center of the floor, was a horse-shaped hearth full of ashes.

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It should be noted here that at the time of the second occupation (Level II) the east wall of Shrine I for some reason needed rebuilding, and that when this was done its position was shifted about 1 meter to the west, reducing the width of the shrine by that amount. It was reused in this position at Level III but furnished with a skirting of kiln-baked bricks. At the

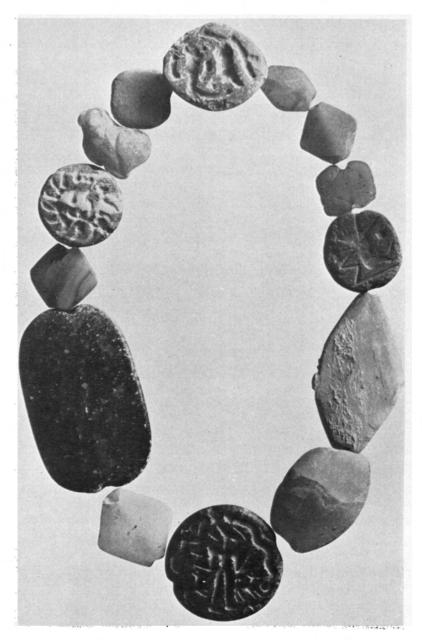


Fig. 142.—Beads and Stamp Seals from Shrine I of the Square Temple. Scale, 1:2

same time the west wall also was protected by a similar skirting, of which some ten courses remained standing. This alteration in the plan is not shown in Plate 22, since it was an isolated change and difficult to indicate without confusing the drawing. It can be seen in the section (Pl. 24 A).

Shrine II is the room in the northwest corner of the building. The record of its discovery

## THE ABU TEMPLE AT TELL ASMAR

in the excavation daybook reads: "We approached this room through the doorway leading from D 17:7. Meanwhile a second man was put to find the southwest corner, descending from

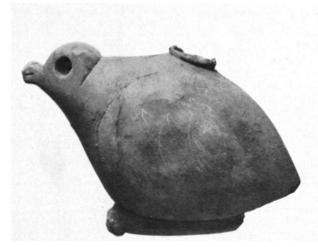


Fig. 143.—Stone Bird-Vase (As. 33:682) Found inside Altar in Shrine I of the Square Temple. Scale, about 2:3

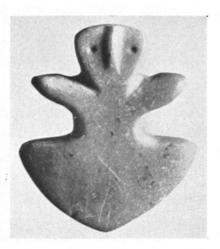


Fig. 144.—Mother Goddess Figurine (As. 33:292) from Shrine I of the Square Temple. Actual Size



Fig. 145.—Pottery Vessels Found in Front of the Altar in Shrine I of the Square Temple

above." This was a mistake and caused a slight mishap in wall-tracing, for, although he succeeded almost directly in finding the corner of the room, the existence here of a second altar



Fig. 146.—Shrine II of the Square Temple after Altar and Southern Pedestal Had Been Repaired Workman beside altar indicates position of hoard of statues. In right foreground is the edge of the rubbish pit which had destroyed the entrance.



Fig. 147.—Plano-convex Bricks Used in the Square Temple

like that in D 17:8 had not been suspected, and, since it consisted of a mere shell of brickwork, a large piece of it was broken away before it was recognized as such. When it had been completely traced and the breach roughly repaired to give it a symmetrical appearance (cf. Figs. 141, 146, and 148) a unique feature of the room came to light. This was a row of four small pedestals disposed in a line rather less than 1 meter from the altar, two square ones standing free and two of three-quarters their size built against the wall on either side (Fig. 146). They were discovered in the process of cleaning the pavement at the main occupation level. This was facilitated by the fact that the pavement as well as the altar was finished with a coating of the same greenish "paint" which we had noticed in Shrine I. It was probably due to this



Fig. 148.—Hoard of Statues in Shrine II of the Square Temple in Process of Excavation

"paint" that the pedestals were found at all, since their consistency was exactly the same as that of the fallen and consolidated brickwork surrounding them. As it was, the southernmost one was much damaged in tracing, but could be restored to match the corresponding one against the north wall. The pedestals were built of plano-convex bricks measuring  $25 \times 15 \times 5$  cm. They all had a slight batter, the free-standing ones measuring 35 cm. square at the base, 25 cm. square at the head and standing 35 cm. high, while that against the north wall stood somewhat higher and measured  $35 \times 28$  cm. at the base and  $30 \times 15$  cm. at the head.

There has been much discussion concerning the purpose of these little structures, particularly since a double row of similar ones stood in front of the great altar in the main shrine of

<sup>&</sup>lt;sup>11</sup> Plano-convex bricks typical of those used in the Square Temple are seen in Fig. 147. It will be noticed here that the brickmaker's individual mark on the bricks is in some cases made with the side of the hand instead of the thumb or fingers.

the Tell Agrab temple (see p. 236) and others were found in the Sin Temple at Khafajah (see p. 74). At first there was a theory that they might have been bases for the vertical members of a wooden "rood screen." Yet in some cases observed at Khafajah the plaster with which they were finished extended over the top surface but showed no signs of the imprint of a post. Also the irregular spacing of those in the Tell Agrab shrine would seem to discount this explanation; on the whole we are now more inclined to attribute to them the function of offering-tables.



Fig. 149.—Statues from Shrine II of the Square Temple. Scale, 1:6

Note the imprint of another statue upon the skirt of the figure second from the left in the front row

The top surface of the altar is unfortunately again uncertain. A series of rough shelves can be seen in Figures 141 and 146; but these are not plastered and they could easily be accounted for by the deformation of the projecting remains of this altar during a later occupation. Even the height to which it stood during our main period cannot be gauged with any certainty. Figure 146 is a good picture of the room after the pavement had been carefully cleaned. A cavity which appears in the bottom right-hand corner is due to the intrusive rubbish pit mentioned in connection with E 16:40 (p. 175), which had also destroyed much of the northeast

<sup>&</sup>lt;sup>12</sup> Similar structures in the court of the Temple Oval at Khafajah seem to have served some such purpose (OIP LIII 61-63). Those were of baked brick, however.

corner of Shrine II. Objects found at Level I lay for the most part in the corner south of the altar, and amongst them were fragments of the slate plaque mentioned on page 176 and also of nacre ornaments with which it had been inlaid. There were also a second fragment (As. 33:350) of the carved relief of which a large piece (As. 33:102) had already been found in D 17:7 and a macehead (As. 33:342).



FIG. 150.—THE LAST THREE STATUES IN THE HOARD

Our next step was to cut a trench between the altar and the line of pedestals in order to trace the foundation of the former. It was when this trench was continued into the corner north of the altar that we made our greatest find, a hoard of statues buried beneath the floor. The cavity in which they were laid was situated directly beneath the point at the right in Figure 146 where a workman is stooping to clean the pavement. It measured about  $85 \times 50$  cm., and its total depth beneath the Level I floor was 1.25 m. For 30 cm. beneath the actual pavement it was packed with pieces of hardened tablet clay, mostly rolled between the palms of the hands into rough balls about the size of an orange (two are lying on the altar in Fig. 148).

Beneath this was the hoard (Fig. 148; see position marked on Pls. 22 and 24 A and in Fig. 130, taken after we had penetrated beneath the floor of this building). The contents of the hole were as follows (Fig. 149): cult statue of a god (As. 33:446), cult statue of a goddess (As. 33:445), eight standing male statues (As. 33:414, 438-39, 444, 447-50), one standing female



Fig. 151.—Close-up of Statue Hoard When First Exposed

statue (As. 33:451), and one kneeling male statue (As. 33:443).<sup>13</sup> The heavier statues, including the two cult figures, lay at the bottom (Fig. 150); the remainder were packed one upon another, apparently with considerable care. Only feet and heads had in some cases become severed from the bodies, and at the point of contact where one body rested upon another some disfigurement had taken place (Fig. 151). In almost every case, however, the inlaid eyes remained intact in the heads.

<sup>13</sup> See OIP XLIV, Nos. 1-11 and 16.

There can be little doubt that these statues, whether cult figures of a god and goddess or votive presentations of their worshipers, had been either slightly broken or superseded by others; and, being too sacred to remove from the precincts of the temple, they could only be carefully buried beneath the floor of one of its sanctuaries. It was for this reason that they survive in such an excellent state of preservation. Other fragments of similar statuary which were found littered about the floor in Shrines I and III had obviously suffered less careful handling.

When the altar in Shrine II was finally removed, a much smaller one—hardly more than a pedestal, measuring 45 cm. square—was found beneath it (see Fig. 130 a), and in front of this was a circular hearth full of ashes. A survival of the function of the tiny shrine near the



FIG. 152.—ALTAR IN SHRINE III OF THE SQUARE TEMPLE

entrance to Archaic Shrine IV (also visible in Fig. 130) may account for this; but it is certain that Shrine II did not exist as such earlier than the Level I occupation at which the pedestals and the hoard of statues occur, since its north wall was founded only a few centimeters beneath the Level I pavement.

The third and last shrine, E 17:20, was the smallest and probably the least important. The altar was well built and easily traced. The top surface was here intact; and a smaller pedestal, superimposed upon it, was undamaged (Fig. 152). The main structure was 40 and the pedestal 13 cm. high. In the corner between the altar and the east wall we found a much damaged head of what must have been a larger statue than any in the Shrine II hoard (As. 33:441). It was interesting to note that, although the head was so violently disfigured, the black paint on the hair was so well preserved that a thick coating was found adhering to the lump of earth from which the head had to be detached. This suggests that the statue was deliberately broken while still in a good state of repair.

The east wall of the shrine was evidently rebuilt and slightly set in at Level II, and the first bricks in the foundation of this later wall must have been laid directly upon the remains of the previous wall. In this shrine also were found the broken fragments of a pot-stand or brazier pierced with window-like apertures.

### THE SINGLE-SHRINE TEMPLE

The third occupation (Level III) of the Square Temple may belong already to the succeeding, Third, Early Dynastic period. Or it is possible that at first no temple stood on the site. The next building, at any rate, shows an entirely new type of plan (Pl. 23 A). The site was

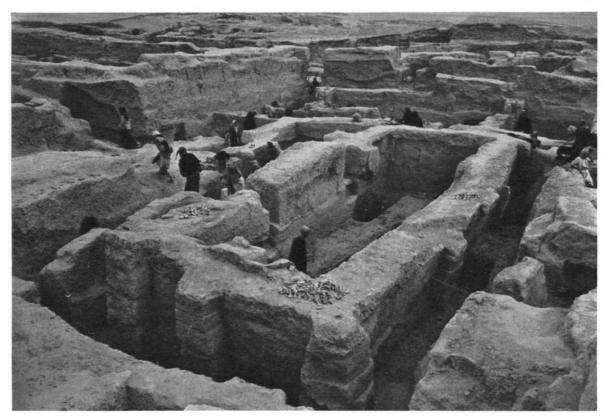


Fig. 153.—The Single-Shrine Abu Temple, Seen from Southwest

leveled and a temple erected with a single shrine oriented almost due east and west with an altar in the center of its west end. The entrance was on the cross axis from the north, and a second doorway in the north wall nearer the altar led to a small annex mainly occupied by a circular baking-oven or kiln. There were four principal building levels of the Single-Shrine Temple, and this plan persisted during the first two. At the third and fourth there was an important change, inasmuch as the shrine was then divided into two separate compartments by a wall with a doorway in it.

The foundations of Single-Shrine Temple I occurred at 33.50 m.; yet the first occupation level at which an altar and doorways existed was 90 cm. above this, and two noticeable pavements occurred between (see Pl. 24 A). One presumes that these correspond to intermediate periods of occupation when no temple existed on the site and that the foundations of the new shrine were sunk into the accumulated debris. The walls, which were a little over 1 meter

thick, were ornamented or strengthened with buttresses projecting about 30 cm., dividing the south wall into three bays and each end wall into two. The north wall of the annex had two considerably smaller buttresses. All these buttresses showed signs of repeated replastering, or possibly even reshaping, at various less well defined occupation periods which fall within the major epoch. This may be deduced from their irregular appearance in Figure 153.

What remained of the south wall of the building had a distinct tendency to lean outward, probably owing to the superimposed weight of a later building. The batter thus produced on its inner face can be seen in Figure 157. A curious feature of the north wall and one not easy to explain is its increase in thickness by about 30 cm. from the entrance doorway westward.

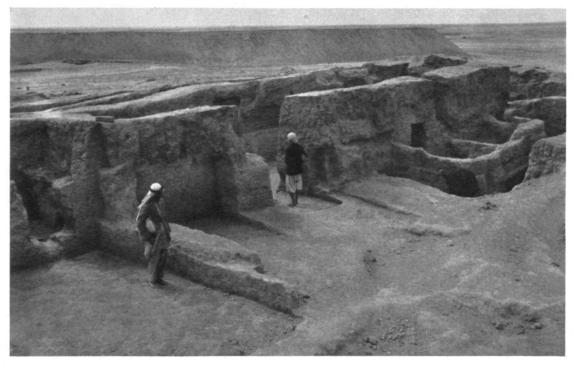


FIG. 154.—THE SINGLE-SHRINE TEMPLE, SEEN FROM NORTHEAST

The man in the center stands in the entrance to Single-Shrine Temple I. At the right is the annex containing an oven. The man at the left stands in E 17:11.

The section between the two doorways was much damaged and difficult to trace, but there is little doubt that its face was aligned with that west of the annex doorway and with the pilaster on the east side of the entrance. One effect of this was to increase the depth of the doorway.

The architectural treatment of the entrance included small flanking towers stepped back along the inner faces so as to give the impression of a doubly rabbeted doorway; or possibly the opening was arched, and the two small "towers" combined above the arch to form a single projecting panel. Apparently a sunk area level with the pavement inside the building extended some distance outside (Fig. 154). It is hard to explain in view of its obvious inconvenience on the occasion of heavy rain.

The circular oven which occupied the western half of the annex (D 17:2) appears in Figure 155. One would conclude that its function corresponded to that of a modern Arab  $tann\bar{u}r$ , but it was built on a somewhat larger scale. Its floor and inner face were burned to a dark red color. In the southeast corner of the room at this level were found the arm and foot of a limestone statue (As. 32:672).

The curiously shaped kiln or forge in Figure 156 was situated outside and near the north-west corner of the temple and appeared to be contemporary.

To return to the interior of the shrine, the walls of this period remained standing about 1.25 m. high, with the result that the altar at the west end remained almost intact. It consisted, as will be seen in Figure 157, of two successive shelves surmounted by a smaller pedestal;

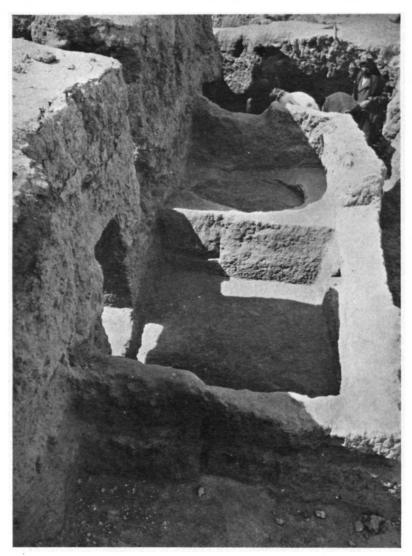


Fig. 155.—Annex to Single-Shrine Temple I

the latter is set in a niche recessed into the end wall of the shrine. The somewhat damaged circular stone statue base standing upon the pedestal was actually found outside the temple but was placed here to suggest the position of the cult statue (see Fig. 159). The top surfaces of both shelves and of the pedestal were intact, luckily in the latter case, since it occurred only a few centimeters beneath the line of a later rebuilding. Set in the face of the lower shelf flush with the surface was an irregular slab of limestone measuring  $110 \times 35 \times 6$  cm. (Fig. 158).<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> As this figure shows, part of the southwest corner of the altar was unfortunately broken away, owing to an indifferent piece of wall-tracing. In Fig. 157 the damaged parts have been patched so that the altar appears once more symmetrical and complete.

It is possible that upon this stone sacrifices were made. All the surfaces of the altar and pedestal, and such sections of the original wall face as survived all round the shrine, were finished in fine mud plaster and showed unmistakable evidence of having been painted red. Against the foot of the south wall, about at its center, two small rectangular bases of mud brick a few centimeters high were placed side by side (Fig. 157). We concluded that these marked the positions of two important votive statues such as we have suggested in the reconstruction (Fig. 159).

Several objects were found at this floor level in the shrine itself, mostly in the angle between the floor and the base of the north wall. These included fragments of limestone statues



Fig. 156.—Kiln or Forge outside and near the Northwest Corner of Single-Shrine Temple I

(e.g. As. 32:1176) and a second fragment of a limestone plaque carved in low relief (As. 32:1178), part of which (As. 32:930) had previously come to light at the same level in E 17:12, a room outside the temple to the east. This plaque was one of those with a hole in the center; they were presumably used, among other things, as wall ornaments and were attached by a "pin" of stone or some other material to the mud brick.<sup>15</sup>

It will be advisable at this point to comment upon our reconstruction of the interior of the Single-Shrine Temple as it appeared at this period (Fig. 159), since many of the details are necessarily conjectural. One of the most controversial of these is the semicircular vault which we have suggested as a method of roofing. The considerations which seemed to argue in favor of this as an alternative to a flat timber roof were various. The shape of the building was one, and the thickness of the walls in proportion to the span was another. In this connection one must always bear in mind the scarcity and consequent high cost of wood in Mesopotamia at

all times, and by contrast the cheapness and structural adaptability of mud brick. It is known that the Sumerians had already mastered the principle of the brick arch, and, to judge from small-scale experiments in vaulting which one finds preserved in the structure of kilns etc.,

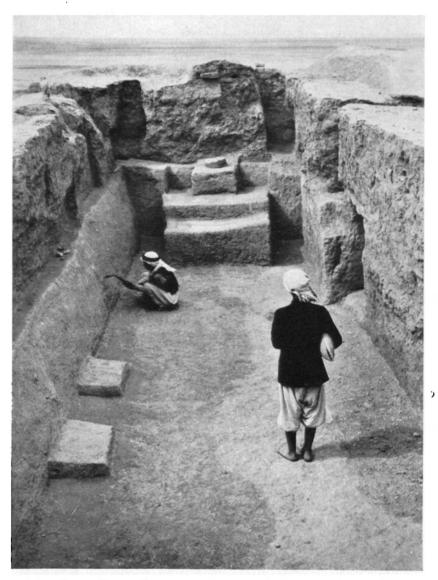


Fig. 157.—Interior of Single-Shrine Temple I after the Altar Had Been Repaired and a Statue Base Placed on Top of It

there is no reason to suppose that the construction of a vault over a span of 3 meters, by means of a movable wooden centering, would be beyond their architectural ingenuity.

The small square windows would be built around a pierced terra-cotta grille, such as was actually found in a fragmentary state in a room among the private houses.<sup>16</sup> Windows of such

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<sup>16</sup> OIC No. 17, p. 14.

position and size are known to have been the rule in Mesopotamia in early times just as they are today. The object was to exclude as much of the sun's heat as was compatible with the introduction of sufficient light. Doubtless the latter purpose was served by the entrance doorway, which faced north, and little additional light was deemed necessary. The arch over the

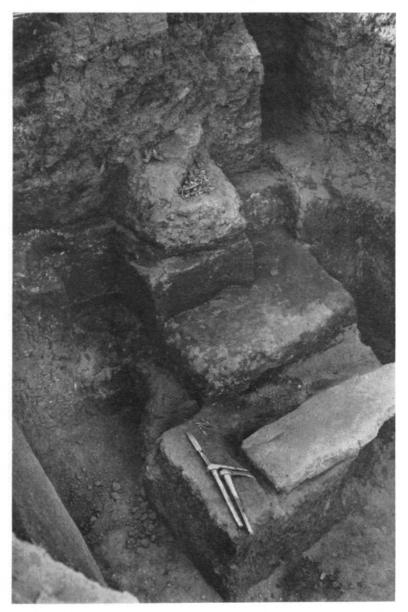


Fig. 158.—Altar of Single-Shrine Temple I during Excavation. Above Are Bones and Horns Deposited during a Later Occupation

doorway to the annex is justified by the discovery of similar arches intact in another building at Tell Asmar belonging to the same period. The ornament in the reveal merely suggests a position for a votive plaque such as was mentioned above. The appearance of the cult statue and two votive figures was based on fragments from other contemporary excavations.

When the altar was broken down as a preliminary to investigating the building beneath, it was found to consist of three walls 45 cm. thick inclosing a cavity filled with loose soil

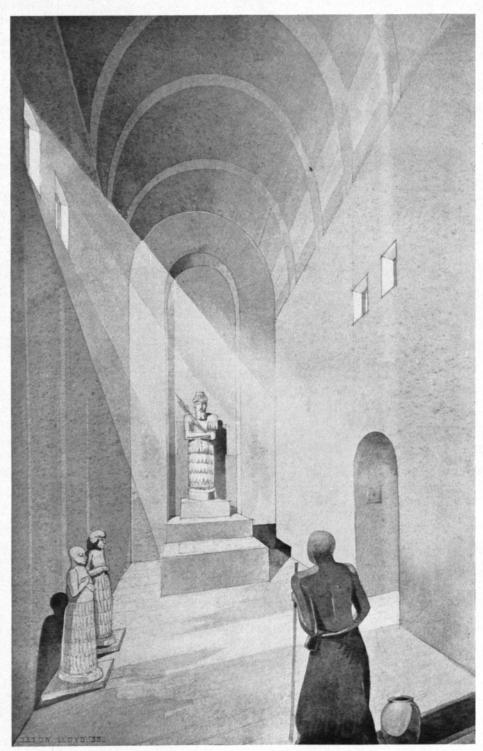


Fig. 159.—Reconstruction of Cella of Single-Shrine Temple I

amongst which were a number of unbroken plano-convex mud bricks and a single stone macehead. There seemed to be no vault over it.

An important collection of statue fragments (As. 33:75, 77, 109-11, and 734-37) and other objects from the temple, including at least a dozen maceheads (As. 33:16, 57-61, 63-64, 76, 78, and 95–96), was found scattered over the area immediately adjoining the northeast corner of the building. The stratification of this group is interesting. At the time of the principal occupation of Single-Shrine I a wall was built butting up against the northeast buttress of the temple and inclosing an area to the east which we called E 17:11 (left foreground of Fig. 154). This wall was built upon the contemporary pavement (about 34.50 m.). More than half a meter beneath its foundations was another clearly defined pavement, showing signs of having received a coating of gypsum; it undulated slightly, owing to the stumps of walls dating from the Level III occupation of the Square Temple over which it was laid. If continued southward beneath the Single-Shrine Temple, it would have corresponded to the second of the two pavement levels mentioned on page 192, which we there assumed to represent periods previous to the rebuilding of the temple. Here the statues were found, some of them actually bearing traces of the gypsum when removed from the ground. One would accordingly deduce that they were a miscellaneous collection, partly surviving from the last occupation of the Square Temple, but discarded before or at the time when the new Single-Shrine Temple was built. This theory is borne out by the following curious fact. Amongst the statues was one (As. 33:75) the feet and pedestal of which were missing; to these (As. 33:281) were found much later in the priests' room (D 17:6)<sup>18</sup> at Level I of the Square Temple. The statue after losing its feet must have been retained in the temple during a period of years represented by two distinct and successive occupations before it was finally discarded.

The second stage of the Single-Shrine Temple appears by the stratification of the intervening terrain to be contemporaneous with the Northern Palace.<sup>19</sup> It consequently belongs to the Proto-imperial period.<sup>20</sup> This rebuilding differed in several rather important details from the original. The walls were still constructed of plano-convex bricks, although the clay was in this case much lighter in color and the masonry could consequently be distinguished very clearly from that above and below. This can be seen in a picture showing the architectural treatment of the main entrance (Fig. 160), where the remains of rabbeted doorways corresponding to three successive periods (I, II, and III) appear superimposed. The bonding of the Single-Shrine II masonry can be clearly seen, and it will be noticed that the bricks are laid flat in alternate courses of headers and stretchers, not on edge in the manner usually employed with plano-convex bricks. This change may possibly foreshadow the introduction of the more regularly made prismatic bricks of the Akkadian period, which was now not far off.

One change in the outward appearance of the building was brought about by a new arrangement of buttresses. There were now only the corner buttresses at each end, with one more near the center of the long south side. The smaller buttresses on the annex wall had not been repeated. The entrance doorway was simplified, being now merely flanked by small towers set wide enough apart to form a deep rabbet. The walls of the actual shrine were of a fairly uniform thickness, and a small break which appears in the south wall on the plan (Pl. 23 B) may have been occasioned by a split due to uneven settlement. The most curious fact about this period is that there seemed to be no altar. It will be seen that the treatment of the west

<sup>17</sup> OIP XLIV, No. 14.

 $<sup>^{18}</sup>$  [In the Catalogue in OIP XLIV the locus was mistakenly given as D 17:9. The change does not affect the conclusions, however, since the level is correct.—Eb.]

<sup>18</sup> See OIC No. 19, folding plate at end.

<sup>&</sup>lt;sup>20</sup> See p. 159, n. 7.

end of the shrine chamber had to be reconstructed from what remained in the southwest corner, the northwest corner having been much damaged during a subsequent rebuilding. Short projecting walls on either side must have framed some sort of niche in front of which stood a small square offering-table of a type with which we became familiar in the Square Temple.

The annex was still approached through a doorway in the north wall of the shrine and again contained a large oven in the northwest corner. This time the oven was more rectangular in plan and built on a slightly raised platform. In it was a well preserved pot, possibly used for cooking.



Fig. 160.—Remains of the First Three Building Periods at the Entrance to the Single-Shrine Temple

On the floor of this shrine was found a fragment of a statue with the end lines of a votive inscription (As. 32:700).

It is uncertain whether the next rebuilding (Single-Shrine III) belongs to the Akkadian (as does the succeeding stage) or to the very end of the Early Dynastic—that is, the Proto-imperial—period. It will be remembered that at Lagash too the use of plano-convex bricks stops with the reign of Entemena, at least sixty years before the accession of Sargon. At this stage the main structure was divided into two separate compartments, and there was some elaboration of the plan. The long south side now had five buttresses, including those at the corners, and the west side three. It is possible that a buttress in the center of the east end was dispensed with on account of some adjoining building abutting on the temple at this point. Wall-tracing was more difficult here, owing to the proximity to the surface, and gaps in the plan which have had to be conjecturally restored are accounted for by this fact. The setting of the

entrance doorway, however, was clearer as well as more elaborate in this case than elsewhere (Fig. 161). The flanking towers had a projection of 70 cm., and two rabbets 15 and 30 cm. wide respectively occurred between them and the actual reveals of the doorway. At their bases there were two low plinths which projected another 75 cm. and inclosed between them a flight of three rather narrow steps composed of bricks on edge (exposed in Fig. 161). Shallow depressions on the inner sides of these plinths were perhaps intended to give some architectural effect. When we removed the plinths preparatory to investigating a deeper level (Fig. 160), we found that the plastered angles and rabbets of the towers and doorway continued down behind them; they must therefore have been a secondary construction.

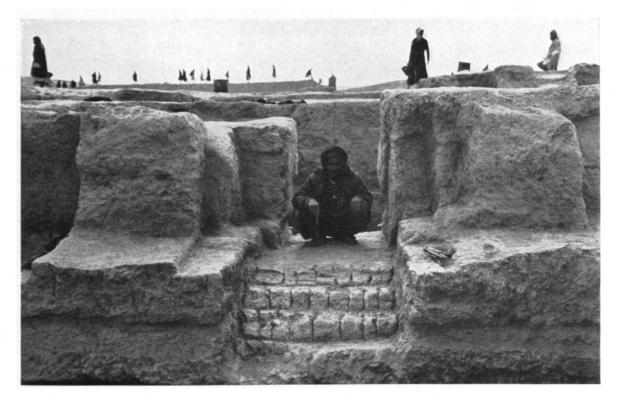


FIG. 161.—ENTRANCE TO SINGLE-SHRINE TEMPLE III

A pavement which, west of a point near the entrance, was covered with a fine coating of white gypsum, made the deep central doorway easier to trace. In the actual reveals there was a skirting composed of bricks standing on end, and the gypsum was slightly turned up against these. The tiny rabbets on either side are hard to explain unless they mark the position of a door. Their doubtful state of preservation and the dilapidated condition of the walls in general can be seen in Figure 162.

The altar was again the most important feature of the sanctuary compartment. There was a step in front of it 25 cm. high, but the height of the structure itself was less easy to gauge. It seems probable that when the temple was rebuilt for the last time (Single-Shrine IV) a new altar of a slightly reduced size was constructed upon the projecting top of the old one, thereby again forming a preliminary step. In this case the original altar must have stood exactly 1 meter high from the pavement. There was again an offering-table or pedestal 35 cm. square, this time in the center of the sanctuary. When this altar was removed preparatory to penetrating into a deeper stratum, a layer of earth and loose bricks was found beneath, amongst

which was a copious collection of bones, including those of several fish and some large bird. There were also fragments of the shell of an ostrich egg and the well preserved horns of a goat or small antelope still attached to the frontal bone. The position in which they were found is shown in Figure 158, which is of course a picture of the much earlier altar in Single-Shrine Temple I. It is just possible that they represented the remains of a sacrifice made as a preliminary to the foundation of the Single-Shrine III altar; but it is equally probable, owing to the ambiguous level at which they were located, that they belonged to the niche in Single-Shrine II.



Fig. 162.—Interior of Single-Shrine Temple III, Showing Division of the Shrine into Two Parts. The Pedestal (a) and Altar (b) Can Be Seen through the Central Doorway

The gypsum pavement sloped sharply up from in front of the altar, and on a line with the west face of the jambs of the central doorway there was a shallow step. The slope continued at a less steep angle toward the entrance doorway. Against the east jamb of the latter a pivot stone was sunk a few centimeters beneath the pavement level. This was merely a small boulder with a circular depression in the top, and above it was a sort of bowl-shaped hollow lined with sherds (Fig. 163). Near by we found a group of objects, the most important of which was a square limestone plaque carved in relief, with a square hole in the center for attaching it to the wall and with a border of nacre inlay set in bitumen (As. 32:800). There were also the broken remains of several clay saucers, a large knucklebone, a small boulder of pinkish granite, a pestle-shaped stone, and a minute earthenware jar.

There was the usual annex approached through a doorway near the altar, but at this and the subsequent level no signs of a baking-oven or kiln.

#### THE ABU TEMPLE AT TELL ASMAR

The final rebuilding of the Single-Shrine Temple (IV) falls within the Akkadian period. All the walls except those at the extreme west end of the plan occurred directly beneath the surface of the mound (see Pl. 24 A) and were particularly difficult to trace owing to the ruins having been packed with hard mud brick to make a foundation for a later building. Very few of the wall faces could be fixed with absolute certainty, but the shape of the actual surviving masonry is shown in Plate 23 D and suggests that again the shrine was divided into two com-



Fig. 163.—East Jamb of Entrance Doorway in Single-Shrine Temple III, Showing Hole Lined with Sherds above Pivot Stone



Fig. 164.—Cylinder Seal As. 32:738 from Single-Shrine Temple IV. Actual Size

partments. We established the existence of a square offering-pedestal, like those of lower levels already described but in this case the first ever to be found, and, in what—to judge by analogy with Single-Shrine III—should be the angle between the north wall and the north jamb of the central doorway, the fragments of a large earthenware bowl. From near by a terra-cotta drain consisting of cylindrical sections led through the wall into the court (see Pl. 23 D). A miscellaneous collection of objects found in the vicinity of the step before the altar belonged to this period. There were many stone maceheads amongst them. In the angle between the floor and the wall in the neighborhood of the entrance doorway was a fine cylinder

seal representing a fight between mythical heroes and a seven-headed animal, perhaps the prototype of the Greek hydra (As. 32:738, Fig. 164). Little more could be ascertained con-

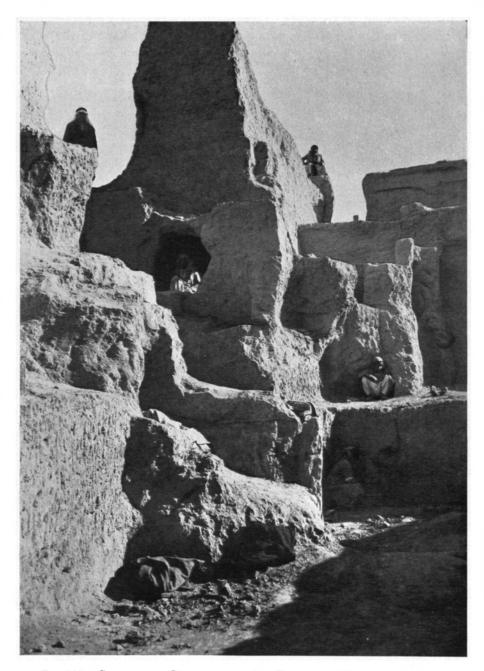


Fig. 165.—Comparative Levels in the Abu Temple and Neighboring Areas

From the top down the workmen are placed as follows: on the surface of the mound; at the main occupation level of the Northern Palace; in the building beneath the Northern Palace corresponding to Single-Shrine Temple I; at Level I of the Square Temple; and at Archaic Shrine III.

cerning the treatment of the entrance than that it was flanked by the usual towers; but three large boulders which remained in place between them had doubtless formed the base of a step. Equally little can be said of the disposition of buttresses at this late period.

Directly above the altar was a shapeless mass of brickwork dating from the Larsa period and standing several courses high. This was the only trace which remained of any building on the Abu Temple site later than the dynasty of Akkad.

A general idea of the stratification and comparative levels is given by Figure 165. Workmen are posted at the following points: (1) surface of the mound: (2) Northern Palace, main

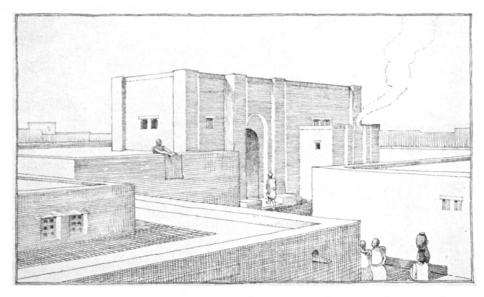


Fig. 166.—Perspective Reconstruction of the Single-Shrine Temple as Seen from Northeast

occupation; (3) plano-convex building beneath the Northern Palace, corresponding to Single-Shrine I of the Abu Temple; (4) Square Temple, Level I; (5) Archaic Shrine III. Plate 24 B also may be studied, since it shows typical plans of the Abu Temple at its three main periods—Single-Shrine Temple, Square Temple, and Archaic Shrine—superimposed upon one another in the position which each actually occupied.

The Abu Temple was at no time a very impressive shrine, even by Early Dynastic standards. Figure 166 shows the probable appearance of the Single-Shrine Temple amongst the houses at the northwestern limit of the city.

### CATALOGUE OF OBJECTS FOUND IN THE ABU TEMPLE

### OBJECTS GROUPED BY PERIODS AND LOCI

### EARLIEST SHRINE (CA. 24.00-26.00 M.)

		•	
Locus	Field No.	Designation	See
D 17:33	As. 34:248	sherd with horizontal lug at rim	$P^{21}$
	<b>24</b> 9	sherd with spout	P
	250	sherd with pierced lug	P
		B. 546.223 <sup>22</sup>	P
		C. 084.200b	P
		C. 455.253	P
		C. 745.270	P
D 17:34	As. 34:220-21	macehead fragments	m
	222	cylinder seal	C
		C. 545.342	P
		C. 545.342	p
	ARCH	AIC SHRINE I (CA. 26.00-27.20 M.)	
D 17:10	As. 34:160	game piece	m
	218-19	fragments of open drains or rainspouts	р
	224	fragment of open drain or rainspout	p
	253a-b	animal bones	M
E 17:30	As. 34:214	seal impression	C
	ARCH	AIC SHRINE II (CA. 27.20-28.50 M.)	
D 16:31	As. 34:213	sherd with pierced lug	P
		C. 525.373	P
D 17		C. 526.353	P
		D. 504.353	p
D 17:10	As. 34:129	painted sherd	P
	141	macehead	m
	164	sherd with horizontal lug at rim	P
		В. 087.700	р
		C. 525.373	P
		D. 504.353	р
D 17:14		D. 504.353	þ
D 17:15	As. 34:140	cylinder seal	C
	143	plaque fragment	m
	153	base of painted pot	P
		C. 456.353	P
		C. 534.313	P
D 17:16	As. 34:137	painted sherd	P
	228	rainspout	p
D 17:26		C. 555.353	P
		/	-

<sup>&</sup>lt;sup>21</sup> A letter here indicates the volume in which the object has been or will be published, a capital showing that it is illustrated and a lower-case letter meaning that it is merely catalogued. "C" and "c" stand for Cylinder Seals from the Diyala Region; "M" and "m," for Miscellaneous Objects from the Diyala Region; "MS" and "ms," for More Sculpture from the Diyala Region; "P" and "p," for Pottery from the Diyala Region; and "S," for Sculpture of the Third Millennium B.C. from Tell Asmar and Khafājah (OIP XLIV). Figure numbers refer to figures in the present volume.

<sup>&</sup>lt;sup>22</sup> These symbols indicate the forms of vessels, as described in the pottery volume, and replace field numbers.

	THE ABU T	EMPLE: CATALOGUE OF OBJECTS	207
Locus	Field No.	Designation	See
D 17:27	As. 34:175	painted sherd with spout and applied snake	P
D 17:30	As. 34:170	painted sherd	P
	172-74	animal figurines	M
D 17:35	As. 34:158	animal figurine	M
	169	painted sherd	P
		C. 086.200	p
		C. 505.353	P
E 16:45		C. 545.222	P
E 17:16		D. 546.542	$\mathbf{P}$
E 17:31	As. 34:176	painted sherd	P
	177	rim sherd with applied snake	P
	209	painted sherd	P
	211	painted sherd	P
	ARCHA	IC SHRINE III (CA. 28.50-29.80 M.)	
D 16:30	As. 34:65	stamp seal	M
D 16:31	As. 34:116 <sup>23</sup>	cylinder seal	C
D 17:10	As. 34: 53	antler fragment	M
	54	figurine fragment	M
	252	sherd with applied snake	P
		C. 594.220	P
D 17:14	As. 34:92	stamp seal	m
		D. 504.353	P
D 17:15	As. 34:147	D. 514.370	Fig. 124 and P
		A. 704.220	P
		C. 516.370	P
		D. 504.353	P
D 17:16	As. 34:223	rainspout	p
		C. 545.220	$\mathbf{P}$
		C. 554.220	P
		C. 555.520	p
D 17:26	As. 34:103-4	cylinder seals	$\dot{\mathbf{c}}$
2, 2, 1, 2, 1		B. 007.700 (many)	P
		B. 077.700a (many)	P
		В. 085.200	p
		B. 087.700 (many)	P
D 17:29	As. 34:86	pierced stone object	M
22 11.20	96	weight	m
	•	B. 556.520	P
		B. 625.521	p
		B. 664.540 <i>b</i>	P
		B. 664.570	$\mathbf{\tilde{p}}$
D 17:30	As. 34: 79	pig amulet	M
D 11.00	123	animal figurine	M
	130-33	ax heads	M
D 17:31	As. 34:124	cylinder seal	Ċ
27 11.01	ABU- WA-LWE	D. 515.370	P
		D. 544.240	P
D 17:32	As. 34: 94	ram figurine	M
17 11.UM	108	stone bowl fragment	m
	100	B. 111.210	P
		B. 183.210	P
		B. 224.443	P
		B. 526.273	P
		— : v=v:=:=	

<sup>&</sup>lt;sup>23</sup> Level given as unknown, but almost certainly Archaic Shrine III.

208		PRE-SARGONID TEMPLES	
Locus D 17:32	Field No.	Designation B. 664.520b B. 666.620	See P P
T- 10.45	A. 04 110	C. 663.540	P
E 16:45 E 16:46	As. 34:119 As. 34:113	copper blade human figurine	m M
13 10.10	114	female figurine	M
E 17:30	As. 34:85	mortar	M
		C. 526.370	P
		D. 504.353	P
Dump	As. 34:105	female figurine fragment	M
		ARCHAIC SHRINE IV (CA. 29.80-31.50 M.)	
D 17:9 (beneath)		cylinder seal	$\mathbf{C}$
D 17:10	As. 33:465	stone bowl	m
	509 536	animal amulet spindle whorl	m
	551	crystal sherd	m
	556	crystal sherd	m m
	658	6 crystal sherds	m
	683	pendant with two animal heads	M
	707-8		C
		C. 357.073	P
D 17:11	As. 33:462	spout with two snakes	P
	506	ram figurine	m
	507	pendant	m
	675	pottery stand fragment	P
	718	stone bowl fragment	m
		C. 041.200	p D
		C. 35–.0— C. 486.320	P P
		C. 480.320 C. 514.540	-
		C. 526.460	p p
D 17:14	As. 33:513	macehead	m
	583	macehead	m
	615	stone sherds	m
		B. $664.520b$	$\mathbf{p}$
D 17:15	As. 33:662	mended stone vase	m
To 48 40		C. 3—.063	P
D 17:16	As. 33:715	cylinder seal	C
D 17:22	As. 34:74	bone spoon D. 516.371	m P
D 17:24		C. 30-	P
E 16:45	As. 33:504	impressions of a miniature foot	M
	609	double spout with snakes	P
	636	painted sherd	P
	637	spindle whorl(?)	m
	638	animal figurine	m
E 16:46	As. 33:660	animal figurine	m
		D. 526.371	P
		D. 535.542	P
Unknown	As. 34:48	D. 535.542 cylinder seal	P C
CHANUWH			
		ARCHAIC SHRINE (LEVEL UNKNOWN)	
D 17:14	As. 34:100	animal figurine	M
	101	pendant	m

Locus	Field No.	Designation	209 See
D 17:14	As 34:102	cylinder seal	C
		B. 083.200	P
	SQUARE TI	EMPLE, LEVEL I (CA. 31.50-32.50 M.)	
D 17:5	As. 33:230	piece of inlay	M
		C. 356.010	P
		C. 357.010b	P
D 17:6 (Priests'	As. 33: 50-55	bead groups	m
Room)	205	cylinder seal	$\mathbf{c}$
	206	cylinder seal	c
	238	sherd with pierced lug	P
	280	male statue fragment	S
	281	statue feet, fitting As. 33:75	$\mathbf{S}$
	291	macehead	m
	293	broken stone sikkatu	M
	294	Imdugud amulet	Fig. 140 and M
	306	male head	S
	307	female head	S
	384	bracelet C. 355.010	M
		C. 357.010b	p
D 17:7 (Court)	As. 33:102	plaque fragment	p S
1) 11.7 (Court)	308	inlay fragment	,
	309	eyeball	m m
	379	blue paint	m m
	406	sherd with plastic rope and loop design	P
D 17:8 (Shrine I)		stone bowl fragments	M
15 11.0 (кинис 1)	121	small stone bowl	m
	136	stone tumbler fragment	M
	137	female head	S
	138	carved vase fragment	M
	188	stone ax head	M
	226	cylinder seal	c
	227	shell	m
	239	stone tumbler	M
	240	long weight	m
	<b>24</b> 1	stamp seal	M
	242	frog stamp seal	M
	243-44	large beads	M
	245-46	diamond-shaped beads	M
	247	bead	m
	248	cylinder seal	$\mathbf{C}$
	249	round weight	m
	252	pendant	m
	253	shell group	m
	254	cylinder seal	C
	255-56c	inlay fragments	M
	258	rosette inlay	M
	259	small weight	m
	260-62	stamp seals	M
	263	animal amulet	M
	264	shell group	m M
	265	diamond-shaped bead	M
	266 267	3 fish vertebrae	m

weight

m

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### PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
D 17:8 (Shrine I)		cylinder seal	C
	271	bead	m
	273	loom weight	m
	274-75	weights	m
	277	diamond-shaped bead	M
	278	bull protoma	S
	279	inlay fragment	M
	282	bead	m
	292	goddess figurine	Fig. 144 and M
	311	copper implement	m
	339	weight	m
	360	stone bowl fragment	m 
	363	weight	m C
	380	cylinder seal	C C
	454	cylinder seal	
	455	stamp seal	m
	456	cylinder seal	C The second sec
	457	large bead animal horn	m
	458	shell	m m
	459 460	diamond-shaped bead	m m
	461	mirror	M
	477	bead	m
	480	shell	m
	481	ax head	m
	483	stone bowl	M
	485 (part)	rim fragment of stone bowl	m
	493	pottery stand fragment	P
	530	bull amulet	M
	531	painted sherd	P
	56566	stone rim sherds	m
	567	stone sherd	m
	572	bead	m
	573	bead	m
	655	stone sherd	m
	656	bead	m
	657	8 crystal sherds	m
	663	cylinder seal	C
	666	cylinder seal	$\mathbf{C}$
	667	weight	m
	677	cylinder seal	$\mathbf{C}$
	678	diamond-shaped bead	m
	679	bead	m
	682	stone bird-vase	Fig. 143 and M
	684	crystal bowl	m
	685	macehead	M
	686	goddess figurine	$\mathbf{M}$
	69091	maceheads	m
	692	6 shells	m
	694	spindle whorl	m
	695	stamp seal	m
	696	double stone vessel	М
	697	unfinished cylinder seal	c
	698-99	cylinder seals	$\mathbf{c}$
	700	diamond-shaped bead	m
		•	

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## THE ABU TEMPLE: CATALOGUE OF OBJECTS

T	Field No.	Designation	See
D 17:8 (Shrine I)		Designation bead	m
2 27 (0 (0	703	model ax head	m
	704	pin with fayence head	m
	705	stone tumbler	M
	706	macehead	M
	720	stamp seal	m
	As. 34:23	miniature stone vase	m
	25	cylinder seal	$\mathbf{c}$
	30	cylinder seal	$\mathbf{C}$
	35	flint blade in bitumen	m
	39	cylinder seal	$\mathbf{c}$
		C. 082.200	P
*		C. 390-	P
D 17:9 (Shrine II)		macehead	m ~
	350	plaque fragment	S
	351-53	inlay fragments	M
	356	inlay fragment	M
	414	male statue	S M
	415	goddess figurine	C
	418	cylinder seal	MS
	419 427	relief fragment female statue	S
	428	ram amulet	M
	429	stone handle	m
	430-31	inlay fragments	M
	432-33b	inlay fragments	m
	434	stone bowl fragment	M
	435	plaque fragment	S
	436	stone vase	$\mathbf{M}$
	438-39	male statues	$\mathbf{s}$
	440	male statue fragment	$\mathbf{s}$
	443	kneeling figure	$\mathbf{s}$
	444	male statue	$\mathbf{s}$
	445	goddess statue	$\mathbf{s}$
	446	god statue	$\mathbf{s}$
	447-50	male statues	$\mathbf{s}$
	451	female statue	$\mathbf{s}$
	484	stone bowl fragment	m
	485 (part)	rim fragment of stone bowl	m
	486	stone bowl fragment	m
	487	stone bowl fragment	M
	488	stone bowl rim	m
	489	base fragment of stone bowl	m <b>M</b>
	490	stone bowl fragment	
	491-92	stone bowl fragments macehead	m
	529 546	stone boat(?) fragment	m
	564	mended stone bowl	m m
	568-69	stone sherds	m
	570	stone bowl base	m
	571	crystal sherds	m
	701	cylinder seal	Č
	717	stone bowl base	m
	As. 34:28	spindle whorl	m
	29	macehead	m
		C. 350	P

212	PRE-	SARGONID TEMPLES	
Locus	Field No.	Designation	See
D 17:12	As. 33:555	needle	m
	611	cylinder seal	$\mathbf{C}$
		B. 406.462	$\mathbf{p}$
D 17:13	As. 33:518	spout with snake	P
D 17:15 <sup>24</sup>	As. 33:630	seated statue	$\mathbf{s}$
f	631	seated statue fragment	$\mathbf{m}\mathbf{s}$
E 16:40	As. 33:574-75	bead groups	m
	576	30 stone sherds	$\mathbf{m}$
	577	9 beads	$\mathbf{m}$
	578	3 shells	m
		A. 645.720	p
		B. 756.720	$\mathbf{p}$
		C. 082.210	$\mathbf{p}$
E 17		C. 664.640	$\mathbf{p}$
E 17:20	As. 33:139	plaited handle	$\mathbf{p}$
(Shrine III)	•		
	396	large bead	$\mathbf{m}$
	441	male head fragment	$\mathbf{S}$
		C. 525.362	P
		C. $526.262c$	P
$\mathbf{Unknown}$	As. 34:37	cylinder seal	$\mathbf{C}$
	38	cylinder seal	e
	44	cylinder seal	C
	SQUARE TEM	PLE, LEVEL II (CA. 32.50-33.00 M.)	
D 17:5	As. 33:388	stone ax head	m
D 17:12	As. 33:508	cylinder seal	c
	SQUARE TEMP	PLE, LEVEL III (CA. 33.00-33.50 M.)	
D 17:8 (Shrine I)	As. 33:200	male head	$\mathbf{s}$
	209-10	statue fragments	$\tilde{\mathbf{s}}$
	211-12	maceheads	M
	213	stone with two rams' heads	M
	268	statue fragment	$\mathbf{s}$
D 17:9 (Shrine II)	As. 33:358	cylinder seal	C
D 17:12	As. 33:534	ram figurine fragment	m
E 17:20	As. 33:151	cylinder seal	C
(Shrine III)		·	
		E I AND FOUNDATIONS (CA. 33.50-35.50	•
D 16:10	As. 32:665	animal amulet	M
D 17:1	As. 32:1174	macehead	$\mathbf{M}$
	1176	statue feet	$\mathbf{s}$
	1178	plaque fragment	$\mathbf{s}$
	1193	macehead	M
	1222	macehead	M
	As. 33:25	plaque fragment	$\mathbf{s}$
	28-29	maceheads	M
	30	female figurine fragment	MS
	31	animal horn	m
	32	statue group	$\mathbf{s}$
	- 38	macehead fragment	$\mathbf{M}$
		A. 654.523	n

A. 654.523

p

<sup>&</sup>lt;sup>24</sup> I.e., outside Square Temple, Level I.

•	*** 11 5*	N 1 - 4	α.
D 17:1 (south of)	Field No. As. 32:1223	Designation stone hammer	See M
D 17.1 (SOUTH OI)	1224	weight	
D 17.1 (west of)	As. 32:664	sherd with snakes	m
D 17:1 (west of) D 17:2	As. 32: 672	statue fragments	$^{ m p}_{ m S}$ .
D 17.2	1387	statue base	S ·
	As. 33:21	pottery lid (A. 010.203)	
D 17:3	As. 33:218	cylinder seal	p C
D 17:3 D 17:10 <sup>25</sup>	As. 34:4	cylinder seal	Č
D 17.10**	7	cylinder seal	Ċ
D 17:12	As. 33:500	male head	s
E 17:11	As. 32:950	cylinder seal	C
E 17.11	As. 52. 550 1001	macehead	M
	As. 33: 15	stone knob(?)	m
	16	macehead	M
	57-61	maceheads	M
	63-64	maceheads	M
	75	male statue	S
	75 76	mace statue macehead	M
	76	male statue	S
	78	macehead	M
	84	stone figurine fragment	MS
	92	macehead	m
	95-96	maceheads	M
	109-10	female statues	S
	111	male statue	s
	734-37	statue bases	$\ddot{\mathbf{s}}$
	19491	C. 084.310	P
		C. 354.010 .	P
		C. 555.522	$\cdot \overset{1}{\mathbf{P}}$
E 17:12	As. 32: 930	plaque fragment	s
E 17:12	As. 52; 950 1213	statue base	$\overset{\mathbf{S}}{\mathbf{S}}$
	1215	statue base	k)
	SINGLE-SHRIN	E TEMPLE II (CA. 35.50-36.00 M.)	
D 17:1	As. 32:700	inscribed statue fragment	MS
D 17:2		C. 596.440b	p
			•
SIN	NGLE-SHRINE TEMPLE	II-III (EXACT LEVEL INDETERMINABI	LE)
D 17:1	As, 32:582	button	m
D 17:3		C. 216.210	p
	SINGLE-SHRINI	E TEMPLE III (CA. 36.00-36.50 M.)	
D 17:1	As. 232:513	stone handle	M
D 11.1	800	plaque	s
	805	head of animal figurine	M
	855	frog amulet	M
	300	A. 524.260	P
			•
T. 4 T. 4		E TEMPLE IV (CA. 36.50-37.20 M.)	
D 17:1	As. 32: 494	rolled pin	m M
	502	game piece	M Di 104 I G
	738	cylinder seal	Fig. 164 and C
	749	button	m
	1065	clay ram's head	m

<sup>25</sup> I.e., in walls above D 17:10.

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## PRE-SARGONID TEMPLES

### SINGLE-SHRINE TEMPLE (LEVEL UNKNOWN)

Locus	Field No.	Designation	See
D 16:10	As. 32:1301	model ax	m
	1332	pendant	$\mathbf{m}$
	1362	trussed animal amulet	M
	1368	worked stone	m
D 17		C. 565.540	. р
D 17:1 (outside	) As. 32: 623	hammer	M
,	1227	cylinder seal	C
D 17:3	As. 32:1189	cylinder seal	C
	1336	stone arrowhead(?)	m
	1357	cylinder seal	C
	1367	shell funnel	m
		B. 644.322	p
		SURFACE	
D 17	As. 32:479	frog(?) amulet	M
D 17:1	As. 32:469	ring	m
	481	flint arrowhead	m
	482-85	maceheads	M
	487	macehead	M
		A. 444.250	P
D 17:3	As, 32:1050	cylinder seal	C

## THE ABU TEMPLE: CATALOGUE OF OBJECTS

# Objects in Order of Field Numbers with Indication of Loci and Periods

0_0_0					
Field No.	Locus	Period	Field No.	Locus	Period
As. 32: 469	D 17:1	surface	As. 32:1387	D 17:2	Single-Shrine Temple I
479	D 17	surface		*******	and foundations
481-85	D 17:1	surface	As. 33: 15-16	E 17:11	Single-Shrine Temple I
487	D 17:1	surface	01	T) 17.0	and foundations
494	D 17:1	Single-Shrine Temple IV	21	D 17:2	Single-Shrine Temple I
502	D 17:1	Single-Shrine Temple IV	0.5	T) 177.1	and foundations
513	D 17:1	Single-Shrine Temple III	25	D 17:1	Single-Shrine Temple I
582	D 17:1	Single-Shrine Temple II-	28-32	D 17.1	and foundations Single-Shrine Temple I
623	D 17.1	III Single-Shrine Temple	20-02	D 17:1	and foundations
664	D 17:1 D 17:1	Single-Shrine Temple I	38	D 17:1	Single-Shrine Temple I
004	D 11.1	and foundations	90	17 11.1	and foundations
665	D 16:10	Single-Shrine Temple I	39	D 17:8	Square Temple, Level I
000	10.10	and foundations	50-55	D 17:6	Square Temple, Level I
672	D 17:2	Single-Shrine Temple I	57-61	E 17:11	Single-Shrine Temple I
V	22 11.2	and foundations	<b>3. %</b> 2		and foundations
700	D 17:1	Single-Shrine Temple II	63-64	E 17:11	Single-Shrine Temple I
738	D 17:1	Single-Shrine Temple IV			and foundations
749	D 17:1	Single-Shrine Temple IV	75-78	E 17:11	Single-Shrine Temple I
800	D 17:1	Single-Shrine Temple III			and foundations
805	D 17:1	Single-Shrine Temple III	84	E 17:11	Single-Shrine Temple I
855	D 17:1	Single-Shrine Temple III			and foundations
930	E 17:12	Single-Shrine Temple I and foundations	92	E 17:11	Single-Shrine Temple I and foundations
950	E 17:11	Single-Shrine Temple I	95-96	E 17:11	Single-Shrine Temple I
550	12 14 . 11	and foundations	<i>50-5</i> 0	13 1(.11	and foundations
1001	E 17:11	Single-Shrine Temple I	102	D 17:7	Square Temple, Level I
		and foundations	10911	E 17:11	Single-Shrine Temple I
1050	D 17:3	surface			and foundations
1065	D 17:1	Single-Shrine Temple IV	121	D 17:8	Square Temple, Level I
1174	D 17:1	Single-Shrine Temple I	136-38	D 17:8	Square Temple, Level I
		and foundations	139	E 17:20	Square Temple, Level I
1176	D 17:1	Single-Shrine Temple I	151	E 17:20	Square Temple, Level III
		and foundations	188	D 17:8	Square Temple, Level I
1178	D 17:1	Single-Shrine Temple I	200	D 17:8	Square Temple, Level III
		and foundations	205-6	D 17:6	Square Temple, Level I
1189	D 17:3	Single-Shrine Temple	209-13	D 17:8	Square Temple, Level III
1193	D 17:1	Single-Shrine Temple I and foundations	218	D 17:3	Single-Shrine Temple I and foundations
1213	E 17:12	Single-Shrine Temple I	226-27	D 17:8	Square Temple, Level I
1215	E 17.12	and foundations	230	D 17:5	Square Temple, Level I
1222-24	T) 17·1	Single-Shrine Temple I	238	D 17:6	Square Temple, Level I
1222-24	D 17.1	and foundations	239-49	D 17:8	Square Temple, Level I
1227	D 17:1	Single-Shrine Temple	252-56c	D 17:8	Square Temple, Level I
1301	D 16:10	Single-Shrine Temple	258-67	D 17:8	Square Temple, Level I
1332	D 16:10	Single-Shrine Temple	268	D 17:8	Square Temple, Level III
1336	D 17:3	Single-Shrine Temple	270-71	D 17:8	Square Temple, Level I
1357	D 17:3	Single-Shrine Temple	273-75	D 17:8	Square Temple, Level I
1362	D 16:10	Single-Shrine Temple	277-79	D 17:8	Square Temple, Level I
1367	D 17:3	Single-Shrine Temple	280-81	D 17:6	Square Temple, Level I
1368	D 16:10	Single-Shrine Temple	282	D 17:8	Square Temple, Level I

### PRE-SARGONID TEMPLES

Field No.	Locus	Period	Field No.	Locus	Period
As. 33:291	D 17:6	Square Temple, Level I	As. 33:572-73	D 17:8	Square Temple, Level I
292	D 17:8	Square Temple, Level I	574-78	E 16:40	Square Temple, Level I
293-94	D 17:6	Square Temple, Level I	583	D 17:14	Archaic Shrine IV
306-7	D 17:6	Square Temple, Level I	609	E 16:45	Archaic Shrine IV
308-9	D 17:7	Square Temple, Level I	611	D 17:12	Square Temple, Level I
311	D 17:8	Square Temple, Level I	615	D 17:14	Archaic Shrine IV
339	D 17:8	Square Temple, Level I	630-31	D 17:15	Square Temple, Level I
342	D 17:9	Square Temple, Level I	636-38	E 16:45	Archaic Shrine IV
350-53	D 17:9	Square Temple, Level I	655-57	D 17:8	Square Temple, Level I
356	D 17:9	Square Temple, Level I	658	D 17:10	Archaie Shrine IV
358	D 17:9	Square Temple, Level III	660	E 16:46	Archaic Shrine IV
360	D 17:8	Square Temple, Level I	662	D 17:15	Archaic Shrine IV
363	D 17:8	Square Temple, Level I	663	D 17:8	Square Temple, Level I
379	D 17:7	Square Temple, Level I	666-67	D 17:8	Square Temple, Level I
380	D 17:8	Square Temple, Level I	675	D 17:11	Archaic Shrine IV
384	D 17:6	Square Temple, Level I	677-79	D 17:8	Square Temple, Level I
388	D 17:5	Square Temple, Level II	682	D 17:8	Square Temple, Level I
396	E 17:20	Square Temple, Level I	683	D 17:10	Archaic Shrine IV
406	D 17:7	Square Temple, Level I	684-86	D 17:8	Square Temple, Level I
414-15	D 17:9	Square Temple, Level I	690-92	D 17:8	Square Temple, Level I
41819	D 17:9	Square Temple, Level I	694-700	D 17:8	Square Temple, Level I
427-36	D 17:9	Square Temple, Level I	701	D 17:9	Square Temple, Level I
438-40	D 17:9	Square Temple, Level I	702-6	D 17:8	Square Temple, Level I
441	E 17:20	Square Temple, Level I	707-8	D 17:10	Archaic Shrine IV
443~51	D 17:9	Square Temple, Level I	715	D 17:16	Archaic Shrine IV
45461	D 17:8	Square Temple, Level I	717	D 17:9	Square Temple, Level I
462	D 17:11	Archaic Shrine IV	718	D 17:11	Archaic Shrine IV
465	D 17:10	Archaic Shrine IV	720	D 17:8	Square Temple, Level I
477	D 17:8	Square Temple, Level I	734-37	E 17:11	Single-Shrine Temple I
480-81	D 17:8	Square Temple, Level I			and foundations
483	D 18:7	Square Temple, Level I	As. 34: 4	D 17:10	Single-Shrine Temple I
484	D 17:9	Square Temple, Level I			and foundations
485	D 17:8	Square Temple, Level I	7	D 17:10	Single-Shrine Temple I
	and 9	• •			and foundations
486-92	D 17:9	Square Temple, Level I	23	D 17:8	Square Temple, Level I
493	D 17:8	Square Temple, Level I	25	D 17:8	Square Temple, Level I
500	D 17:12	Single-Shrine Temple I	28-29	D 17:9	Square Temple, Level I
		and foundations	30	D 17:8	Square Temple, Level I
504	E 16:45	Archaic Shrine IV	35	D 17:8	Square Temple, Level I
506-7	D 17:11	Archaic Shrine IV	37-38	Managarak	Square Temple, Level I
508	D 17:12	Square Temple, Level II	39	D 17:8	Square Temple, Level I
509	D 17:10	Archaic Shrine IV	44		Square Temple, Level I
513	D 17:14	Archaic Shrine IV	48		Archaic Shrine IV
518	D 17:13	Square Temple, Level I	53-54	D 17:10	Archaic Shrine III
529	D 17:9	Square Temple, Level I	62	D 17:9	Archaic Shrine IV
530-31	D 17:8	Square Temple, Level I	65	D 16:30	Archaic Shrine III
534	D 17:12	Square Temple, Level III	74	D 17:22	Archaic Shrine IV
536	D 17:10	Archaic Shrine IV	79	D 17:30	Archaic Shrine III
546	D 17:9	Square Temple, Level I	85	E 17:30	Archaic Shrine III
551	D 17:10	Archaic Shrine IV	86	D 17:29	Archaic Shrine III
555	D 17:12	Square Temple, Level I	92	D 17:14	Archaic Shrine III
556	D 17:10	Archaic Shrine IV	94	D 17:32	Archaic Shrine III
564	D 17:10	Square Temple, Level I	96	D 17:32	Archaic Shrine III
565-67	D 17:8	Square Temple, Level I	100-102	D 17:14	Archaic Shrine
568-71	D 17:9	Square Temple, Level I	103-4	D 17:14	Archaic Shrine III
0.00-1.1	AF I F OF	equate remine, herei i	1007	D 11.40	ARCHAR DITHE III

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## THE ABU TEMPLE: CATALOGUE OF OBJECTS

Field No.	Locus	Period	Field No.	Locus	Period
As. 34:105	dump	Archaic Shrine III	As. 34:164	D 17:10	Archaic Shrine II
108	D 17:32	Archaic Shrine III	169	D 17:35	Archaic Shrine II
113-14	E 16:46	Archaic Shrine III	170	D 17:30	Archaic Shrine II
116	D 16:31	probably Archaic Shrine	172-74	D 17:30	Archaic Shrine II
		III	175	D 17:27	Archaic Shrine II
119	E 16:45	Archaic Shrine III	176-77	E 17:31	Archaic Shrine II
123	D 17:30	Archaic Shrine III	209	E 17:31	Archaic Shrine II
124	D 17:31	Archaic Shrine III	211	E 17:31	Archaic Shrine II
129	D 17:10	Archaic Shrine II	213	D 16:31	Archaic Shrine II
130-33	D 17:30	Archaic Shrine III	214	E 17:30	Archaic Shrine I
137	D 17:16	Archaic Shrine II	218-19	D 17:10	Archaic Shrine I
140	D 17:15	Archaic Shrine II	220-22	D 17:34	Earliest Shrine
141	D 17:10	Archaic Shrine II	223	D 17:16	Archaic Shrine III
143	D 17:15	Archaic Shrine II	224	D 17:10	Archaic Shrine I
147	D 17:15	Archaic Shrine III	228	D 17:16	Archaic Shrine II
153	D 17:15	Archaic Shrine II	248-50	D 17:33	Earliest Shrine
158	D 17:35	Archaic Shrine II	252	D 17:10	Archaic Shrine III
160	D 17:10	Archaic Shrine I	253a-b	D 17:10	Archaic Shrine I

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### III

#### THE SHARA TEMPLE AT TELL AGRAB

By SETON LLOYD

#### EXCAVATION

Inasmuch as no preliminary report has appeared in which reference was made to the discovery and investigation of Tell Agrab, it will be well to say a few words here on this subject, preparatory to discussing the actual results of the excavations.

The tell is not by any standard a large one. It will be seen in Plate 25 that a rectangle  $600 \times 500$  meters in area covers the entire site, leaving a considerable margin. Yet, owing to the almost featureless character of the desert in which it is situated, its 12 or 13 meters of height constitute a considerable landmark (Fig. 167). It is doubtless for this reason that it

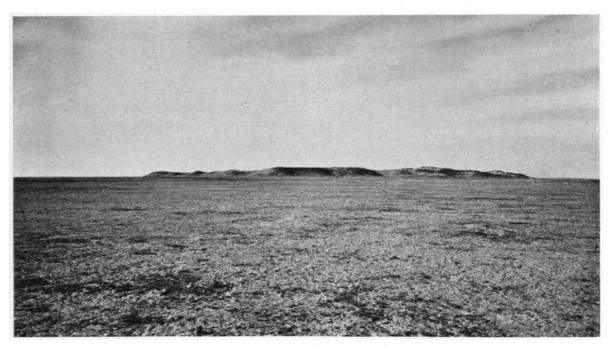


Fig. 167.—View of Tell Agrab from Southeast

appears upon the 1:1,000,000 map of the world from which the names of many more imposing mounds are absent. For some time before the Oriental Institute made its headquarters at Tell Asmar, 15 miles to the west, its existence was known to Mr. Sidney Smith, at that time director of antiquities, and others, from certain archeological material which found its way into the hands of Baghdad dealers and purported to come from a mound which could be identified as Tell Agrab. This consisted of cylinder seals, mainly of the Akkadian period, many stone bowls suggesting an earlier date, and a type of pottery made of gray clay, bearing a fine incised decoration with a filling of white gypsum or some similar substance, and associ-

<sup>&</sup>lt;sup>1</sup> [The spelling Aqrab has been used in OIP XLIII, XLIV, and LIII. However, the name proves to be variously interpreted by the Arabs. Hence a spelling which is definitely ambiguous is now preferred.—Ep.]

ated at the time with a period intermediate between the end of the Akkadian period and the Third Dynasty of Ur, perhaps contemporary with Gudea.

During the first five seasons' work in the Diyala concession the Expedition was too much preoccupied with excavations at Tell Asmar itself, Khafajah, and later Ishchali to pay much attention to a fourth tell. Yet a special arrangement was made with the Department of Antiquities that Tell Agrab should be officially included in the concession, and in return the site was visited by members of the staff, or in the summer by Arab guards, at sufficiently frequent intervals to check the damage which it had already suffered from illicit diggers. In the autumn of 1935, however, when the protracted search for the great temple of Eshnunna had proved fruitless and the system of final search trenches was almost complete, it became evident that what remained of the season could not profitably be spent in further work of the same sort at Tell Asmar. Our attention was accordingly focused upon Tell Agrab, and our interest in that site was considerably increased when a group of surface finds was examined in the light of much new information accumulated by us during the previous five years. There were pottery indications of an extensive occupation during the first and second phases of the Early Dynastic period and reasons for thinking that a rich stratum of the last phase of the Proto-literate period (Jamdat Nasr) lay beneath. Furthermore several clay mosaic cones were included, some with their ends dipped in paint, such as have been found at Warka, al-'Ubaid, and Eridu in use at earlier phases of that period.

It was accordingly determined that a gang of about 150 men should be detached from Tell Asmar and employed during the first weeks of 1936 in investigating the possibilities of Agrab. Guards were at once installed on the site, quarters arranged for the men, and a scheme worked out for transporting and storing water. This problem of water will always be a formidable one in excavating a mound in such an isolated position. For short periods after the winter rains there were lakes of standing water in the surrounding desert, but normally a heavy truck carrying tanks had to be used and water brought from the nearest irrigation canal head, sometimes as far distant as twenty miles. A cement-lined cistern had to be built to hold several thousand gallons, and a wooden superstructure to protect it from the sun.

While a small expedition house and quarters for the workmen were being prepared, the writer was engaged upon a rapid topographical survey of the mound, which, when completed on the fifth day, revealed its shape and extent as shown in Plate 25. For the moment, however, we may turn to its more superficial characteristics as they had appeared to us on our preliminary visits from Tell Asmar and to our deductions made therefrom. It was oblong in shape with the long axis running almost due north and south. All along the east side was a high ridge rising to a series of little peaks, and to the west the ground fell away gradually in a complicated series of water-worn valleys and gently sloping plains to a fairly clear line where the signs of occupation ended and the flat desert began. Along the whole length the eastern flank of the ridge dropped precipitously to plain level, except at one point, where there was a breach in the bulwark which it formed and the little peaks receded, leaving an irregular "amphitheater" with low ground in the center. The curious effect can be seen in Figure 168. It was this point which first attracted the writer's attention on an early visit to the site in the company of Dr. John A. Wilson, who was then staying at Tell Asmar.

With regard to surface finds, little more had been seen of the gray, incised ware hitherto considered typical of the site; but, judging from other potsherds, of which there were great quantities, and from the shape of the kiln-baked bricks littered about on certain parts of the tell, we had come to the conclusion that remains of later periods such as the Akkadian and Larsa dynasties were best preserved at the south end of the tell, whereas at the north end and in the center ruins dating from the Early Dynastic period were likely to be found on the sur-

face. Furthermore, there were surface indications in the so-called "amphitheater" which suggested that the ruins of a large building lay beneath. This inference was rather dramatically confirmed a few days later when two men, temporarily disengaged from work on the water cistern, were put to scraping the surface of a projecting spur in the center of the amphitheater (square M 13). A wall of great thickness was at once discovered, and no sooner had they begun to trace its heavily plastered face than a fragment of a limestone relief of a type now invariably associated with Early Dynastic temples appeared. After this there remained little doubt as to where digging should begin.

On January 1, 1936, the writer was still engaged on the topographical survey of the tell, but the pickmen were now established in their new quarters and could be employed on preliminary soundings. The first problem was to decide on the most suitable place for dumping, and, since

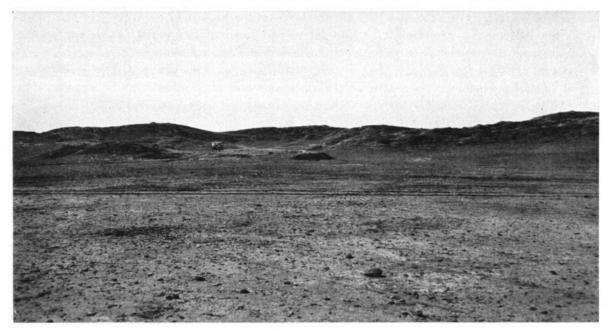


Fig. 168.-View of Tell Agrab from East, Showing the "Amphitheater" Where Excavations Began

we were still in complete ignorance as to the extent of the building about to be excavated and only able to estimate its approximate position, this was no easy matter. There was an opening into the amphitheater on the east side, flanked by two little spurs constituting the points of the crescent of hills which surrounded it. The opening itself seemed likely to have been the site of a gateway in the town wall, and it was therefore eventually decided that a dump should be run out diagonally across the southern spur. When the spur was investigated it proved that our conjecture at least as to the position of the town wall had been correct. We at once encountered the ruins of an imposing fortification (Figs. 169–70 and Pls. 25–26) standing, at the point where it was first exposed, as much as 1.30 m. high, elsewhere somewhat higher.

The wall was 5.50 m. in thickness, and its outer face was ornamented or reinforced with semicircular buttresses at intervals averaging about 15 meters. These buttresses were about 2.20 m. wide and had a projection of 2.50 m. Tracing the wall southward,<sup>2</sup> we found that it decreased in height until a point roughly corresponding to the dividing line between squares

<sup>&</sup>lt;sup>2</sup> For convenience directions are referred to in the text as "north," "east," "south," and "west," although they are actually northwest, northeast, southeast, and southwest respectively; cf. p. 9, n. 17.

P 13 and Q 13 was reached, where it disappeared altogether owing to the denudation of the tell. We were therefore able to adhere to the original line planned for our dump, which crossed

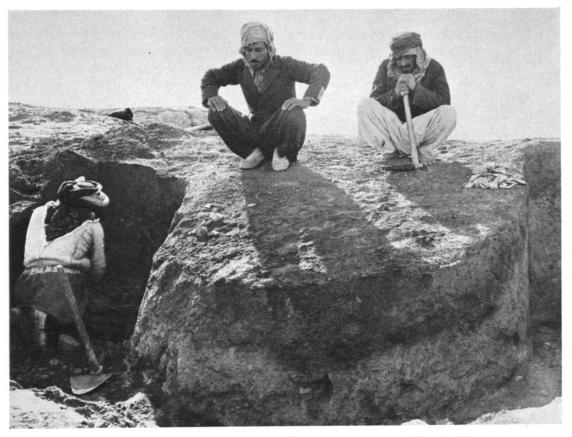


Fig. 169.—A Semicircular Buttress of the Town Wall at Tell Agrab



Fig. 170.—Section of the Town Wall in P 12-13, Seen from Northwest

the southern spur at this point (Fig. 170). Very much the same thing happened as we approached the opening to the north. A short way beyond the second buttress, which occurred

about the center of P 12, the outer face was interrupted by a secondary burial. The wall was by now only a few courses high, and beyond this point it became impossible to trace. Transferring our attention to the inner face, we cleared a length of about 20 meters without encountering any interruption. Occasionally loose bricks were found in a good state of preservation. They were large, measuring about  $25 \times 16 \times 10$  cm., and of a normal plano-convex shape. On both sides a quantity of broken pottery had accumulated against the base of the wall. Solid-foot calices and bowls of an Early Dynastic type were present in about equal proportions, also a scattering of painted "scarlet-ware" fragments of Early Dynastic I. On the out-



Fig. 171.—Skeleton Found beside the Town Wall in O 11

side only there was also a considerable quantity of spherical lumps of baked clay about the size of a tennis ball. These were unquestionably sling balls used in some attack upon the walls of the town.

The wall was not laid upon an even foundation. The varying levels at which the lowest courses occurred suggest that it may have been built upon the ruins of some earlier wall. The most notable variation is in the buttress in the center of P 12, whose foundations occur at a point as much as 1.25 m. beneath those of any other (cf. Fig. 170).

Beyond the gap in O 11, which was after all probably caused only by the outflow of surface water from the amphitheater, we again managed to pick up the outer face of the wall and to trace it northward for another 45 meters. Within this distance two buttresses occurred, similar in shape and dimensions to those southeast of the gap, one of them standing over 1.60 m.

in height. Two more burials were found in the course of this work, one of which, in O 10, was probably intrusive. The other, Grave 1 (Fig. 171), seemed more nearly contemporary, if not with the construction of the wall then with some phase of its existence, but left some doubt as to whether it was in fact a burial or merely a corpse covered by a fall of masonry. The body lay on its side in a contracted position, with knees and forehead touching the plaster face of the wall. When it was removed, two cylinder seals (Ag. 35:181–82) were found in a position suggesting that they had been suspended from the neck; one is clearly Akkadian in style. We were less fortunate with the inner face of this section of town wall. Quantities of fallen masonry and the superimposed debris of later private houses made it almost impossible



Fig. 172.—Burial Found Southeast of the Shara Temple in a Sounding in Q 13

to trace. It can, however, be safely assumed that the width of the wall was the same as in the southern section.

By January 6 we had a full team of men, about 150 in all, at work on the site. They were at first engaged in making soundings in O 14, which was later likely to be covered by the head of the dump, and also near by in squares Q 13, P 14–15, O 13, and N 13. The only find of interest in Q 13 was a burial, Grave 2 (Fig. 172). In O 13 they at once encountered some sort of inner inclosure wall (a in Fig. 173, a picture taken at a later stage in the excavations; cf. Pl. 27 B) about 2.5 m. in thickness, running not quite parallel to the town wall and some 18 meters from it. This wall actually seemed to be hardly more than a foundation. Its faces were unplastered, and tracing was extremely difficult owing to the almost indistinguishable similarity of the loosely laid masonry filling the space on either side. It soon became

clear that the inclosure wall must have belonged to an early building, whose ruins had been packed out with a filling of loose brickwork in order to make a level foundation for some new structure. The individual bricks of the filling matched those of the town wall in size and shape, whereas those of the earlier foundation appeared to be considerably smaller—about  $20 \times 14 \times 8$  cm. We therefore provisionally considered the filling, and also the building which we were expecting to find in the hill to the west, contemporary with the town wall. This theory was partially corroborated when we followed a wall leading northeast at right angles to the inclosure wall. This did not eventually reach the town wall, since a street about 4 meters wide had apparently always existed just inside the latter; but when the corner was reached a com-



Fig. 173.—General View of Excavations in the Shara Temple from Northwest The inner inclosure wall in N 11—0 13 is marked a; b shows the sounding in the southeast corner of N 13

parison of levels showed a discrepancy of 1.20 m. between their respective foundations. Two square-angled buttresses on its outer face gave the inclosure wall some character, while inside (in O 13) we were with great difficulty able to disentangle the walls of two intercommunicating chambers built against it. Its exact extent could not be determined, but it was eventually traced from N 11 to O 14 with a fair amount of certainty. A secondary grave cut into it diagonally at one point in O 13.

Another sounding, in the southeast corner of N 13 (Fig. 173 b) struck plastered wall faces corresponding in level to the inclosure wall. Part of a room (N 13:1) and three plastered pedestals were traced here, and a number of interesting objects came to light (see pp. 253 f.). The objects lay upon and in the filling above a pavement (at 30.75 m.) roughly corresponding to the top of the inclosure wall in O 13, which was, as we have mentioned, no more than a foundation, so that the wall built upon it could have started at about this point.

Meanwhile work had begun in earnest on either side of the little spur projecting in the

center of the amphitheater, where, as mentioned above (p. 220), a wall of great thickness had already been detected, and one by one the rooms of an important building took shape. The first room discovered to the north was later numbered L 13:1 (Pl. 26). Here we encountered thin walls of a secondary occupation, possibly the work of mere squatters, and, taking this to be contemporary, we at first supposed that we were dealing with private houses. This illusion was soon dispelled by the number and quality of the finds, particularly in the adjoining room or passage, L 13:3.3 Farther to the south the first scraping of the surface brought to light a fine gypsum pavement whose outline coincided with the shape of a room later numbered M 14:1. Only a few centimeters of the walls remained standing, and we were able to deduce from this fact that other rooms belonging to the same building level, but situated far-

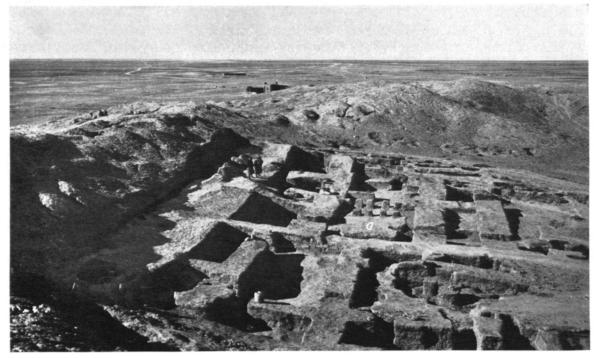


Fig. 174.—The Main Level of the Shara Temple, Seen from Southeast

The residential rooms are in the foreground. The main sanctuary (a) is distinguished by two rows of square offering-tables.

ther east, would probably be untraceable owing to the slope of the ground. In the west wall of M 14:1, however, we were able to locate a doorway and to trace our way into an adjoining room, M 14:2. Here almost at once one of two rows of small square offering-tables came to light, and from that moment on there could be little doubt that we had discovered a large temple of which this was the main sanctuary.

The remainder of the plan now began gradually to appear. It covered the whole of the western part of our so-called "amphitheater" and was inclosed to the south, west, and north by an outer wall over 4 meters thick ornamented on the outside with alternate buttresses and curtains. On the west side in particular it was necessary to trench deep into the side of the hill in order to trace the outer face of the building (on the left in Fig. 174), and in doing so we came to realize the explanation of the crescent-shaped formation of hills in the center of which the temple lay. They consisted entirely of the ruins and debris of private houses built and

<sup>&</sup>lt;sup>3</sup> L 13:3, 5, and 8, which are in square M 13, were excavated and numbered before the grid was laid down.

rebuilt at many later periods on sites immediately adjoining this Early Dynastic temple but never encroaching upon it. The whole area covered by the ruins of the latter had evidently been held too sacred to defile with secular buildings or to disturb in any way, except possibly with an occasional burial. Thus the level of the surrounding buildings had risen, eventually many meters, while the site of the old temple had remained at its original level, thus creating the amphitheater-like depression in the flank of the mound by which we had been so struck.

We were now clearing a definite and uniform occupation level all over the building, and we found our activities limited to the east by an equally definite, if somewhat irregular, line beyond which our walls could not be traced, owing to the denudation of the tell and consequent slope of the ground (indicated by a broken line in Pl. 26). Our plan could now be pronounced unquestionably contemporary with the preliminary filling of large plano-convex bricks encountered during the tracing of the inclosure-wall foundation in O 13 and again in the sounding in N 13 (cf. p. 224); in the latter case the filling might have served as a foundation for the pavement of the central court M 13:1 if this had been prolonged somewhat toward the east (see Pl. 28). This of course involved dating both the inclosure-wall foundation and the plastered structures in N 13:1 (cf. Pl. 27 B) to an earlier occupation. Similarly when soundings were made at a later date in M 12 and N 12 the walls and rooms which were encountered could not be considered as contemporary with the building period which we were investigating in the temple proper.

Certain walls and rooms such as N 13:4, excavated toward the end of the first season, belonged to an earlier version of the temple and are more properly discussed in connection with our deep-level discoveries of the second season.

Between January 6, 1936, when we started work with a full team of men, and February 12 the whole of the surviving part of the temple as it appears in Plate 26 was excavated to a uniform floor level, except that in the sanctuary and storerooms adjoining it we went somewhat deeper in order to complete our harvest of finds. In the case of the main sanctuary itself the process of penetrating beneath the floor revealed certain walls testifying to a change of plan beneath. Since this suggested that nothing more could be done without undertaking the investigation of an earlier building period, we deemed this a suitable point at which to terminate our first season's work.

During the last few days we were prevented by heavy rain from continuing with the final clearance of certain less important rooms. Accordingly we took the opportunity of making rapid soundings in other parts of the tell, in order to get some idea of how buildings of the various periods represented by the surface finds were distributed topographically. In D 21-22 (Pl. 25) we succeeded in locating another portion of the Early Dynastic town wall (easily identified by a semicircular buttress like those already described) and in partially tracing a building of the Larsa period beside it. We established the fact that the majority of remains of the later periods were situated at the southern end of the mound but did not encounter any buildings other than private houses. A baked-brick well belonging to the Larsa period in E 16 had been gradually excavated during the time that work was in progress in the temple.

When work was resumed in November, 1936, we found ourselves with a very much reduced budget and were consequently able to employ only about a third as many men as during the previous season. Our intention had been to excavate the earlier building of which we had found traces beneath the great temple. But we soon realized that with the reduced funds and time at our disposal this would be far too great a task and that we should therefore be compelled to confine ourselves to a much smaller area. With this in mind a point had to be chosen at which, having removed the ruins of the later building, we should penetrate into an earlier level.

Attempts were made to follow up the wall faces discovered the previous season in two lowlevel soundings, N 13:1 and 4, since both were evidently connected with an early building and had produced objects of a type usually found in the neighborhood of a sanctuary. In N 13:1 no progress at all was made, because the walls had been much interfered with by later foundations and their consistency was almost indistinguishable from that of the tightly packed filling between. Working westward from N 13:4, however, we began to get a better idea of the problem which we had to face. From there an unplastered wall face could easily be traced up to a point where it almost coincided with that of the later wall inclosing the courtyard M 13:1 on the north side. It belonged, however, to a slightly earlier period than the latter, and we were soon able to identify it as representing a building which immediately preceded the main level and of which very little besides foundations seemed likely to have survived (Pl. 27 A). This was destined, as we had anticipated at the time, to confuse matters considerably, particularly the allotting of objects to their correct building period. In fact it turned out that these intermediate foundations, or more rarely a few courses of the plastered walls which had stood upon them, were encountered everywhere and had to be considered before the more adequate ruins of the building beneath could be investigated.

The area upon which we eventually decided to concentrate was in the vicinity of the main sanctuary of the later temple. Two small intercommunicating rooms (M 14:10 and 11) had already, at the end of the previous season, been discovered beneath the mud-brick filling which supported the floor of the latter. After some time had been spent in removing the very substantial walls of the later building, several other rooms were traced to the north and east. One, directly beneath the high altar, though extremely small, seemed to have the character of a sanctuary. A very fragmentary section of an early plan was thus obtained (Pl. 27 B), and all the rooms were followed down through a series of building levels until, at a depth of over 4 meters beneath the main occupation of the later temple, a slight change of plan was encountered and the walls became better plastered and somewhat thicker. With the few men at our disposal it was out of the question at this depth to extend the area of our excavation in order to follow up this earliest plan, and the quality of objects found gave us no direct inducement. For any future excavations on the site, however, this remains an obvious point of continuation.

Early in January, 1937, circumstances had already made it seem improbable that we should be able to continue excavating Tell Agrab, and, with the prospect of having to abandon the site in view, we determined to make as thorough an investigation as we could of its possibilities. Two different systems were employed in succession. The first consisted in making isolated soundings at points chosen more or less at random in the higher parts of the mound. The second was somewhat more methodical and involved marking out a series of twelve trial trenches measuring 30×1 meters, carefully disposed over the remaining area. In both cases the process consisted of scraping away the soft surface soil and debris until the tops of walls appeared beneath. These were then traced, if necessary beyond the confines of the trench, until the character of the building to which they belonged could be judged from their thickness and the character of the surrounding debris. In most cases also any objects found gave a clue to the approximate date.

As it turned out no new structure of obvious importance was discovered. Trench No. 7 (in D 14) brought us at its west end to a small public building of the Larsa period, and beyond this to the town wall, a length of which we were able to trace and provisionally to link up with that in D 21. In G 3 we were also able to locate the town wall by surface indications, and, tracing it with difficulty westward, to establish the position of a gateway. For the rest, the conclusion arrived at after this rapid general survey was that, in the event of other important

buildings having at any period existed in the town, it would be likely to require a somewhat elaborate and costly system of trenching to locate them.

Two other small hills situated respectively northeast and southeast of the main mound had attracted our attention owing to the fact that the surfaces of both were strewn with early pottery. Starting with the former, Hill C, we found several rooms of a private house of Early Dynastic I most of whose floors were paved with broken fragments of pottery. There were among them many elaborately painted sherds and others representing various shapes and forms of incised ornament characteristic of this early period. All these sherds were later removed and carefully sorted. In this way large and extremely interesting fragments of painted designs in "scarlet ware" were preserved. Afterward we turned our attention to the southeastern mound, Hill B, and there again found ourselves tracing a group of private houses probably representing an Early Dynastic I settlement outside the actual town walls. A number of unbroken painted pots and a very fine collection of unpainted types characteristic of the period were found. Here we concluded the season's work by making a deep sounding which brought us to what, to all intents and purposes, might be considered virgin soil. A small quantity of Jamdat Nasr painted pottery was found in the process.

It was unfortunate that very little inscribed material was found by us. A fragment of a stone vase (Ag. 35:203; see p. 229) bore, however, a dedication to the god Shara, and we have consequently assumed that the great temple in which it was found was dedicated to this deity.

#### THE MAIN LEVEL

There seem to have been two occupations of the main building level<sup>4</sup> of the Shara Temple (I and II in Pl. 28), the second floor level occurring as a rule about 20 cm. above the first.<sup>5</sup> Except in the main sanctuary, however, the plan did not change, and there was apparently no necessity to do more than replaster the walls. Generally, therefore, the various rooms may be commented upon without differentiating between the two occupations except in so far as objects found therein are attributed definitely to one or the other.

The surviving portion of the plan (Pl. 26) is divided into three distinct parts by stout walls running east-west.<sup>6</sup> The division is made more conspicuous by the fact that the means of access from one part to another are lost to us on account of the denudation of the mound and the consequent disappearance of that part of the building in which such doorways occurred. We may start by considering the middle part.

M 13:1 was undoubtedly a central hall or court, possibly obtaining clerestory lighting beneath the eaves of a roof raised somewhat higher than that of the neighboring rooms but more probably open to the sky (see p. 251). The brick filling upon which the earliest pavement was finally laid had a depth of nearly 2 meters and was considerably harder and more consistent than that encountered in our soundings farther to the east (cf. p. 224). One conspicuous feature of the court was a well built of kiln-baked bricks and measuring a little over a meter in diameter. The system of bonding, in which some bricks were laid flat, some on edge, can clearly be seen in Figure 175. Unfortunately the masonry had disappeared to some distance beneath the pavement level, and therefore no trace of the superstructure remained. It was not considered worth while to excavate the well to its full depth. When the pavement between

Since the building was incompletely excavated, it is not feasible to describe it in chronological order, beginning with its original construction and tracing the changes made throughout its history. Instead, of necessity, we start with the highest level of which we were able to obtain an extensive and coherent plan (Pl. 26) and proceed from there in the order of the actual excavation, to the earlier building periods (Pl. 27 A-B).

<sup>&</sup>lt;sup>5</sup> [It will clarify the discussion if we state here that both seem to fall within Early Dynastic II.—H. F.]

<sup>6</sup> Cf. p. 220, n. 2.

here and the west wall of the court was cleaned, it was found to be profusely littered with beads, mostly of the black and white doubly pierced diamond-shaped type (cf. Fig. 198), and with small amulets.

Of two doorways in the west wall, one, which led to the small room M 13:2, may perhaps have been ornamented with rabbets on either side, but so few courses of the wall remained standing at this point that it was not possible to establish their existence with complete certainty. M 13:2 itself had no particular character. Its northeast corner was much damaged by an intrusive rubbish pit of a later period, from which, amongst a great quantity of sherds and other debris, came a fragment of a bowl in hard brown stone bearing a clearly cut but incomplete inscription (Ag. 35:203; see p. 297), naming the god whom we presume to

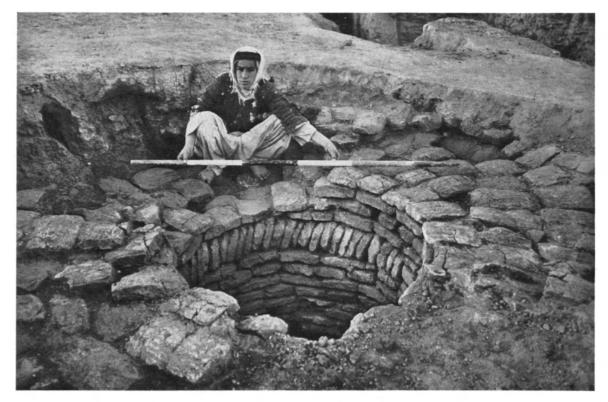


Fig. 175.—Well in Courtyard M 13:1 at the Main Level of the Shara Temple

have been worshiped in the temple. Its intrusion with rubbish of a later date need not disturb us, since remains north and east of the altar in M 14:2 seemed to represent a later (Early Dynastic III) phase of the temple lost to us as a result of denudation (see Pl. 28). A number of stone maceheads and amulets seemed to come from the floor of the room rather than from the intrusive rubbish. In the southwest corner occurred a curious phenomenon which was not explained until some weeks later. The west wall was furnished with a somewhat roughly constructed revetment of baked brick; but this had partly collapsed so that the workman tracing the south wall face in search of the southwest corner did not encounter it and, following a trodden pavement and cutting away only rough filling, he went straight ahead and had dug his way through almost the whole thickness of the wall separating M 13:2 from M 14:2 before he again struck proper masonry. It will later be seen that what this man had succeeded in tracing was a breach in the wall made during some attack on the temple as a short cut to the sanctuary, when the doors in M 14:1, by which it was usually approached, were shut and

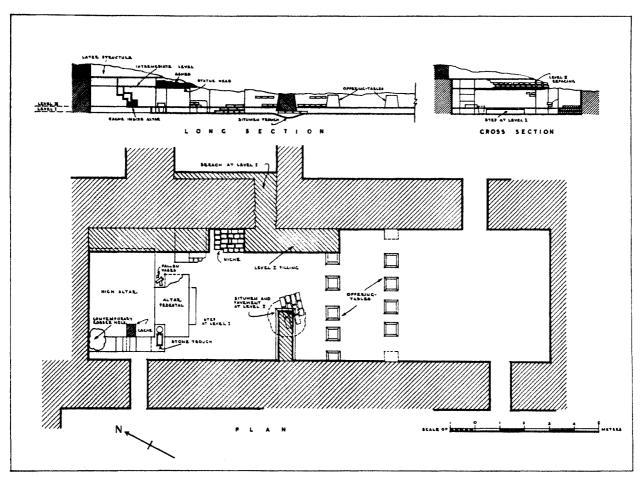


Fig. 176.—Plan and Sections of Sanctuary M 14:2 in the Main Level of the Shara Temple. Scale, 1:150

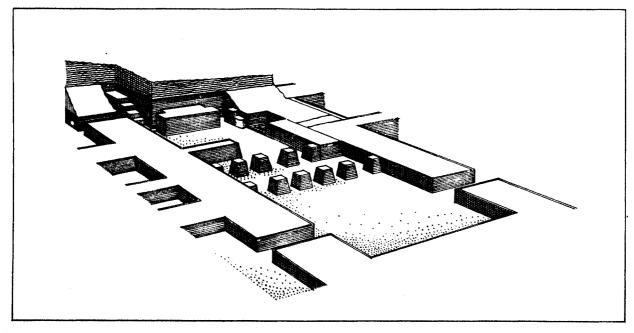


Fig. 177.—Projected Plan in Perspective of Sanctuary M 14:2 at the Second Occupation Level

probably barricaded. When the temple was reoccupied this gap in the sanctuary wall was roughly filled, a revetment was built in M 13:2, and a new screen wall in the sanctuary itself was put up to cover it.

The second doorway in M 13:1 was a direct approach to the sanctuary through a long rectangular vestibule, M 14:1, whose function is obvious. Both occupations were here represented by well defined pavements. Each had a heavy coating of gypsum, and what remained of the wall faces had been treated in the same way. In the center of the floor at the north end of the room there was a rough hearth which was probably used by a guard or door-keeper. Near the doorways at the south end a number of spherical lumps of baked clay were found, sling balls similar to those found at the foot of the town wall. Here was further evidence of an attack on the temple which marked the end of the first occupation.

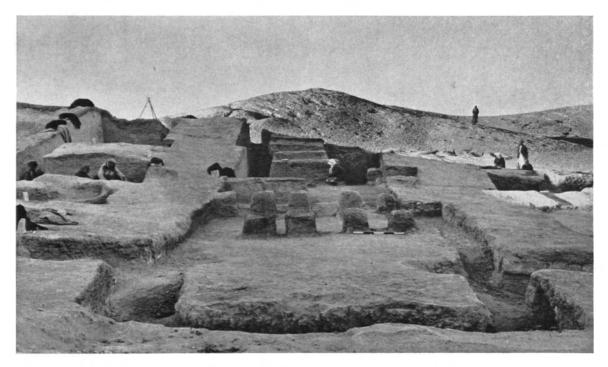


FIG. 178.—SECOND OCCUPATION LEVEL OF SANCTUARY M 14:2, WITH LATER REMAINS ON TOP OF ALTAR, SEEN FROM SOUTHEAST

The doorway in the west wall of M 14:1 leads to the main sanctuary, M 14:2, about which there is a great deal to be said. The room itself (Figs. 176–77) gives every indication of having provided a dramatic and impressive setting for an important ritual. It is just under 19 meters in length by 5.5 m. wide, and for anyone standing at the south end these proportions must have created a fine vista, terminated by the high altar, itself sufficiently imposing in size. It should be noted at this point how lucky we were to find most of the distinctive appointments of the shrine intact. At the altar end of the room the distance from the earlier floor level to the surface of the tell measured as much as 2.5 m.; but, owing to the slope of the ground, at the south end of the room the walls remained standing only a few courses high (Pl. 28), and it proved necessary to penetrate beneath the pavement and trace the line of the foundations in order to determine the exact arrangement of the plan (Fig. 178).

In addition to the entrance from the vestibule M 14:1, there were two doorways in the west wall leading at the south and north ends respectively to M 14:5 and L 14:1. Pavements

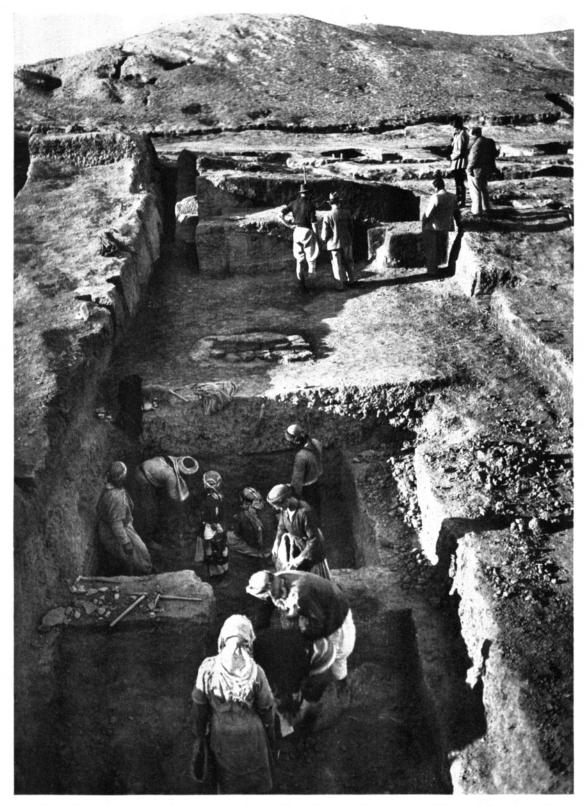


Fig. 179.—First Occupation Level of Sanctuary M 14:2 and, in Foreground, Walls of Earlier Building, Seen from Southeast

corresponding to the two principal occupations occurred only about 20 cm. apart, at 32.65 and 32.85 m.; and at the earlier level very few features of the room, apart from the three doorways, could be traced with any degree of certainty. The bulk of the high altar, however, was clearly defined. It filled the north end of the room, with spaces about 80 cm. wide on either side, and projected about 2.50 m. On the west side 60 cm. of the space was taken up by a small staircase of which three somewhat irregular steps remained. This confirmed the inference we had already drawn concerning the impressive height of the altar. Its actual fabric survived up to about 1.50 m. above the original floor level, at which point the site had been leveled and the foundations of a later building laid (see Pl. 28).

Built up against the front of the high altar was a subsidiary altar or pedestal about 1 meter high, and a great deal of time was spent in endeavoring to elucidate the shape and purpose of this structure. It had evidently been considerably modified if not actually rebuilt at the time of the secondary occupation, so that we were ultimately compelled to deduce its original shape from such fragments of brickwork as remained when all obviously secondary structures had been removed (see Fig. 179, where this has been done and the floor cleared down to earliest occupation level). Its existence at the first occupation (32.65 m.) was proved by the fact that



Fig. 180.—Cylinder Seal (Ag. 35:614) Found in Vessel beside Altar in M 14:2. Actual Size

a narrow step running part of the way across the front of its base did not appear above the later pavement and had not been repeated. The shape of the west side was fairly clear. Between the altar pedestal and the face of the high altar a deep chase was cut, measuring  $40\times50$  cm., to accommodate two objects doubtless connected with some ritual which involved the pouring of libations. These were a shallow stone trough measuring  $24\times45$  cm. and a deep, conical stone bowl about 20 cm. in diameter into which the liquid would drain from it. The lowest step of the altar staircase was brought forward to form a base for the trough, and the stone bowl was imbedded in it. These objects were actually found where they had been reset at a slightly higher level during the secondary occupation (see Fig. 183), but there is no reason to suppose that they had not previously been in use in the same position. The stone bowl (Ag. 35:1097) when cleaned was found to contain two large, squat cylinder seals of white limestone bearing designs representing the "temple herd" (Ag. 35:614-15; Fig. 180 shows No. 614).

The treatment of the east side of the altar pedestal at the first occupation was considerably more difficult to understand. As found, the front face ended about 1.80 m. from the east wall in a corner built up with burnt bricks (Fig. 181), perhaps added later, since repairs had been made elsewhere with similar material. No face, however, could be found running back from this corner, and it was at first presumed that the hinder part had collapsed. A later discovery made this seem less likely to be the case. The earliest pavement continued some distance behind the built-up corner mentioned above, and at a point which would have been beneath

the pedestal if it had been built solid there lay two large stone objects, one black and the other green, apparently stands or bases for some sort of vessel (Ag. 35:392-93). As these would be likely merely to have fallen from the top of the pedestal (one was broken), their position at once suggested that a chase had existed on this side also. The shape of the altar pedestal thus arrived at can be seen in Figure 176; the only obvious objection to it is that at the first occupation, before the thickening of the east wall took place, the whole structure must have been asymmetrically placed in relation to the high altar. This may have been caused by the curious block of masonry which appears to the right of the pedestal in Figure 179, part of which can also be seen projecting from the later "packing" in Figures 178 and 181-82. Its purpose is completely obscure, but evidently some space had to be left between it and the corner of the



Fig. 181.—Altar and Pedestal in M 14:2 before Removal of Later Remains

pedestal so that access might be obtained to the inclosure behind. Perhaps this was the position occupied by a priest during some ritual.

A few centimeters south of this curious structure we found a few remaining courses of a baked-brick plinth rather more than 1 meter wide and projecting 95 cm. from the original wall face. It was founded at the earliest floor level and probably dated from that period (in Fig. 179 it has already been removed); but when, at the second occupation, the wall at this point was strengthened by the addition of an inner shell, a gap was left so as to form a niche in which the plinth could remain standing. This suggests some important function, and one is tempted to think that it served as the base for some great statue, possibly the life-size copper figure a fragment of which (Ag. 35:988; see Fig. 192) was found in an adjoining room. A shallow depression in the gypsum pavement directly in front of it was filled with fragments of stone vessels and a few amulets and beads. A similar depression, in this case lined with bitumen, was located some distance south of this point (Figs. 176 and 179). It was circular in shape and some 15 cm. deep in the center. A rough pavement of baked bricks (also visible in Fig. 179) had been laid over it to raise the level at some intermediate period; and a statue

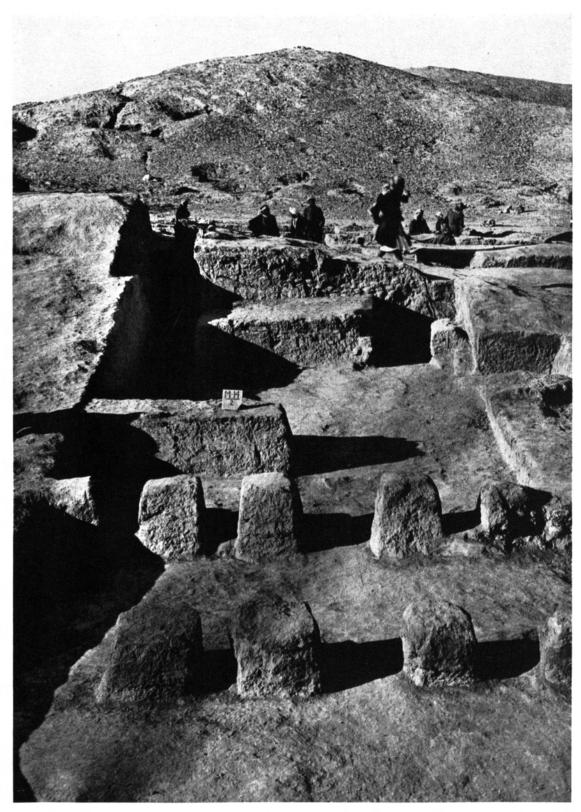


Fig. 182.—Second Occupation Level of Sanctuary M 14:2 Seen from Southeast

fragment, together with various smaller objects, was found amongst the debris between brick and bitumen.

When the repairs and additions to the sanctuary connected with the secondary occupation were complete, it must have presented a considerably changed appearance (Fig. 182). The most notable innovation was the double row of small offering-tables built across the center of

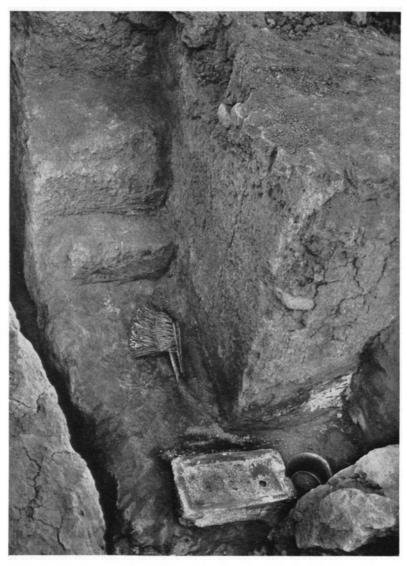


Fig. 183.—Stone Trough and Bowl in Place beside the Altar at the Second Occupation Level in M 14:2

the room about 5.5 m. from the altar. These corresponded exactly to those found in Shrine II of the Square Abu Temple at Tell Asmar (p. 187) and in one of the sanctuaries of Sin Temple X at Khafajah (p. 74). They averaged 55 cm. square at the base, tapering slightly to 40 cm. square at the top; and two which were practically undamaged showed their height to have been 50 cm. This statement does not imply that the plaster was so well preserved on the top that we could decide whether they were flat or curved, as were those in the Temple Oval at Khafajah and in Sin Temple X (see also pp. 300 f.). They were arranged in two rows, 1.80 m. apart. The intervals between them varied. There were four detached pedestals in the south

row and three in the north, and probably each row had a pair of about two-thirds normal width built against the wall at either end. Only one pair of these had survived, the others having probably been unintentionally removed in the process of tracing the wall faces, which stood only a few courses high at this point (Fig. 182). The pavement upon which they were built had a coating of gypsum plaster which showed signs of having also adorned the offering-tables themselves. Another contemporary innovation was a heavy screen wall, projecting 2.10 m. from the west wall rather more than a meter behind the second row of offering-tables. This wall was built across the bitumen and baked-brick pavement mentioned above as dating

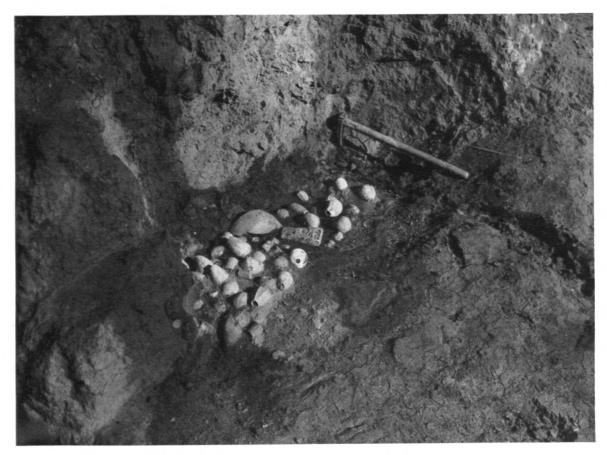


Fig. 184.—Hoard of Objects Hidden inside Altar in M 14:2

from the first occupation. It was founded at 32.80 m. and did not interfere with the latter: it was 80 cm. thick at the base, but a slight batter on either side reduced the dimension to 65 cm. where it reached the surface 50 cm. above the pavement. The angle of the batter makes it improbable that the wall ever stood much higher than this, although the top surface was not preserved.

The new inner shell of brickwork with which, as we have already observed, the east wall was now repaired and strengthened extended from the altar end of the room as far as the first row of offering-tables. It was partly revetted with baked brick of a type which we eventually came to associate with the secondary occupation, for it had also been used to repair or reface the high altar above the altar pedestal (Figs. 181, at right, and 182; see p. 239). It is hard to say whether it was built right up to the ceiling or terminated in a flat shelf at some intermediate point. If the former was the case, it must have produced a chancel-like effect, filling up the

recess on one side and throwing the high altar off the main axis of the room. (The subsidiary pedestal would remain more symmetrically placed.) The gap left to accommodate the baked-brick plinth has already been referred to and can be seen in Figures 178 and 182. The breach in the wall behind, which appeared when the whole structure was eventually removed, is visible in Figure 179.

The altar pedestal presumably retained its original shape. Certainly the chase which contained the trough and vessel remained the same, being only heavily replastered and showing signs of having been whitened with gypsum. Figure 183 shows the bowl in position beside the stone trough. The altar stairway had been rebuilt and adjusted to the new floor level, and a projection of the lowest step formed a base for the trough.

Near this point a pleasant surprise was in store for us when at the beginning of the following season (December, 1936) it became necessary to break up the altar in order to investigate a building at a deeper level. At some time during the first occupation a rectangular hole had been cut in the side of the altar and an exciting collection of objects hidden in it (Fig. 184). Most



Fig. 185.—Macehead Decorated with Four Lions' Heads (Ag. 36:191), Found in Altar in M 14:2. Scale, 4:5

prominent among these was a large ceremonial macehead in gray stone ornamented with four finely carved lions' heads (Ag. 36:191, Fig. 185). In addition to this there were about forty other maceheads of various shapes and colors (Ag. 36:193–233), a fragment of carved relief (Ag. 36:192), eleven stone cylinder seals of the heavy caliber generally in use in temples (Ag. 36:243–53), and various amulets and copper objects. When all these objects had been carefully laid in the hole the opening was sealed and replastered. Later, when the steps flanking the altar were rebuilt (Fig. 176), one of them actually overlapped the aperture and permanently protected it. In the process of taking down the staircase it was amusing to discover that at a later date someone had recollected the existence of this hoard of valuables and had sunk a small shaft from above in search of them. It penetrated the fabric of the altar and stair at a point near the back wall, missing its objective by about 50 cm. When the rubbish which filled it was cleared away, we were able to detect the marks of the flat-pointed tool used by the ancient excavator.

Figure 181 shows the top of the altar and pedestal in an early stage of excavation, before clearing down to the plaster faces appropriate to the main level had been completed. It will be seen that a series of plaster steps has been laid bare. It seems likely that these steps belonged to a later (Early Dynastic III) building of which some foundation masonry here sur-

vived. At the spot where a notebook is lying in the picture, a magnificent head in carved limestone was found (Ag. 35:550, Fig. 186); whether it had been covered by falling debris while resting upon the top of the altar pedestal belonging to the later occupation of the main level or simply had been trodden into the floor of some later building it is hard to say.

There was evidence to show that at the secondary occupation both floor and wall faces had been plastered with white gypsum. Trodden into or otherwise imbedded in the pavement over the whole area of the room was a surprising assortment of beads (literally thousands) and small objects, varying from delicately carved amulets to fragments of nacre or lapis lazuli inlay. There was also a quantity of maceheads and statue fragments, particularly in the vicinity of the altar and the doorway to L 14:1.

Figure 187 shows various types of baked bricks found in the sanctuary (M 14:2). In the center is a group of normal plano-convex examples of the type associated with the original



Fig. 186.—Female Head (Ag. 35:550) Found on Top of Altar Pedestal in M 14:2 (where notebook is lying in Fig. 181). Scale, 1:2

building. These were used, for instance, in the face of the altar pedestal (see Fig. 181) and to raise the level of the bitumen pavement (see Fig. 179). The square plinth, which was also built of this material, does not, unfortunately, appear in any photograph. Wooden molds of two sizes seem to have been in use, producing bricks which measured respectively  $24 \times 16 \times 5$  cm. and  $22 \times 15 \times 5$  cm. Bricks of the type seen behind the meter rod in Figure 187 were used exclusively during the secondary occupation. In Figure 182 it will be seen that they have been used to reface the high altar; they also appear in the partial revetment of the secondary wall shell. They are of an unfamiliar shape, being handmade upon a flat surface and by no means uniform in dimensions. They were of a rather conspicuous yellow color. In the foreground of Figure 187 are examples (one a fragment only) of a much larger type of plano-convex brick incorporated in the foundations of the later, Early Dynastic III, building which overlay the altar end of the sanctuary.

The somewhat narrow doorway adjoining the high altar on the west side led to a group of three rooms, L 14:1 and M 14:3-4, which may be treated together as a single unit. It even seems probable that there was originally a single chamber, a kind of sacristy or priest's room,

from which two small compartments were eventually walled off to act as store chambers or repositories for valuable objects connected with the temple ritual. The two principal occupations which we have already noted in the sanctuary are here represented by floor levels a little higher than those in the adjoining room (32.70 and 33.00 m.). The walls separating M 14:4 from M 14:3 and L 14:1 were both founded a little beneath the lower of these pavements. That between M 14:3 and 4 was less thick than one would expect and, at the time of the earlier occupation, showed no signs of a communicating doorway. A breach which oc-



Fig. 187.—Three Types of Baked Bricks from Sanctuary M 14:2

curred at 33.00 m. seems more likely to have been made by some looter in search of the temple treasure. But whether this smallest compartment (M 14:3) had actually been intended as a kind of safe deposit, to which one could obtain access only by cutting a hole in the wall (presumably bricking it up again afterward), or whether it was merely a means of insulating the sacristy more effectively from the adjoining room M 14:5, it is difficult to say. The existence of actual pavements in it and the discovery at the first occupation level (32.70 m.) of a fine stone vase (Ag. 35:120) suggest that the former was the case.

The function, on the other hand, of the more substantial wall between M 14:4 and L 14:1 was a good deal clearer. Again there was no doorway in it in the proper sense; but it stopped short about 1 meter from the west wall, and the return face was plastered. To judge from the number and quality of our finds in M 14:4, this room was definitely the treasury of the temple.

and the gap in the heavy wall which separated it from the sacristy L 14:1 was intended to be built up solid at a moment's notice (Fig. 188).

At the north end of the sacristy (L 14:1), where the mound rose into a high ridge, there remained a good deal of masonry belonging to the later, Early Dynastic III, building (Fig. 188),

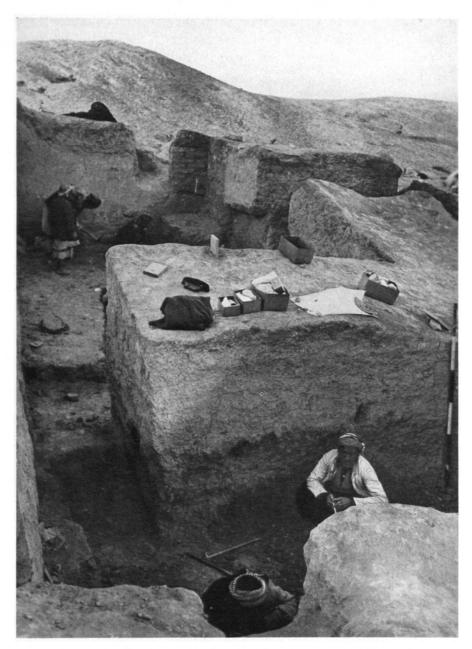


Fig. 188.—Rooms M 14:4 and L 14:1 Seen from South

similar to that which covered the altar in the sanctuary. Here certain plastered wall faces could be detected and traced, and the small fragment of plan thus obtained was at least sufficient to show that it in no way corresponded to its predecessor. In this case the later walls were founded at 34.00 m., and between this point and the secondary (33.00 m.) occupation of the earlier temple there was an intermediate floor (at 33.50 m.) which had no equivalent in

the sanctuary. A small area of this floor in the northeast corner of the sacristy was paved with thin, yellow, handmade bricks such as were used in the sanctuary to reface the altar etc., at the secondary occupation (Fig. 187, top). The surprising accumulation of objects found in this room can be judged from the catalogue and need not be enumerated here. Neither their individual positions nor their general disposition was in any way significant. The smaller objects—beads and amulets—lay for the most part actually upon one or another of the pavements which were successively cleared; but many of the larger finds, such as the fine carved base of a vase (Ag. 35:674, Fig. 189), and statue fragments, were lying in the filling between the floor levels.



Fig. 189.—Sculptured Vase Ag. 35:674. Scale, 1:2

From Figure 188, looking through the gap in the north wall of M 14:4 toward L 14:1, one gains some idea of the considerable height to which the walls remained standing in this quarter. In the upper background various wall faces belonging to the later building can be distinguished. They look somewhat confused, since they have been cut into in the process of tracing the walls of the sacristy beneath, but the large plano-convex bricks, such as we noticed at a corresponding level in the sanctuary, can be seen. A little lower down, in the northeast corner of the room, a small section of the intermediate (33.50 m.) pavement has been left intact. Both earlier floor levels have been cleared, the second completely and the first only partially. A section of each can be seen through the gap in the wall.

The base of the sacristy walls was reached at 32.30 m., and the unplastered faces of apparently earlier and thicker walls were found, projecting about half a meter from them. These

were, in point of fact, foundations which in our second season we were able to associate with an earlier plan (Pl. 27 A). They can be seen in Figure 190, where the quality and thickness of the plaster on the sacristy walls is also apparent. Only one object of note was discovered after we penetrated beneath the first (32.70 m.) floor level of the sacristy. This was a stone

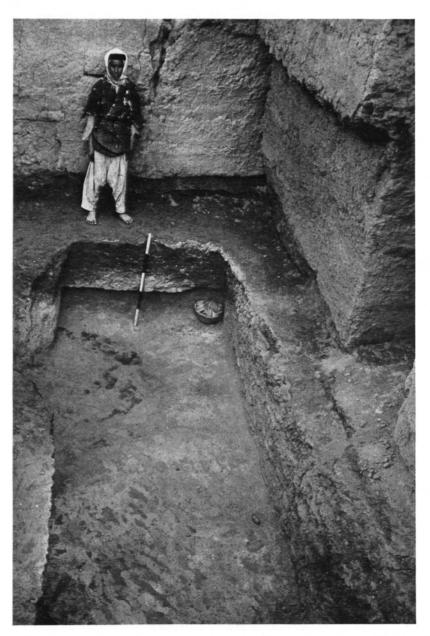


Fig. 190.—Foundations of the Intermediate Building Period beneath the Walls of L 14:1

macehead finely carved with rampant lions (Ag. 35:1030). Unfortunately it had been split in halves, one of which was lost.

The bulk of good objects produced by this group of rooms came from M 14:4. The levels at which they were found were here more significant than in the case of the adjoining room, since there was conclusive evidence that on two successive occasions holes had been dug and a collection of objects intentionally buried. The first items we encountered, however, were just

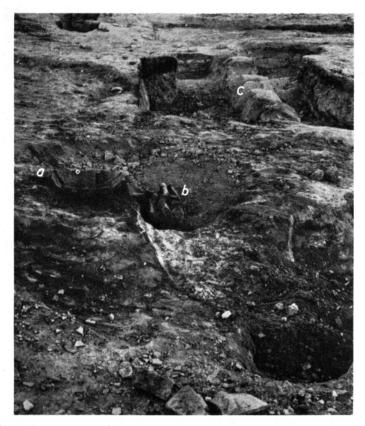


Fig. 191.—Stone Bowl (a) and Copper Objects (b) in situ Just below the Surface in M 14:4 Note the row of offering-tables (c) in M 14:2



 $Fig.\ 192. \\ --Part\ of\ the\ Foot\ of\ a\ Copper\ Statue,\ Nearly\ Life-Size\ (Ag.\ 35:988).\ Scale,\ 2:3$ 

below the present surface of the mound. They were, in fact, only concealed by a sprinkling of fine surface soil. A large stone bowl can be seen in Figure 191, split into a number of fragments but otherwise complete. It had small square lugs, one of which can be seen in the picture, and was made of soft greenish sandstone, so decomposed by the weather on account of its proximity to the surface that it eventually proved impossible either to mend or to preserve it. A little to the south, partially covered by this vessel, was an extraordinarily heterogeneous collection of copper objects (Ag. 35:78). These also can be seen in Figure 191. It was evident that they had originally been tied together into a bundle and deposited here, perhaps with a view to being melted down and recast. They were still stuck together in a single mass owing to the corrosion of the copper. The individual pieces seemed to consist mainly of broken fragments from the body and tripod stand of a large copper statue very similar to those found in the Temple Oval at Khafajah<sup>7</sup> and also to miniature versions discovered in our own temple in N 13:4 (Ag. 35:1035) and in a room of an earlier building beneath the sanctuary (Ag. 36:70, 140, and 141). The fore part of a copper foot (Ag. 35:988, Fig. 192) found in L 14:1 again must have belonged to a similar copper statue, in this case almost life-size.

As we worked around this group of finds, two plastered faces forming the corner of room M 14:4 soon appeared. The outline of the room was then completed by penetrating beneath the "intermediate" pavement. Just before reaching the secondary (33.00 m.) occupation level, however, we found the group of objects shown in Figure 193, piled high in the northeast corner of the room directly beneath the point where the copper group had previously been found. Apart from the complex carved stone vase (Ag. 35:200) which appears at the top of the pile, this group consisted almost entirely of stone maceheads, which numbered over a hundred and included a great variety of shapes and sizes, and, near the bottom of the pile, of stone amulets in the shapes of birds and animals.

For the rest, the more valuable contents of this room were largely concentrated in a hole dug about in the center. Objects were scattered more or less haphazard over the secondary (33.00 m.) pavement, and there were many amulets and beads in the filling between the latter and the original (32.70 m.) occupation level. But, since the contents of the actual hole seemed to occur between levels 33.00 and 31.60 m., one may conclude that the hole was dug at the time of the secondary occupation or later and that it cut through any earlier pavement to a depth of 1.40 m.

This group of objects in turn need not be enumerated here, since they are referred to in detail elsewhere. It was fairly clear that they consisted for the most part of offerings to the shrine, somehow damaged, and ritual objects or utensils broken or for other reasons discarded. There was in this case no suggestion of their being valuable objects hidden for safety. Many carved vases or statues were fragmentary and incomplete, while others had obviously been broken through being carelessly deposited in the hole; no single object was undamaged.

Another, more shallow, pit had been cut at the base of the opening in the wall between this room and L 14:1. This seemed to date from the first (32.70 m.) occupation, and the objects deposited were less abundant. In fact their sparsity and inferior quality suggested that this hoard had perhaps been rifled at a later date and the more valuable objects recovered. The base of the partition wall overlapped the hoard to some extent. This confirms an impression which we had already received that the partition wall was a secondary structure and that at least M 14:4 and L 14:1 were originally one room.

The further possibility that the smaller chamber, M 14:3, was also originally included in this single compartment is suggested by the fact that the narrow wall which incloses it to the

<sup>&</sup>lt;sup>7</sup> OIP XLIV, Nos. 181-83, Pls. 98-103.

north was composed of a somewhat different brick from the walls on its shorter sides and apparently not bonded with them. The stone vase found in this room has already been mentioned (p. 240). Very little else was found before the base of the walls was reached at 31.80 m. At this level, as in the adjoining room, M 14:4, foundation offsets were encountered which

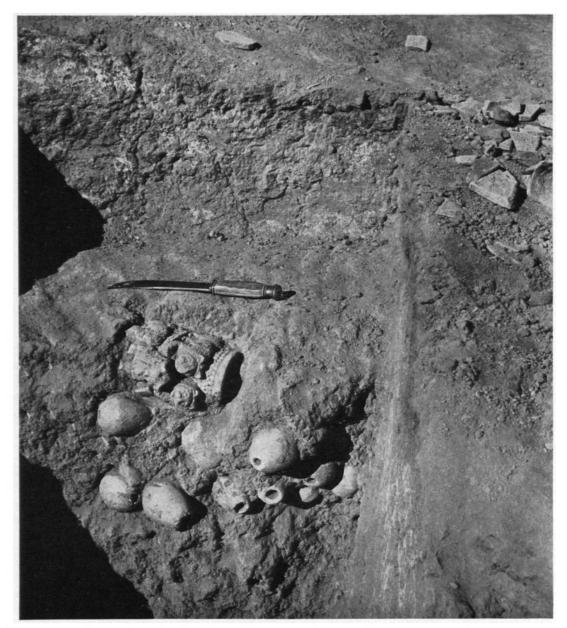


Fig. 193.—Sculptured Vase (Ag. 35:200) and Maceheads in situ in M 14:4 above the Secondary Occupation Level

were not identified as belonging to an earlier building until our second season's work at this site.

South of M 14:3 another room—M 14:5—was approached from the sanctuary, through a doorway on the same axis as the entrance from the central court. This room was without character and gave no indication of its individual function except what may be deduced from

the fact that it contained great quantities of copper bolts, nailheads, and nondescript fragments of other cast copper objects. On account of the slope of the mound, finds belonging to the secondary occupation (here about 32.50 m., which suggests that there was a step down from the sanctuary) began to appear in the loose soil directly beneath the surface. Near the doorway there were fragments of gold finely wrought into the shape of beech leaves (e.g. Ag. 35:196), also a damaged bitumen disk inlaid with mother-of-pearl cut like petals (Ag. 35:194). The secondary pavement yielded a variety of objects, amongst which was the head of a small female statue (Ag. 35:494) in an excellent state of preservation. It was also littered with small amulets and beads, the latter for the most part black or white diamond shapes and tiny flat

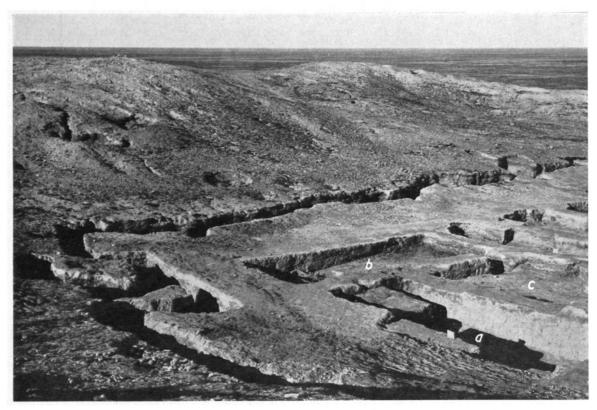


Fig. 194.—Northwest Corner of the Main Level of the Shara Temple Viewed from South The small shrines L 13:4 and 6 are marked a and b respectively; the central room L 13:1 is marked c

disks of quartz, types with which almost all the main rooms near the sanctuary were littered. It was not until our second season that we were able to complete the clearance of this room, along with certain others to the south of it, down to the earliest floor level. During the last few hours of our work at Tell Agrab in the spring of 1937 a few men were spared for this purpose and were rewarded by finding a number of objects of secondary importance. Among these were certain fragments which fitted with some found in M 14:4 and thus helped to some extent in elucidating and dating the various deposits in that room. The only conspicuous feature of M 14:5 at this early period was a great storage jar almost a meter in diameter, evidently buried beneath the floor with only its narrow rim appearing. Unfortunately it was empty.

This completes the description of the central group of rooms, of which the main sanctuary is the focal point. We may now turn to the subsidiary group to the north (Fig. 194). Here was

a self-contained unit showing at once a surprising affinity to the Square Abu Temple at Tell Asmar. It included a central room, L 13:1, with others grouped round it, at least two of which, L 13:4 and 6, contained alters and had the character of small shrines or chapels. The line of approach cannot, unfortunately, be followed owing to the denudation of the tell. L 13:58 was an incompletely defined space or hall, the only noteworthy feature of which was a circular pit or possibly grain repository with the beginnings of a beehive-shaped mud vault. This was probably intrusive. From here one passed through a tiny vestibule (L 13:8), whose function was obvious, into the central room of the group, L 13:1. Later occupants of this room, perhaps squatters, had divided off small compartments with narrow walls. One of these had a doorway roughly paved with a doorsill of baked bricks brought from another part of the site. Beneath this appeared a fairly deep rubbish pit which we judged from some of the smaller objects found in it to have been contemporary with the squatters. The later walls stood between levels 32.50 and 33.40 m., and since the average level of the secondary occupation throughout this northern group of rooms is 32.50 m. one would conclude either that the squatters arrived soon after the ruin of the building corresponding to this period or that this part of the site was not again built over. A section of terra-cotta drain, more than a meter long and tapered at one end, was found at the bottom of the rubbish pit.

Doorways led from L 13:1 to the two rooms known to have been shrines. The first, L 13:4. had a pivot stone beside the doorway at a level of 33.00 m. This probably represented an intermediate floor level corresponding to that which has already been mentioned as occurring 50 cm. higher in the sacristy (L 14:1) and elsewhere. Owing to the denudation of the tell, only a very small area remained of the pavement to which it belonged. The altar, which was placed in the center of the north wall, measured 1.40×2.00 m. and remained standing to an average height of 50 cm. above the earlier (32.30 m.) floor level. It had remained standing and had merely been replastered at the secondary occupation. A number of valuable objects were found at both levels. The earlier floor was not cleared until our second season, but proved well worth the trouble. In the southwest corner was a group of large stone bowls mostly unbroken (Ag. 36:260-61a); and built into the wall a little beneath them were two pipelike pot stands of earthenware, fitted end to end, to serve some obscure drainage purpose. Fragments of square plaques carved in low relief, of a type familiar at other contemporary sites, were found at the secondary level; one large piece fitted on to Ag. 35:668, making an almost complete plaque. A large circular earthenware cistern had now been placed in the recess between the altar and the wall on the west side. In its neighborhood we found several large cylinder seals of white stone, representing the sacred herd of the temple. Smaller objects, such as carved amulets and the usual profusion of beads, need not be referred to in detail. The altar itself, when it was eventually broken down as we proceeded to penetrate to an earlier level, produced another cylinder seal and a heterogeneous collection of small objects and fragments of silver stored in a sealed pot and apparently built into the masonry (Ag. 36:279).

The appointments of the second shrine (L 13:6) were almost exactly the same, but the orientation was different. The altar was somewhat smaller, measuring  $1.50 \times 1.60$  m., but stood to the same height. In Figure 195 a baked brick can be seen projecting from one corner. This was one of several which were evidently used to repair the structure at the secondary occupation. Again there was a circular cistern, in this case set a little forward, and beside it can be seen two parts of an earthenware pot stand of a well known type (Ag. 35:1133). The purpose of the screen wall or buttress on the left is uncertain, but one recalls a similar structure

<sup>&</sup>lt;sup>8</sup> Cf. p. 225, n. 3.

in the main sanctuary. There was a roughly shaped hearth in the center of the room toward the east end.

No new features and very few objects were found at the earlier (32.30 m.) occupation level. Room L 13:9 really completes the group, and it is difficult not to think of it in this way. We were not able, however to find any doorway giving access to it. This is perhaps hardly surprising in view of the fact that a small wadi, carrying rain water away from the mound, cut diagonally across the plan at this point, leaving only a few courses of brickwork standing. The room might therefore have been approached from L 13:1, or less probably from L 13:8,



Fig. 195.—Shrine L 13:6 Seen from Northeast

where the north face of the partition wall was somewhat obscured by an intrusive child burial (Grave 3). But our interest was focused on the north end of the room, where, by analogy with the Square Abu Temple at Tell Asmar, we were hoping to find a third altar; whether or not one had existed we were not destined to know, for here the denudation was complete. About 1 meter before the north end of the room was reached the east wall face appeared to break out at a right angle, after which it was lost. Any objects which may have been here had been washed out by the wadi.

We were able partially to trace two other rooms to the south which seemed to be more connected with this subsidiary group than with that which included the main sanctuary. Of these the larger—M 13:3—was paved with gypsum plaster, and its walls had been covered with the same material. Since, however, the walls remained standing less than 5 cm. high,

the outline of the room was obtained by studying the white line left by the plaster when the surface of the ground was scraped. We found sufficient evidence to prove that a doorway led northward from here into the narrow corridor L 13:3, which was in its turn almost certainly approached from L 13:5. L 13:3 was one of the first rooms cleared when we began work on the temple, and the 20 cm. of filling between the two successive pavements produced a large and miscellaneous collection of objects. Against the jamb of the doorway leading to M 13:3 we found another small jar full of metal trinkets (Ag. 35:139-58). Objects from elsewhere included beads, amulets, fragments of colored stone bowls, and some large shells. There is no explanation for this accumulation of objects in this room, as we have no clue to its function. The purpose of a small jog in its south wall face was equally obscure.

The third group of rooms, those in the southern subdivision of the surviving plan, seemed to us to have a more domestic character; they probably included living-quarters for the priests. By analogy with other plans there is reason to suppose that they were approached by the long narrow passage N 15:1. The doorway at the east end of this passage had a pivot stone, and a little beyond it there was a breach in the outer wall of the building which for some time we thought might prove to be one of the main entrances. Unfortunately not enough remained of the wall here to establish the point, and a short way beyond it became untraceable. To return to the corridor, N 15:1, there were doorways at either end; a third, about halfway along, led to two small intercommunicating rooms, N 14:1 and 2. These were just traceable at 32.30 m.

After traversing the corridor it was necessary to pass through a small bitumen-payed ablution room, N 15:3, before reaching the main rooms of this wing (cf. the ablution room adjoining the entrance in the Square Abu Temple at Tell Asmar; see Pl. 22). The north end of this room came very near the surface, but the wall on that side and the doorway could be restored with certainty because of the outline in the bitumen. The south end of the room can be seen in Figure 196. Here a small boy is seated upon the bitumen pavement which dates from the earlier occupation (32.30 m.). It slopes down sharply into the southwest corner, where a drain occurred; behind is the outside wall of the building, where we have laid bare a drain, built of baked brick and lined with bitumen, which passed through the thickness of this wall at a sharp slope and emptied into a circular refuse pit dug beside the foundations. There can be no doubt that this drain served a later version of the same lustration room, connected perhaps with the second or some subsequent occupation. It also seems likely that the structure of baked bricks in the southwest corner of the room was built up to make a foundation for the later pavement at a point where the water would tend to accumulate before entering the drain. A circular water eistern, near which the boy is sitting, has been left in place, although it also plainly belongs to the later period. It was in all probability partially buried beneath the later pavement.

From here we pass through a court or hall whose shape and size are only partially defined, into the main group of residential quarters. The relationship of the two principal halls, one square (M 15:1) and one rectangular (M 14:7), and the disposition of the smaller rooms around them tempt one to make a comparison with a unit of planning familiar in buildings of a much later date at Tell Asmar. None of the rooms has particularly distinctive individual characteristics, and it is consequently perhaps unnecessary to refer to them separately. In all cases there were, as usual, two successive occupation levels separated by a few centimeters of filling. The objects which came from this filling and from the payements themselves were

<sup>&</sup>lt;sup>9</sup> Cf. the court and throneroom in the Palace of the Rulers (OIP XLIII, Pls. I, IV, and VI). [While the manuscript was being edited, Mr. Delougaz noted the resemblance of this group of rooms to "House D" at Khafajah. His comparison of the two and his suggested restoration on the basis of that comparison appear at the end of this chapter.—ED.]

very similar to those found in the other parts of the building, only not quite so numerous and tending to an inferiority of quality.

M 14:8 had a sort of dais raised 20 cm. at the south end. In the doorway between M 15:1 and 5 a bitumen doorsill survived at 33.00 m., perhaps testifying to a third occupation of this wing of the building. The doorway to M 14:6 showed signs of having been ornamented with small rabbets on either side. The walls surrounding the adjoining room M 14:9 were denuded to beneath the earliest pavement, so that no doorway could be located. The double line in the plan represents what at the time of excavation appeared to be offset footings in the foundations. Subsequently they appeared more likely to be earlier walls aligned somewhat differently.

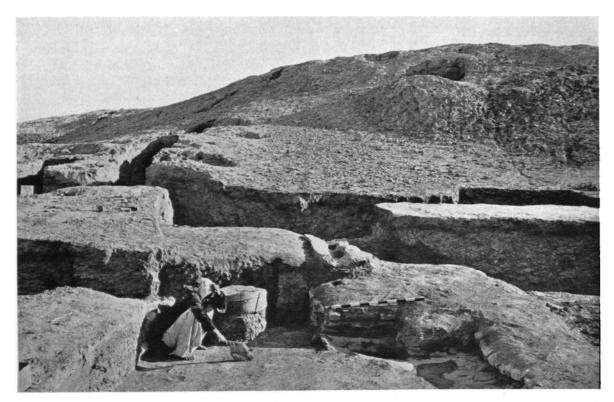


Fig. 196.—Ablution Room N 15:3 Seen from Northwest

The process of tracing the buttressed outer face of the main inclosure wall of the temple was not in any way difficult except on the west side, where the accumulated remains of private houses and their refuse rose many meters above the foundations of our building (see Fig. 174). A trench had to be cut through this debris deep into the side of the hill, after which it was possible at certain points to identify small sections of the original outer wall face. Generally speaking, however, the line marking the limit of our masonry was hard to discern. Elsewhere the buttresses and the curtains between them varied somewhat in proportion. The buttresses averaged 2.70 m. wide and had a projection of 50 cm. The maximum distance from center to center was 9.50 m., the minimum 8.25 m.

Little more can be said about the functions of those parts of the temple which survived. The great central court, M 13:1, in which the baked-brick well was situated, was the only portion of the building which gave any evidence of having been open to the sky (the deep packing of brickwork beneath the pavement would otherwise have little point). Other halls,

such as L 13:1, M 14:7, and M 15:1, and also the main sanctuary (M 14:2) could have had clerestory lighting, while the smaller rooms around could have obtained light from them through their various doorways. This system of lighting for buildings of this period has finally been arrived at as being the most probable, partly by the implication of architectural remains and partly by some analogies with comparatively modern buildings in Mesopotamia.

#### THE INTERMEDIATE FOUNDATIONS

The next phase to which we must refer in the architectural history of the temple is the immediate predecessor of the building which we have just described. By one of those strange freaks of survival with which we have elsewhere become familiar, the evidence of its existence was so slight that it might well have escaped our notice altogether. In point of fact, here was a building destroyed or deliberately denuded down to the tops of the foundations, with only an occasional stump of wall left standing a few centimeters high. For the purpose of building a new temple on these ruins, the spaces between the foundations had either been filled with the rubble of fallen brickwork or deliberately built up solid, and new walls had been constructed upon the ancient footings, with the result that, if the earlier plan had not differed somewhat in alignment and other respects from the later one and occasional stumps of the earlier wall consequently remained standing here and there in the thickness of the filling beneath the pavements of rooms in the later building, we might well have failed to detect this building period altogether (see Pl. 28).

Plate 27 A shows a small section of the system of early foundations which we were able to trace out. Since in some places, such as the north doorway in M 13:6 and the northeast corner of the long room beneath M 14:2, it was found that the pavement covered the projecting foundations, we may conclude that the foundations regularly projected a certain amount beyond the walls. Our plan is based on this supposition, so that, whereas the outlines of the foundations which we were able to trace are drawn with continuous lines, the walls which we may presume to have stood upon them and, in some cases, the doorways from room to room are suggested by broken lines. In the same way only those fragments of the actual walls which remained intact are shown in solid black, while the section of plan is completed with conjectural walls in crosshatching.

No separate locus numbers were attributed to rooms at this level. In the plan, therefore, they are given in most cases the number of the room in the later temple to which they most nearly approximate; in the remaining cases, the number of the room in the earlier building (cf. Pl. 27 B).

The northern doorway to M 13:6 remained standing to a height of a few centimeters. The plastered faces which testify to its rabbeted treatment both inside and out were laboriously disentangled from the later filling which surrounded them and, when complete, suggested an approach to some important part of the building. On the south side of M 13:6 the foundations of a wall separating it from the central court M 13:10 were strongly built and easily traced. The wall itself, however, had been replaced by the north wall of the later court and no longer existed. But, since the rabbeted doorway already referred to occurred on the main axis of the court, we have tentatively restored a similar doorway in the north wall of the latter on the same axis. We were unable to extend our investigations much farther in the direction to which this approach pointed. Only remnants of walls belonging to this period were found beyond the rabbeted doorway. They inclosed three rooms, L 13:1 and 3<sup>10</sup> and M 13:4, and the doorways leading from one to another could be located. Evidence of a

<sup>10</sup> Cf. p. 225, n. 3.

fourth room in this series, L 13:4, was provided by remains of its foundations. The wall separating the two rooms M 14:15 and M 13:5 was not satisfactorily proved to be contemporary; hence they may have composed a single compartment. The foundation of the wall inclosing the early court M 13:10 on the west side was one of the first to be encountered by us. While breaking through the heavy filling (actually 80 cm. deep) which supported the floor of the main sanctuary in the later building (see Fig. 179), we discovered certain plaster faces which later proved to represent the northern end of a long narrow room directly beneath M 14:2. In one wall there was evidence of a rectangular, plastered niche, and opposite this we have reconstructed a doorway leading to a smaller room beneath M 14:3 and 4. A contemporary wall survived, separating this room from a similar one beneath M 14:5. Doorways leading from here to the central court, M 13:10, have been restored on the same axis as those of the subsequent period.

#### THE EARLIER BUILDING

During our first season we had come upon early building remains in some soundings in N 13 and M-N 12. At the end of that season we had penetrated at one point beneath the floor of the main sanctuary of the temple and, after cutting through nearly a meter of filling, had contrived to trace parts of two small rooms belonging to an earlier building (see Fig. 179), to which we concluded that our "deep-level" wall faces and objects in N 13 also belonged. Further portions of this building were excavated in our second season.<sup>11</sup> From the results of this investigation certain indications may be derived as to the extent to which future excavations on the temple site might be profitable.

The sounding in the southeast corner of N 13 (Pl. 27 B) was of considerable interest. Two isolated blocks of masonry, one square and the other somewhat irregular, were traced, and later a third, evidently built against the wall of a room (N 13:1). This wall itself was traced only with the greatest difficulty, as was that inclosing the room to the north. On the south side only a single course of foundations survived, and the line of the wall remained somewhat uncertain. To the east no wall at all could be found. The square plastered pedestals seem likely to have been offering-tables, for an impressive collection of objects, mostly of ritual character, was scattered between and around them. These lay upon and in the filling above a pavement at 30.75 m. There were stone maceheads, amulets of various shapes, such as a gazelle's head (Ag. 35:80) and a kneeling bull (Ag. 35:59), a fine cylinder seal in translucent green stone (Ag. 35:81, Fig. 197), some stamp seals, and one horn from a bull's head cast in copper (Ag. 35:84) such as was found the season before at Khafajah in a contemporary occupation of the Sin Temple.<sup>12</sup> There was also a group of four well preserved bowls made of various colored stones (Ag. 35:74-77). In one case (Ag. 35:74) a pair, joined together at the lip by a horizontal member, was cut out of a single block. Finally, beneath the floor near the center of the north wall a large buried pot was encountered and proved to contain a rich hoard of jewelry. Most of its contents are discussed in detail elsewhere, but one may again mention the fine modeling of a tiny gold lion (Ag. 35:941) and a pig pendant in pinkish stone (Ag. 35:909) which still had a carnelian bead wedged in the hole pierced in its back and must therefore have been suspended from a necklace. Apart from the amulets there was an enormous number of beads, including many of the black and white diamond-shaped variety (Fig. 198). Others were so distributed in the pot that several separate necklaces could be identified and in some cases restrung with a certain amount of confidence as to the correct arrangement.

<sup>&</sup>lt;sup>11</sup> [This building also seems to belong to Early Dynastic II.—H. F.]

<sup>12</sup> OIP XLIV, No. 184, Pl. 104.

One had consisted of eight strings separated by silver spacers (Ag. 35:1132), while another (Ag. 35:1131), perhaps a wristband, had smaller spacers of the same type made of gold. There were also many long bone ornaments—up to 13 cm. in length—pierced through the center,



FIG. 197.—CYLINDER SEAL AG. 35:81, FOUND IN N 13:1. ACTUAL SIZE

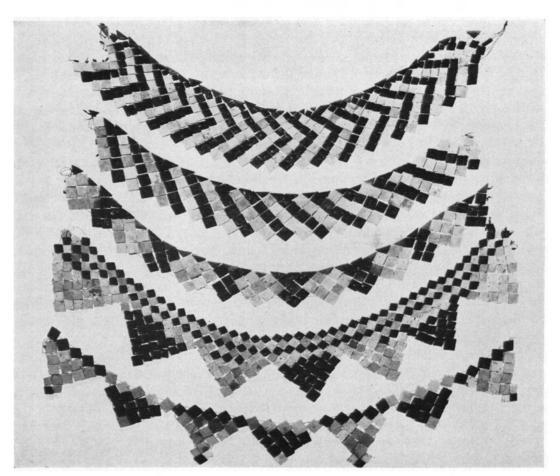


Fig. 198.—Black and White Doubly Pierced Diamond-shaped Beads (Ag. 35:1086, 1093, 1088, 1098, and 1094) Found in N 13:1. Scale, 1:4

whose function was less clear. A copper bowl some 20 cm. in diameter and much corroded lay inverted on top of the hoard (Ag. 35:953). It had probably served as a stopper to the pot, which had split and collapsed. The pot (Ag. 35:1136) was of a well known Early Dynastic I type (C. 526.373a) having a band of incised ornament on the shoulder and one upright lug. It was buried about half a meter below the floor corresponding to the offering-tables.

Another sounding in N 13 encountered the small room N 13:4, which likewise yielded a large quantity of objects and which in the second season served as a starting-point for more extensive investigation of the lower level in this area.

The earlier building seemed to have had two successive occupations or rebuildings, with very little sign of a change of plan during the transition from one to the other. The floor level corresponding to the later of the two occurred directly beneath the intermediate foundations, always a little below 31.00 m. (corresponding to all intents and purposes to the pavements in N 13:1 and 4 from which so many objects came), and the earlier one at exactly 30.00 m.

What we now succeeded in tracing, after a large quantity of heavy masonry belonging to the later building had been removed, was a series of small rooms here too surrounding a central court, M 13:10, which more or less coincided with that of the immediately subsequent, or "intermediate foundation," period. What remained of its plastered walls was buried beneath the great mass of those foundations, so that in the time at our disposal only the north side and some of the west could be traced. This work began somewhere in the neighborhood of the locus N 13:4. This was a small square compartment with carefully plastered walls on the west and south sides and a minute doorway leading westward into the court. The north and east walls were at first a little uncertain but later became more definitely indicated. All attempts to connect these wall faces with others to the south or east proved unsuccessful except for a detached length of narrow wall which might have been a continuation of the west wall of our small room. All these walls stood upon a pavement at 30.85 m. upon which, both inside and outside the narrow doorway, a great number of objects, including a small copper statuette (Ag. 35:1035), were found. The task of extending the clearance of this pavement farther into the court involved removing nearly 2 meters of immensely hard filling. This was done, however, for a considerable distance, and over the whole of this area maceheads and smaller objects such as amulets and beads came to light, apparently trodden into the pave-

It was from this point then that the tracing of the north wall of the early courtyard began, and almost at once a doorway ornamented with double rabbets was discovered. It was puzzling to find that the long room (M 13:6 in Pl. 27 B) to which this gave access about in the center had no other doorway and no objects or features to give it a particular character. A small square compartment west of this room—M 13:5—also presented something of a problem. Its east and west walls were well plastered and, down to the 31.00-meter pavement, easy to trace; but those to the north and south had been entirely cut away by later foundation trenches, so that there was no evidence as to whether any doorway had existed. A single macehead was the only object found in this room.

To the west again we found what proved to be the most interesting of all the rooms excavated at these levels, M 14:15, since it appeared to have been a shrine and contained an altar at the west end. Figure 199 gives a good idea of it when cleared down to the 31.00-meter pavement. It was located beneath the north end of the later main sanctuary, so that its altar occurred almost directly below the high altar of the latter. The walls, whose plastered faces can be seen behind the kneeling workman in Figure 199, remained standing from the pavement (31.00 m.) up to the underside of the filling which supported the floor of the later sanctuary (see Pl. 28). In the picture the remains of this filling can be seen beneath the feet of the workman who is standing behind the altar.

The altar itself was asymmetrically placed for a reason which did not become clear until later. It measured 1.20 m. wide and projected 1.30 m. Its height was 55 cm., the original upper surface being preserved. In the recess between its flank and the wall on the north side was a group of eight finely carved maceheads (Ag. 36:294-301), while a second and a third

group appeared later (Ag. 36:326-45), in the northeast corner and at about the center of the south wall respectively. At the base of the altar in front there was a slight hollow in the pavement in which three small copper implements—two long pegs (Ag. 36:313-14) and a poker-butted spearhead (Ag. 36:312)—were stuck upright. Around these had been twisted a somewhat elaborate necklace of beads. They varied from small spheres of lapis lazuli and carnelian to long cylindrical shapes of bone. There were also traces of wooden spacers. A fine cylinder seal (Ag. 36:346) of the "temple herd" type was found in another part of the room as well as various other small objects. In the center of the room near the east end was a roughly shaped hearth containing ashes. Other features of the room, such as the broken remains of a partially

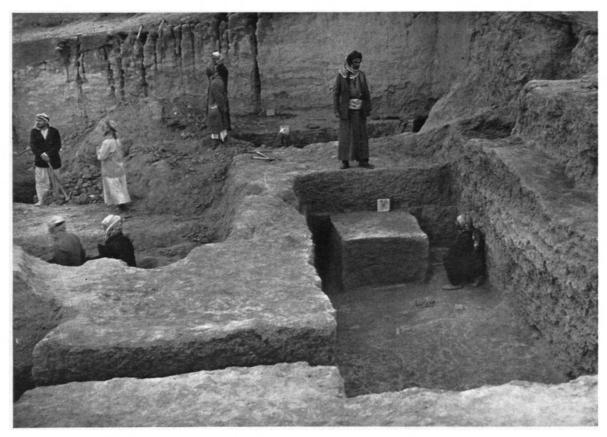


Fig. 199.—Shrine M 14:15, of the Earlier Building, Seen from Northeast

buried earthenware jar in the vicinity of the altar and two rather inexplicable troughs of baked brick near by, can be distinguished in Figure 199.

When we began to clear down to the earlier (30.00 m.) level it became evident that there had originally been at the west end of the room a doorway leading to an adjoining chamber, M 14:16. At the second occupation this doorway had been roughly blocked up, and the altar, which was a hollow shell of brickwork, had been built in such a position as to obstruct it more completely. How that part of the doorway which appeared above the top of the altar was treated there is no means of knowing. Both in the cavity within the altar and beneath the filling of the doorway, there were large collections of small clay bowls of a well known type, mostly unbroken. Some of these were either full or partially filled with charcoal. There were also some beads and broken amulets of poor quality, while in the northwest corner of the room at this deeper level we unearthed a quantity of eggshells about the size of those of a

hen, and the bones of at least two large fish. A large flat rubbing-stone incorporated in the pavement near the doorway gave the exact level of 30.00 m.

The room M 14:16, approached at the earlier period through the doorway behind the altar in M 14:15, had very little character and contained no objects. At the south end there was a little pile of baked bricks. Amongst these were some rather large, fairly flat, plano-convex bricks and others much smaller, made without any mold. One of the former was pierced through with a single hole and bore the impression of the hoof of a gazelle or small antelope. Beneath the 30.00-meter floor of this room and that of the adjoining sanctuary was a filling of small plano-convex bricks laid solid, course upon course, to a depth of over 1 meter.

A great many of our most important finds in the second season came from a small square compartment, M 14:12, adjoining the shrine M 14:15 to the south. First and foremost among these were a cast copper quadriga (Ag. 36:150, Fig. 200) and three small copper statuettes (Ag. 36:140, 141, and 70, Fig. 201). These latter, in both size and character, so nearly matched the one found in N 13:4 (Ag. 35:1035) that parallel dating of the two loci became likely.



Fig. 200.—Copper Quadriga (Ag. 36:150). Scale, 2:3

The remainder of the list will be seen to include thin copper ax blades with three bent tangs (e.g. Ag. 36:143), a finely made gold toggle pin (Ag. 36:46), a great number of amulets, mostly of a peculiar type representing a bird, and other small objects. These and many more, not to mention innumerable beads, were all incorporated in the debris with which the room was packed for a matter of about 70 cm., from the 31.00-meter floor level up to the underside of the later filling. Penetrating beneath the 31.00-meter pavement we encountered two deeper ones, at 30.30 and 29.80 m. respectively, and were unable to distinguish which corresponded to the 30.00-meter level in the adjoining shrine. A few more beads and a single macehead came from the later of these. At both a doorway led into the central court M 13:10, and one may presume a similar doorway to have existed at 31.00 m. but to have been destroyed by later foundation trenches.

Two larger rooms to the south—M 14:10 and 11—were partially excavated at the end of the first season and appear so in Figure 179. The more southerly of the two, M 14:11, had very little character and produced no objects. Doorways led north into M 14:10 and west into an only partially excavated area which we called M 14:13. A rather large number of objects came from M 14:10. These were mostly grouped at the north end of the room and were again imbedded in the filling directly above the 31.00-meter floor level. In character

they corresponded exactly to those found in the adjoining compartment, M 14:12; in fact, it seemed by no means certain that the two rooms had not at this period combined to form a single unit, the wall between being fragmentary and uncertain. There were again many "bird" amulets, beads, and small gold objects.

One other room, M 14:17, partially excavated at this depth, had rather the character of a room or court in a private house. A little beneath 31.00 m. there was an occupation level marked by a heavy deposit of ashes and greenish rubbish. At 30.50 m. there was a pavement upon which lay a number of significant objects. Areas in the northwest and southeast corners were inclosed by low walls half a brick thick. Inside the former of these the floor had been covered with reed matting, of which a clear impression remained in the earth. Upon this was inverted a shallow earthenware bowl. In the latter there was no mat impression, but several



Fig. 201.—Three Copper Statuettes (Ag. 36:140, 141, and 70) from M 14:12. Scale, 2:3

other features of a domestic character were observed. There were two storage jars partially buried beneath the floor and covered with small saucers, while two roughly circular grinding-stones actually remained superimposed one upon the other. At a point near the southwest corner of the room there was a small baking-oven; and half a dozen little pottery bowls of a well known Early Dynastic type were found in its vicinity. A portion of the room at the south end had to remain unexcavated owing to the great mass of superimposed later masonry.

It will be seen that very few generalizations can be made or deductions drawn from the small section of this earlier building which we were thus able to excavate. The poverty of the finds in the shrine, M 14:15, and its unimpressive size make one reluctant to think of it as the main sanctuary of the temple; yet one could find no clue to an alternative focal point. The important objects found in N 13:1 and 2 were somewhat tantalizing, since all efforts to connect these loci with the rest of the building, or to explain their significance, were frustrated by the heavy later filling. The asymmetrical arrangement of the pillars or offering-tables in N 13:1 for a time suggested that the whole unit might be repeated at a corresponding point

#### THE SHARA TEMPLE AT TELL AGRAB

on the north side of the main axis of the building, but this theory also we were unable to prove.

A word may be said here in regard to the northerly soundings in M-N 12. The walls were hard to trace accurately and were in some cases confused by association with the remnants of later foundations. But N 12:1 and the room west of it definitely extended northward beyond the inner face of the northern outside wall of the main level if prolonged, bearing witness to the fact that beyond a certain point in M 12 the latter had entirely disappeared as a result of denudation. Another wall, presumably the outside wall of this earlier structure, gives their limit on the north side. N 12:1 was confused on the west side by the intrusion of a later burial,



Fig. 202.—Intrusive Burial in N 12:1

Grave 4 (Fig. 202). The grave was covered by a roughly made vault of mud brick, the side of which had collapsed, revealing what seemed, in comparison with other graves, to be an exceptionally long skeleton. When some cleaning had been done this was partially explained by the fact that one of the fingers bore a heavy iron ring dating the burial to a post-Babylonian period.

Near the south and east walls of the room fragments of bowls in various colored stones appeared, and near the southeast corner a magnificent painted pot (Ag. 35:1032) had been crushed beneath the weight of a heavy stone into more than three hundred pieces. Fortunately few had been lost, and we were able to reconstruct the vessel fairly adequately.<sup>13</sup> It was of an Early Dynastic I type with a single upright lug on the shoulder, "scarlet ware," painted with animals, birds, fish, and plants in black and red on a cream slip. Two similar pots were found in another sounding a little southwest of N 12:1, but these were unpainted.

<sup>&</sup>lt;sup>13</sup> See Pottery from the Diyala Region, Pl. 11.

In M 12:2 no objects at all were found. There was an intrusive burial in the east corner, while the southwest wall was plastered and had a small doorway looking very much like that leading from one room to another in any private house. A similar doorway occurred on the line between squares M 12 and M 13, but at this point and beyond it was difficult to tell whether we were dealing with the walls of early private houses or the foundations of the temple.

#### THE EARLIEST REMAINS

The last few days of work were, as we have stated above, spent in investigating the possibility of an even earlier building. In M 14:10 and 12 we did in fact encounter walls of an improved quality, although no objects appeared and the plan seemed to remain substantially the same. These walls seemed to be founded at 28.25 m. and to remain standing about 1.60 m. high, while the principal occupation level occurred at 29.00 m. (see Pl. 28). They were heavily plastered, and, although a partition wall separated the two rooms M 14:10 and 12, it was noticeable that the plaster of the east and west walls continued behind it, suggesting that at some time the two rooms had formed a single unit. M 14:12 still had a doorway leading to the court (M 13:10), while in the west wall of M 14:10 there was a new doorway, leading to M 14:17. This had been partially blocked up and then replastered, so as to form a kind of niche. At a later period a small doorway had also been cut from M 14:12 to M 14:17, and this latter room was now limited to the west by a new wall which somewhat reduced its width.

It can be seen that this would perhaps be the point of departure for any future work on the deeper levels of the temple. Whether the few indications which we have at present of its character would justify the labor involved in removing the heavy walls of the later building is a somewhat doubtful point.

It remains to assign the successive levels of the Shara Temple to their proper places within the Early Dynastic period; the use of plano-convex bricks throughout the ruins shows that all of them fall within its scope.

In a few architectural features the main level is comparable with dated buildings at other sites, but such features are not specific enough to mean much. The plan reconstructed by Mr. Delougaz (Fig. 203) recalls in shape that of the Square Temple at Tell Asmar and shows an equivalent for "House D" at Khafajah which connects it with the Temple Oval. Square Temple and Temple Oval were both founded in Early Dynastic II, but there is no proof that the features mentioned are confined to that period.

However, the objects recovered from the main level of the Shara Temple suggest the same date. It is true that a large proportion of them are shown by the excavation of the Sin Temple at Khafajah to belong to the Proto-literate period. They must evidently be rated as survivals in the plano-convex brickwork at Tell Agrab. But it is significant that the latest objects from the main level belong to Early Dynastic II. They comprise statuary of the early style found in the Square Temple at Tell Asmar and also stone vases and cylinder seals as found in that building. It would be out of place to discuss this matter here in detail, and the reader is referred to the relevant volumes in this series.

The "latest building," of which only a few traces remained, belonged most likely to Early Dynastic III; this is suggested by the head Ag. 35:454, which belongs to the later style of sculpture. The hoard of copper derived from statues found among the surface remains (Fig. 191) recalls the figures found in the Temple Oval, '4 but with these there was the same uncertainty as to whether they belong to Early Dynastic II or III.

The intermediate foundations and the earlier building found below the main level belonged to Early Dynastic II to judge by the same criteria, the age of the latest objects found in them. The earliest remains, however, also were built of plano-convex bricks; the presence of "scarlet ware" and of brocade-style seals seems to date that layer to Early Dynastic I. It seems certain that a rich temple existed on the site in the later part of the Proto-literate period, since so many valuable objects of that age were preserved in the shrine and buried there at a later date. But we lacked the opportunity of penetrating into those earlier layers.—H. F.]

# COMPARISON OF THE SOUTHERN ROOMS IN THE MAIN LEVEL WITH "HOUSE D" AT KHAFAJAH AND RESULTING RESTORATION OF THE SHARA TEMPLE

#### By PINHAS DELOUGAZ

The southern rooms of the Shara Temple as an architectural unit appear to me to resemble even more closely "House D" at Khafajah than they do the Tell Asmar palace section mentioned above (p. 250, n. 9). Since the Shara Temple and "House D" are also much nearer each other in time, their resemblance is perhaps likewise the more significant.

While a central court with series of rooms grouped around it is a favorite architectural motif in Mesopotamia from very early times down to our own, the similarity between these two buildings<sup>15</sup> extends far beyond such a general concept. Indeed, comparison of their plans shows clearly that both the character of the architectural elements and their arrangement are strikingly alike, although, perhaps on account of its incompleteness, the Tell Agrab building gives the impression of being somewhat less efficiently planned.

The principal part of the Agrab unit (Pl. 26)—a square court (M 15:1) flanked by a large oblong hall (M 14:7) with two small rooms beyond (M 14:8 and M 15:3)—has its exact counterpart in "House D" (court, L 43:3; hall, K 43:3; small rooms, K 43:5 and K 44:5). The second large room adjoining the court at right angles to the main hall (M 15:5) clearly corresponds to L 43:9 at Khafajah. No parallel to rooms M 15:2 and 4 exists in "House D," but it seems likely that they fulfilled some of the functions reserved in it for L 43:9, since there this large room also communicated with the main hall. The similarities cover not only the central part of the plan but also the characteristic approach, which in each case was through a narrow corridor and from it through vestibules into the central court. Furthermore, in each building the corridor was flanked by a room or two isolated from the rest of the building and communicating with the corridor only—presumably a porter's lodge. The only notable difference between the entrances is in the grouping of the two vestibules between the corridor and the central court; they were parallel in "House D" but seem to have been consecutive in the Shara Temple.

Notwithstanding such slight differences, the similarities seem strong enough to suggest a priori that those parts in the buildings which correspond in plan were also identical in function. This view is supported by the occurrence of an ablution pavement and a drain in N 15:3, the likes of which were introduced in an exactly similar position in "House D" (in K 43:2) during the third occupation of the first building period of the Temple Oval. The importance of the analogy lies in the fact that it provides the only means of determining the functions of some parts of the building, thereby helping us to establish the character of the building as a whole and consequently to gain a clearer picture of the entire Shara Temple. For instance, the rabbeted treatment of the doorway into the small room M 14:6, exceptional in this building but elsewhere almost invariably associated with entrances to sacred buildings or cult chambers, remains inexplicable until we realize that this small room corresponds to L 43:4 in "House D," which was proved by the presence of an altar to have had some ritual function and which we consider as a private chapel of the resident of "House D," perhaps dedicated to his personal deity. Likewise one may gain some notion concerning the character of the eroded part of the building under discussion by recalling that the only rooms in "House D" the counterparts of which are missing in it are those forming the service quarters.

<sup>15</sup> For the plan of "House D" see OIP LIII, Pls. III-IV.

The resemblance in plan and the similarity of function of the corresponding parts in the two buildings justify, in my estimation, the more general conclusion that the original purpose of each was the same. The position of the Agrab unit within the larger temple complex, very much like that of "House D" within the Temple Oval, is a further trait in common supporting this view. Now "House D" was interpreted as the residence of a person of high rank connected with the temple, probably its high priest. The same interpretation may, then, apply to the Agrab building. 17

If this is correct, it would follow that the grouping of temple and residence, as first observed in the Temple Oval, was not just an isolated occurrence there but may represent a more generally accepted architectural scheme. From this point of view it is perhaps worth considering whether the later similarities pointed out by Mr. Lloyd do not actually reflect to some extent an earlier architectural tradition.

It may be useful likewise to note that the above interpretation has some bearing upon our views regarding the contemporary private dwellings. It may be argued, of course, that, even if it is correct, the relation of these residences to the temples puts them in a class apart, from which no inferences regarding ordinary dwellings can be drawn. On the other hand, the view may be held that, since such factors as limited means, restricted space, or earlier ruins, which usually affected the character of more modest dwellings, played but a minor role in the planning of the Temple Oval and the Shara Temple, their residential annexes may in some respects be considered as representing rather closely an ideal type of house to which private dwellings tended to approach in so far as those hindering factors could be overcome. The substantiation of this view and the discussion of its implications are, however, extraneous to our present problem.

To return to the Shara Temple, the close parallel between the unit under discussion and "House D" provides some basis for conjecture regarding the missing portion of the temple. Presuming that the position of the Agrab residence within the temple inclosure and the characteristic approach to it result from an architectural connection between it and the rest of the temple similar to that between "House D" and the temple proper at Khafajah, one would expect a common entrance to both through the thick inclosure wall. Presumably this main entrance would lead first into a forecourt (corresponding to K 44:1 in the Temple Oval); thence through the corridor N 15:1 into the residence and through a second gateway, perhaps with a gate chamber, into the temple area proper. The obvious location for this forecourt is the east corner of the building. The entrance into it could be from the east or from the south. In our restoration (Fig. 203) the latter alternative is adopted, chiefly in order to follow as closely as possible the arrangement of the Temple Oval, where the main gateway from the outside faces the second gateway into the temple area, while the corridor leading into "House D" is reached by turning left from the main entrance. As to the location of the gateway, it seems fairly certain that it could not have been at the breach in the wall in square O 14, as that would bring it too close to the entrance to the corridor. The nearest probable position of the gateway is between the next two buttresses, if we assume that the buttressed south face of the wall continued. On the other hand, in view of the thickness of the wall, it would be awkward to place the gateway in the last curtain. We require, therefore, an additional curtain and buttress to the east, which determine the minimum length of the south wall. Since there are no indications that the building extended any farther, we have restored here the eastern corner tower. At the north end of the building we have prolonged the north wall and deter-

<sup>16</sup> OIP LIII 56 f

<sup>&</sup>lt;sup>17</sup> Dr. Jacobsen calls my attention to the *giparu*, often mentioned in Sumerian texts as residence of the high priest or priestess (*enu*, *entu*).



Fig. 203. Reconstructed Plan of the Main Level of the Shara Temple at Tell Agrab. Scale, 1:600

mined its length by restoring three additional buttresses of the same width as those preserved and a somewhat wider corner buttress. It is noteworthy that the east wall, obtained by joining the two corners, covers the main length of an earlier wall which presumably delimited a preceding stage of the same building (Pl. 27 B). The buttressing of the face of the east wall is of course purely conjectural. Its length permits the restoration of either seven buttresses as on the north wall or eight as on the south wall, and the latter alternative has arbitrarily been adopted. The buttresses flanking the gateway are restored to match those on the south and east walls, while the doubly rabbeted effect is obtained by recesses into the thickness of the walls, a procedure for which there are a great many examples.

Inside this larger complex we have delimited the residence on the north side by prolonging its north wall and on the east side by restoring an outer wall at the most likely point, by analogy with "House D," that is, on a line with the entrance to the corridor. We thus obtain a comparatively small additional residential area which, although its plan is lost, would, as we have seen, have been occupied by service quarters. The remaining area (A) east of the residence can be considered as a forecourt, of reasonable size and proportions, into which the main entrance opens approximately in the center of its south wall. Opposite this entrance we have restored a second gateway, leading into a gateroom flanked by a room on each side. 18

The space B beyond the gateroom is restored as a second, rather oblong court by simply prolonging the wall north of M 13:3, on the one hand, and the east wall of the residence, on the other. It may be noted that the prolongations of these restored walls coincide with stumps of earlier walls in N 13-14. A series of rooms is restored against the east wall of this court on the basis of similar rooms against the inner face of the earlier east wall (cf. Pl. 27 B). Continuation of the cross walls delimits three more distinct areas, C, D, and E. By projecting the wall between M 13:2 and 3 to the east, C is divided into two parts, the larger of which, approximately 15×17 meters, coincides very closely with the area recognized by Mr. Lloyd as a central court (p. 251). Approximately in the center of its east wall we restored a doorway to connect it to court B. The northern oblong part was probably subdivided into two or three rooms, at least one of which (M 13:3) was connected with the northern unit of the temple.

About the planning of area D there is little one can surmise except the possibility of three rooms against the north wall, as indicated by earlier remains (Pl. 27 B). The entrance into this area might have been from either B or C, presumably through one of the rooms north of C. The possibility is of course not excluded that another main entrance led into D and E from town areas north or east of the temple complex.

As to the plan restored in area E, it is, of course, purely hypothetical. However, since the character of this edifice as a multiple temple is established by the presence in the preserved part of two temple units, one with the main shrine M 14:2, the other with the two smaller shrines L 13:4 and 6, there is some basis for restoring a similar unit in this space. Moreover, its shape and size are such that the plan of sanctuary M 14:2 and its subsidiary rooms can be transferred to it almost without alteration.

According to our restoration, then, the building would have consisted of five architectural units: the forecourt (A), the residence, and three temple units in the temple area proper, each of the last containing all the usual features of a complete temple. The best preserved of these consists of the large sanctuary M 14:2, the smaller rooms on each side of it, and the court-yard C. The second, north of it, contained at least two smaller sanctuaries, L 13:4 and 6,

<sup>18</sup> Cf. OIP LIII, Pl. III.

and a number of service rooms west and north of courtyard D. The third unit would include the sanctuary and flanking rooms in E and the courtyard B with service rooms on its east and south sides.

Whether this restoration is accepted or not, the character of the edifice as a multiple temple is beyond doubt. We can draw the conclusion, therefore, that residences were combined not only with the type of temple represented by the Temple Oval at Khafajah, in which a single main sanctuary was placed on a platform, but also with multiple temples in which the sanctuaries and their auxiliary rooms were all built on the same level. It may also be pointed out that the Square Temple at Tell Asmar, which may be considered in some respects as a simplified form of the type of temple here restored, and the Temple Oval combining temple and residence both occur in Early Dynastic II, to which the Shara Temple has been dated on other grounds.

# CATALOGUE OF OBJECTS FOUND IN THE SHARA TEMPLE AND AT THE TOWN WALL

#### OBJECTS GROUPED BY LEVELS AND LOCI

#### BELOW 30.00 M. (EARLY DYNASTIC I)

	BELO	W 30.00 M. (EARLY DYNASTIC 1)	
Locus	Field No.	Designation	See
O 12:2	Ag. 35:1068	cylinder seal	$C_{19}$
	30.00	-32.00 M. (EARLY DYNASTIC II)	
M 13:4	Ag. 35:884	seal loop	C
	885	pendant	M
	886	animal amulet fragment	M
•	887	pendant	M
	888	2 gold beads	M
	890	pendant	m
M 13:5	Ag. 36:283	stone ornament	M
M 13:6	Ag. 35:682	fish amulet	M
	683	calf amulet	$\mathbf{M}$
M 13:10	Ag. 35: 960	neck of stone vase	M
	1031	dog's head	M
	Ag. 36:36	carved vase fragment	m
M 14:1 (beneath)	Ag. 36:11	carved bowl fragment	M
	12	bird's head	$\mathbf{m}$
	13	macehead	m
M 14:4	Ag. 35: 880	bull amulet	M
	891	cylinder seal	e
	894	sculptured vase fragment	M
	895	statue fragment	ms
	896	copper cup	m
	897	macehead	M
	898	carved shell	M
	899	statue fragment	MS
	900	carved bowl fragment	M
	962	spacer	m
	963-65	cylinder seals	. С
	968	gold rosette	M
	969	doubly pierced gold ring	M
	970	gold bead	M
	976-77	toggle pins	M
	1006-7	cylinder seals	C
	1008	wire bead	m
	1009	silver pinhead	m
	Ag. 36:366 <sup>20</sup>	pendant	M
	492	stone bowl fragment	M
	493	stone cup fragment	M

<sup>19</sup> A letter here indicates the volume in which the object has been or will be published, a capital showing that it is illustrated and a lower-case letter meaning that it is merely catalogued. "C" and "c" stand for Cylinder Seals from the Diyala Region; "M" and "m," for Miscellaneous Objects from the Diyala Region; "MS" and "ms," for More Sculpture from the Diyala Region; "P" and "p," for Pottery from the Diyala Region; and "S," for Sculpture of the Third Millennium B.C. from Tell Asmar and Khafajah (OIP XLIV). Figure numbers refer to figures in the present volume.

<sup>20</sup> Beneath M 14:4.

Locus	Field No.	Designation	See
M 14:4	Ag. 36:499	stone vase fragment	M
		B. 075.210 <sup>21</sup>	p
		B. 203.510	P
		B. 525.322	p
M 14:8 (beneath)		rough carving	MS
M 14:10	Ag. 36: 3	bead hoard	m
	4	gold toggle pin	M
	5	silver headband(?)	M
	6	2 gold rings	M
	7	inlay fragment	m
	8	man amulet	M
	9	bead	M
	10	gold bead	M
	28	cylinder seal	$\mathbf{C}$
	29	silver toggle pin	M
	30	flying-bird amulet	M
	31	toggle pin	m
	32	double-headed nail	M
	33	long bead	m
	34	inlay fragment	M
	35	shell lamp	m
	45	calf amulet	M
	48	ring pendant	M
	49	bull amulet	M
	50	gold foil bead	M
	52	inlay	M
	53-54	stone wall nails	M
	55	stone vase base(?)	m
	56	lion amulet	M
	57	ram amulet	M
	58-59	inlay fragments	m
	60	copper arrowhead	M
	61	copper stand fragment	m
	62	gold bead	M
	63	gold foil	m
	90	bead	M
	91	flint core	m
	92-93	pins	M
	291	model paddle	M
	310	nail with 3 lions' heads	M
	311	animal amulet	M
	352	bull stamp seal	M
	353	falcon's head	M
	354	bead	M
	355	bird amulet	M
	356	gold bead	M
	372-74	cylinder seals	C
	375	stamp seal	M
	377	silver pin	M
	378 370	fish tail	m M
	379	gold rosette	M
	380	statuette	M
	381-86	bird amulets	M
	387	toggle pin	M

<sup>&</sup>lt;sup>21</sup> These symbols indicate the forms of vessels, as described in the pottery volume, and replace field numbers.

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## PRE-SARGONID TEMPLES

Locus	Field No.	Designation	9
M 14:12	Ag. 36: 37	dagger	See M
141 11.12	38	pinhead	M
	39	ram amulet	M
	40	calf amulet	M
	41	bird amulet fragment	M M
	$\frac{41}{42}$	bird amulet	M
	43-44	cylinder seal fragments	C
	46	gold toggle pin	M
	47	silver pin	M
	64	bead	m
	65	miniature fayence pot	m
	66	cylinder seal	C
	67	lion and bull pendant	M
	68	spoon	M
	69	toggle pin	M
	70	male statuette, copper	Fig. 201 and MS
	71	long bead	m
	73	nail	M
	74	macehead	M
	75	mirror	M
	112	mirror	M
	113	cylinder seal	Ċ
	114	cylinder seal	Č
	115~22	cylinder seals	$\ddot{\mathbf{c}}$
	123	stone bowl	$\mathbf{M}$
	124	bird amulet	m
	125-30	bird amulets	M
	131	bird amulet	m
	132-33	bird amulets	M
	134	hut symbol	M
	135	pendant	$\mathbf{M}$
	136	bull amulet	${f M}$
	137	lion amulet	M
	138-39	ring pendants	$\mathbf{M}$
	140	female statuette, copper	Fig. $201$ and $\overline{\mathrm{MS}}$
	141	male statuette, copper	Fig. 201 and MS
	143-45	ax blades	M
	146-47	sickle-shaped objects	M
	148	silver toggle pin	M
	149	cylinder seal	$\mathbf{C}$
	150	copper quadriga	Fig. 200 and MS
	151	stamp seal	M
	152	bead	m
	153	stone pot	M
	154 155–57	engraved lid	M
		cylinder seals	C
	158	inlay fragment	m
	159 160	cylinder seal	C
	161	cylinder seal ax blade	C
	162-63	sickle-shaped objects	M M
	164	bird-shaped pinhead	M M
	165	bird amulet	M M
	166	bird amulet	m
	167	bird amulet	M
	* 0**	West of Besselving	272

Locus M. 14, 19	Field No.	Designation	See
M 14:12	Ag. 36:168	bird's head bird amulets	m
	285–87 288		M
	200 362	bull amulet	M
	363	inlay bird amulet	M
	364		m
	365	cylinder seal	C
	388	bird amulet cylinder seal	m
	389	macehead	C M
	390-92	bird amulets	M M
	393	pinhead	M M
	394	copper cutting edge	M M
	403	macehead	
	404	cylinder seal	m C
	418	bird amulet	M
	419	bead with incised star	M
M 14:13	Ag. 36:351		M
M 14:15	Ag. 36:292	spoon fragment sickle flint set in bitumen	
M 14.10	Ag. 50.292 294	macehead	m
	295	macehead	m M
	296-97	maceheads	
	298-300	maceheads	m M
	301	macehead	
	302	bead with two animal heads	m <b>M</b>
	303	copper tube fragment	
	305-7	maceheads	т <b>М</b>
	308	macehead	
	309	miniature macehead	m M
	312	poker-butted spearhead	M
	313-14	long copper pegs	M
	316	bull amulet	M
	317	silver leaf	M
	318	gold bead	M
	319	spacer fragments	M
	320	large diamond-shaped bead	M
	321	ornament	M
	322	cylinder seal	C
	325	stone vase fragment	m
	326	macehead core	m
	327-31a	maceheads	
	332	macehead	f m
	334-35	maceheads	M
	336-38	maceheads	m
	339	macehead	M
	340-42	maceheads	m
	343	macehead	M
	344-45	macehead	m
	346	cylinder seal	C
	347	stone vase	m
	367	hut symbol	M
	368	cylinder seal	C
	369	dagger	M
	370	stamp seal	M
	395	cylinder seal	Č
	396	bead	M

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# PRE-SARGONID TEMPLES

Locus M 14:15	Field No. Ag. 36:405–9	Designation maceheads	See m
212 22120	410	dagger	M
	411	8 beads	M
	412	bead with animal head	m
	413	pendant fragment	m
	414-15	cylinder seals	C
	420	stone bowl	m
	421	macehead	M
	422	3 beads	M
	423	lump of carnelian	M
	424	ram amulet	M
	425	claw amulet	M
	426	cylinder seal	M
	517	25 beads	
	518	25 beads	m m
	565	plaited double handle	m P
	566	sherd with two handles	r P
	569		r P
	309	sherd with applied ornament	r P
		B. 754.540	P P
		C. 358.010	_
M 14.18	A = 26.246 40	D. 516.363	p M
M 14:16 M 14:17	Ag. 36:348-49	stamp seals	M
WI 14:17	Ag. 36:357	bull amulet	M
	<b>358</b> –59	beads	M
	360	lion stamp seal	M
	361	bird amulet	M
	371	cylinder seal	C
	397	cylinder seal	C
	398	animal amulet	M
	399	animal amulet, broken	M
	400	animal amulet	M
	401	bird amulet	M
	416	wall nail ending in bull's head	M
N 10.1	417	cylinder seal	C
N 12:1	Ag. 35:1026	stone cup	M
N 10.0	A 07 - 1000	C. 526.373	P
N 12:2	Ag. 35:1028	bull's head	M
N 13:1	Ag. 35: 59	bull amulet	M
	74	double cup, stone	M
	75-77	stone cups	M
	80	gazelle's head amulet	M
	81	cylinder seal	Fig. 197 and C
	84	copper bull's horn	M
	90	stamp seal	M
	93	head amulet	M
	94	bead group	m
	620	macehead	M
	663	macehead	m
	901	50 shell rings	$\mathbf{m}$
	902	35 long beads	m
	903	4 worked beads	m
	904	mended bead	M
	905	13 long beads	m
	906	11 spiral shells	m
	907	4 worked rings	m
	908	10 shells	m

#### THE SHARA TEMPLE: CATALOGUE OF OBJECTS 271 Locus Field No. Designation Ag. 35: 909 pig amulet N 13:1 M 910-11 eyeballs M 912-16 cylinder seals $\mathbf{C}$ 917 cylinder seal $\mathbf{c}$ $\mathbf{C}$ 918-24 cylinder seals 925-27 stamp seals M 928 animal stamp seal M 929 animal amulet M 930 ferrule? m M 931 spacer 932 bead M 933-34 M spacers 935 spacer fragment m 936spacer(?) fragment M 937 eyeball M 938 - 40gold beads M 941 gold lion amulet M 942 - 45necklaces M 946-51 necklaces m 953 copper bowl m 1077 necklace m 1078 necklace M 1079-80 necklaces m 1081 necklace M necklaces 1082 - 851086 necklace Fig. 198 and M 1087 necklace 1088 necklace Fig. 198 and M 1089-92 necklaces 1093-94 Fig. 198 and M necklaces M 1095 gold spacer 1096 gold crescent M 1098 necklace Fig. 198 and M 1099-1101 necklaces m 1121 necklace m 1130 necklace $\mathbf{m}$ 1131-32 necklaces M bull amulet M 1135 Ag. 36:51 bull amulet M C. 526.373a P N 13:4 Ag. 35:1035 male statuette, copper MS 1041 lion figurine M 1042 hut symbol m 1043 cylinder seal c 1044-45 maceheads M 1046-51 maceheads m 1052 macehead M 1053-55 maceheads m 1056 macehead M 1057-65 maceheads m 1067 cylinder seal $\mathbf{C}$ 1069 M stone tumbler 1070 macehead m N 13:5 Ag. 36: 76 stone vase fragment m macehead M 77

maceheads

m

78-79

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### PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
N 13:5	Ag. 36: 80	macehead	M
	81	macehead	m
	82	cylinder seal fragment	$\mathbf{C}$
	83	animal stamp seal	m
	. 84	stamp seal	M
	85	stamp seal	$\mathbf{m}$
	94	lion amulet	M
	95	pendant	m
	96	fish amulet fragment	M
	97	rosette inlay	m
	98-100	lion amulets	M
	101	bull amulet	M
	102	macehead	M
	103	macehead	m
	104-5	maceheads	M
	106	macehead	m
	107	macehead	M
	108-10	maceheads	m
	111	macehead	M
	169-70	maceheads macehead	M
	171 172	macehead macehead	m M
	173	stone tumbler	M
	174	painted potsherd	m P
	176	calf amulet	M
	177	pendant	
	178	stamp seal	f m
	179	calf amulet	M
	180	long bead	m
	181	macehead	M
	18283	maceheads	m
	184	macehead	M
	185-86	maceheads	m
	187-88	maceheads	M
	269	stone tumbler fragment	m
	270-72	maceheads	M
	273	macehead	m
	274	macehead	M
	275-76	maceheads	m
	277	bull amulet	M
	350	macehead	M
O 13:1		C. 515.373	$\mathbf{P}$
	32.00-3	4.00 M. (EARLY DYNASTIC II)	
L 13:1	Ag. 35: 49-50	shell lamp fragments	m
20.1	623-24	stone tumblers	M
	1013	carved vase fragment	M
L 13:3	Ag. 35: 54	stone tumbler fragment	M
= · <del>-</del>	56	stone cup base	· m
	61	cylinder seal	C
	63	macehead	m
	68	bead group	m
	83	bead group	m
	95	cow amulet	M
	99	stone sherd with tubular lug	m
	123	long bead	m
		-	

	771.13.37		
Locus L 13:3	Field No. Ag. 35: 133	Designation bead group	See m
1. 10.0	134	bull amulet	M
	139-40	rolled wires	M
	141-46	wire fragments	M
	147-40	3	M
	148	foil fragments	M
		crushed rings	M
	149	wire foil	M
	150		
	151	wire	M
	152-53	wire rings	M
	154	wire ring fragments	M
	155	2 silver beads	M
	156	2 silver beads	M
	157	gold weight?	M
	158	wire fragments	M
	188	beads and shells	m
•	189	stamp seal	M
	955	lion-head stamp seal	M
	956	bird amulet	M
	1029	inlay	m
	1066	copper blade	m
	1072	ring pendant	M
L 13:4	Ag. 35: 8 (half)	relief fragments	MS
	668 (part)	relief fragments	MS
	693	chisel	m
	704	stone bowl	M
	705	claw amulet	M
	719	macehead	M
	730	cylinder seal	$\mathbf{C}$
	734	stamp seal	M
	735	pronged copper object	m
	739	ram protoma	MS
	770	cylinder seal	$\mathbf{C}$
*	771	statue skirt	ms
	772	stone implement	m
	Ag. 36:260-61a	stone bowls	M
	262	cylinder seal	$\mathbf{C}$
	263	statue feet	ms
	264	macehead	m
	265	macehead	M
	266	macehead	m
	267	bead	M
	268	macehead	m
	278	seal impression	e
	279	pot (B. 644.520) with fragments of copper	$\mathbf{p}$
	280	whetstone	M
	281-82	carved vase fragments	m
	284	plaque fragments	MS
	289	stamp seal	M
	290	inlay	M
L 13:5	Ag. 35:387	bead group	$\mathbf{m}$
	Ag. 36:259	mortar	m
L 13:6	Ag. 35: 8 (half)	relief fragments	MS
	467	bead group	m
	472	macehead	$\mathbf{M}$
	473-74	maceheads	m

## 4 PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
L 13:6	Ag. 35:618	pierced ornament	m
	721	bull's head	MS
	746-48	maceheads	M
	749-50	maceheads	m
	760	macehead	M
	761	cylinder seal	$\mathbf{C}$
	766	body of bull amulet	M
	773-74	statue fragments	MS
	784-86	maceheads	M
	787-89	maceheads	m
	793	cylinder seal	$\mathbf{C}$
	823	statue skirt	MS
	824	small bull's head	M
	830	macehead	M
	832	macehead	m
	844 (part)	carved vase fragments	M
	1133	C. 357.010a	P
L 13:8	Ag. 35:831	macehead	m
L 13:9		B. 533.230	P
		B. 652.500	P
L 14:1	Ag. 35: 549	statue fragment	MS
	552	long bead	$\mathbf{m}$
	553	bead	m
	554	goddess figurine	. <b>M</b>
	629	bird's head	M
	630	inlay fragment	m
	639	macehead	M
	644	bead	M
	655	bead	M
	674	carved base of vase	Fig. 189 and M
	686	fish amulet	M
	687	stamp seal	M
	688	large diamond-shaped bead	m
	689	seated statue	MS
	718	animal amulet	M
	723-24	maceheads	M
	725–27	maceheads	m
	731	statue head	MS
	733	carved bowl fragment	M
	753-55	maceheads	m
	775–76	cylinder seals	C .
	777	inscribed stone vase fragments	m
	779	lioness amulet	M
	790-92	maceheads	m
	805	hut symbol	M
	806	large bead	M
	807-8	cylinder seals	C
	809 810	Imdugud amulet ornament	M
			m C
	811 812	cylinder seal	C
	812 813	stamp seal demon amulet	M M
	814	calf amulet	M M
	815	flying-bird amulet	M M
	816	figurine head	M M
	817	macehead	M M
	011	Maccheau	AVA

### THE SHARA TEMPLE: CATALOGUE OF OBJECTS

Locus	Field No.	Designation	See See
L 14:1	Ag. 35: 818	macehead	m
13 11.1	819	lion-head stamp seal	M
	820	cylinder seal	C
	838	rosette inlay fragment	m
	839-41	animal amulets	M
	842	cylinder seal	C
	844 (part)	carved vase fragments	M
	845	knob	m
	846	fish amulet	M
	847	bull amulet	M
	859	ring pendant	M
	860	crescent amulet	M
	861	fish amulet	M
	863-65	maceheads	m
	868	stone openwork vase	M
	870	clay gazelle	M
	872	cylinder seal	$\overline{\mathbf{C}}$
	892-93	cylinder seals	c
	957	macehead	m
	959	macehead	m
	971	man amulet	M
	972	lion-head amulet	M
	973	bead	M
	974	pig amulet	m
	975	ear plug	m
	988	copper foot fragment	Fig. 192 and $MS$
	989	male head	MS
	995	man amulet	M
	996	bead	m
	997	gold wire	M
	1022-25	necklaces	m
	1030	macehead fragment with rampant lions	M
	1125	macehead	m
M 12:1	Ag. 35:1010	torque	M
	1011	cylinder seal	c
M 13:1	Ag. 35: 60	Imdugud amulet	M
	62	macehead	m
	64	macehead	M
	67	bead group	m
	82	bead group	m
	91	crescent pendant	M
	106-9	maceheads	m
	110	macehead	M
	111	macehead	m
	112	macehead	M
	113-17	maceheads	m
	118	macehead	M
	119	macehead	m
	121	cylinder seal	C
	122	bead group	m
	126	bead group	m
	160-62	maceheads	m
	186-87	beads and shells	m
	201	bead group	m
	206	macehead	m
	207	macehead	M

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### PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
M 13:1	Ag. 35:377	bead group	m
	378	animal amulet	M
	382	bead group	m
	385	bead group	m
	446	macehead	m
	Ag. 36:175	carved vase fragments	m
M 13:2	Ag. 35:127	bead group	m
	202	bead group	m
	203	inscribed stone bowl fragment	M
	205	rattle	m
	210	macehead	m
	379	bead group	m
	397	macehead	m
	433-37	maceheads	m
	443-44	maceheads	m
	445	macehead	M
	Ag. 36: 15	worn statue	MS
	16	macehead	m
	17	macehead	M
	18	macehead	m
	19	hammer-ax	M
	20	skirt fragment	ms
	24	4 shells	m
	25	fish amulet	M
	26	carved vase fragment	m
	27	statue fragment	MS
M 13:3	Ag. 35:495	gold ribbon	M
M 14:1	Ag. 35: 52-53	statue elbows	ms
	163	macehead	m
	616	macehead	m
	1036	cylinder seal	C
M 14:2	Ag. 35: 57	statue legs	ms
	66	bead group	m
	96	cylinder seal	C
	125	staff head	m
	129	bead group	m
	135	large bead	m
	159	cylinder seal	$\mathbf{C}$
	164-66	maceheads	m
	195	bead group	m
	197	gold flower center	M
	198-99	bead groups	m
	209	macehead	M
	380-81	bead groups	m
	388	bead group	m
	389	stamp seal	$\mathbf{M}$
	390	cow amulet	M
	392	stone stand	M
	393	stone stand, fluted	M
	453	statue elbow	$\mathbf{m}\mathbf{s}$
	460	claw amulet	M
	461	large bead	m
	462	stamp seal	M
	463	stone hammer	M
	476	inlaid cup	M
	479-80	inlaid disks	M

## THE SHARA TEMPLE: CATALOGUE OF OBJECTS

	THE SHIM I	EMILE: CHIMDOGUL OF OBULCIS	211
Locus	Field No.	Designation	See
M 14:2	Ag. 35: 486	macehead	m
	487-88	maceheads	M
	489	macehead	m
	490	pendant with incised snakes	M
	491	large diamond-shaped bead	m
	498	stamp seal	M
	526	macehead	M
	527-30	maceheads	m ·
	532	macehead	m
	533	macehead	M
	534-36	maceheads	m
	537	hammer-ax	M
	538–39	maceheads	m
	541	macehead	m
	544	stamp seal	M
	548	statue base	ms
	550	female head	Fig. 186 and MS
	557	ostrich shell	m
	614	cylinder seal	$\mathbf{C}$
	615	cylinder seal	Fig. 180 and C
	874	carved bowl fragment	M
	875	large bead	m
	876	animal amulet	m
	877	spacer	M
	878	pendant	m
	881	stone bowl fragments	M
	883	cylinder seal	$\mathbf{C}$
	954	macehead	M
	961	Imdugud amulet	M
	966	bull amulet fragment	M
	967	flying-bird amulet	M
	978	stamp seal	m
	979	large bead	M
	980	bull amulet	M
	981	shell tube	M
	982	bead	M
	983	ram amulet	M
	984	plaque	M
	985	statue feet	ms
	990	macehead	M
	991	cylinder seal	C
	992	bead	m
	993	cylinder seal	c
	994	cylinder seal	C
	998	carved vase fragment	M
	999	statue fragment	ms
	1000	carved vase fragment	M
	1001-2	gold model bottles	M
	1003	model cup	M
	1004	stone cup	M
	1005	ram amulet	M
	1071	stone wall nail	m
	1097	stone vase	M
	Ag. 36: 21	animal fragments belonging with Ag. 35:728	MS
	22	statue nose	MS
	23	statue fragment	ms

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## PRE-SARGONID TEMPLES

Locus M 14:2	Field No. <b>Ag. 36:189</b>	Designation animal amulet fragment	See M
W. 14:2			
	190	small copper lion	M EV - 105 - 1 M
	191	macehead with four lions' heads	Fig. 185 and M
	192	relief fragment	MS
	193-94	maceheads	M
	195	macehead	m
	196	macehead	M
	197-99	maceheads	m
	200	macehead	M
	201-2	maceheads	m
	203	macehead	M
	204-6	maceheads	m
	207-8	maceheads	M
	209-12	maceheads	m
	213	macehead	M
	214	macehead	m
	215-17	maceheads	M
	218	macehead	m
	219-20	maceheads	M
	221-22	maceheads	m
	223	macehead	M
	224	macehead	m
	225-26	maceheads	M
	227	macehead	m
	228-30	maceheads	M
•	231-33	maceheads	m
	234	statue fragment	ms
	235	stone bowl fragments	$\mathbf{m}$
	236-37	long beads	m
	238	copper rod	m
	<b>2</b> 39	spearhead	M
	240-41	unworked copper blades	m
	242	copper cup	M
	<b>24</b> 3	unworked cylinder	m
	243a	rosette	M
	244-53	cylinder seals	$\mathbf{C}$
	254-55	animal amulets	M
	<b>25</b> 6	ornament	m
	257	bead group	m
	324	cylinder seal	$\mathbf{C}$
M 14:3	Ag. 35: 89	bead group	m
	120	stone jar	M
	124	shell lamp	m
	128	bead group	m
	138	bead group	m
	394	stone bowl fragment	$\mathbf{m}$
	759	bird amulet	M
	1034	bead fragment	m
	1037	cylinder seal	С
	1038	bird amulet	M
	1039-40	ram amulets	M
M 14:4	Ag. 35: 130	bead group	m
	131	bear(?) amulet	M
	136	calf amulet	M
	137	large bead	m
	167-69	maceheads	m ·

Locus	Field No.	Designation	See
M 14:4	Ag. 35:170	macehead	M
	171	macehead	m
	172	macehead	M
	173-79	maceheads	$\mathbf{m}$
	180	lion fragment	M
	190	shells etc.	m
	191	long bead	m
	192	large bead	$\mathbf{m}$
	193	animal amulet	$\mathbf{M}$
	200	sculptured vase	Fig. 193 and M
	204	statue head	MS
	211	macehead	$\mathbf{M}$
	212-14	maceheads	m
	215	macehead	M
	216-32	maceheads	m
	233	macehead	M
	234-46	maceheads	m
	347-60	maceheads	m
	361	macehead	M
	362-69	maceheads	m
	374	bead group and statue eye	m
	375	calf amulet	$\mathbf{M}$
	396	ram amulet	m
	398	macehead	M
	399	macehead	m
	400	macehead	M
	401-4	maceheads	$\mathbf{m}$
	405	macehead	M
	406-9	maceheads	m
	410	stone battle-ax	M
	411-16	maceheads	m
	417	macehead	M
	418-24	maceheads	m
	425	macehead	$\mathbf{M}$
	426-32	maceheads	$\mathbf{m}$
	438-42	maceheads	m
	447	macehead	m
	448	macehead	$\mathbf{M}$
	449	macehead	m
	450	macehead	M
	451	macehead	m
	452	large bead	m
	455	inlay	m
	456	fish amulet	M
	465	bead group	m
	466	crescent amulet	m
	470	macehead	m
	481	macehead	m
	483-85	maceheads	m
	492	man amulet	M
	496	pendant	m
	497	clay bead	m
	499	bull's head	m
	501	bead	M
	503	ring fragments	m
	507	animal amulet	M

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### PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
M 14:4	Ag. 35:514	cylinder seal	$\mathbf{C}$
	542	copper lion pendant	m
	551	statue feet	ms
	558	macehead	m
	56465	maceheads	m
	566	macehead	M
	567-74	maceheads	m
	575 57679	macehead maceheads	M
	580	macehead macehead	m M
	581-86	maceheads	
	587	macehead	m M
	588-93	maceheads	
	594	macehead	m M
	595-97	maceheads	m
	598	macehead	M
	599604	maceheads	m
	605	macehead	M
	606-7	maceheads	m
	609	bull's head	MS
	610-12	statue fragments	ms
	613	statue feet	MS
	617	animal amulet	M
	621	large bead	m
	625	stone cup	M
	626-27	carved vase fragments	M
	632	spacer	M
	635-38	maceheads	m
	640	flying-bird amulet	M
	642	miniature stone vase	m
	657	kneeling statue	MS
	658	animal amulet	M
	659-60	cylinder seals	$\mathbf{C}$
	661	bird amulet	M
	662	bead	M
	664	carved vase fragment	m
	665	stone tumbler	$\mathbf{M}$
	666	female statue	MS
	667	macehead	m
	668 (part)	relief fragments	MS
	669	stone bowl fragment	M
	673	small stone bowl	m
	675	copper blade	m
	676	statue fragment	ms
	677	copper animal fragment	m
	678	cone	$\mathbf{m}$
	679	macehead	m
	684	stamp seal	M
	685	animal amulet	M
	690	female head	MS
	691	animal amulet	M
	692	statue, headless	MS
	696	carved vase fragment	M
	697	macehead	m
	698	stamp seal	M
	700	stone jar fragment	m

## THE SHARA TEMPLE: CATALOGUE OF OBJECTS

Locus M 14:4	Field No. <b>Ag</b> , 35:701–2	Designation maceheads	See
MI IT.T	703	carved bowl fragment	m.
	703 709	fish amulet	m M
	709 710	carved bowl fragment	M
	710 711		M
	711	stone cup	
		male head	MS
	713	fayence bowl fragment	M
	716	cylinder seal	C
	717 720	pendant	M
		stone bowl fragment	$\mathbf{m}$ $\mathbf{M}$
	722	stone bowl	
	728	animal fragment belonging with Ag. 36:21	MS
	729	stone spout	m
	736	lion amulet	M
	737	bull amulet	m No
	738	claw amulet	M
	742	seated statue	MS
	745	ornament	M
	751 750	male head	MS
	752 752	triply pierced stone disk	m
	756	calf amulet	M
	757	bull amulet	M
	758 Tab	calf amulet	M
	762	ram amulet	M
	<b>763</b>	statue top	MS
	768	statue arm	ms
	780	stamp seal	M
	781	seated man	MS
	782	stone vase	m
	783	leopard amulet	M
	794	carved vase fragment	m
	795	stone vase	M
	796	carved bowl fragments	M
	797	stone vase fragment	M
	798	stone cup	m
	799	carved vase fragment	M
	801	stone vase fragment	m
	821	stone tumbler	M
	822	stone vase	M
	825	fragment of lapis lazuli	M
	826	animal amulet	M
	827	ring pendant	M
	828	eyeball	m
	829	ram amulet	M
	834	stone bowl	M
	836	statue fragment	ms
	848	stone tumbler	m
	849	end piece for necklace	m
	850	male statue	MS
	851	stone tumbler	M
	852	stone bowl	m
	853	carved vase fragment	m
	854	cylinder seal	C
	856	cylinder seal	C
	857	inscribed statue fragment	MS
	858	claw amulet	M

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### PRE-SARGONID TEMPLES

Locus	Field No.	Designation	See
M 14:4	Ag. 35:866	statue fragment	ms
	869	stone vase fragment	M
	871	gypsum pot	M
	1014	necklace	m
	1015	necklace	M
	1016-17	necklaces	m
	1018-20	necklaces	M
	1021	necklace	m
	1073-74	necklaces	m
	1075	necklace	M
	1076	necklace	m
	1102	stone vase fragment	M
	1103-4	stone bowls	M
	1105	stone bowl fragment	M
	1106-7	stone bowls	M
	1108-12	stone bowls	M
	1114	stone bowl	m
	1115-17	stone bowls	M
	1118-19	stone saucers	m
	1120	stone trough	M
	1124	macehead	m
	1126-28	macehead fragments	m
	Ag. 36: 494-96	stone bowl fragments	M
	497	stone vase fragment	M
	498	stone bowl fragment	M
	500-501	stone vase fragments	M
	503	large stone vase fragment	m
	507	stone bowl fragment	M
	508	stone bowl fragment	m
	509	stone bowl fragment	M
	516	stone vase fragment	m
M 14:5	Ag. 35:194	bitumen disk with rosette inlay	m
1.1 11.0	196	gold beech leaf	M
	208	macehead	m
	370	cylinder seal	C
	376	bead group	m
	384	bead group	m
	457	bead group	m
	458	bull stamp seal	M
	475	pierced stone base	m
	494	female head	MS
	504	pendant	m
	511	ram figurine	m
	512	tweezers	m
	519	bead group	m
	520	statue head	MS
	522-23	bead groups	m.
	545	claw amulet	M
	546	small bull's head	M
	547	gazelle amulet	M
	Ag. 36:476	carved bead	M
	Ag. 30:470 477	bird amulet	M
		cylinder seals	C
	478-79 480	cynnder seals lion cub amulet	M
* .	480	stone tumbler	M
	481		M M
	482	stamp seal	TAT

## THE SHARA TEMPLE: CATALOGUE OF OBJECTS

Locus M 14:5	Field No. Ag. 36:483	Designation fish amulet	See M
M 14:0	Ag. 50:465 484	cylinder seal	C
*	485	spindle whorl	m
	486	copper tool	M M
	487	inlay	M
	488	inlay	m
	489	macehead	M
	491	statue arm	ms
M 14:7	Ag. 35:540	macehead	M
	622	calf amulet	M
	628	shell lamp	m
	670	copper blade fragment	m
	671	animal amulet	M
M 14:8	Ag. 35:468	pendant	m
	471	macehead	ın
	505	12 shell rings	m
	513	pronged copper object	m
	517	statue feet	ms
	525	shell group	m
	559	metal band	m
	707	pendant	M
	708	foot amulet	M
		C. 555.921	P
M 14:9	Ag. 35:641	cylinder seal	$\mathbf{C}$
M 15:1	Ag. 35:619	cylindrical bead	M
	804	fish amulet	M
M 15:2	Ag. 35: 482	macehead	M
	656	relief fragment	MS
	706	macehead	m
	1129	shell lamp	m
M 15:3	Ag. 36:459	macehead	M
	460	lion amulet	M
	461	lion-head stamp seal	M
	462	inlaid bead	M
	463	nail	m
	464 465	bead	m M
	466	stone pot	
M 15:4	Ag. 35:741	mortar carved bowl fragment	m M
M 15:5	Ag. 55.741	B. 663.213	P
M 15:6	Ag. 35:800	relief fragment	MS
N 15:1	Ag. 35:508	animal stamp seal	M
14 10.1	509-10	animal figurines	M
	518	bead group	m
	543	stone pot	m
	560	inlay fragment	m
	740	male head	MS
	802	stone vase	M
	803	copper hoe(?)	m
	952	spouted copper vessel	m
N 15:2	Ag. 35:515	carved vase fragment	m
N 15:4	Ag. 35:714	statue head	MS
		TOP LEVEL	
L 13	Ag. 35:43-44	stone bowl fragments	m
L 13:1	Ag. 35:31	bone implement	m

284	·	PRE-SARGONID TEMPLES	
Locus	Field No.	Designation	See
L 13:1	Ag. 35:69	bead group	m
L 13:3	Ag. 35:45	2 stone bowl fragments	m
	65	macehead	m
M 14:1	Ag. 35:32	carved foot	m
	39	macehead	M
M 14:2	Ag. 35:36-37	maceheads	m
	38	macehead	M
	55	copper chisel end	m
		SURFACE	
L 13:1	Ag. 35:23	incised stone object	M
	24	pendant	m
	26-27	cylinder seals	$\mathbf{c}$
L 14:1	Ag. 35:506	cylinder seal	$\mathbf{c}$
	531	macehead	m
M 14:2 (south of)	Ag. 35:383	female head	ms
M 14:4	Ag. 35:78	copper statue fragments	Fig. 191 and MS
	97-98	statue fragments	ms
	Ag. 36:515	copper hoof	M
M 14:5	Ag. 35:454	male head	MS
M 14:9	Ag. 35:694	clay plaque fragment	M
N 13:1	Ag. 35:100	head of male figurine	m
Temple Area	Ag. 35: 79	inscribed arm	MS
rempre in ca	391	bead group	m
	833	cylinder seal	Č
		LEVELS UNKNOWN	
T 10	A 90.50592		M
L 13	Ag. 36:505 <sup>22</sup>	copper stand fragment	M M
T 10.0	506 <sup>22</sup>	toggle	
L 13:6	Ag. 35:459	bead group	m M
M 13:5	Ag. 35:608	macehead	
N 14	Ag. 36:502	triple stone vase fragment	m
N 14 well	Ag. 35: 29	head of male figurine	m
	70-71	clay plaque fragments	M
	72-73	clay plaque fragments	m
	102	male figurine fragment	M
	103	clay plaque fragment	M
	183-85	clay plaque fragments	m
0.40.40	680	stamp seal	M
Q 13 (Grave 2)	Ag. 35:371	cylinder seal	C
	373	metal rod	M
	386	group of shells	m
		C. 365.810 <i>e</i>	p
		C. 526.471c	p
		C. 555.420 (three or four)	p
		C. 586.420	p
- ·		C. 596.440b (three)	$\mathbf{p}$
Temple Area	Ag. 35:521	pierced stone ax	m
	Ag. 36:504	eyeball	m
		TOWN WALL (SURFACE)	
O 11	Ag. 35:181-82	cylinder seals	e
P 13	Ag. 35:25	painted clay cone	m
		process only over	

 $<sup>^{22}</sup>$  These objects, brought from the dump, probably came from 32.50 m. in L 13.

## THE SHARA TEMPLE: CATALOGUE OF OBJECTS

### OBJECTS IN ORDER OF FIELD NUMBERS WITH INDICATION OF LOCI AND LEVELS

Field No.	Locus	I₌evel	Field No.	I.ocus	Level
Ag. 35: 8	L 13:4	32.00-34.00 m.	Ag. 35: 125	M 14:2	32.00-34.00 m.
8. 00.	and 6	<b>3</b> _100 <b>4</b> _100 1	126	M 13:1	32.00-34.00 m.
23-24	L 13:1	surface	127	M 13:2	32.00-34.00 m.
25	P 13	town wall	128	M 14:3	32.00-34.00 m.
26-27	L 13:1	surface	129	M 14:2	32.00-34.00 m.
29	N 14	unknown	130-31	M 14:4	32.00-34.00 m.
31	L 13:1	top level	133-34	L 13:3	32.00-34.00 m.
32	M 14:1	top level	135	M 14:2	32.00-34.00 m.
36-38	M 14:2	top level	136-37	M 14:4	32.00-34.00 m.
39	M 14:1	top level	138	M 14:3	32.00-34.00 m.
43-44	L 13	top level	139-58	L 13:3	32.00-34.00 m.
45	L 13:3	top level	159	M 14:2	32.00-34.00 m.
49-50	L 13:1	32.00-34.00 m.	160-62	M 13:1	32.00-34.00 m.
52-53	M 14:1	32.00-34.00 m.	163	M 14:1	32.00-34.00 m.
54	L 13:3	32.00-34.00 m.	164-66	M 14:2	32.00-34.00 m.
55	M 14:2	top level	167-80	M 14:4	32.00-34.00 m.
56 56	L 13:3	32.00-34.00 m.	181-82	O 11	town wall
57	M 14:2	32.00-34.00 m.	183-85	N 14	unknown
59	N 13:1	30.00-32.00 m.	186-87	M 13:1	32.00-34.00 m.
60	M 13:1	32.00-34.00 m.	188-89	L 13:3	32.00-34.00 m.
		32.00-34.00 m.			
61 62	L 13:3 M 13:1	32.00-34.00 m.	190-93	M 14:4 M 14:5	32.00-34.00 m. 32.00-34.00 m.
63		32.00-34.00 m.	194		
	L 13:3		195	M 14:2	32.00-34.00 m.
64	M 13:1	32.00-34.00 m.	196	M 14:5	32.00-34.00 m.
65	L 13:3	top level	197-99	M 14:2	32.00-34.00 m.
66	M 14:2	32.00-34.00 m.	200	M 14:4	32.00-34.00 m.
67	M 13:1	32.00-34.00 m.	201	M 13:1	32.00-34.00 m.
68	L 13:3	32.00-34.00 m.	202~3	M 13:2	32.00-34.00 m.
69	L 13:1	top level	204	M 14:4	32.00-34.00 m.
70-73	N 14	unknown	205	M 13:2	32.00-34.00 m.
74-77	N 13:1	30.00-32.00 m.	206-7	M 13:1	32.00-34.00 m.
78 70	M 14:4	surface	208	M 14:5	32.00-34.00 m.
79	temple area	surface	209	M 14:2	32.00-34.00 m.
8081	N 13:1	30.00-32.00 m.	210	M 13:2	32.00-34.00 m.
82	M 13:1	32.00-34.00 m.	211-46	M 14:4	32.00-34.00 m.
83	L 13:3	32.00-34.00 m.	347-69	M 14:4	32.00-34.00 m.
84	N 13:1	30.00-32.00 m.	370	M 14:5	32.00-34.00 m.
89	M 14:3	32.00-34.00 m.	371	Q 13	unknown
90	N 13:1	30.00-32.00 m.	373	Q 13	unknown
91	M 13:1	32.00-34.00 m.	374-75	M 14:4	32.00-34.00 m.
93-94	N 13:1	30.00-32.00 m.	376	M 14:5	32.00-34.00 m.
95	L 13:3	32.00-34.00 m.	377-78	M 13:1	32.00-34.00 m.
96	M 14:2	32.00-34.00 m.	379	M 13:2	32.00-34.00 m.
97-98	M 14:4	surface	380-81	M 14:2	32.00-34.00 m.
99	L 13:3	32.00-34.00 m.	382	M 13:1	32.00-34.00 m.
100	N 13:1	surface	383	M 14:2	surface
102-3	N 14	unknown	384	M 14:5	32.00-34.00 m.
106-19	M 13:1	32.00-34.00 m.	385	M 13:1	32.00-34.00 m.
120	M 14:3	32.00-34.00 m.	386	Q 13	unknown
121-22	M 13:1	32.00-34.00 m.	387	L 13:5	32.00-34.00 m.
123	L 13:3	32.00-34.00 m.	388-90	M 14:2	32.00-34.00 m.
124	M 14:3	32.00-34.00 m.	391	temple area	surface

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Z	А	П

1751	J N7.	1	71	TO -1-4 N7 -		
	d No. : 392–93	Locus M 14:2	Level 32.00-34.00 m.	Field No. <b>Ag.</b> 35: 541	Locus M 14:2	Level 32.00–34.00 m.
വള. ഗ	394	M 14:3	32.00-34.00 m.	Ag. 55. 541 542	M 14:2 M 14:4	
	396	M 14:4	32.00-34.00 m.	543	N 15:1	32.00-34.00 m. 32.00-34.00 m.
	397	M 13:2	32.00-34.00 m.		M 14:2	32.00-34.00 m.
				544 545 47		
	398-432	M 14:4	32.00–34.00 m. 32.00–34.00 m.	545-47	M 14:5	32.00-34.00 m.
	433-37	M 13:2		548	M 14:2	32.00-34.00 m.
	438-42	M 14:4	32.00-34.00 m.	549 550	L 14:1	32.00-34.00 m.
	443-45	M 13:2	32.00-34.00 m.	550	M 14:2	32.00-34.00 m.
	446	M 13:1	32.00-34.00 m.	551	M 14:4	32.00-34.00 m.
	447-52	M 14:4	32.00-34.00 m.	552-54 552	L 14:1	32.00-34.00 m.
	453	M 14:2	32.00-34.00 m.	557 550	M 14:2	32.00-34.00 m.
	454	M 14:5	surface	558 550	M 14:4	32.00-34.00 m.
	455-56	M 14:4	32.00-34.00 m.	559 540	M 14:8	32.00-34.00 m.
	457-58	M 14:5	32.00–34.00 m.	560	N 15:1	32.00-34.00 m.
	459	L 13:6	unknown	564-607	M 14:4	32.00-34.00 m.
	460-63	M 14:2	32.00-34.00 m.	608	M 13:5	unknown
	465-66	M 14:4	32.00-34.00 m.	609-13	M 14:4	32.00-34.00 m.
	467	L 13:6	32.00-34.00 m.	614-15	M 14:2	32.00-34.00 m.
	468	M 14:8	32.00-34.00 m.	616	M 14:1	32.00-34.00 m.
	470	M 14:4	32.00–34.00 m.	617	M 14:4	32.00-34.00 m.
	471	M 14:8	32.00-34.00 m.	618	L 13:6	32.00-34.00 m.
	472-74	L 13:6	32.00-34.00 m.	619	M 15:1	32.00-34.00 m.
	475	M 14:5	32.00–34.00 m.	620	N 13:1	30.00-32.00 m.
	476	M 14:2	32.00-34.00 m.	621	M 14:4	32.00-34.00 m.
	479-80	M 14:2	32.00-34.00 m.	622	M 14:7	32.00-34.00 m.
	481	M 14:4	32.00-34.00 m.	623-24	L 13:1	32.00~34.00 m.
	482	M 15:2	32.00-34.00 m.	625-27	M 14:4	32.00-34.00 m.
	483-85	M 14:4	32.00-34.00 m.	628	M 14:7	32.00-34.00 m.
	486-91	M 14:2	32.00-34.00 m.	629-30	L 14:1	32.00-34.00 m.
	492	M 14:4	32.00-34.00 m.	632	M 14:4	32.00-34.00 m.
	494	M 14:5	32.00-34.00 m.	635-38	M 14:4	32.00-34.00 m.
	495	M 13:3	32.00-34.00 m.	639	L 14:1	32.00-34.00 m.
	496-97	M 14:4	32.00-34.00 m.	640	M 14:4	32.00-34.00 m.
	498	M 14:2	32.00-34.00 m.	641	M 14:9	32.00-34.00 m.
	499	M 14:4	32.00-34.00 m.	642	M 14:4	32.00-34.00 m.
	501	M 14:4	32.00-34.00 m.	644	L 14:1	32.00-34.00 m.
	503	M 14:4	32.00-34.00 m.	655	L 14:1	32.00-34.00 m.
	504	M 14:5	32.00-34.00 m.	656	M 15:2	32.00-34.00 m.
	505	M 14:8	32.00-34.00 m.	657-62	M 14:4	32.00-34.00 m.
	506	L 14:1	surface	663	N 13:1	30.00-32.00 m.
	507	M 14:4	32.00-34.00 m.	664-67	M 14:4	32.00-34.00 m.
	508-10	N 15:1	32.00-34.00 m.	668	L 13:4 and	32.00-34.00 m.
	511-12	M 14:5	32.00-34.00 m.	000	M 14:4	99.00 94.00
	513	M 14:8	32.00-34.00 m.	669	M 14:4	32.00-34.00 m.
	514	M 14:4	32.00-34.00 m.	670-71	M 14:7	32.00-34.00 m.
	515	N 15:2	32.00–34.00 m.	673	M 14:4	32.00-34.00 m.
	517	M 14:8	32.00-34.00 m.	674	L 14:1	32.00-34.00 m.
	518	N 15:1	32.00-34.00 m.	675-79	M 14:4	32,00-34.00 m.
	519-20	M 14:5	32.00-34.00 m.	680	N 14	unknown
	521	temple area	unknown	682-83	M 13:6	30.00-32.00 m.
	522-23	M 14:5	32.00-34.00 m,	684-85	M 14:4	32.00-34.00 m.
	525 526 20	M 14:8	32.00-34.00 m."	686-89	L 14:1	32.00-34.00 m.
	526-30	M 14:2	32.00–34.00 m.	690-92	M 14:4	32.00-34.00 m.
	531	L 14:1	surface	693	L 13:4	32.00-34.00 m.
	532-39	M 14:2	32.00-34.00 m.	694	M 14:9	surface
	540	M 14:7	32.00-34.00 m.	696-98	M 14:4	32.00-34.00 m.

### THE SHARA TEMPLE: CATALOGUE OF OBJECTS

77 1 1 57	T	T1	TV 11 Mr.	<b>Y</b>	T
Field No. Ag. 35: 700-703	Locus M 14:4	Level 32.00–34.00 m.	Field No. <b>Ag. 35: 844</b>	Locus L 13:6 and	Level 32.00–34.00 m.
		32.00-34.00 m.	Ag. 55. 044		52.00~54.00 m.
704-5 706	L 13:4 M 15:2	32.00-34.00 m.	945 47	L 14:1 L 14:1	32.00-34.00 m.
707-8	M 14:8	32.00-34.00 m.	845–47 848–54	M 14:4	32.00-34.00 m.
707-8	M 14:6 M 14:4	32.00-34.00 m.	856-58	M 14:4	32.00-34.00 m.
		32.00-34.00 m.			32.00-34.00 m.
714	N 15:4	32.00-34.00 m.	859-61 863-65	L 14:1	32.00-34.00 m.
716-17	M 14:4		866	L 14:1 M 14:4	32.00-34.00 m.
718 719	L 14:1 L 13:4	32.00–34.00 m. 32.00–34.00 m.	868	L 14:1	32.00-34.00 m.
				M 14:4	32.00-34.00 m,
720	M 14:4	32.00-34.00 m.	869 870		32.00-34.00 m.
721	L 13:6	32.00-34.00 m.		L 14:1	32.00-34.00 m.
722	M 14:4	32.00-34.00 m.	871 872	M 14:4 L 14:1	32.00-34.00 m.
723–27 728–29	L 14:1 M 14:4	32.00–34.00 m. 32.00–34.00 m.	874-78	M 14:2	32.00-34.00 m.
		32.00-34.00 m.	880	M 14:2 M 14:4	30.00-32.00 m.
730 731	L 13:4	32.00-34.00 m.	881	M 14:4 M 14:2	32.00-34.00 m.
	L 14:1		883		32.00-34.00 m.
733	L 14:1	32.00-34.00 m. 32.00-34.00 m.	884-88	M 14:2 M 13:4	30.00-32.00 m.
734-35	L 13:4 M 14:4		890	M 13:4 M 13:4	30.00-32.00 m.
736-38		32.00-34.00 m. 32.00-34.00 m.	891	M 14:4	30.00-32.00 m.
739 740	L 13:4		892-93	L 14:1	32.00-34.00 m.
740 741	N 15:1 M 15:4	32.00-34.00 m.	894-900	M 14:4	30.00-32.00 m.
741 742	M 13:4. M 14:4.	32.00-34.00 m. 32.00-34.00 m.	901-51	N 13:1	30.00-32.00 m.
742 745	M 14:4	32.00-34.00 m.	952	N 15:1	32.00-34.00 m.
		32.00~34.00 m.	952 953	N 13:1	30.00-32.00 m.
746-50	L 13:6	32.00~34.00 m.	954	M 14:2	32.00-34.00 m.
751-52 753-55	M 14:4 L 14:1	32.00-34.00 m.	955-56	L 13:3	32.00-34.00 m.
756–58	M 14:4	32.00-34.00 m.	957	L 14:1	32.00-34.00 m.
750-58 759	M 14:3	32.00-34.00 m.	959	L 14:1	32.00 -34.00 m.
760-61	L 13:6	32.00-34.00 m.	960	M 13:10	30.00-32.00 m.
762-63	M 14:4	32.00-34.00 m.	961	M 14:2	32.00-34.00 m.
762 05 766	L 13:6	32.00-34.00 m.	962-65	M 14:4	30.00-32.00 m.
768	M 14:4	32.00-34.00 m.	966-67	M 14:2	32.00-34.00 m.
770-72	L 13:4	32.00-34.00 m.	968-70	M 14:4	30.00-32.00 m.
773-74	L 13:6	32.00-34.00 m.	971-75	L 14:1	32.00-34.00 m.
775-77	L 14:1	32.00-34.00 m.	976-77	M 14:4	30.00-32.00 m.
779	L 14:1	32.00-34.00 m.	978-85	M 14:2	32.00-34.00 m.
780-83	M 14:4	32.00-34.00 m.	988-89	L 14:1	32.00-34.00 m.
784-89	L 13:6	32.00-34.00 m.	990-94	M 14:2	32.00-34.00 m.
790-92	L 14:1	32.00-34.00 m.	995-97	L 14:1	32.00-34.00 m.
793	L 13:6	32.00-34.00 m.	998-1005	M 14:2	32.00-34.00 m.
794-99	M 14:4	32.00-34.00 m.	1006-9	M 14:4	30.00-32.00 m.
800	M 15:6	32.00-34.00 m.	1010-11	M 12:1	32.00-34.00 m.
801	M 14:4	32.00-34.00 m.	1013	L 13:1	32.00-34.00 m.
804	M 15:1	32.00-34.00 m.	1014-21	M 14:4	32.00-34.00 m.
805-20	L 14:1	32.00-34.00 m.	1022-25	L 14:1	32.00-34.00 m.
821-22	M 14:4	32.00-34.00 m.	1026	N 12:1	30.00-32.00 m.
823-24	L 13:6	32.00-34.00 m.	1028	N 12:2	30.00-32.00 m.
825-29	M 14:4	32.00-34.00 m.	1029	L 13:3	32.00-34.00 m.
830	L 13:6	32.00-34.00 m.	1030	L 14:1	32.00-34.00 m.
831	L 13:8	32.00-34.00 m.	1031	M 13:10	30.00-32.00 m.
832	L 13:6	32.00-34.00 m.	1034	M 14:3	32.00-34.00 m.
833	temple area	surface	1035	N 13:4	30.00-32.00 m.
834	M 14:4	32.00-34.00 m.	1036	M 14:1	32.00-34.00 m.
836	M 14:4	32.00-34.00 m.	1037-40	M 14:3	32.00-34.00 m.
838-42	L 14:1	32.00-34.00 m.	1041-65	N 13:4	30.00-32.00 m.

### PRE-SARGONID TEMPLES

	_			_	
Field No.	Locus L 13:3	Level <b>32</b> .00–34.00 m.	Field No. Ag. 36: 285-88	Locus M 14:12	Level 30.00–32.00 m.
Ag. 35:1066 1067		30.00–32.00 m.	Ag. 50; 289–88 289–90		
	N 13:4 O 12:2	below 30.00 m.	209-90 291	L 13:4	32.00-34.00 m.
1068			291 292	M 14:10	30.00-32.00 m.
1069-70	N 13:4	30.00–32.00 m.	294-303	M 14:15	30.00-32.00 m.
1071	M 14:2	32.00-34.00 m.		M 14:15	30.00-32.00 m.
1072	L 13:3	32.00-34.00 m.	305-9	M 14:15	30.00-32.00 m.
1073-76	M 14:4	32.00-34.00 m.	310-11	M 14:10	30.00-32.00 m.
1077-96	N 13:1	30.00-32.00 m.	312-14	M 14:15	30.00-32.00 m.
1097	M 14:2	32.00-34.00 m.	316-22	M 14:15	30.00-32.00 m.
1098-1101	N 13:1	30.00-32.00 m.	324	M 14:2	32.00-34.00 m.
1102-12	M 14:4	32.00-34.00 m.	325-31a	M 14:15	30.00-32.00 m.
1114-20	M 14:4	32.00-34.00 m.	332	M 14:15	30.00-32.00 m.
1121	N 13:1	30.00-32.00 m.	334-47	M 14:15	30.00-32.00 m.
1124	M 14:4	32.00-34.00 m.	348-49	M 14:16	30.00–32.00 m.
1125	L 14:1	32.00-34.00 m.	350	N 13:5	30.00-32.00 m.
1126-28	M 14:4	32.00-34.00 m.	351	M 14:13	30.00-32.00 m.
1129	M 15:2	32.00-34.00 m.	352-56	M 14:10	30.00-32.00 m.
1130-32	N 13:1	30.00-32.00 m.	357-61	M 14:17	30.00-32.00 m.
1133	L 13:6	32.00-34.00 m.	362-65	M 14:12	30.00-32.00 m.
1135	N 13:1	30.00-32.00 m.	366	M 14:4	30.00-32.00 m.
Ag. 36: 3–10	M 14:10	30.00-32.00 m.	367-70	M 14:15	30.00-32.00 m.
11-13	M 14:1	30.00-32.00 m.	371	M 14:17	30.00-32.00 m.
21-23	M 14:2	32.00-34.00 m.	372-75	M 14:10	30.00-32.00 m.
24-27	M 13:2	32.00–34.00 m.	377-87	M 14:10	30.00-32.00 m.
28-35	M 14:10	30.00-32.00 m.	388-94	M 14:12	30.00-32.00 m.
36	M 13:10	30.00–32.00 m.	395-96	M 14:15	30.00-32.00 m.
37-44	M 14:12	30.00-32.00 m.	397-401	M 14:17	30.00-32.00 m.
45	M 14:10	30.00–32.00 m.	403-4	M 14:12	30.00-32.00 m.
46-47	M 14:12	30.00–32.00 m.	405–15	M 14:15	30.00-32.00 m.
48-50	M 14:10	30.00-32.00 m.	416-17	M 14:17	30.00-32.00 m.
51	N 13:1	30.00-32.00 m.	418-19	M 14:12	30.00-32.00 m.
<b>52</b> -63	M 14:10	30.00-32.00 m.	420-26	M 14:15	30.00~32.00 m.
64-71	M 14:12	30.00-32.00 m.	459-66	M 15:3	32.00-34.00 m.
73-75	M 14:12	30.00-32.00 m.	472	M 14:8	30.00-32.00 m.
76-85	N 13:5	30.00-32.00 m.	476-89	M 14:5	32.00-34.00 m.
90-93	M 14:10	30.00-32.00 m.	491	M 14:5	32.00-34.00 m.
94-111	N 13:5	30.00–32.00 m.	492-93	M 14:4	30.00-32.00 m.
112-41	M 14:12	30.00-32.00 m.	49498	M 14:4	32.00-34.00 m.
143-68	M 14:12	30.00-32.00 m.	499	M 14:4	30.00-32.00 m.
169-74	N 13:5	30.00-32.00 m.	500-501	M 14:4	32.00-34.00 m.
175	M 13:1	32.00–34.00 m.	502	N 14	unknown
176-88	N 13:5	30.00-32.00 m.	503	M 14:4	32.00-34.00 m.
189-257	M 14:2	32.00-34.00 m.	504	temple area	unknown
259	L 13:5	32.00-34.00 m.	5056	L 13	unknown
260-61a	L 13:4	32.00-34.00 m.	507-9	M 14:4	32.00-34.00 m.
262-68	L 13:4	32.00-34.00 m.	515	M 14:4	surface
269-77	N 13:5	30.00-32.00 m.	516	M 14:4	32.00-34.00 m.
278-82	L 13:4	32.00-34.00 m.	517-18	M 14:15	30.00~32.00 m.
283	M 13:5	30.00-32.00 m.	565-66	M 14:15	30.00-32.00 m.
284	L 13:4	32.00-34.00 m.	569	M 14:15	30.00-32.00 m.

### IV

#### THE INSCRIPTIONS

By THORKILD JACOBSEN



In most of the inscriptions here published it is extremely difficult to decide with certainty whether the inscription is to be read as Sumerian or as Akkadian. An exception is No. 4, in which the use of the -iš case makes it safely Akkadian. Of the rest we have chosen to treat as Akkadian those which use the writing sag RIG6—favored in early certainly Akkadian inscriptions; the others we have treated as Sumerian.

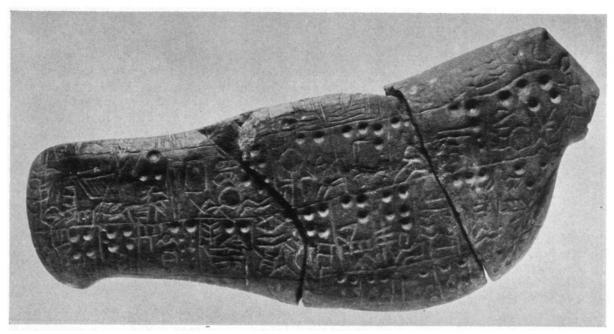


Fig. 204.—A Lion-headed Bird (Kh. V 68) Inscribed in Archaic Characters. Scale, 3:5

The following symbols have been employed in our transliterations:

- to separate signs written and transliterated in the order in which the sounds to which they correspond followed one another in speech. (In analytic transcriptions the hyphen serves to separate word elements.)
- . to separate signs written in an order different from, but transliterated in an order corresponding to, that in which the corresponding sounds presumably followed one another in speech; also to mark syllable division in the subauditur of elliptic writings.
- : to separate signs transliterated in the order in which they are written, when the order in which the corresponding sounds followed one another in speech is unknown to us.

#### No. 1

Kh. V 68 (Fig. 204). Slate tablet in the shape of a lion-headed bird, inscribed on both sides; reverse preserved in fragments only. Found in R 42:2 in Sin Temple VIII.

The inscription—understandable only in parts—seems to be of account type, perhaps a contract. It gives numbers associated with sign groups which would appear to represent proper names and types of objects or materials respectively. Of interest is a reference to silver (kù.babbar níg-nu-deb(.a), "silver not taken[?]") on the reverse. Complete publication of the document will unfortunately have to be deferred, since the available records (photographs, rubbings, and a rough copy) have proved inadequate as a basis for a final publication.

#### No. 2

Kh. VIII 7. Statue fragment with inscription on breast, found in Q 45:12 in Nintu Temple VI.

š e -	She-
dumu	, ehild
dn in -mušen(?)-	of Nin-mušen(?)-

#### No. 3

Kh. III 1207. Fragmentary sculptured plaque, perforated in center, found partly below P 45:6 and 12 and partly in Q 45:3, in the area occupied by Nintu Temple VII.

```
Col. i dn i n - t u x child

dd a m - g a l - n u<sub>6</sub> (. n a . k a . r a) of Dam-gal-nuna(k),

£: Ku(?): A(?) has £: Ku(?): A(?),

d u m u child

Col. ii a m a - a b - z u - d a (. k e) of Ama-abzu(k)da,

a m u - (n a .) r u presented (this).
```

We are unable to identify the last sign in case 1 unless it is a variant of TUN (UET II, Sign 339) exhibiting an extra horizontal line. Nor is it certain whether this sign represents an integral part of the divine name:  $^{d}$ n i n - t u - x (a deity  $^{d}$ n i n - t u - t u<sub>18</sub>[?] is, however, otherwise unknown to me) or merely a descriptive adjective loosely connected with the name: "the . . . . Nin-tu." For practical purposes the second of these possibilities has been arbitrarily chosen for general reference to the temple.

Dam-gal-nuna(k), "The great spouse of the prince," is well known as the wife of En-ki (A. Deimel, *Pantheon Babylonicum* [Romae, 1914] No. 700). The earliest occurrence of her name is, as far as we know, in the inscription of Kur: Líl found at al-'Ubaid (*UET* I, Pl. XL, BM 114206).

 $^dN$  in - t u x d u m u  $^dd$  a m - g a l - n u<sub>6</sub> instead of the expected  $^dn$  in - t u x d u m u  $^dd$  a m - g a l - n u<sub>6</sub> - n a - k a - r a (representing  $^dd$  a m - g a l - n u n - a k - a (k) - r a) constitutes an example of the "elliptic writings" so frequent in texts earlier than E-Anna(k)-tum and occurring sporadically also in and after his time. Our transliteration  $^dd$  a m - g a l - n u<sub>6</sub> (. n a . k a . r a) is intended to indicate that both writer and reader had the full form of the word in mind and considered the unexpressed parts of it as implicit in or suggested by the preceding sign or sign group. To this extent such elliptic writings may be considered parallel to modern abbreviations (e.g. "pl." for "plural"), though they are, of course, quite different in origin. This view of the elliptic writings may be substantiated by comparison of parallel passages in the inscriptions of E-Anna(k)-tum. We find there—in exactly

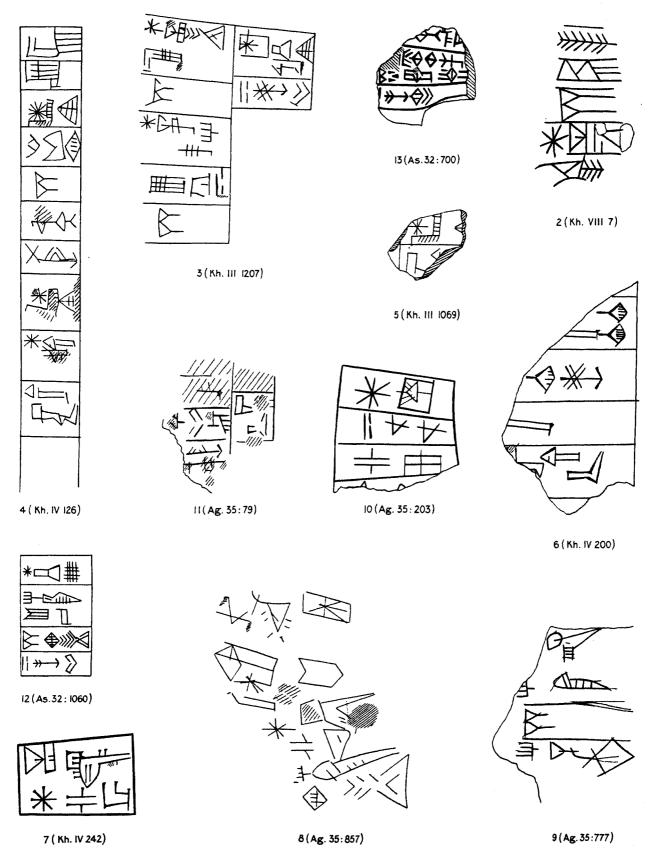


Fig. 205.—Inscriptions on Objects Found in or Near the Pre-Sargonid Temples at Khafajah, Tell Asmar, and Tell Agrab. Scale, 3:5

the same phrase and fulfilling exactly the same function (subject of a transitive verb)—the elliptic writing  $SIR:BUR:LA^{k_i}$  as alternative for the more explicit  $SIR:BUR:LA^{k_i} - k$  and  $SIR:BUR:LA^{k_i} - k$  a - k e<sub>4</sub>:

```
i. BOULDER A AND BRICK B

é-an-na-túm ... dumu a-kur-gal ensi lagaša (šir:BUR:LA<sup>ki</sup>)

II. BOULDER B AND BRICK A

é-an-na-túm ... dumu a-kur-gal ensi lagaša (šir:BUR:LA<sup>ki</sup>) - ke<sub>4</sub>

III. SMALL COLUMN

é-an-na-túm ... dumu a-kur-gal ensi lagaša (šir:BUR:LA<sup>ki</sup>) - ka-ke<sub>4</sub>

"E-Anna(k)-tum ..., child of A-Kurgal(ak), (the) duke of Lagash."
```

Since the context demands that the same grammatical form—I a g a š a k a k e—be read in all three cases, we may conclude that this form was meant to be conveyed by all three writings. In terms of a predominantly phonetic, syllabic system of writing (and by the time of E-Anna(k)-tum we may assume that Sumerian writing had reached that stage) this may be expressed as follows: The possible phonetic range of a sign or sign group extends by syllabic steps virtually, dependent upon the volition of the scribe, to the complete forms of the word (inclusive of grammatical elements) of which it would normally indicate merely a basic part.

It may be added that the interpretation of the elliptic writings here given is suitable only for the period of classical Sumerian orthography and perhaps for the time immediately preceding, when the originally ideographic system of writing—as such independent of speech—through a long development had come to be viewed as largely a reflection of speech.

É:KU:A is given by my copy, made in the field. The photo seems to offer a possibility of reading É:TứG:SI, but the marks that suggest extra wedges are probably accidental scratches and holes in the pitted surface of the stone.

We have provisionally analyzed a ma-ab-zu-da(.ke) (on transliteration see above) as the genitive form with subject element -e of an abbreviated name a ma abzu(k)-da, "With the lady of Abzu...," assuming the "lady of Abzu" to be the goddess of the cosmic Abzu or of a terrestrial sanctuary of that name. Her counterpart may have been the "lord of Abzu" who seems to figure, for example, in en-abzu(k)-si, "The lord of Abzu is pre-eminent" (UET II, Name 282). For construction compare en-kulaba(k)-si (ibid. Name 292). On a ma, "mother," as playing in the older names the role which nin, "lady," plays in the later see Burrows in UET II 20. The explanation for this substitution is probably that "mother" connoted "lady of the house." 2

On the transliteration of a mu-(na.) ru see above.

In the writing a detail worth noticing is the absence of a splayed line in such signs as NuN and Mu. This constitutes a difference from the writing of the Fara tablets. The signs are almost purely linear, although the somewhat heavier lines in signs such as DAM, É, KU(?), and DA may represent crude efforts at wedge-shaped forms. The text shows no examples of anagraphy; the order of the signs is that of the corresponding sounds in the spoken language. Even the word a b z u, usually written zu:AB, appears here with the signs in natural order.

The personal names £: ku(?): A(?) and a ma-ab-zu-da find close parallels in names from Fara and from tablets older than the "royal cemetery" in Ur. Compare e.g. names such as a ma.ab.zu.si (i.e., a ma abzu(k) si; UET II, Name 78), a ma.é.nun.si (i.e., a ma e-nuna(k) si; ibid. Name 97), a ma-é-nun.da (i.e., a ma e-nuna(k)-da; ibid. Name 96) with our a ma-ab-zu-da. The a ma e-nuna(k), "lady of E-nun," figuring in these names from Ur would seem to be Nin-gal, wife of Nanna, the chief god of Ur, inasmuch as her temple was known by that name in later times. The Fara texts offer a ma.ab.zu.làl (i.e., a ma abzu(k) lal; WVDOG XLV 21\*). An early parallel name from Lagash is a ma-ab.zu-e (.ga.ka), "The lady of the Abzu of the dike...," an abbreviated personal name occur-

In later times the "lord of Abzu" is En-ki (see e.g. S. Langdon, Sumerian Liturgical Texts [Pennsylvania. University. Babylonian section, "Publications" X 2 (Philadelphia, 1917)] No. 20:14); the "lady of Abzu" should accordingly be his wife Dam-gal-nuna(k). The attachment of the family of  $\pounds: \kappa u(?): \Lambda(?)$  to deities of the En-ki circle, attested by her votive offering to Nin-tu . . . , thus seems to be reflected also in the name of  $\pounds: \kappa u(?): \Lambda(?)$ 's mother, which alludes to Dam-gal-nuna(k).

<sup>&</sup>lt;sup>3</sup> English lacks a technical term for Sumero-Akkadian writings in which the signs appear in an order different from that of the corresponding sounds in speech. We propose to use "anagram" and "anagraphy" in this sense.

<sup>&#</sup>x27;On abzu-ega(k), "The Abzu of the dike," a sanctuary near Lagash mentioned in Ur-Nanshe(k) Tablet Bv6as ab.zu-e(.ga) and in Uru-ka-gina(k) Clay Tablet iii 11 as ab.zu-e-ga-ka, "in the Abzu-ega(k)," see Poebel in ZA n.F. V (1930) 163 and Thureau-Dangin in RA XXIX (1932) 24-25.

ring in Allotte de la Fuÿe, Documents présargoniques I 1 (Paris, 1908) Pl. I. The name £:ku(?):A(?) may perhaps be compared with £:ku and £:ku:ku (WVDOG XLV 29\*).

As for the divine names occurring in our inscription, they are both of a type later than the period represented by *UET* II. Burrows has pointed out that the later epithets of the mother goddess, Nin-hursaga(k) and Damgal-nuna(k), though frequent in texts of the First Dynasty of Ur, are absent from texts which antedate the "royal cemetery" (*ibid.* p. 21). He similarly points out that names formed with the element n in seem to be just coming in at that period. These observations warn against dating our inscription too early.

#### No. 4

#### Kh. IV 126. Male statue<sup>5</sup> found in Q 42:3 in Sin Temple IX.

ur- $kisal(.la)$	Ur-kisala(k),
$\check{s}anga$	<i>šangû</i> -priest
<sup>d</sup> sú.en	of Sîn
$ak\check{s}ak^{\mathtt{k}i}$	of Akshak,
$5 mar^{3}u(DUMU)$	son
$\lceil na \rceil$ (?)- $li$	of Nati,
$pa$ šīš $i({ t PA_4}$ -ŠEŠ $)$	<i>pašīšu-</i> priest
$^{\mathrm{d}}s\acute{u}.en$	of Sîn,
$^{ ext{d}}$ ş $almi$ - $^{ ext{f}}i\check{s}^{ ext{1}}$	to Şalam
10 a(na )širiktim(sAG) išrukšum(RIG6)	as a gift presented (this)

The identification of the last sign as kisal is preferable, although  $\tau \acute{u} g$  (cf. UET II, Sign 385 c) might also be envisaged. If kisal is correct, kisal, "the court," must be understood as a specific temple court which because of its holiness could play the role usually reserved for deities in names of this type. As a parallel to a name ur-kisala(k), "Wild beast of the (sacred) court," may be cited a mar.kisal(.la), i.e., a mar-kisala(k), "Young bull of the (sacred) court" (UET II, Name 177).

Line 2.—In transliterating this form, construct state, nominative sing. of \*šangaum, a loan word from Sumerian s a n g a, as šanga we are simply projecting—perhaps arbitrarily—the inflectional pattern found in Old Akkadian back into our period. Although the initial sibilant of \*šangaum>šangū, šangū and the related words šangūtu, šangamaḥhu appears written with š fairly consistently in later Akkadian, we cannot be certain of its quality at our period, for, as pointed out by Poebel (GSG § 38) and Falkenstein (ZA n.F. VIII 153), we must reckon with vacillation between š and s in Sumerian and possibly also with a change from one to the other at some unknown time in Akkadian or Sumerian. 10

- \* OIP XLIV, No. 37, Pls. 48-50.
- $^{6}$  Berlin, Staatliche Museen, Keilschrifturkunden aus Boghazköi VIII (Berlin, 1924) 50 rev. iii 13; cf. Friedrich in ZA n.F. V 24 rev. iii 13.
  - <sup>7</sup> See Falkenstein and Matouš in ZA n.F. VIII (1934) 147.
  - 8 Note the form UR-za-bi-tum.
- <sup>2</sup> We know of only one exception: sa-an-gu-ti-šu in the Assur text VAT 10057 rev. 24 (see ZA n.F. IX [1936] 18, 1. 64, and Pl. III); and this may well represent a slip conditioned by specifically Assyrian pronunciation of š as s (cf. Delitzsch, Assyrische Grammatik [2. . . . . Aufl.; Berlin, 1906] p. 124).
- <sup>10</sup> Part of the material thus far adduced should, however, be reconsidered. As may be seen by a study of the variants in the Sumerian values given by S<sup>b</sup> (for our purposes the edition in Delitzsch, Assyrische Lesestücke [5. . . . . Aufl.; Leipzig,

#### PRE-SARGONID TEMPLES

Line 4.—Various renderings are possible. We have chosen to conceive U<sub>4</sub>-Kušú<sup>ki</sup> as the genitive of a proper name without mimation and external case mark, written with the determinative for place names, KI. Since the use of determinatives is not, however, obligatory at this early period, it is quite possible that KI here stands for "land," "territory," so that we should read šanga dsú.en carsati akšak, "šangū-priest of Sîn of the land of Akshak." Lastly, comparing such passages as the Brussels vocabulary i 18–20:

UNUG <sup>ki</sup>	u-nu-uk-ú
ZA-SUḤ <sup>ki</sup>	u-ru-uk-ú
TIR-AN-NAki	tir-an-na <sup>ki</sup> -ú

we might read šanga dsú.en akšakijim, "šangû-priest of the Akshakian Sîn." Since epithets formed from place names are frequent with divine names in later times, sometimes even supplanting the name itself," this rendering has much in its favor.

Line 6.—With the name 'na'-ti compare the name na-ti-um in the inscription on seal No. 105 in H. H. von der Osten, Ancient Oriental Seals in the Collection of Mr. Edward T. Newell (OIP XXII [1934]).

Line 7.—The syllabaries give for pa<sub>4</sub>-šeš the Akkadian equivalents ašarēdu and rabī aḥḥē (Deimel, ŠL, No. 59.73), suggesting a meaning "primus inter pares." The Sumerian term itself seems, however, to have passed over into Akkadian as pašīšum; see Poebel's remarks in OLZ XVIII (1915) 134 and JAOS LVII 44. Less likely is Jensen's derivation of pašīšu from pašāšu, "to anoint."

Line 9.—Our earlier rendering of this line as an-dúl-'iš', "for protection," is hardly tenable in view of the parallels offered by old inscriptions from Maeri¹⁴ which make it probable that our inscription would have the name of a deity in this place. We now accordingly read ⁴κύš-'iš', i.e., ⁴şalmi-'iš', "to Ṣalam." A deity ⁴κύš seems to appear in proper names of approximately our period.¹⁵ In the later lists of gods he is identified with Shamash.¹⁶

1912] pp. 95 ff. is sufficiently complete and the one most practically arranged), the writings with  $\tilde{s}$  and the writings with s group themselves cleanly according to whether the copy in question is Assyrian or Babylonian:

Line	Assyrian Copy	Babylonian Copy
77	šu-uk-kal	su-kal
203	š á - a m	s a - a - a m
318	š u - u l	su-ul
320	š á - a h	sa-ah
291	šu-hur	su-hur

Cf. also  $S^{b_1}$  iii 22: Ass. § á - a , Bab. s a - a . This clean-cut division depending upon where the copy was made suggests that the variation is conditioned not by features of the Sumerian but rather by differences in Assyrian and Babylonian pronunciation and orthography. As shown by Delitzsch, Assyrische Grammatik, p. 125, Assyrian scribes of the time of Ashurbanipal could use signs with  $\delta$  to render s of foreign words, presumably because Assyrian itself at that time pronounced  $\delta$  as s, so that signs with  $\delta$  and s were pronounced alike (*ibid.* pp. 122–26). Since Late Babylonian appears to have kept  $\delta$  and s separate in both pronunciation and orthography, we should be guided by the Babylonian copies and conclude that the underlying Sumerian words at that time were pronounced with s.

- <sup>11</sup> E.g., <sup>d</sup>Inanna Kititum and just Kititum; also Anunnitum and examples quoted by Poebel in JAOS LVII 361.
- <sup>12</sup> See his Assyrisch-babylonische Mythen und Epen ("Keilinschriftliche Bibliothek" VI 1 [Berlin, 1900]) p. 368. Cf. Ungnad in Beiträge zur Assyriologie und semitischen Sprachwissenschaft VI 5 (1909) p. 50; Langdon in RA XIII (1916) 45; Landsberger in OLZ XXIX (1926) 763; Dossin in RA XXXV (1938) 19, n. 1.
- <sup>13</sup> Atti del XIX Congresso internazionale degli orientalisti (Roma, 1938) p. 94. In OIP XLIV 11 this phrase was inadvertently omitted.
  - <sup>14</sup> Published by Thureau-Dangin in RA XXXI (1934) 137-43.
  - 18 UET II 19 and 31, No. 235; WVDOG XLIII (1923) 13\*.

<sup>&</sup>lt;sup>16</sup> See CT XXV, Pl. 25:13: d sa-lamkúš min(=dšamaš) and the duplicate 80-7-19, 131 rev. 2 (ibid. Pl. 46). Since the sign kúš is regularly used for salmum, "statue," in the oldest Akkadian inscriptions (see Thureau-Dangin in RA XXXI

#### THE INSCRIPTIONS

It may be mentioned that the parallelism with the Maeri inscriptions seems to extend to grammatical construction, for the sign v after dinanna(k), which Thureau-Dangin left untranslated, corresponds apparently to the case ending -i of our text, whether v is merely an orthographic variant for -i or whether -i in the early Akkadian dialect of Maeri had developed to -u  $\delta$ . 18

Line 10.—The sign group sag-Rig6 corresponds to the Sumerian phrase sagše muni(n) rig, which in classical Sumerian orthography was written sag-šè mu-ni-rig6 (e.g., E-Anna(k)-tum Boulder A vii 6 [SAK, p. 22] and inscription of bára-ir-nun in RA XXXIV [1937] 177), "as a gift (s)he presented (it) to him." It is thus to be classed as an elliptic writing of the type discussed under No. 3. To judge from the similar sag-gá-eš mu-un-rig5-ga ana ši-rik-ti iš-ruk-šú (B. Hrozný, "Sumerisch-babylonische Mythen von dem Gotte Ninrag (Ninib)," MVAG VIII 5 [1903] Pl. II 5 f.), sag-e-eš ha-ra-ab-rig5-ga ana ši-rik-ti lu-ša-rik-šu (Sir Henry Rawlinson, The Cuneiform Inscriptions of Western Asia V [London, 1884] 51:51-52b), and sag-geš mu-un-rig5-eš ana ši-rik-tum iš-ru-ku-ši (RA XI [1914] 146, ll. 40-41), the Akkadian equivalent of sag-Rig6 is ana širiktim išrukšum, in earlier texts perhaps also ašširiktim (<an širiktim) išrukšum, not—as is usually assumed—merely išruk.

#### No. 5

Kh. III 1069. Fragment of stone bowl(?) found in M 43:1 in Temple Oval II-III.

```
[N. . . . .]
ds[\hat{u}].en
[orange in the single state of the second content of the sec
```

On the construction of dsú.en see No. 10. On sag.rig6 see No. 4.

#### No. 6

Kh. IV 200. Arm of statue found in R 42:2 in Sin Temple IX.

On the construction of \*salam see No. 10. Another possible reconstruction would be with [sal]mam, "the statue as a gift presented."

#### No. 7

Kh. IV 242. Headless standing male statue<sup>19</sup> with inscription on left side of skirt, found in Q 42:7 in Sin Temple IX.

dnin-kilim-bá-ur Ni(n)kilim-ba-ur(r).

This is presumably a proper name identifying the statue as a representation of a person of that name. Since sign order is immaterial in the older inscriptions a reading ur-dnin-kilim (.ma) ugula, "Ur-Ni(n)-kilima(k), bencher," might be considered (cf. OIP XLIV 11). Certain later names containing an element ba-ur

<sup>141),</sup> it seems plausible that the pronunciation salam here given actually represents that word used as a proper name (on the relation salam:salmum cf. šamaš:šamšum). On  ${}^d$ kúš see also Deimel,  $Pantheon\ Babylonicum$ , No. 2994, and  $\check{S}L$ , No. 329.11 a, although many of the references there given are to an-dul, "shade," rather than to  ${}^d$ kúš. The article by E. Douglas Van Buren, "The  $salm\acute{e}$  in Mesopotamian art and religion," Orientalia, n.s. X (1941) 65–92 does not contribute directly to our problem.

<sup>&</sup>lt;sup>17</sup> Note that uš in later texts from Maeri seems to be employed with the value  $i\check{s}_x$ ; see  $Kar-ka-mi-i\check{s}(=u\check{s})^{ki}$  quoted in RA XXXV 117. Does  $i\check{s}_0$ , given by Jean, ibid. p. 122, represent the same sign?

<sup>18</sup> By influence of the š. On this peculiarity of Akkadian š see Poebel in JAOS LVII 53 and Gelb, op. cit. p. 60. On the interpretation of uš given here the Maeri inscription No. 174 (RA XXXI 140): salam-sù a-na dinanna-išx sag-rigge offers a welcome early example of ana/ina governing the -iš case, discussed by W. von Soden in ZA n.F. VII (1933) 108, n. 4, end. Cf. also the frequent use of the related (see Landsberger apud von Soden, ibid. pp. 118 f.) -š form of the personal pronoun with ana: ana jāšim, ana kāšim, etc.

<sup>19</sup> OIP XLIV, No. 102b, Pl. 71a C-D.

#### PRE-SARGONID TEMPLES

(e.g. a-hu-ba-ur [Manishtusu Obelisk D xi 12] and be-li-ba-ur [unpublished Agade text from Tell Asmar]) suggest, however, the interpretation given above as the more probable one. This element ba-ur seems best explained as a fa-ull form of the verb baru (med. b, "to be shining," "to be happy," "to be in good humor" (cf. Stamm, "Die akkadische Namengebung," MVAG XLIV [1939] 155), from which the noun bu-aru, "joy," is derived. On the first element, the divine name Ni(n)-kilima(k), see Deimel, Pantheon Babylonicum, No. 2625. The names quoted would then mean "Ni(n)-kilima(k) is in good humor," "The brother is happy," "My lord is in good humor."

#### No. 8

Ag. 35:857. Upper part of male statue, inscribed on back, found in M 14:4 at main level of Shara Temple.

n u (?): n a m: a m a

s a h a r a m a r

dk i l i m (?). m a (. k a)

AN:PA:NfG

5 l u g a l (. l a)

HAR:TU

Nu:nam: ama,

attendant of Amar
Kilima(k),

....

(of the) king,

courtier(?).

Analysis and transliteration of this text must be considered entirely hypothetical; it is based on the following considerations. Nu: nam: ama is not known to us from elsewhere. By analogy with other early inscriptions, however, the first line most likely contained a personal name. This interpretation seems to be supported partly by the title sahar which follows, partly by the fact that ama is a frequent element in Early Dynastic personal names (see UET II, Names 76-144; WVDOG XLV 21\*). Note also the divine name dama: name (WVDOG XLIII 10\*), which—with omission of the determinative—might constitute an element of our nu (?); nam; ama (or ama; nam; nu [?] or nu [?]; ama; nam). The title sahar, "attendant," "page," is frequent in the Fara texts (see WVDOG XLV 7\*) and is found also in UET II 17, No. 60. Since it has no obvious Sumerian etymology, the possibility that it might be a loan word from a proto-Akkadian suhār(um?), "boy," "attendant," seems worth considering.20 With the proposed personal name Amar-Kilima(k) may be compared such names as a mar-dalim-ma, a mar-dlam ma, etc. (UET II, Names 150 ff.) and the names beginning with a mar listed in WVDOG XLV 21\*f. Identification of the sign read as kilim (?) is not certain. It seems, however, to resemble LAK, Nos. 245 and 246 (kilim), fairly closely. Compare also the form of kilim in our No. 7. In an: PA: Níg we suspect a title but hesitate to compare ugula níg-ga (. r a)21 since that would leave AN isolated and unexplained. On HAR:TU see ŠL, No. 401.96, where Deimel translates "Hausdiener," and compare our No. 12.

### No. 9

Ag. 35:777. Fragment of stone vase found in L 14:1 at main level of Shara Temple.

lugal kiši king of Kish, dum u child of Munus-ushumgala(k).

Since we do not know what went before, the signs 1 u g a l: kiši, here assumed to represent the title "king of Kish," might in reality mean something entirely different. They could, to mention one possibility, form part of a personal name. The name Munus-ushumgala(k) may be compared with the names beginning with SAL listed in UET II, Names 617-31, and WVDOG XLV 45\*f. The element ušumgal would seem to represent a divine name or a substitute for one (cf. the name ur.ušum.gal(.la) in UET II, Name 752). If so, our name "Woman of Ushumgal" may be viewed as a feminine counterpart to male names formed on the pattern lú-dN.a(k), "Man of (the deity) N." It should be remembered that in the period to which our inscription belongs writing of the divine determinative was not obligatory (see UET II 20). For the form of the sign ušum compare UET II, Sign 5.

<sup>&</sup>lt;sup>20</sup> The shift of u to a would then be due to vowel assimilation, well known in Sumerian.

<sup>&</sup>lt;sup>21</sup> UET II 16, No. 49, translated "treasurer or the like" by Burrows.

#### THE INSCRIPTIONS

#### No. 10

Ag. 35:203. Fragment of stone bowl found in M 13:2 at main level of Shara Temple (cf. p. 229).

```
dšará
To Shara

a-nu-nu
µakil(UGULA) ¬aţlē(GURUŠ)
foreman of (yeo)men,

[a(na) širiktim¹(「SAG¹) ¹išrukšum¹(「RIG6¹)
presented (this) as a gift.
```

We have tentatively read this inscription as Akkadian, although a Sumerian rendering would also be possible. On dšará see Deimel, Pantheon Babylonicum, No. 1812; C. F. Jean, La religion sumérienne (Paris, 1931) pp. 94-96; and N. Schneider, Die Götternamen von Ur III ("Analecta orientalia" XIX [Roma, 1939]) Nos. 561-72. Early occurrences are WVDOG XLIII 19\* and XLV 35\* (u r - dš a r á). As for the grammatical construction, it should be noted that, whereas the second (dative) object of šarāku, "to present," is regularly construed with ana unless merely expressed by a dative suffix in the verbal form, the oldest Akkadian inscriptions occasionally employ a simple dative such as the one here found. See the inscription of Ikû(n)-Shamash (CT V, Pl. 2, No. 12146 ii): şalam(kúš)-sù dšamaš a(na)širiktim(sag) išrukšum(RIG6), also the probably Akkadian inscriptions CT VII, Pl. 4, No. 22458: [N.] tám-kàr¹ dnin-men(.na) a(na)širiktim(sag) išrukšum(RIG6), "N., the merchant, to Nin-mena(k) as a gift presented (this)," and (with noteworthy word order) CT XXXII, Pl. 8, BM 60036: a(na)širiktim(sag) išrukšim(RIG6) dnin-men(.na) luḥ-ḥa mar²u i-[....], "As a gift presented (this) to Nin-mena(k) Luḥḥa, son of I...."

Our transliteration yakil assumes that the later form ellum represents a facl form of a root able in which a had changed to e under the influence of the preceding original h, of or g. At the period of our inscription that change should not yet have taken place. allum, with its Sumerian equivalent guruš, "(full-grown) man," is in the early periods the usual designation of an individual as a unit in the apparently identical labor and military organization of the city-state (see WVDOG XLV, Nos. 92, 94-97, and 101; and of, the inscriptions of the Agade kings, where guruš=allum is the typical expression for soldier). We have tried to express this triple aspect of "man," "soldier," "workman," by translating "(yeo)man." Within the organization mentioned the men were organized in smaller groups according to their trades. The leader of such a group was called yaklum (Sum. u gula), a term which, dependent upon the current activity of the group (labor or military) and on the type of men comprising it (unskilled laborers, craftsmen, etc.) may be translated as "foreman," "sergeant," or "alderman." On the functions of the yaklum as foreman of a group of laborers in later periods see J. G. Lautner, Altbabylonische Personenmiete und Erntearbeiterverträge ("Studia et documenta ad iura Orientis antiqui pertinentia" I [Leiden, 1936]) Index.

#### No. 11

Ag. 35:79. Arm of statue found on surface in area of Shara Temple.

```
Col. i [N.] [N., daughter of X, [a\check{s}]\check{s}at wi]fe of [...]-paţir, [a\check{s}]\check{s}at pašī\check{s}i(PA_4-\check{s}E\check{s}) pašī\check{s}i(PA_4-\check{s}E\check{s}) pašī\check{s}i(PA_4-\check{s}E\check{s}) for (the god) Y, Col. ii [d\check{s}ar\acute{a}-i\check{s}] to Shara] as a gift presented (this).
```

The restorations here offered must of necessity remain hypothetical. We have assumed that the inscription is in Akkadian, but reading as Sumerian also seems possible.

The restoration  $[a\bar{s}]\bar{s}at$ , i.e., [DA]M, in col. i was suggested by the extant remnants of the sign. As early parallels the seal of Nin-tur: n i n - t u r n i n d a m mes - a n - né - pà - da (UET I 268) and the broken inscription D. D. Luckenbill, Inscriptions from Adab (OIP XIV [1930]) No. 2, which likewise seems to be by a woman, may perhaps be quoted. Acceptance of the restoration  $a\bar{s}\bar{s}at$  in i 3 presupposes feminine forms in the preceding line and in ii 2. In our choice of forms we have largely been guided by Agade usage.

Our transliteration of the signs in i 4 envisages as a possibility a personal name [\*il(um)]-patir. The restoration of the lines from i 5 to ii 2 takes Kh. IV 126 (No. 4) as a pattern. The divine name we have assumed to be Shara, since the inscription comes from the same temple as does No. 10.

#### No. 12

As. 32:1060. Copper bowl found in E 16:35 below Northern Palace.

dAB-Ú	To Abu
lugal-kisal (.la) -si	has Lugal-kisala(k)-si
dumu HAR:TU(.ke)	son of HAR:TU,
a mu-(na.) ru	presented (this).

On dab-ú see Deimel, Pantheon Babylonicum, No. 128; Frankfort in Iraq I (1934) 18 ff.; Jean, La religion sumérienne, p. 127 and p. 107, n. 5; Schneider, Die Götternamen von Ur III, No. 13. In Lagash he was considered son of Baba (see S. N. Kramer, Lamentation over the Destruction of Ur [AS No. 12 (1940)] p. 18, ll. 22-25, and n. on p. 74). His character as god of vegetation is clear from the Dilmun myth (S. Langdon, Le poème sumérien du paradis ... [Paris, 1919] Pl. VI 26 and 43), which tells of his birth and appointment to be king of the pasture.

The reading of the name dab-ú is still somewhat uncertain. From writings such as dab-ba-ú (see Kramer, op. cit. p. 74 and material there quoted) it appears likely that the sign AB in the standard orthography, dAB-Ú, is to be read with its longer value, a b b a: da b b a - ú. As noted by Jensen in Thureau-Dangin, Les homophones sumériens (Paris, 1929) p. 40, the alternation of dab-ú (i.e., da b b a -ú) with dab-b a (i.e., da b b a - b a) in CT XXIV, Pls. 16:17 and 28:72, suggests that there has the value bas. Such a reading has the support of a variant ba-ba for dba-t (see AS No. 11, pp. 104 f.) and of the fact that a divine name da-ba-ba, which would agree with the postulated da b b a - b as, is actually attested (H. de Genouillac, Textes économiques d'Oumma de l'époque d'Our [Paris, 1922] No. 6053 ii 27; and cf. the personal name šu-a-ba-ba, M. I. Hussey, Sumerian Tablets in the Harvard Semitic Museum II ["Harvard Semitic Series" IV (Cambridge, Mass., 1915)] No. 71 obv. 6). It should be noted, however, that no direct evidence for identity of da - ba - ba and dAB-ú is yet known. Against the reading da b b a - b a might be quoted the fact that the etymology of the name would seem to be "Father pasture" (a b b a ú; cf. the passage from the Dilmun myth quoted above and names such as e n 111, "Lord wind") and that ú when meaning "pasture" is to be read ú. This objection is not, however, conclusive, for t with the reading bas may well have had a meaning closely related to or even synonymous with ú, "pasture." Until new material gives full certainty about how the name was pronounced, we consider it more prudent to abide by the rendering in which dab-ú is most frequently quoted, Abu, although this form is almost certainly not correct.

HAR:TU is here probably a personal name. If Deimel is right in translating HAR:TU as "Hausdiener" ( $\check{S}L$ , No. 401.96; cf. our No. 8), this personal name may have originated as an appellative or nickname.

#### No. 13

As. 32:700. Statue fragment inscribed on back, found in D 17:1 in Single-Shrine Temple II.

$[^{\mathbf{d}}\mathbf{A}\mathbf{B}\mathbf{-}\hat{\mathbf{U}}]$	[To Abu
[N. ]	has N.
[n a m - t] i - 'l a' - n [é (?) - š è]	for] hi[s li]fe
n a m - t i (!?) - d a m (!?)	(and) [for] the life of his wife
5 d u m u - n e (! ?) - n e [- š è]	(and) children
<sup>f</sup> a <sup>1</sup> mu-na-ru (!?)	presented (this).

The restoration of the divine name as  ${}^{d}AB-\dot{U}$  is suggested by the find-spot, the temple of this deity. Lines 4-5 are to be analyzed as nam-ti(l) dam dumu-(a)n(e)-ene-(ak-)še (cf. GSG § 136). Peculiar features of the inscription are the extensive abbreviation of sign forms and the monogrammatic combinations used; note LA and NI (l. 3) and TI and DAM (l. 4), the latter sign much abbreviated, as is also RU in line 6.

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#### $\mathbf{V}$

#### CONCLUSIONS

#### By HENRI FRANKFORT

When our expedition started, one single Early Dynastic sanctuary was known, and that very incompletely. Underneath substantial remains of later times, Professor Andrae had discovered at Assur a shrine of Ishtar dating back to the period of the city-states.<sup>1</sup>

We can describe in the present volume six temples of the same period which we excavated in addition to the Temple Oval at Khafajah.<sup>2</sup> But the earlier discovery loses nothing of its importance. It is true that the plan of the Ishtar temple is incompletely preserved, while we are able to follow a number of successive building phases through almost every detail of their changes. But at Assur hostile destruction had caused the broken equipment to be left more or less where it had been used, and consequently an unusually complete and detailed picture of the appointments of the actual sanctuary has been revealed.

Maeri<sup>3</sup> on the Euphrates and Ur<sup>4</sup> in Lower Mesopotamia have also yielded shrines of the Early Dynastic period in recent years. The most significant fact emerging from a comparison of the older and the more recent finds is the far-reaching agreement in layout and internal arrangements which exists between sites hundreds of miles apart. We may, consequently, claim that we now know the temple as built throughout the greater part of Mesopotamia in Early Dynastic times. Nor is this all. Discovery of earlier stages of the Sin Temple at Khafajah allows us to recognize this Early Dynastic type of temple as the direct descendant of an older form, which, in its turn, shares essential features with those found at Warka in the south and Tepe Gawra in the north. Since these shrines belong to the Proto-literate and even earlier ages, going back as far as the Uruk and the 'Ubaid periods, we are made aware of a measure of continuity of culture in Mesopotamia far exceeding that which earlier evidence had led us to suspect. The history of sacred architecture from the earliest settlement of the country down to Early Dynastic times now appears as one unbroken development in which a few features appear throughout as characteristic. It will be shown in another volume of this series that the story can be continued from Early Dynastic down to Neo-Babylonian times without a hiatus in the succession of forms which can be derived one from another and do not require at any stage an appeal to outside influence for an explanation of the change.

The authors of this volume are primarily concerned with rendering an accurate account of those sections of our work of which they had charge. They barely touch, therefore, upon the importance which these discoveries possess in a wider context, and it will be useful briefly to consider here this aspect of our material.

We shall first demonstrate the essential similarity of the Early Dynastic temples known at present; next we shall describe their antecedents in the Proto-literate period and consider this phase of their existence in comparison with contemporary and earlier shrines known in the north and in the extreme south of Mesopotamia.

- <sup>1</sup> W. Andrae, Die archaischen Ischtar-Tempel in Assur (WVDOG XXXIX [1922]) Pl. 2.
- <sup>2</sup> P. Delougaz, The Temple Oval at Khafājah (OIP LIII).
- <sup>3</sup> A. Parrot in Syria XVI (1935) 12-22; XVII (1936) 3-11; XVIII (1937) 55-65.
- C. L. Woolley, The Ziggurat and Its Surroundings (UE V [1939]) Pl. 66.
- <sup>5</sup> Old Babylonian Public Buildings in the Diyala Region.

#### THE EARLY DYNASTIC TEMPLES

The most important feature of the Early Dynastic shrine, and one which is never absent, is a long narrow room—a cella—entered through one of the long walls. There may be two doors in this wall, in which case one may be placed at either end or the two may come close together at one end; but the doors are not placed in the middle, nor is that place assigned to the more usual single entrance.6 At the end of the room farthest removed from the entrance a platform is built against the short side of the long cella. Though we know little of the ritual performed in these temples, we may with some confidence call this platform an altar. It is not only the outstanding feature of the most important room in the shrine, dominating the vista of any person entering and turning to view the room.<sup>7</sup> It is certainly also the place where such communication with the deity as the cult implied found its proper setting. We do not know for certain that the god was represented on this platform by a statue. Mr. Lloyd has hypothetically placed one there in his reconstruction of the Abu Temple (Fig. 159), and Mr. Delougaz points out that the altar in shrine P 45:51 of the Nintu Temple would well accommodate the aragonite figure of a cow which was found near by and may well have symbolized a goddess. We know, in any case, that statues of the gods were placed in the temple, and the platform which we call "altar" is in later times the place for such figures.

However that may be, we know for certain that cultual acts were performed on the altar. Sometimes it shows signs of wear (Figs. 4 and 87), and in the Single-Shrine phase of the Abu Temple a stone slab was built into its surface to counteract this (Fig. 158). Moreover, we know that liquids played a part in the ritual. In several instances (Figs. 87, 121, 131) bitumenlined grooves lead down the side or corner of the altar to a vessel dug into the pavement. Sometimes these vessels are all that remain of this device (Figs. 36–37, 102, 126). The quantities of liquid—water or milk, beer or wine, or possibly blood of sacrificed animals—must have been small, since the pots serving as drains have no outlets. All these details justify the use of the term "altar" in its original meaning. So much is certain, then, and applies to all Early Dynastic temples: a mud-brick platform, an altar, at the narrow end of a room entered usually at the opposite end through a long side wall serves as basis for certain cultual acts which subject it to wear and tear and in which small quantities of liquid are spilled.

The altar varies greatly in complexity. The basic form is an oblong benchlike structure of mud brick, generally hollow, or at least with only a shell of masonry, and covered with mud plaster. Its height seems to be about 1 meter in most cases. It may be raised upon a dais with one or more steps; it may itself recede once or more and thus have a stepped appearance. On the left or right of it subsidiary platforms may appear (Figs. 28, 47, 100, 121). In Tell Agrab it is placed before a much higher platform to which steps give access (Figs. 177, 179, 181–82). Curiously curved parapets such as are shown on either side of the stepped temple entrances occur occasionally on the sides of the altars, as in the Nintu Temple (Figs. 78–81). We do not know the meanings of these various elaborations, but the fundamental similarity of all the altars is apparent.

The architecture of the cella sometimes accentuates the altar in two ways. The wall against which it is built is occasionally recessed, so that the platform appears placed in a large niche (Figs. 9-10, 157). Secondly, a single or double row of small square blocks of masonry may separate the altar from the remainder of the room (Figs. 67-68, 146, 182). That this is truly

<sup>&</sup>lt;sup>6</sup> The situation in the subsidiary shrine Q 42:2 of Sin Temple VIII-X is exceptional (Pls. 10-12). The entrance is in the middle because of practical considerations. In Sin X the doorway into the westernmost sanctuary is restored near the center, since no doorway was found in the preserved brickwork of its east wall.

<sup>&</sup>lt;sup>7</sup> The so-called "bent-axis approach."

their purpose follows from the fact that the row is placed between two half-blocks of masonry actually built against the wall. We have, at Khafajah, restored these blocks with rounded tops, since those preserved for their full height were so shaped, and we have referred to them as offering-tables. Even if those placed across the cella in front of the altar had this function, they were clearly meant at the same time to set the altar somewhat apart from the rest of the room.

The long, narrow cella with its altar at one end is shown to be the essential feature in the temple by the fact that it alone may establish a sanctuary. Two of the shrines at Khafajah

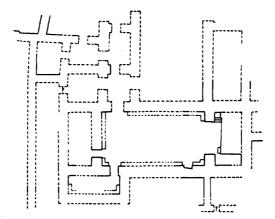


Fig. 206.—Restored Plan of Level H of the Archaic Ishtar Temple at Assur. Scale, 1:400 After Andrae, Die archaischen Ischtar-Tempel in Assur, Pl. 2

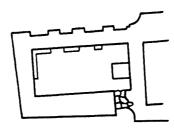


Fig. 207.—Plan of One Sanctuary of the Ishtar Temple at Maeri. Scale, about 1:400 After Parrot in Syria XVI, Pl. V

were no more than just this throughout their existence. The Nintu shrine was a combination of three single shrines. The Sin Temple and the Abu Temple were originally no more than one single cella with a few subsidiary rooms and were elaborated in the course of the Early Dynastic period; but the Abu Temple, after the short interval of the Square Temple, reverted to the original simple type. The curious series of changes which constitute its history allows one to assert that apparently it was immaterial which point of the compass the altar faced. On the whole, Early Dynastic temples were oriented with their corners toward the cardinal points;

<sup>&</sup>lt;sup>8</sup> At Assur only these projections may survive on either side of the altar; they have been restored as full-height piers (Andrae, op. cit., Pl. 11), on the strength of a later plan. Thus the section at the end of the room where the altar stood was not fully screened off but was yet accentuated as a space set apart. This, as Dr. Jacobsen has suggested, may be the origin of the "Breitraum" cella of later times, for which no prototype exists in the prehistoric temples. We have not restored them in this way at Tell Agrab and in Shrine II of the Square Temple since they are part of a series of blocks of masonry going right across the cella.

the Abu Temple, however, had its walls, not its corners, roughly oriented north and south. The altar was originally built, in Proto-literate times, against the west or northwest wall; in Early Dynastic I it was against the east wall; in Early Dynastic II the Square Temple had altars against west and south walls; and in Early Dynastic III and Akkadian times the altar was built up against the west wall again.

Outside the Divala region also the long narrow cella prevails. At Assur (Fig. 206) it seems situated beyond a court and to be approached through a vestibule as in the Archaic Shrines at Tell Asmar. The Ishtar temple at Maeri has not been so well preserved that its structure is thoroughly elucidated. It seems to contain one unusually wide shrine entered from a court to the north of it and another (Fig. 207) of the usual oblong ground plan entered by steps from a court to the south of it. 9 Of the four benches three recall those of the archaic Ishtar temple at Assur, while that against the east wall resembles the alters of the temples in the Divala region in several respects. Its shape seems not well preserved, but it contained on its front face a runnel such as we observed at Tell Agrab and in Shrine I of the Square Temple at Tell Asmar; and inside its brickwork statuettes were found. The placing of the entrance on the same end of the room as the altar is unusual. The differences between the successive shrines at Tell Asmar and between contemporary buildings at Khafajah show how elastic the temple plan was and how a recognizable set of recurring characteristics could be rearranged, elaborated, or partly suppressed in accordance with requirements of space or means. At Ur too an Early Dynastic temple has been found, built within a heavy inclosure wall (but not demonstrably near a contemporary ziggurat). It is square in plan (Fig. 208), seems to have an oblong altar base in the court, as observed in the Temple Oval and the Sin Temple at Khafajah, and either GG, KK, or CC or all of them would, if sanctuaries, conform to the type which we found characteristic for the period.<sup>10</sup>

In these oblong shrines or cellas we note certain recurring features, but the brick bases in the Single-Shrine stage of the Abu Temple remain isolated; we have compared them with brick benches observed at Assur and supposed to have supported the statues found in the cella. This assumption of Andrae is supported by the discovery of statues in room Q 42:7 of Sin Temple IX, where there were just such benches along the wall. Common at all our sites, however, is the occurrence of a hearth or fireplace in the cella. Another very widespread feature is a baking-oven, which appears in the only subsidiary room in the Single-Shrine stage of the Abu Temple and is found in connection with several of the Khafajah temples, often placed in a court or subsidiary room. Another appears at EE in the southeast temple at Ur (Fig. 208). At Agrab, Maeri, and Assur the incompleteness of the plans may explain its absence.

For the rest, the various temples differ merely in the monumentality of their entrances or architecture in general; in the size and number of subsidiary courts and rooms; and in the repetitions of certain features which we have discussed already. Thus, as we have seen, each temple may include more than one cella. Or an altar, complete with small square offering-tables, may be placed in the court. Sometimes a separate room is set aside for the lustration of worshipers and priests, as in the Square Temple at Tell Asmar and the Shara Temple at Tell

<sup>&</sup>lt;sup>9</sup> Syria XVI, Pl. V.

<sup>&</sup>lt;sup>10</sup> In EE we find the baking-oven so common in our Early Dynastic shrines. Other features recalling these are scattered through the two larger courts—a circular brick basin in the north and others in court BB, where we also find a pedestal against the court walls; and a drain led through the outer wall. Whether the narrow cutting above this is a passageway seems very doubtful. It is quite unlikely that the six chambers A-F were sanctuaries (Woolley, *The Ziggurat and Its Surroundings*, pp. 17-19); indeed, room A served as a passageway.

 $<sup>^{11}</sup>$  Ovens occur in various stages of the Sin Temple (Pl. 4, Q 42:21; Pl. 5 A, Q 42:17; Pl. 6, R 42:12; Pl. 8, Q 43:13; Pl. 11, Q 43:11), in court P 45:53 of Nintu Temple VI (Pl. 16), in the court of Small Temple IX (Pl. 17 I), and in the Temple Oval (OIP LIII, Pls. III, IV, and VII).

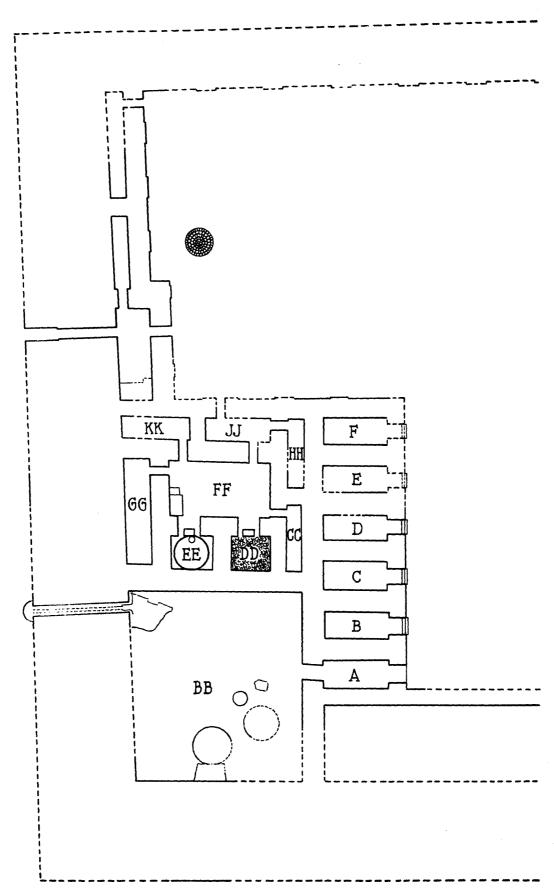


Fig. 208.—Plan of the Early Dynastic Temple Southeast of the Urnammu Ziggurat at Ur. Scale, 1:400 After Woolley, UE V, Pl. 66

Agrab. Or a well or round basin, serving presumably the same purpose, is constructed in the temple court, as in Sin Temples VII and IX and in the Shara Temple. These courts themselves are generally very irregular in shape. A glance through the successive plans of the Sin and Abu temples from their foundation in the Proto-literate period shows clearly that these courts were originally adjacent open spaces where certain work connected with the temple took place and where priests and people congregated. These open spaces were subsequently incorporated in the temple complex, which retained the curiously polygonal shape determined by the limits of neighboring plots or buildings. The Temple Oval, on the other hand, which was an entirely new foundation of Early Dynastic II, did not take any earlier buildings existing on the site into account and was naturally arranged on a regular plan which includes a courtyard. An entirely enigmatic circular base, which occurs at all stages of the Sin Temple and also in the Archaic Shrines and the Square Temple at Tell Asmar, was first placed in the open space in front of the temple and subsequently appeared as a standing feature of its courtyard, just as it occurs at Khafajah in the court of the Temple Oval and in the Small Temple in square O 43.

Whenever the temple went beyond the single-room plan, it was natural that the cella was not directly accessible from the outside but that a secondary room served as an entrance lobby or vestibule. Already the earliest, minute and primitive Abu Temple, built at the end of the Proto-literate period, possesses such a vestibule. Another room was obviously needed to store vessels and other utensils used in the cult. It was generally accessible through a door near the altar. In the plans of the Archaic Shrines at Tell Asmar we find, therefore, along the cella on the south side two secondary rooms, one accessible from the outside and serving as vestibule, the other, behind it, accessible from the cella and serving as storeroom or sacristy. At Assur these two rooms appear grouped round the end of the cella opposite the altar (Fig. 206). In the square temple plans, as the Square Temple at Tell Asmar and the southeast temple at Ur, and at the combined dwelling-places and shrines of the type of "House D" at Khafajah, it is impossible to state which rooms fulfilled this purpose. In any case we notice again the elasticity of the architectural formula.

At Tell Asmar both the Earliest and the Archaic shrines are poor, very primitive structures, cramped by adjoining houses and consequently planned as well as possible under such circumstances. At Tell Agrab and Khafajah we can observe, however, that the larger and more regular plans include rooms fulfilling the same functions. At Khafajah we find, moreover, clear evidence of how the two unessential but desirable rooms which we have discussed were combined with the cella when the architects were not hampered in their planning by the exiguity of available space. It is this earlier planning which allows us to recognize that our series of Early Dynastic temples descends from an earlier type found throughout Mesopotamia from the earliest times of which we have knowledge.

# THE SIN TEMPLE AT KHAFAJAH AND THE BASIC TEMPLE PLAN OF MESOPOTAMIA

The plan upon which the Sin Temple was founded is both clear and simple. Its central room is the long cella which we have found the essential feature of all Early Dynastic temples. It contains the altar against one of the short walls, a hearth, <sup>13</sup> and a double entrance in the long

<sup>&</sup>lt;sup>11a</sup> This observation is important in connection with certain theories as to the origin of the Babylonian temple form (see p. 311, n. 23).

<sup>12</sup> Except the very fragmentary last plan, Sin X.

<sup>&</sup>lt;sup>13</sup> It is probably due to the water-logged condition of Sin I that no traces were found there of a feature which is quite typical for the various temples at Khafajah; or it may be that the hearth was removed along with the original floor during rebuilding (cf. p. 14).

wall at the end of the room farthest removed from the altar. Both entrances lead through vestibules and are at a later stage reached by a few steps. The vestibules are regularly planned as part of a series of rooms including, at the other end, near the altar, the sacristy. This is obviously the regular scheme underlying the makeshift adaptation observed in the Archaic Shrines at Tell Asmar. But the regularity of the earliest Sin Temple goes beyond the arrangement of the vestibules and sacristy in a regular series of rooms. The most essential part, the cella, is truly made the central feature, flanked on the one side by sacristy and vestibules, on the other by one long, oblong space. This is likely to have accommodated both a staircase to the roof and also another room, since there are two doors (Pl. 2); at least we notice that this space was blocked up (in Sin IV) after a staircase leading to the roof along the north wall of the court had been constructed. The change is reasonable enough. In the hot summer months, during early morning and in the evenings, those who had business to transact with the temple personnel and all those dependents and servants of the temple who normally were to be found about the place would prefer to be on the roof; and it was surely undesirable that all of them should have to pass through the cella to reach it. This asymmetrical position of the cella, with a series of rooms separating it from the court but with no rooms on the west side, remains characteristic for the Early Dynastic period. Yet it is quite clearly a development from a more regular original plan. The fact that this continuous development can be traced (as Mr. Delougaz has shown, pp. 121-23) must not obscure the differences between its first and last stages. The cella, in such Early Dynastic shrines as the Sin Temple, appears hidden away at the very back of the complex formed by entrance courts and subsidiary rooms. In the Protoliterate temple it did not have this character of being the goal at the end of a somewhat extensive road. But it is well to realize that this new architectural disposition is not the outcome of a new conception as to the nature of the shrine.<sup>14</sup> The new disposition, placing the cella at the back of the court and the subsidiary rooms, seems mainly due to practical changes: the open space near the temple where in the Proto-literate period much work was carried out and business transacted was included in the temple complex in the form of an open court; and the staircase to the roof was moved, as we have seen, to this more accessible part of the complex. The outcome was a different temple plan from that observed in the earlier period, and, though evolved in the manner described from purely practical considerations, it offered nevertheless obvious advantages. The cella now appearing at the far end of a series of rooms and courts created a climax for the worshipers visiting the sanctuary. It was also well protected. These accidental advantages of the change explain why it was generally adopted in the Early Dynastic period.

We do not maintain, of course, that the Sin Temple at Khafajah is the prototype of all Early Dynastic temples, but a similar development may have taken place elsewhere. It is, at any rate, a fact that neither the Anu temples on the ziggurat at Warka nor the temples of Eanna at the level of the town show (as far as the plans allow us to judge) courtyards incorporated in their plans, while in the Early Dynastic period this seems to be the rule.

At Tell Agrab the shrines of the Shara Temple (Pl. 26, L 13:4 and 6) conform to the later usage; but in addition the main cella is flanked by two rows of subsidiary rooms, in the manner

This becomes evident when we compare the Early Dynastic shrine with an Egyptian temple, which quite unequivocally incorporates the idea of a road mounting through increasing darkness toward an inner sanctum placed upon the Primeval Hill (see A. de Buck, De Egyptische voorstellingen betreffende den oerheuvel [Leiden, 1922]). It would be easy to read the same meaning into the shrine placed upon the Anu ziggurat at Warka, if one considered the complex including the ziggurat as a whole. But that is irrelevant to our present discussion, for the temple on the Anu ziggurat has the symmetrical plan and not one of the new (Early Dynastic) type; and in the Temple Ovals at Khafajah and at al-Cubaid the cella, according to the very probable restoration, stands upon its platform within view of anyone entering the gate that leads into the court and probably even visible from outside the Oval inclosure (see OIP LIII, frontispiece).

of Sin Temples I-III. We cannot decide (and it is of no consequence) whether this is due to archaism, such as the retention of a ground plan of an earlier period, or merely to the availability of ample space. The irregularity at its northeast corner finds no parallel in the earlier examples of this plan and follows from its inclusion in a larger complex.

In any case the earlier plan, that of Sin I-III, is the earliest so far discovered in the Diyala region and is basic to the Early Dynastic forms. And it recurs at Warka, in southern Mesopotamia, and, more modified, at Tepe Gawra in the north.<sup>15</sup>

The published plans of the early temples at Warka must be used with some reserve. Most of the buildings are too fragmentary to provide a good basis for discussion. The so-called "limestone temple" in layer V is often shown with a completely restored plan for which there is, in the opinion of the authors of this volume, an entirely inadequate foundation. There is, however, an unequivocal plan of the temple which stood on the archaic Anu ziggurat (Fig. 209), and this tallies strikingly with Sin I at Khafajah. The similarity is apt to be overlooked because the Warka temple is decorated with elaborate recesses and boasts, moreover, openings on all four sides. But the recessed decoration is an embellishment which also occurs

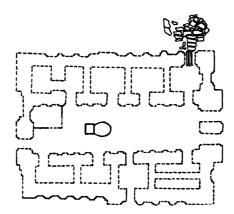


Fig. 209.—Plan of Stage E of the Temple on the Archaic Anu Ziggurat at Warka. Scale, 1:400 After UVB VIII, Pl. 20

in the Diyala region, and, in fact, Sin V shows such niches within the cella. In the earliest stages of the Anu temple (D-E) one entrance is clearly marked as intended for practical use, and there we find steps leading up to it from the court; this suggests that the other openings were not used as entrances and were inconveniently elevated above the court level. The entrance supplied with steps leads through a vestibule into the long central room. This room shares with the cella of the Diyala temples the possession of an altar platform against the short wall farthest away from the entrance, and furthermore it has a hearth. Both features recur in a later stage (B) where the entrance appears on the other side, but still in a long wall.

- 18 Studied by Ann Louise Perkins in The Comparative Stratigraphy of Prehistoric Mesopotamia (in preparation).
- <sup>16</sup> Blocks of roughly hewn limestone may be considered indicative of an original plan if found in numbers and clearly aligned, but isolated blocks or groups of blocks may so easily have got to their present positions during the stone-robbing that disposed of their fellows that it is unsound to base much reliance on their evidence.
- <sup>17</sup> The genetic relationship between these buildings has been proclaimed by Th. A. Busink in his Sumerische en Babylonische tempelbouw (Batavia, 1940). His contention that the temple of the type discussed in this volume is pre-eminently Sumerian raises a problem which I consider at present insoluble; we can distinguish languages and we can distinguish civilizations. We cannot, at present, distinguish the elements which went into the fabric of the country's civilization as it confronts us in the Proto-literate period. This does not diminish the value of his demonstration that the temples of middle and southern Mesopotamia represent an intelligible though not unilinear development. He does not include the temples of Tepe Gawra in his demonstration, however.

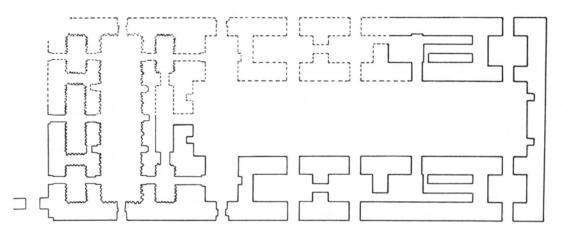


Fig. 210.—Plan of Temple C in Stratum IV of the Eanna Precinct at Warka. Scale, 1:400 After UVB VII, Pl. 2

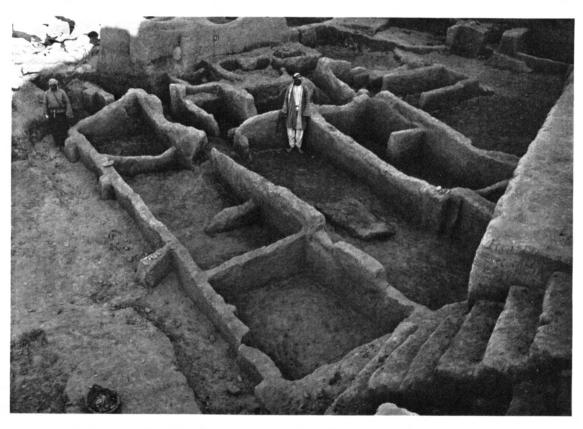


Fig. 211.—Temple of Levels XIX-XVIII at Tepe Gawra By courtesy of Professor E. A. Speiser

The altar is not centrally placed but appears in a niche balancing another niche or opening. Stairs lead up to the altar platform, as in Tell Agrab. As to stairs leading up to the roof, these occur in one or more of the rooms flanking the cella.

Differences notwithstanding, the resemblances between the Anu temple and the earliest Sin Temple at Khafajah are most striking. In both cases we have a long narrow room as cella with on either side a series of subsidiary rooms serving as entrance lobby, sacristy, and stair-well. The cella has an altar against the short wall and a hearth and is entered through a vestibule on one of its long sides. The vestibule is reached by one or more steps since the temple is placed on a low terrace or socle, again a feature recurring at Khafajah.

The other temples found at Warka in the Eanna precinct are related to that placed on the Anu ziggurat. Temples A, B, and D in Eanna are too incompletely preserved or excavated to allow of any conclusions besides this, that they seem to consist of a long central room with series of rooms on either side. Temple C (Fig. 210), however, is revealed as a combination of two plans of this type: a large oblong court with a series of rooms on either side abutting at right angles against a smaller unit of the same type. In none of these Eanna temples are there traces of steps at the main entrance or altars or hearths in the cella, but it is at least clear that the same basic plan underlies them as we have observed at Khafajah and on the Anu ziggurat. It is possible that the latter goes back to the 'Ubaid period.' 18

In the north, at Tepe Gawra, a temple is recognized in the earliest 'Ubaid layers (XIX-XVIII). 19 Its plan is not published so far, but a photograph (Fig. 211) shows, again, a long central room with two rows of subsidiary rooms on either side. There are three features, however, which oppose an identification of this plan with those from middle and southern Mesopotamia. In the first place, the entrance is on a short side; secondly, the altar stands not against a short wall but in the middle of the room; thirdly, there seems to be either a narrow passage or a porch instead of an entrance vestibule. Such a porch, in any case, occurs in layers XI-VIII, which seem to revert to the earliest plan just discussed. Most of these temples are represented by more than one building period. In some of them we find the hearth usual in the south. It is especially interesting to note how, in layers VIII B and  $C_{i}^{20}$  we get variants conditioned by the cramped space (Fig. 212), in which almost all the distinctive features become modified, just as the principles underlying the Sin Temple plan appear modified through lack of space and presumably of means in the Archaic Shrine at Tell Asmar. We get, for instance, an entrance through the long wall with "bent-axis" approach, a vestibule instead of a porch, features which the large number of instances make us recognize as irregular. They warn us, in any case, not to assert too dogmatically that certain features are imperative or indispensable, or characteristic of a particular element in the population. The occurrence, as a makeshift, of the bent-axis approach through a long wall in layers VIII B and C (in the two buildings uppermost in Fig. 212) is especially interesting since it is freely used, in different ways apparently, in the three temples of the citadel of layer XIII (Fig. 213). And if there can be doubt as to the relationship of the temples of Gawra XIX-XVIII, XI, and VIII with those of the south, there is certainly less in the case of layer XIII.<sup>21</sup> In the only complete plan of the three temples of the citadel the entrance is not in the porch but beside it and leads to a central aisle which would correspond to the long narrow cella of the other Gawra temples but which is here entered from the side at the end of the room, as was customary in the south.

<sup>18</sup> Perkins, op. cit.

<sup>19</sup> See E. A. Speiser in Asia, September, 1938, p. 543.

<sup>&</sup>lt;sup>20</sup> Speiser, Excavations at Tepe Gaura I (Philadelphia, 1935) Pls. X-XI.

<sup>&</sup>lt;sup>21</sup> So also E. Heinrich in UVB X (1939) 26.

FIG. 212.—PLAN OF TEMPLES OF LEVEL VIII C AT TEPE GAWRA. SCALE, 1:400
After Speiser, Excavations at Tepe Gawra I (Philadelphia: University of Pennsylvania Press, 1935) Pl. XI

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It must remain a matter of opinion whether the differences between the various Gawra temples and those of Warka and Khafajah outweigh the similarity of the general arrangement, namely the building of a long narrow cella inclosed by two series of subsidiary rooms and containing an altar and a hearth. The present writer tends toward the view that the common features are more significant than the differences, especially since the temples of Gawra XIII and VIII B-C show that a side entrance with a bent-axis approach was used on occasion in the north too. Moreover, the adaptability of architectural formulas in Mesopotamian temples has been demonstrated repeatedly by our comparisons on the foregoing pages.

The ornamentation by means of recessing is another common feature of sacred architecture in the north and in the south. The porch may be a modification due to the rougher climate of



Fig. 213.—Plan of Temples of Level XIII at Tepe Gawra. Scale, 1:400

After Archiv für Orientforschung XII 166

the north. The difference in the placing of the altar might be explained if the common tradition of north and south went back to a time before this detail had become standardized; alternatively, it might be assumed that the podium in the middle of the cella of the shrines at Tepe Gawra corresponds with the "podium" which is found in the same position in the shrines on the Anu ziggurat at Warka and which is usually explained as a hearth. We do not dissimulate the hypothetical character of these arguments; they merely show that it is possible to consider the Tepe Gawra shrines of the 'Ubaid, Uruk, and Proto-literate periods as related to those of the south. Even those who refuse to acknowledge such relationship must accept the startling similarity of Sin Temples I–III at Khafajah with the temples at Warka. And this similarity in plan applies to the temples placed on top of the Anu ziggurat as well as to temples placed on the soil in Eanna. If these two types of temples ("Hochtempel" and "Tieftempel") had different functions, the difference does not appear, at least in early times, in their plans.

As to the ziggurat, its interpretation is made difficult, not in the last place, by the fact that shrines with and without temple towers seem to occur at all times. Yet it seems likely that the ziggurat was the fully developed architectural form of an idea that could be represented abbreviated, as it were—by a platform or terrace of more modest height such as has been found in the Temple Ovals of Khafajah and al-'Ubaid. This platform, as Mr. Delougaz points out (p. 121, n. 79), must be distinguished from the socles upon which the temples are often built. The Sin Temple appears based on such a socle from the fourth phase of its existence onward, but one may well assume it to be a much older though facultative feature, since the archaic Anu Temple on top of the ziggurat at Warka is placed on such a low socle, to which, as in Khafajah, a few steps give access. The function of this socle is clearly to accentuate the structure, to mark out its sacred site as distinct from the profane soil which is subject to the accidents of daily life, being tilled at one time, made to accommodate a dwelling at another, transformed into a cemetery at yet another period. Thus the socle possesses a very general significance, and its use is naturally not confined to Mesopotamia. The ziggurat, on the other hand, must embody a specific and characteristically Mesopotamian idea, and while we need not, at the moment, enter into its interpretation, we may at least suggest that a terrace of from 2 to 4 meters' height may take its place. Thus we find, in the Eanna precinct at Warka, the temple with large columns placed upon such a terrace. The Temple Ovals at Khafajah and al-'Ubaid likewise contained a temple placed on such an elevation, and Urnammu built his ziggurat at Warka over a similar platform of Early Dynastic date.

Here we need do no more than point out that the Anu temples on top of a ziggurat form part and parcel of a development which represents a gradual and continual change from the earliest sacred buildings in the plain down to the Early Dynastic period. The volume on Old Babylonian public buildings excavated by our Expedition will in its turn show how there is complete continuity between the early Mesopotamian remains and those of later periods. This conclusion was not foreseen. In fact, the theoretical reconstruction of the course of events, evolved before actual remains of prehistoric times were known, differs in every respect from that which now appears indicated. This discrepancy represents a distinct advance. In most discussions of ancient oriental architecture which aim at more than mere description a spurious history of architecture is implied. Existing buildings are analyzed, their essential characteristics are discovered, and it is then suggested that this analysis reflects the genesis of the architectural form in question—in other words that the features systematically recognized as basic were actually the starting-point of the development and that subsidiary features represent a later addition to or elaboration of the original scheme. This unwarranted projection of the systematic into the realm of history can rarely be proved wrong, because actual remains are scarce. However, in the case of the Early Dynastic temples—as in that of the Egyptian dwelling house<sup>22</sup>—the evidence is quite unequivocal.<sup>23</sup>

<sup>&</sup>lt;sup>22</sup> See my review of H. Ricke, Der Grundriss des Amarna-Wohnhauses, in OLZ XXXVI (1933) 354-57.

<sup>&</sup>lt;sup>23</sup> It is the merit of the German school of "Bauforscher" to have pursued the systematic distinction of plans with unfailing interest, convinced that architectural no less than other art forms express the spirit of their makers. Their views, which go back to Robert Koldewey, are best stated in the first part of Andrae's Das Gotteshaus und die Urformen des Bauens im alten Orient (Berlin, 1930). A modified statement appears in his Die jüngeren Ischtar-Tempel in Assur (WVDOG LVIII [1935]) pp. 6–14. But throughout the literature of this school we find a dangerous confusion between systematic distinctions and historical development. Fully grown architectural forms may be better understood in their essential nature by such systematic classifications as, for instance, "injunktiver Hoftypus," "konjunktiver Hoftypus," "disjunktiver Hoftypus" (R. Koldewey, Die Tempel von Babylon und Borsippa [WVDOG XV (1911)] pp. 14 f.). But the court is not, as Koldewey suggested, the remnant of an increasingly built-up inclosed area. We can notice in the successive stages of the Sin Temple how the court, far from being a central feature, is only at length incorporated in the temple com-

#### PRE-SARGONID TEMPLES

When early temples were discovered, in the south and in the north, they seemed at first merely to complicate our problems. They differed among themselves and also from the buildings erected in historic times. It is not the least of our rewards that our discoveries in the Diyala region supply the connecting links in the chain of architectural forms in which Mesopotamian religion has found expression.

plex. In the early temples at Tepe Gawra and Warka it does not occur. Similarly, we notice how the ground plan which he considered typical for the Babylonian temple and which prevails from the Third Dynasty of Ur onward is completely absent in the Early Dynastic and earlier periods. Systematic distinctions such as Koldewey's three types of buildings with courts are often illuminating, but the present chapter may well serve as an illustration of the difficulties encountered when a definite concept is applied to architectural forms which show great elasticity under the pressure of circumstances and requirements. The attempt should be made, but the danger of forcing abstractions upon incongruous material will ever be present.

We have avoided in our text taking up any position in these terms as to the function of the Early Dynastic temple. Whether it represents a god's dwelling, or the place of his epiphany, or the "gate" in which he sits in judgment, cannot (at least as yet) be decided.

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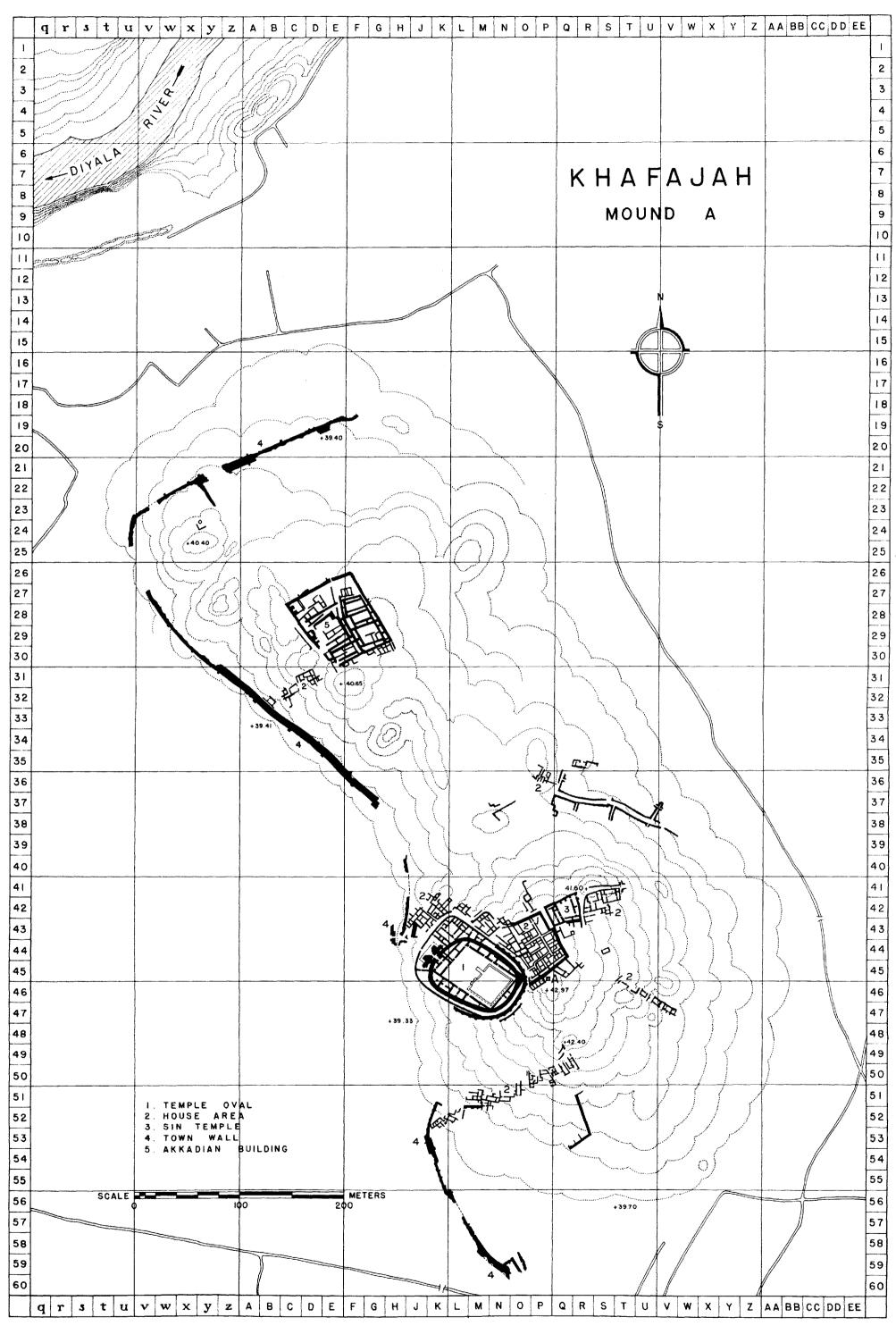
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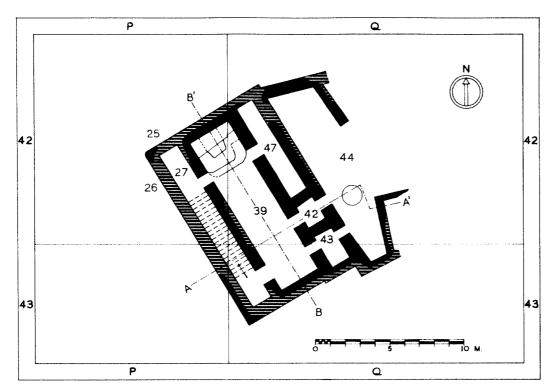
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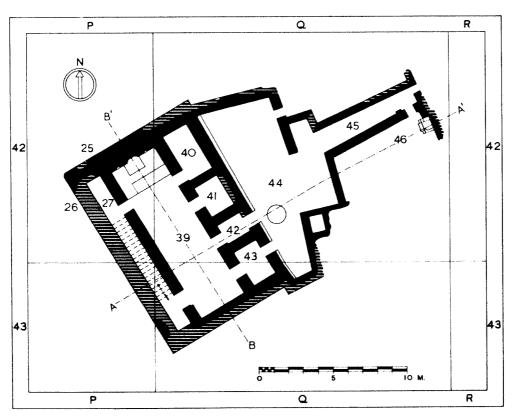
**PLATES** 



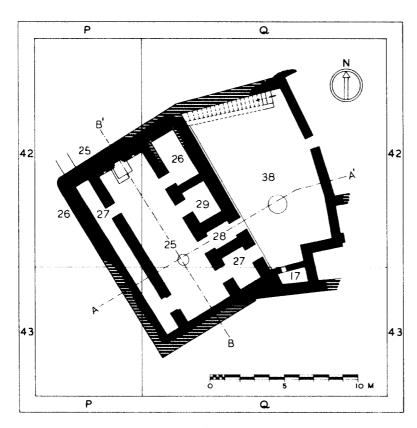
CONTOUR MAP OF MOUND A AT KHAFAJAH, SHOWING EXCAVATED AREAS. SCALE, 1:3000



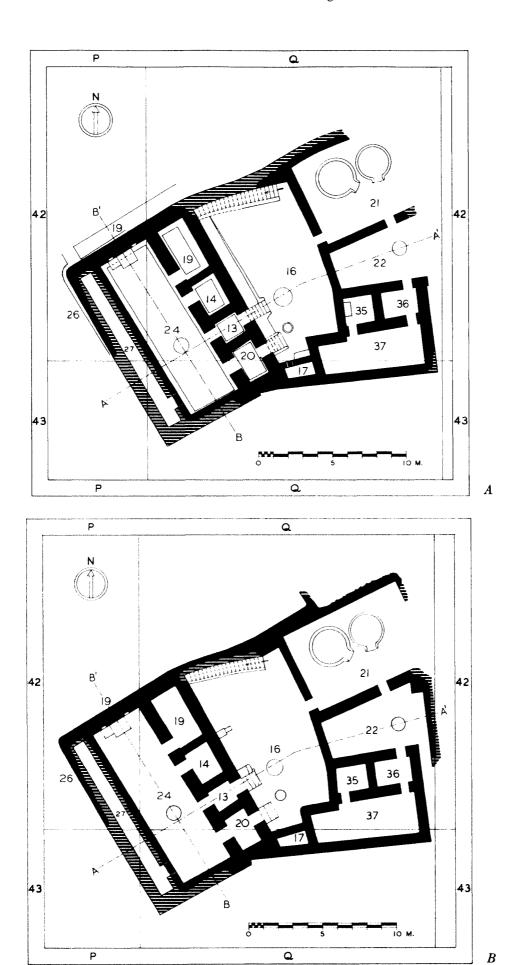
A. Plan of Sin Temple I at Khafajah. Proto-literate c. Reconstructed Walls Hatched. Scale,  $1\!:\!250$ 



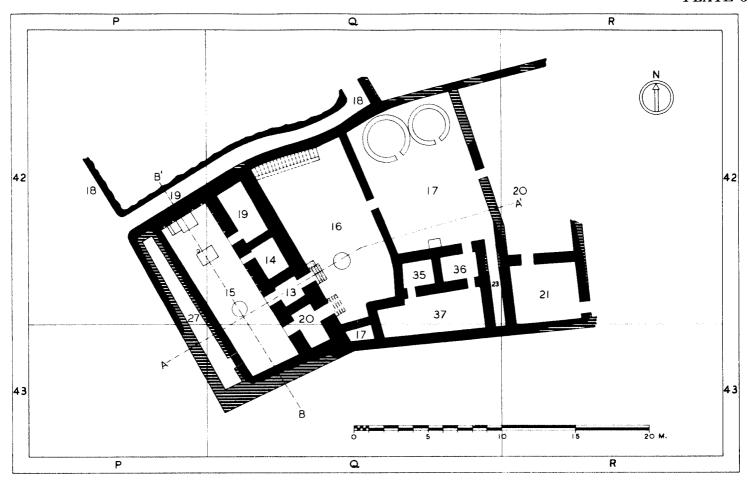
B. Plan of Sin Temple II at Khafajah. Proto-literate c. Reconstructed Walls Hatched. Scale,  $1\!:\!250$ 



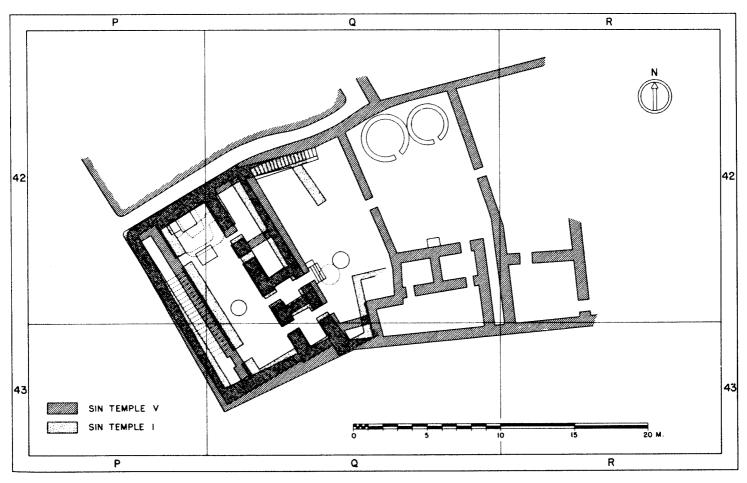
Plan of Sin Temple III at Khafajah. Proto-literate c. Reconstructed Walls Hatched. Scale, 1:250



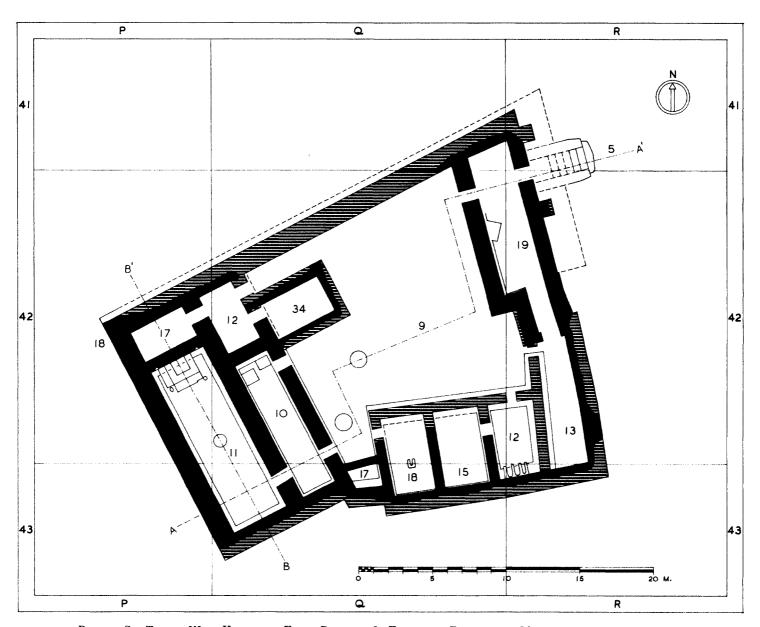
Plans of the First (A) and Second (B) Occupation Levels of Sin Temple IV at Khafajah. Proto-literate d. Foundations Marked by Continuous Black Lines; Reconstructed Walls Hatched. Scale, 1:250



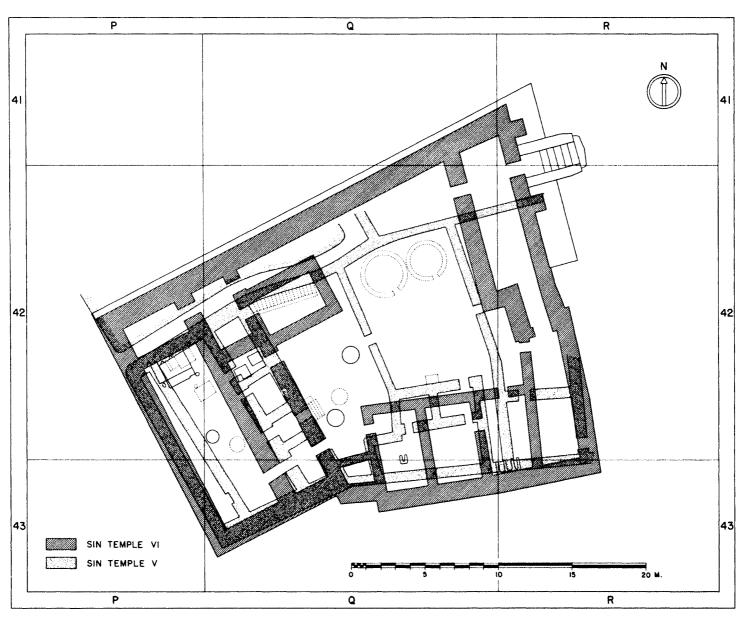
A. Plan of Sin Temple V at Khafajah. Proto-litebate d. Dotted Stairways in Q 42:16 are Attributed to a Second Occupation Level. Reconstructed Walls Hatched. Scale, 1:250



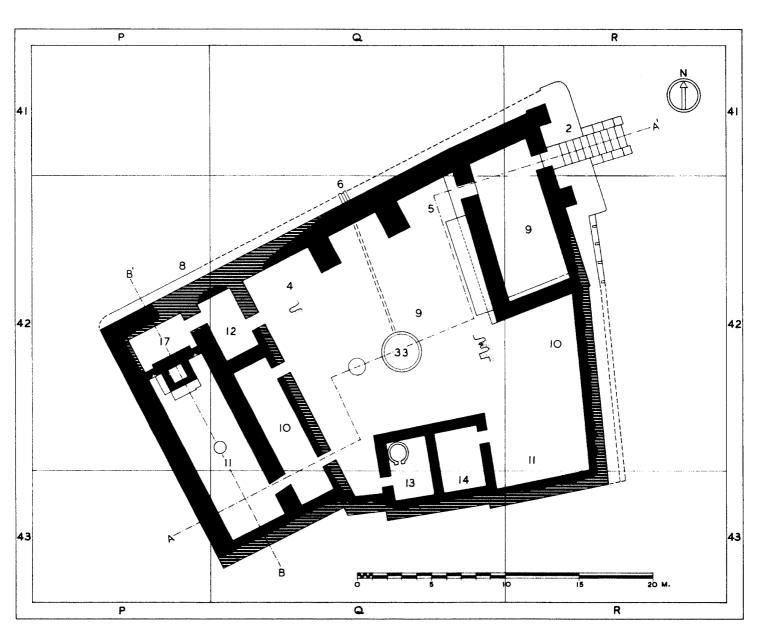
B. Plan of Sin Temple V Superimposed on That of Sin Temple I. Scale, 1:250



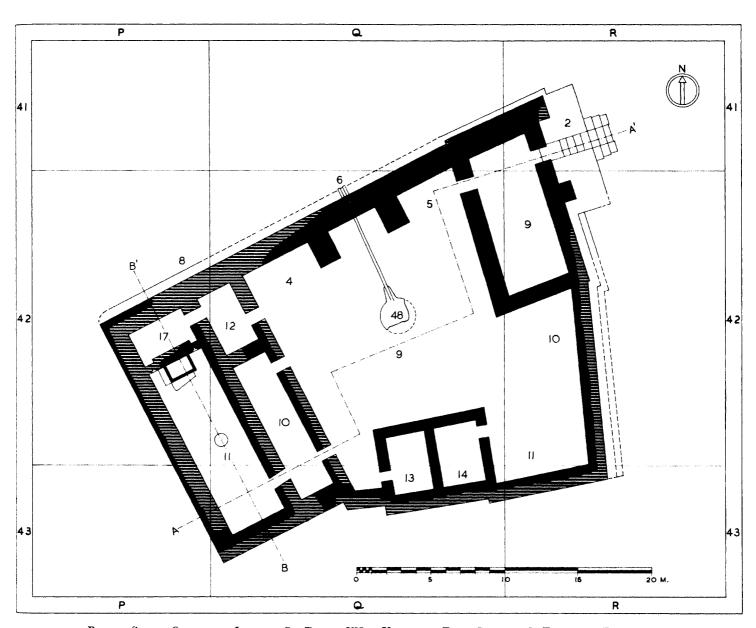
Plan of Sin Temple VI at Khafajah. Early Dynastic I. Excavated Foundations Marked by Continuous Black Lines, Reconstructed Foundations by Broken Lines; Reconstructed Walls Hatched. Scale, 1:250



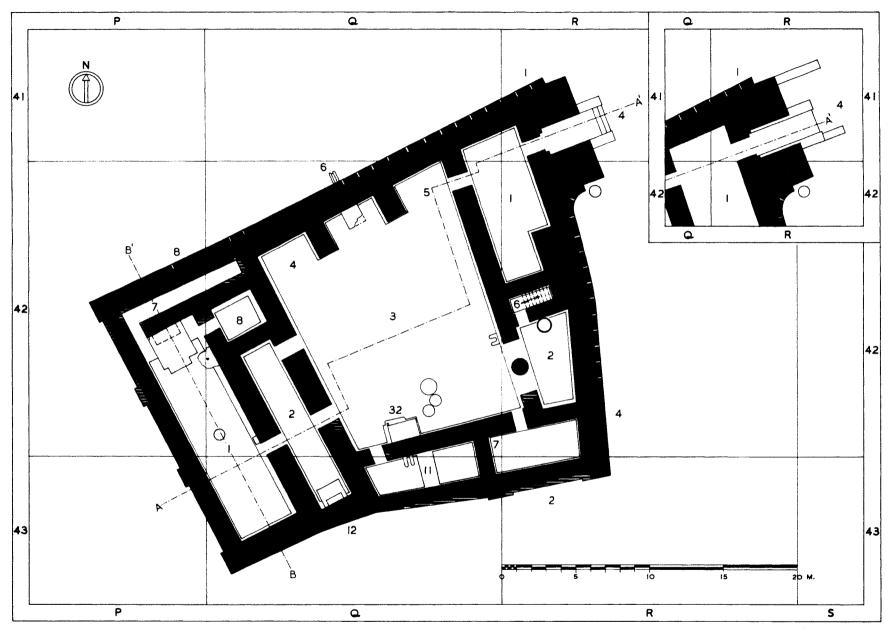
Plan of Sin Temple VI Superimposed on That of Sin Temple V. Scale, 1:250



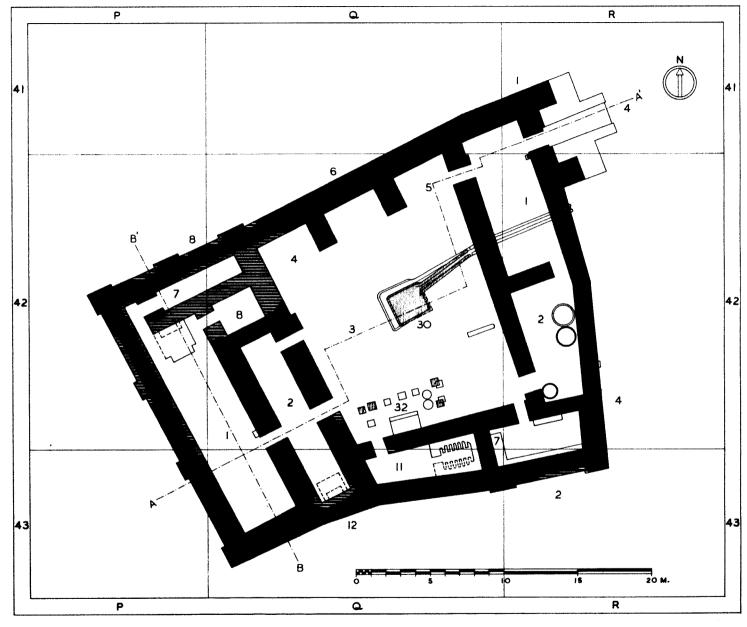
PLAN OF FIRST OCCUPATION LEVEL OF SIN TEMPLE VII AT KHAFAJAH. EARLY DYNASTIC I. EXCAVATED FOUNDATIONS MARKED BY CONTINUOUS BLACK LINES, RECONSTRUCTED FOUNDATIONS BY BROKEN LINES; RECONSTRUCTED WALLS HATCHED. SCALE, 1:250



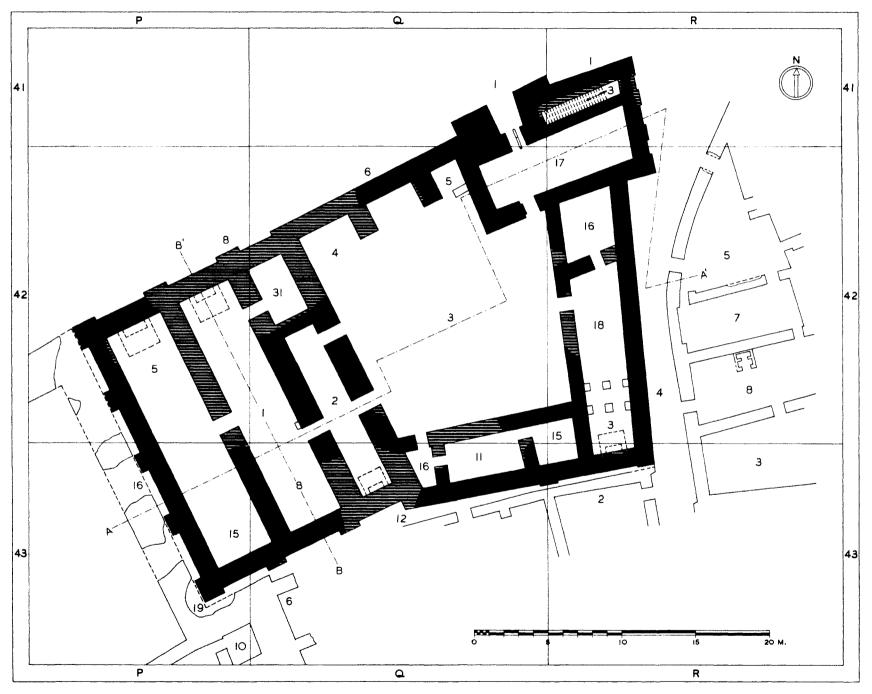
Plan of Second Occupation Level of Sin Temple VII at Khafajah. Early Dynastic I. Excavated Foundations Marked by Continuous Black Lines, Reconstructed Foundations by Broken Lines; Reconstructed Walls Hatched. Scale, 1:250



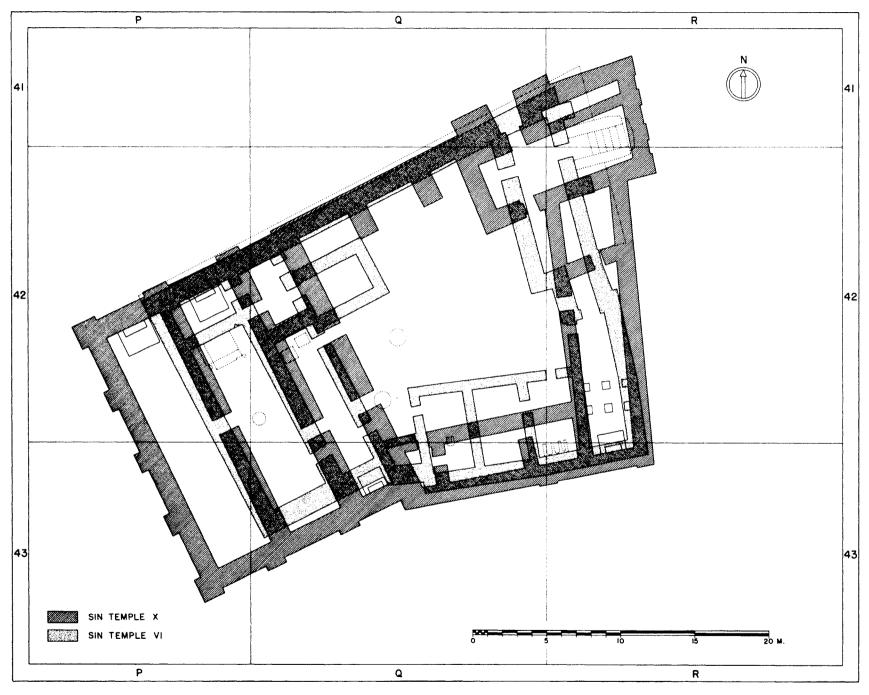
PLAN OF FIRST OCCUPATION LEVEL OF SIN TEMPLE VIII AT KHAFAJAH. EARLY DYNASTIC II. FOUNDATIONS MARKED BY CONTINUOUS BLACK LINES; RECONSTRUCTED WALLS HATCHED. INSET SHOWS ENTRANCE OF SECOND OCCUPATION LEVEL. SCALE, 1:250



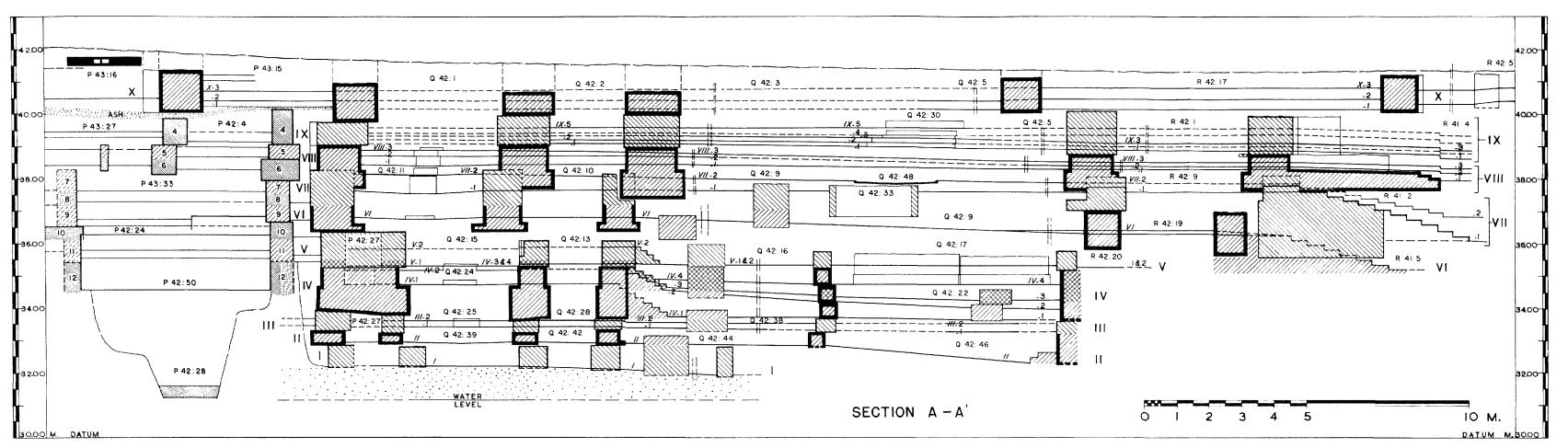
PLAN OF SIN TEMPLE IX AT KHAFAJAH. EARLY DYNASTIC II. RECONSTRUCTED WALLS HATCHED. SCALE, 1:250



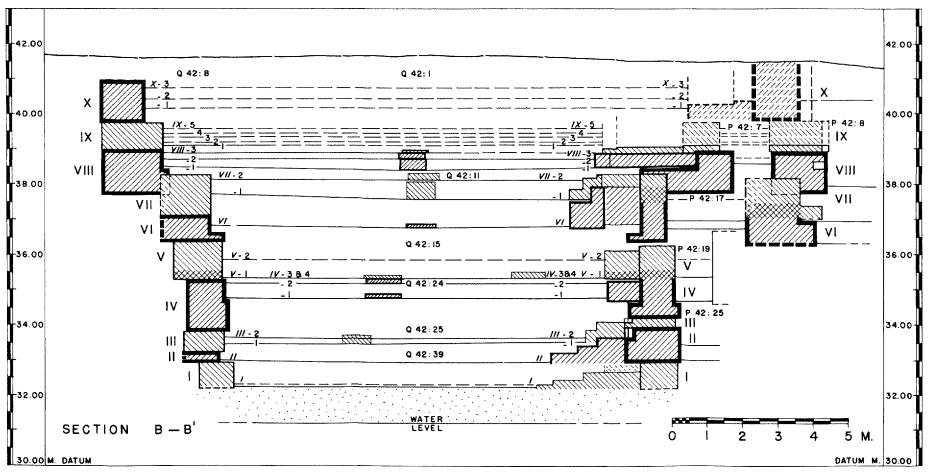
PLAN OF SIN TEMPLE X AT KHAFAJAH. EARLY DYNASTIC III. RECONSTRUCTED WALLS HATCHED. SCALE, 1:250



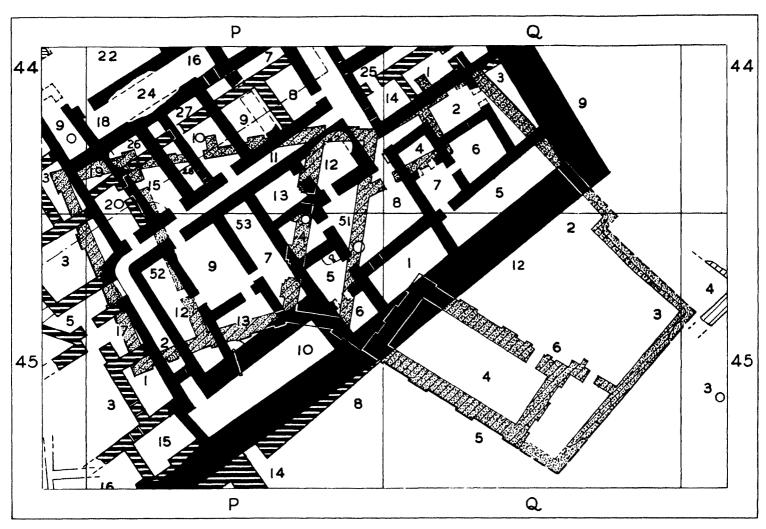
Plan of Sin Temple X Superimposed on That of Sin Temple VI. Scale, 1:250



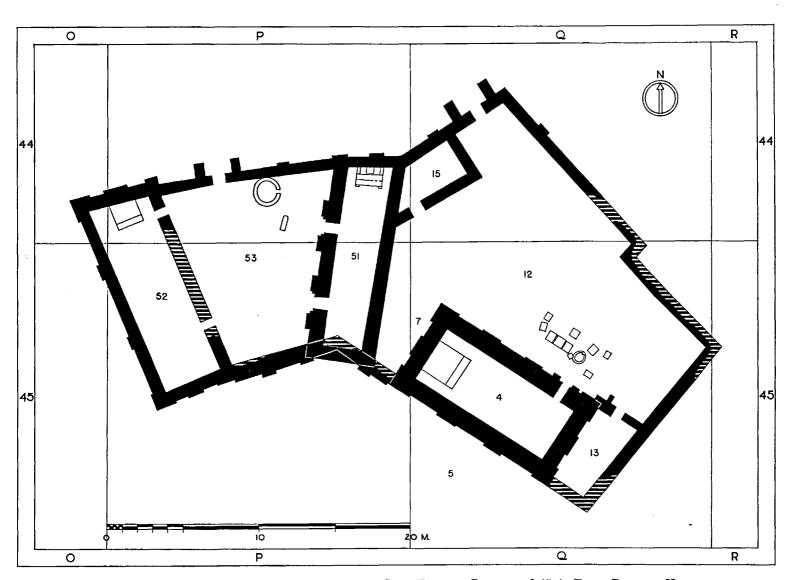
A. Section A-A' through Sin Temple at Khafajah. Scale, 1:100



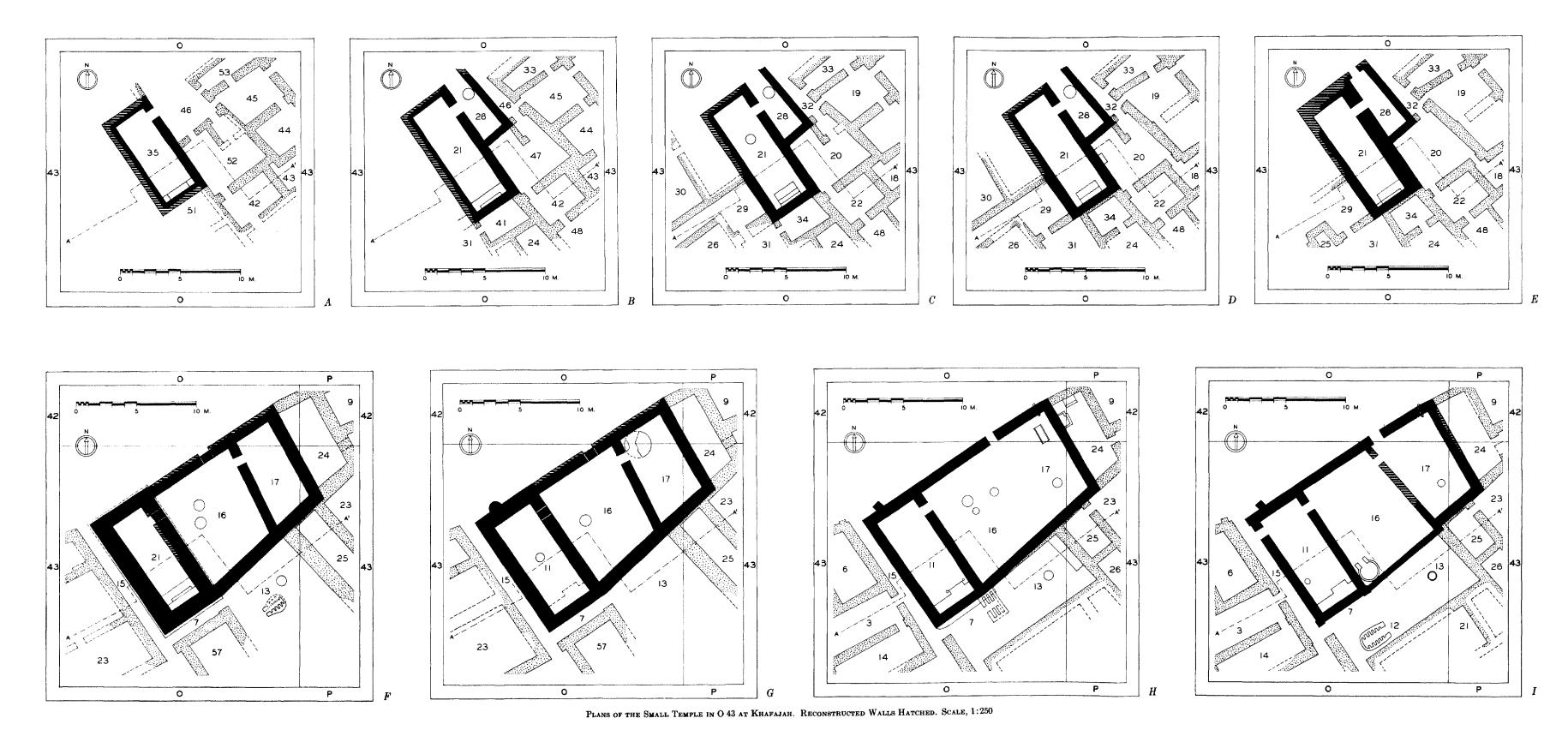
B. Section B-B' through Sin Temple at Khafajah. Scale, 1:100

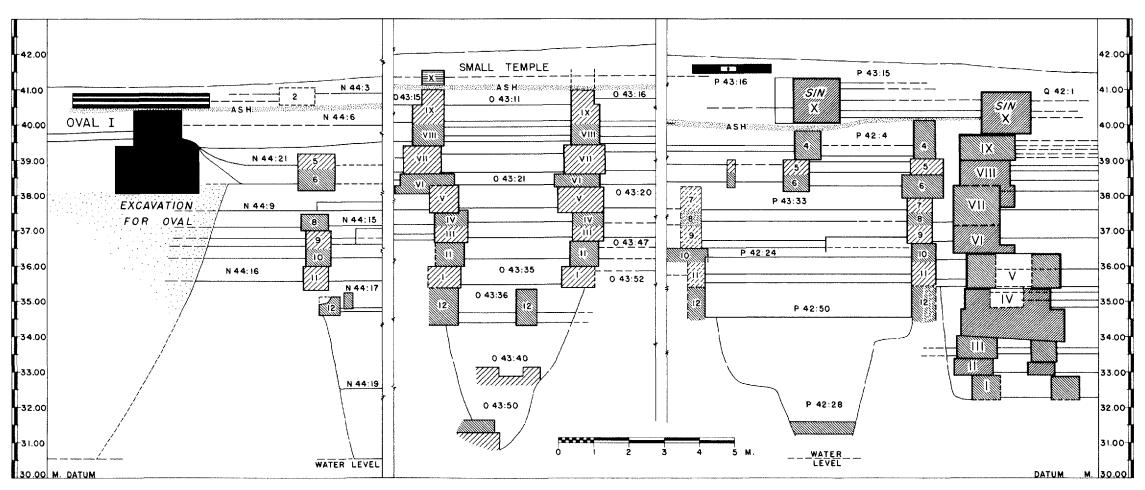


Plan of Part of the Walled Quarter (black) East of the Temple Oval at Khafajah, Showing Walls of Earlier Houses (hatched) and of the Nintu Temple (stippled). Scale, 1:250

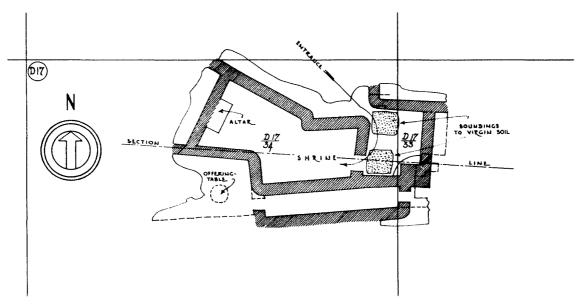


Plan of the Nintu Temple at Khafajah during Sixth Building Period of Q 45:4. Early Dynastic II. Reconstructed Walls Hatched. Scale, 1:250

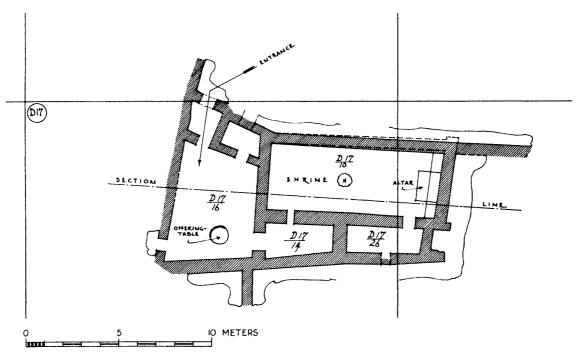




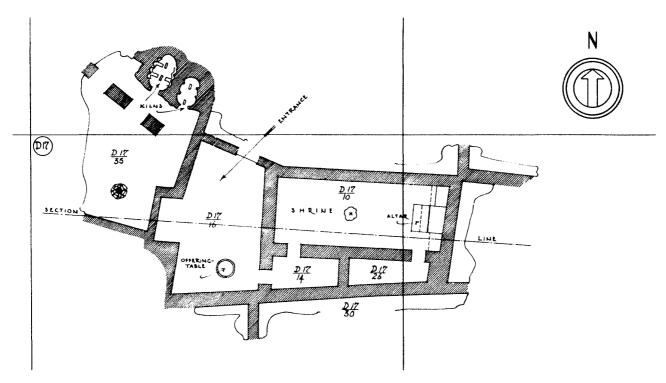
Section through the Small Temple in O 43 Compared with Partial Sections of the Temple Oval and Sin Temple and the Houses in Their Immediate Vicinity. Scale, 1:100



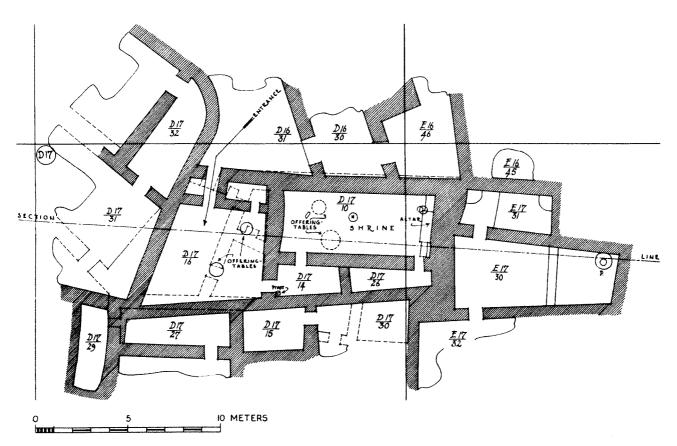
A. Plan of the Earliest Shrine of the Abu Temple at Tell Asmar. Proto-literate d. Broken Lines Indicate Rebuilding. Scale, 1:200



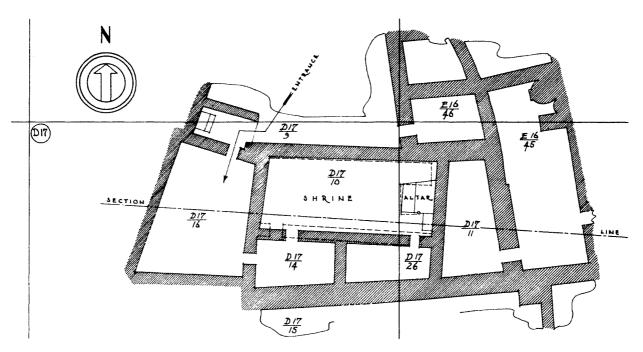
B. Plan of Archaic Shrine I of the Abu Temple at Tell Asmar. Early Dynastic I. Broken Lines Indicate Rebuilding at Level I B. Scale,  $1\!:\!200$ 



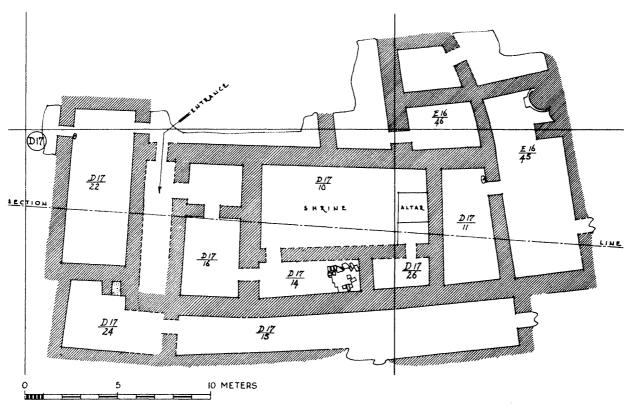
A. Plan of Archaic Shrine II of the Abu Temple at Tell Asmar. Early Dynastic I. Hatched Walls Belong to Level II B, Altar Drawn in Broken Lines to Level II A. Scale, 1:200



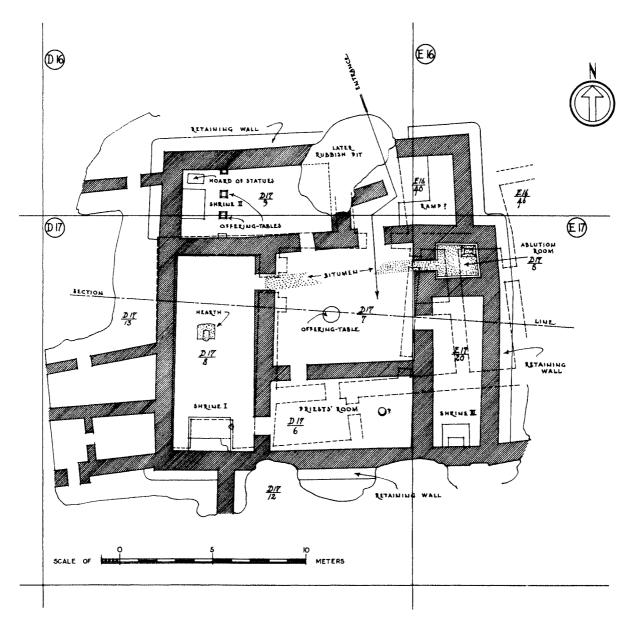
B. Plan of Archaic Shrine III of the Abu Temple at Tell Asmar. Early Dynastic I. Broken Lines Indicate Reconstruction at Level III B. Scale, 1:200



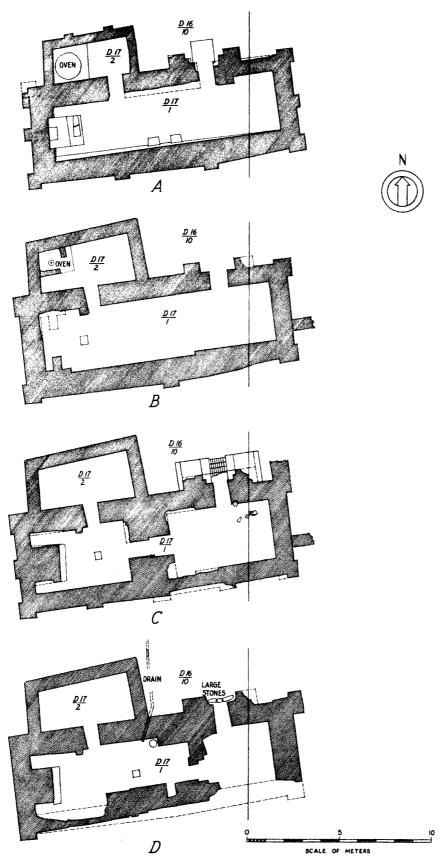
A. Plan of Archaic Shrines IV A-B of the Abu Temple at Tell Asmar. Early Dynastic I. Broken Lines Indicate Reconstruction at Level IV B. Scale, 1:200



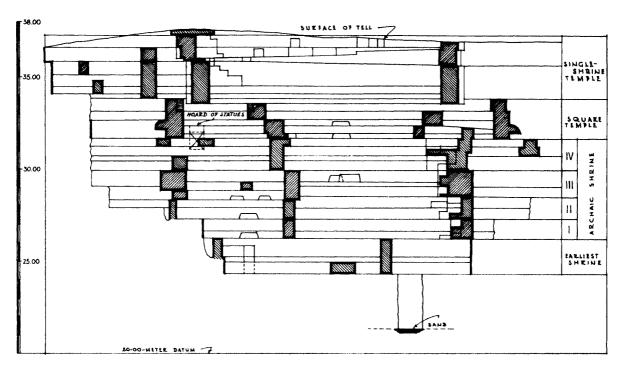
B. Plan of Archaic Shrine IV C of the Abu Temple at Tell Asmar. Early Dynastic I. Scale, 1:200



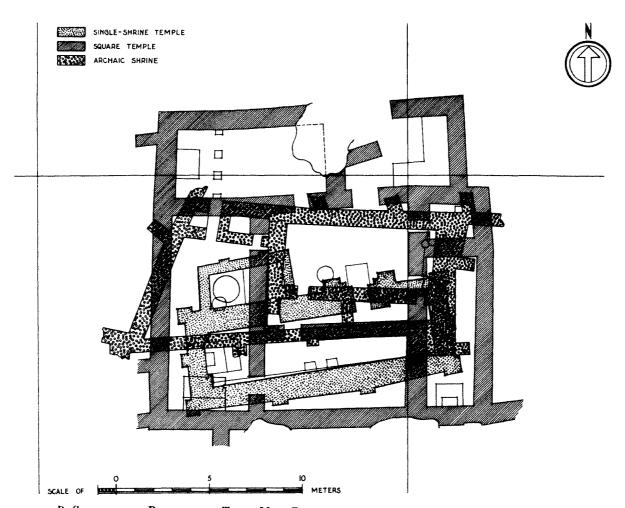
Plan of the Square Abu Temple (hatched) and Its Immediate Predecessor (in broken lines) at Tell Asmar. Early Dynastic II. Scale, 1:200



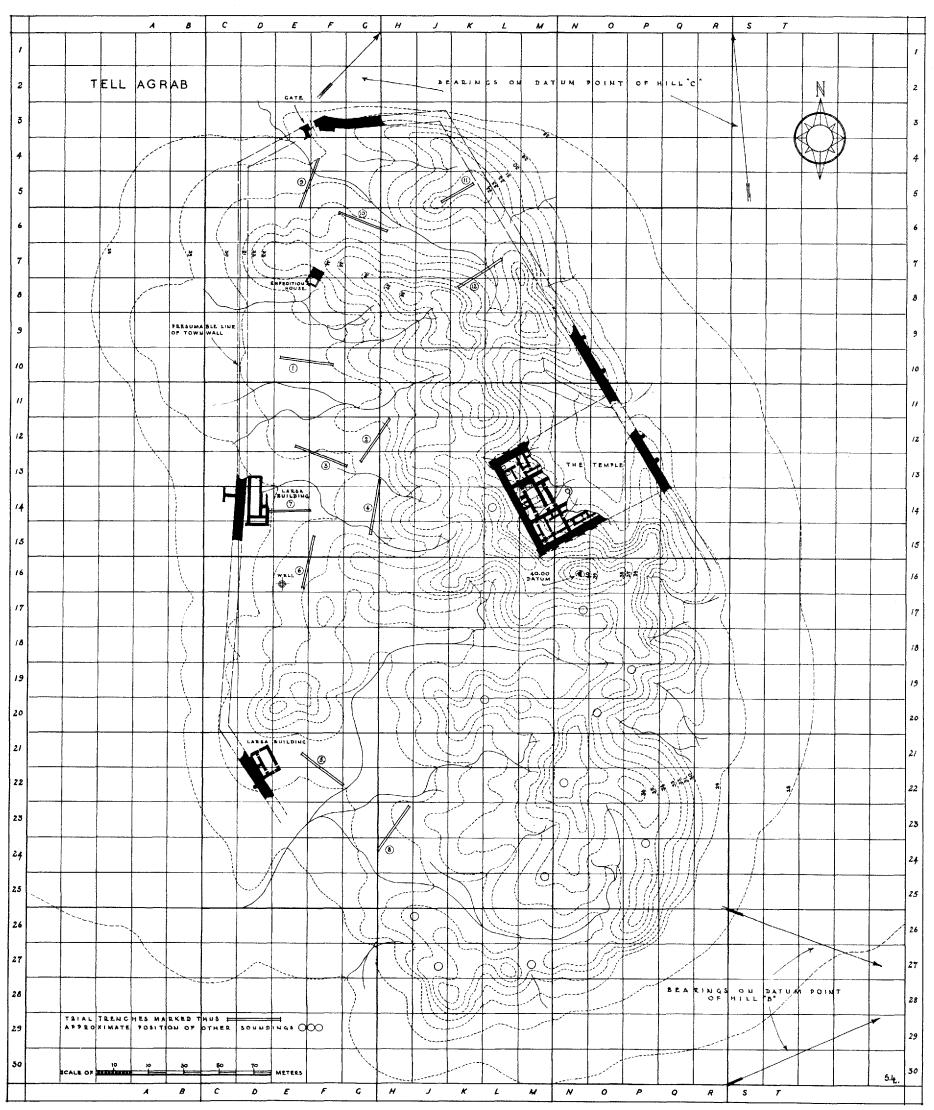
Plans of the Single-Shrine Abu Temple at Tell Asmar. Early Dynastic III to Akkadian. Scale, 1:200



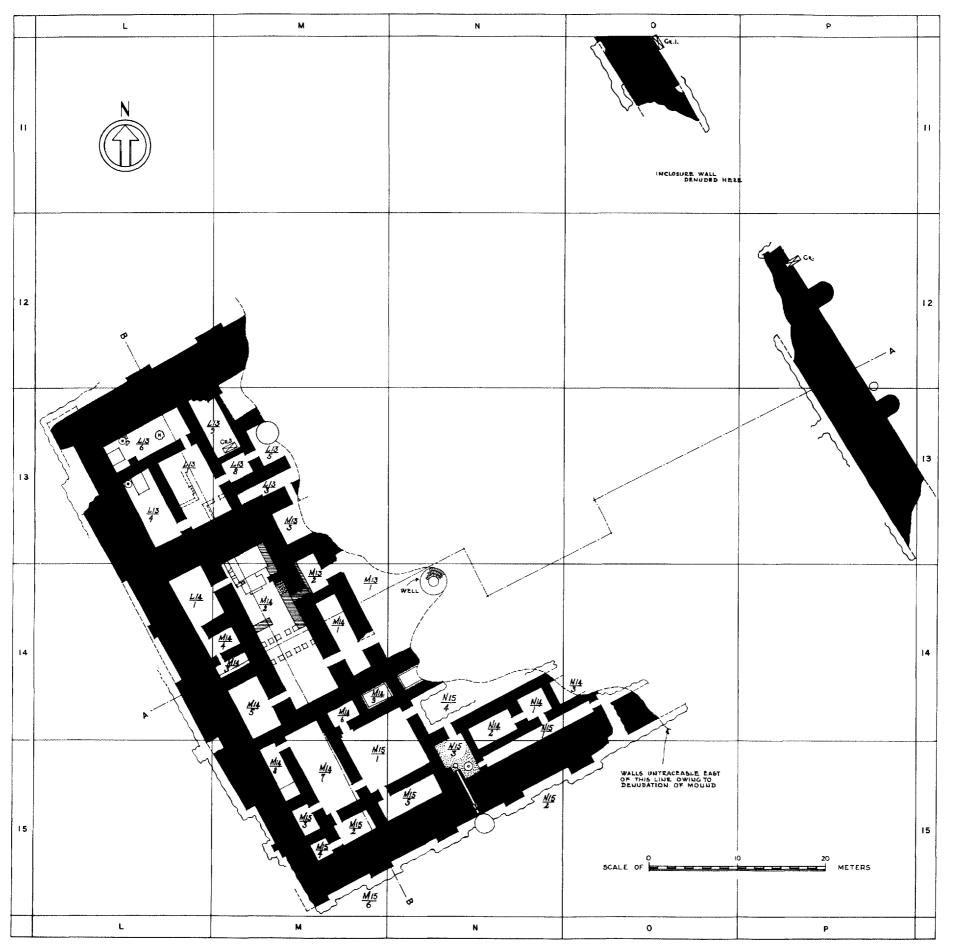
 $A.\ \mathrm{West ext{-}East}\ \mathrm{Section}\ \mathrm{through}\ \mathrm{the}\ \mathrm{Abu}\ \mathrm{Temple}\ \mathrm{at}\ \mathrm{Tell}\ \mathrm{Asmar}.\ \mathrm{Scale},\,1:200$ 



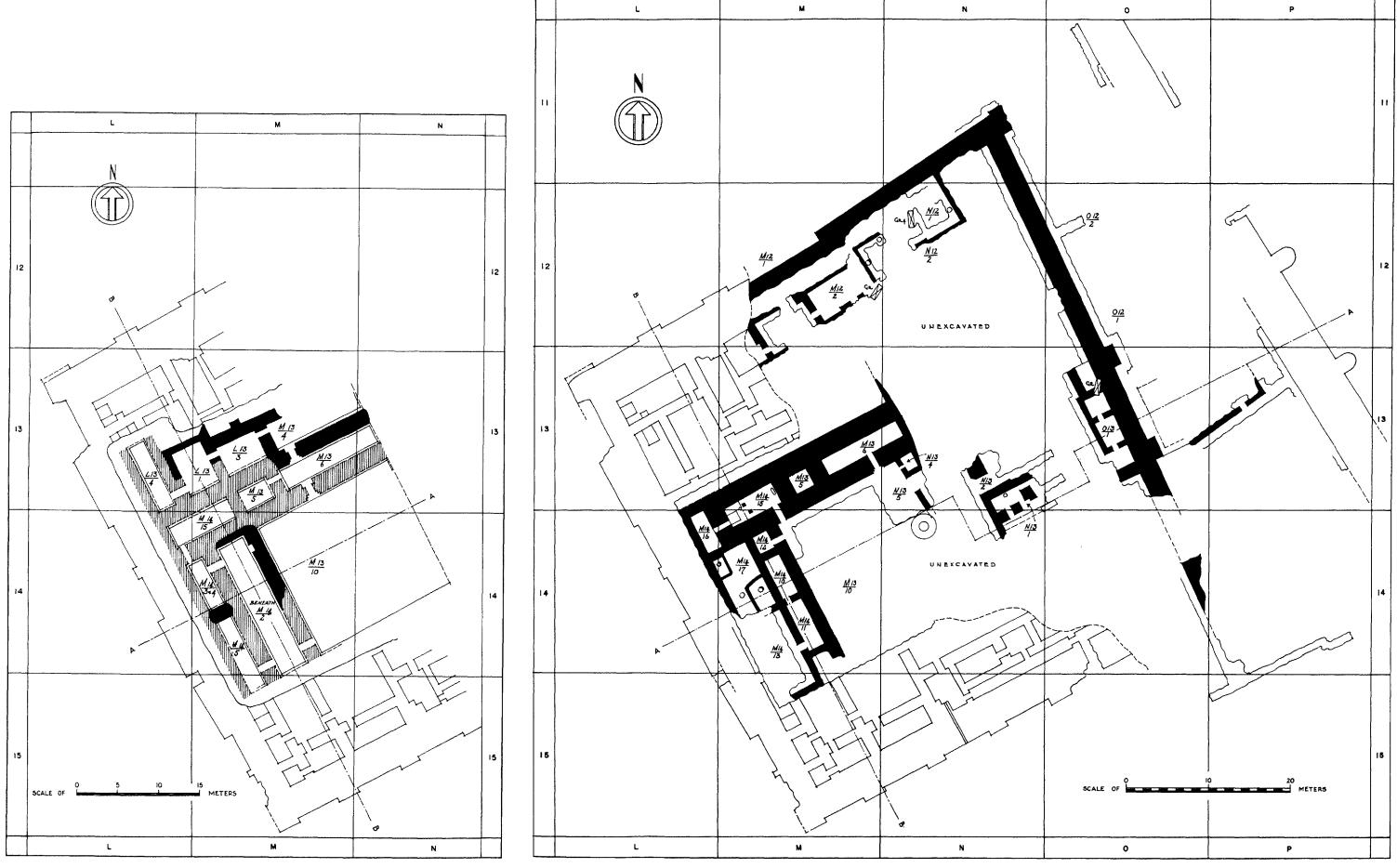
B. Superimposed Plans of the Three Main Periods of the Abu Temple: Archaic Shrine III, Square Temple, and Single-Shrine Temple I. Scale, 1:200



Contour Map of Tell Agrab, Showing Excavated Areas. Scale,  $1\!:\!2000$ 

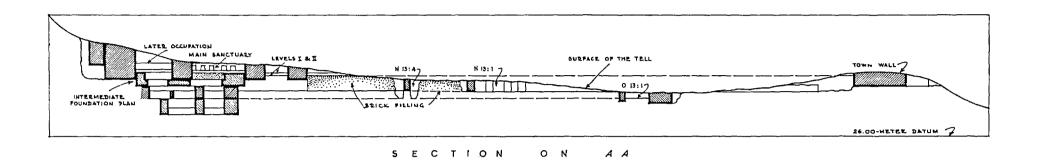


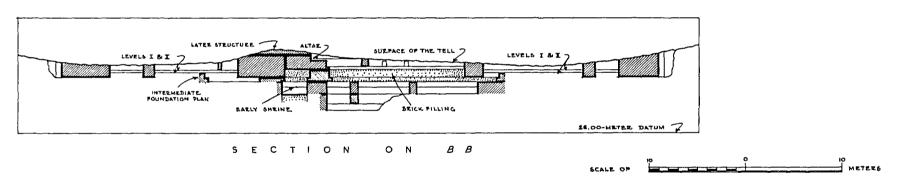
Plan of the Main Level of the Shara Temple and the Town Wall at Tell Agrab. Early Dynastic II. Scale, 1:400



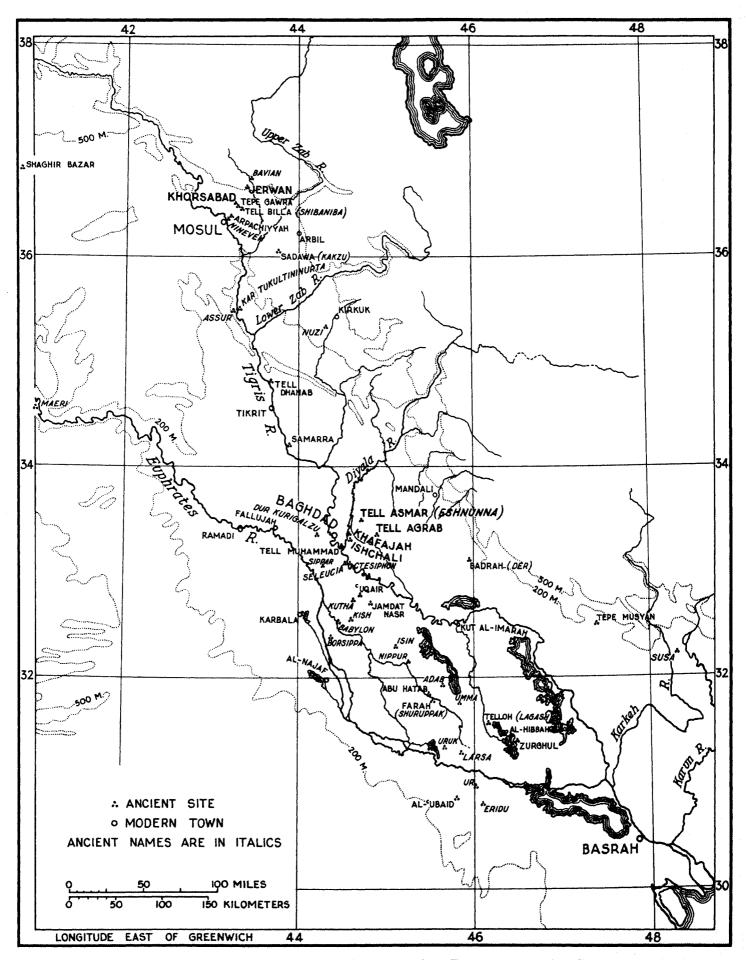
A. Plan of the Intermediate Foundations of the Shara Temple at Tell Agrab. Early Dynastic II. Scale, 1:400

B. Plan of the Earlier Shara Temple at Tell Agrab. Early Dynastic II. Scale, 1:400





Sections on AA and BB through the Shara Temple at Tell Agrab. Scale, 1:400



Map Showing Location of Major Sites in Mesopotamia. Sites Excavated by the Iraq Expedition are Shown in Larger Characters

In this chart the various remains are dated to the periods in which they were built. As shown by arrows, some of these buildings survived in use from one period into another (cf. pp. 5 and 123). There is no vertical time scale, and the main subdivisions of cultural periods are all given the same space. Any one building period is related only to those above and below it. Subdivisions of different buildings which happen to fall on the same horizontal line within a cultural period are not necessarily strictly contemporaneous. For estimates of the duration of building periods at Khafajah and of the cultural periods involved see pages 125–35 and Figure 115.

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### CORRELATION OF PRE-SARGONID TEMPLES AT KHAFAJAH TELL ASMAR, AND TELL AGRAB

		КНАГАЈАН						TELL ASMAR	TELL AGRAB
		Sin Temple	Houses Levels	SMALL TEMPLE IN O 43	Nintu Temple	SMALL SINGLE SHRINE IN S 44	Temple Oval	ABU TEMPLE	Shara Temple
PROTO- IMPERIAL PERIOD								Single-Shrine III II	
EARLY DYNASTIC PERIOD	III b		1 2		Aban- doned	Cella only	—↑— III	Single-Shrine I	Latest building
	III a	X ↑	3	X IX	VII	Unexca- vated	II ↑		
	II	IX VIII	4 5 6	VIII VII VI	VI V		I	Square Temple	Main level Intermediate foundations Earlier building
	I	VII	7 8 9	V IV III II	IV III II —— I ——			Archaic Shrine IV III II I	Earliest re- mains
PROTO-LITERATE PERIOD	d	V	11 12	1				Earliest Shrine  3 meters of occupational debris	Unexcavated
	c	III	Isolated brick- work					Virgin soil	
		Wate	Uncon- nected re- mains er level						