

ALBERT RECKITT ARCHAEOLOGICAL LECTURE

ELAMITE PROBLEMS

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Read 17 December 1969<sup>1</sup>

THE honour of giving this Memorial Lecture is one that pleases me much, for I travelled with Albert Reckitt to Ur of the Chaldees more than forty years ago. He was a munificent supporter of those rewarding excavations which were destined to yield so much information about the impact of Babylonia and Elam upon one another.

These two territories marched closely together; there were times when the great Elamite city of Susa was politically dominated from the capital cities in the Euphrates valley; conversely it seems that two of the oldest cities in the Sumerian King List, Larak and Shurruk, may bear Elamite names, and may therefore have been Elamite foundations.<sup>2</sup> Here already is one problem for further investigation.

There was indeed much that the two countries had in common, although we must remain conscious of the profound differences between them. Both enjoyed the fruits of a fertile alluvial plain and already by the fifth and fourth millennia before Christ had achieved a material prosperity which found expression in populous and prosperous cities. But Elam, a

<sup>1</sup> In abbreviated form, illustrated with lantern slides. I have pleasure in acknowledging my profound debt to Monsieur R. Ghirshman who has generously allowed me to reproduce a map showing the course of 'the Darius canal', and a number of plans and illustrations from his *magnum opus* on Choga Zanbil which has so widely enlarged our vision of ancient Elam. I am furthermore indebted to the Trustees of the British Museum, to Monsieur André Parrot, and to Messrs. Thames and Hudson who through the kindness of Mr. Peter Clayton have authorized me to reproduce a number of half-tone plates.

<sup>2</sup> They were ruled by pre-Diluvian kings. For early 'Elamite' place names in Mesopotamia see E. A. Speiser, *Mesopotamian Origins* (1930), pp. 42 f.: 'Akshak, Eshnunnak, Apirak and the like betray themselves immediately by their ending.' See also C. J. Gadd in *C.A.H.*, vol. i, ch. xiii (1962), p. 7, and reference to E. Sollberger (ed.), 'Aspects du contact suméro-akkadien' in *Genava*, n.s. 7 (1960), pp. 241 f. Earlier references to discussions on the subject by A. Ungnad and B. Landsberger are given in S. A. Pallis, *The Antiquity of Iraq* (1956), pp. 450, 454.

federation of tribes distributed over the plains of Susiana and the mountains of Anshan on its eastern flanks, approximately coterminous with the present-day territory of the Bakhtiari, disposed of less *Lebensraum* than Babylonia: it was probably at most periods a less populous country, and although there were remarkable developments in architecture the scale was usually smaller than that of Babylonia even allowing for many grandiose adventures, for example at Choga Zanbil (figs. 1, 2, 13).

We may be certain that there were in antiquity as many racial, physical, sociological,<sup>1</sup> and religious differences between the peoples of these two territories as there are today. The same profound differences are to be detected in the language and the writing;<sup>2</sup> but here we seem to be justified in giving an answer to one of the constant problems that must exercise the minds of all who consider the comparable developments of civilisation in each of these important tracts of Western Asia. Who influenced whom? Who is to be given the claim for priority in the innumerable technological developments that archaeology has revealed on either side of the frontier?

Already before 3000 B.C. a pictographic script had been invented and was freely used in the great Babylonian cities of the southern Euphrates, notably the ancient Uruk, which within less than two centuries had developed into the partly syllabic script of Jamdat Nasr where we may definitely trace the hand and the mind of the Sumerian genius. The same sequence of development occurred in Elam,<sup>3</sup> and it is now

<sup>1</sup> A unique feature of the Elamite ruling house was the tendency for brother to succeed brother and to take over the deceased brother's wife. Religious practices were often closely allied in the two countries. See W. Hinz in *C.A.H.*, vol. i, ch. xxiii (1963), p. 21: '[Elamite] religion had much in common with that of neighbouring Mesopotamia, but a well defined Elamite character is always present.'

<sup>2</sup> The affiliations of the Elamite language are not yet known, but it can be said with certainty that it is not related to any of the Semitic languages nor is it an Aryan tongue. It has been stated by Gerard Clauson in *Antiquity*, vol. xliii, no. 171 (September 1969), that Elamite and Dravidian are genetically related, p. 202, following I. M. Dyakonov. This line of investigation may be promising but the relationship is as yet far from certain. See also n. 1 on p. 291 below.

<sup>3</sup> But admittedly, the earliest traces of writing so far discovered in Elam have already advanced beyond the stage known as Uruk IV to one that may be considered the equivalent to Jamdat Nasr (Uruk III). There are, however, some pictographic signs on the earliest Proto-Elamite tablets. List of signs on the tablets from Susa, see *M.D.P.* xvii (1923), pp. 31-66. But early, Uruk IV-stage tablets are now reported from Tepe Yahya (1970).

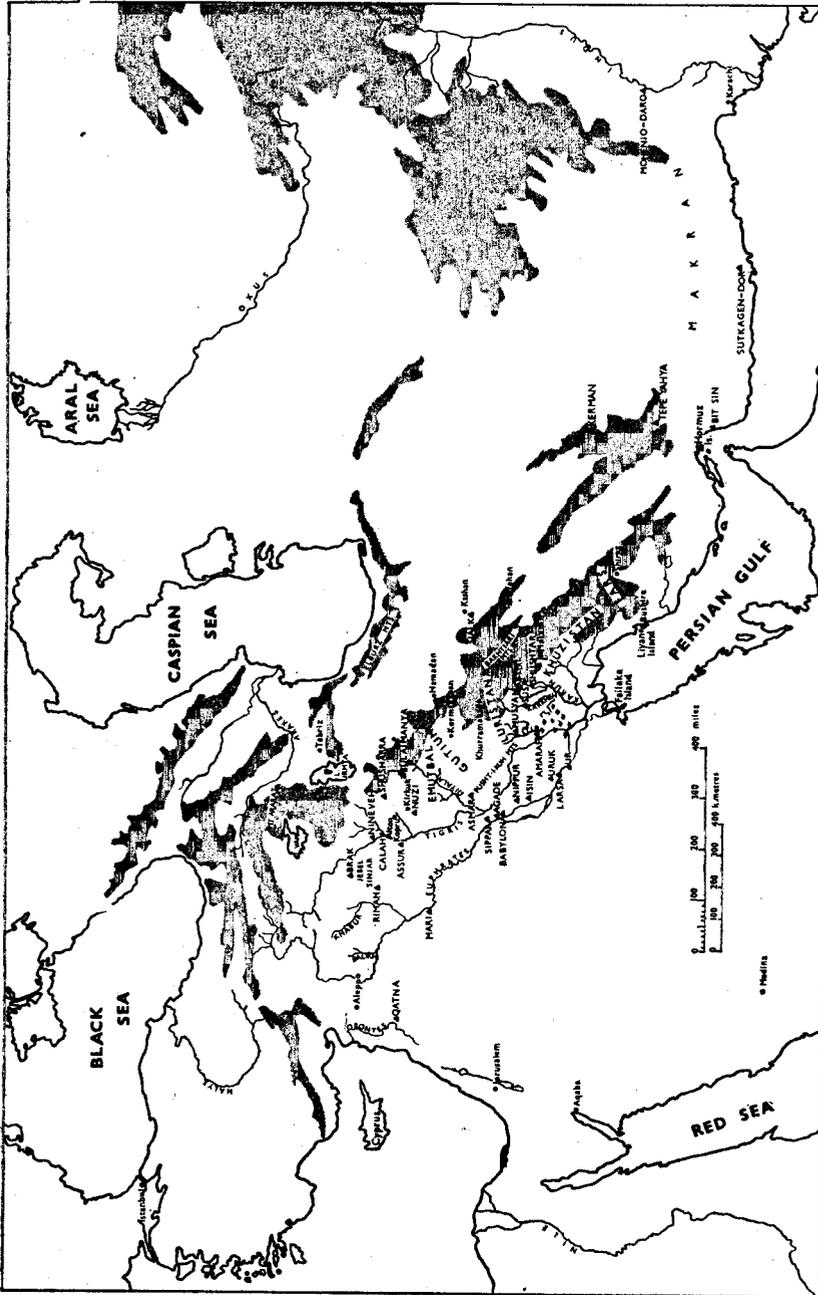


Fig. 1. Mesopotamia and Western Iran.

accepted by the majority of expert opinion that this astounding invention was made slightly earlier in Babylonia, and thence perhaps transmitted by the Sumerian scribes directly into the city of Susa: this hypothesis is based on the comparative archaeological evidence of stratification at Uruk and at Susa and has been well demonstrated by L. Le Breton.<sup>1</sup> Proto-Elamite, however, was distinct from Mesopotamian and expressed an entirely distinct language.

In this case examination of the linguistic evidence agrees perfectly with the archaeological, for in the subsequent transformation of a partly pictographic linear script into a cuneiform it can be seen that the Elamites had to contend with many difficulties in conscripting a signary congenial to the Akkadian language, but by no means suitable to their own. Here certainly we have a case of Elamites borrowing from Babylonia, but in return, as is thought by some authorities, they may well have been responsible for imposing the decimal system on the sexagesimal system of Sumerian reckoning as well as binary fractions—if that be so, the return they made was not a small one.<sup>2</sup>

As early as the twenty-third century B.C. the Elamites were freely writing their own language in a cuneiform script, and about this time already we have a remarkable document in that script, composed in the time of Naram-Sin of Agade *c.* 2290–2250 B.C.; it is a vassal treaty probably imposed on Khita, king of the Elamite city of Awan, the location of which is still not yet known, and inevitably we look round at the Mesopotamian monuments to see if there is any corresponding pictorial record of that triumph. I venture to make a suggestion that may be thought overbold, namely that the famous frieze made of Persian alabaster and known as the Nasiriya Stele (Pls. I, II), attributable to king Naram-Sin because it is in the fine style of works of art contemporary with that monarch, may represent his historical victory over the Elamites.<sup>3</sup> The scene illustrates a frieze of

<sup>1</sup> *Iraq*, xix (1957), pp. 104 f.; W. Hinz, *Das Reich Elam*, pp. 23 f. The script appeared in Sialk not long after its first appearance in Susa and is usually also termed Proto-Elamite. But the language is not yet deciphered and we do not know the extent of the linguistic relationship, if any. R. Ghirshman, in *Iranica Antiqua*, iii. 1 (1963), p. 3, has erroneously attributed to C. J. Gadd the opinion that the Proto-Elamite script might have been prior to the Sumerian. Gadd's remarks in *C.A.H.*, vol. i, ch. xiii, p. 5, have unfortunately been misquoted and misunderstood.

<sup>2</sup> W. Hinz in *C.A.H.*, vol. i, ch. xxiii (1963), p. 35.

<sup>3</sup> E. Strommenger and M. Hirmer, *The Art of Mesopotamia*, pl. 118, 119.

prisoners, naked, fettered, with their necks confined in stocks. The treatment of the hair, frizzy, with long locks pendent at the back, thin moustaches, and the physiognomy, especially the noses, makes it possible to think of these unfortunate captives as Elamites: they cannot be Babylonian. The identification of the persons represented on this beautifully carved monument may therefore be reckoned as one of our many Elamite problems. This one cannot yet be solved for there are other Iranian, or Anatolian tribesmen whom various authorities identify as the victims of this Akkadian triumph.<sup>1</sup>

However, much evidence of Mesopotamian contact with Elam, long before the reign of Naram-Sin, has been made known to us from the historical records. I can only touch on one body of archaeological evidence which seems to me to illustrate in a remarkable way the part played by Elam as an intermediary in the spread of long-distance trade. The evidence consists of a series of vases, usually carved in a dark stone, some, but not all of it steatite, decorated with a wide repertoire of designs,

Campaigns against Elam: C. J. Gadd in *C.A.H.*, vol. i, ch. xix (1963), pp. 30, 31. Account of the Treaty in W. Hinz, *Das Reich Elam* (1964), pp. 63 f. Although the tablet found at Susa on which the text was written is fragmentary and damaged it is virtually certain that the name Khita may be read as proposed by G. G. Cameron and accepted by Hinz.

<sup>1</sup> Faraj Basmachi has identified the captives as Lullubi in comparison with figures on the Darband-i-Gawr rock relief. *Sumer*, 10 (1954), pp. 116-19, and *Sumer*, 13 (1957), p. 222, figs. 1-2, illustrates the restored stela, now exhibited in the Iraq Museum, Baghdad. A stronger case, for identification with prisoners and booty from an Anatolian campaign conducted either by Sargon or by Naram-Sin, has been made by M. Mellink; see *Anatolia*, vii (1963), pp. 101 f. But I am not convinced by the comparisons of objects illustrated on the stela with Trojan and Cilician material. It is alleged that a *depas amphikypellon* is carried by one of the soldiers and is typical of Troy II-IV; but the vase carved on the monument is much larger in scale—all the Trojan examples are relatively small. Heavy metal vessels of this kind were so valuable that they have hardly ever survived and it is not surprising that none of them has been found in Elam or anywhere else. Moreover, the stela is broken away below the shoulder of this vase and we cannot decide on the original shape; it might have had a big galb and a pedestal base. I am doubtful if Mellink is right in assuming that this was a fluted vessel; other explanations are possible for the markings between the two handles. The daggers could be matched in the Royal Cemetery of Ur and might well have been at home in Susa where Naram-Sin's writ was paramount. As I have stated in the text, the physiognomy and the hair-style must be taken into consideration. We have to return a verdict of not proven, but we should not exclude the possibility of identifying the captives and the booty as Elamite—and what more appropriate medium could there be than Persian alabaster for the register of Naram-Sin's triumph in Elam?

animal and vegetable, geometric, architectural, mythological. One of the most remarkable specimens (Pls. IV, V) comes from Khafajah in the Diyala valley and is of the period known as Early Dynastic III,<sup>1</sup> not later than *c.* 2550 B.C. Here we see a scantily clad goddess (?) whose head looks like a caricature of Elamite physiognomy; big nose, thick lips, receding forehead, long twisted hair, and pigtail. She figures together with Arni cattle or Indianesque bulls and in one setting holds serpents; in another, running water flows from her hands; she is also accompanied by lionesses, a rosette, and other plants. This is an atypical specimen of a stone ware which has been found in an astonishing variety of places ranging from Syrian Mari on the Euphrates (Pl. III), through sites in the Diyala valley, to the Royal Cemetery of Ur, Kish, Susa, Persian Baluchistan, and finally the Indus valley. A fragment of a vase with a matted design from Kish exactly matches another from Mohenjo Daro. Some of the most interesting are ones that depict the façades of matted shrines and the sagging roof poles of their entrances. Amiet says: 'Ils évoquent apparemment une architecture exotique en clayonnage et semblent avoir été importés d'Iran, ou exécutés sur place, par des sculpteurs ambulants.'<sup>2</sup> Indeed some time ago, Amiet and I came to the conclusion independently that this lapidary work was Elamite. The fact is that more specimens have been found at Susa than anywhere else, and that Susiana is admirably placed as a distributing centre towards the Euphrates on the one hand and the Indus valley on the other.

In this transcontinental trade it now seems probable that the inland region of southern Iran played an important part, for recently some significant evidence has come from the site of Tepe Yahya which is situated in a fertile river valley about

<sup>1</sup> Frankfort, *A.A.A.O.*, pl. 11B and fig. 9 on page 19 illustrates and discusses this and cognate stone bowls. It is probable that the style of carving originated in E.D. II. This specimen now in the British Museum is thought by some to have been plundered from Khafajah, Sin Temple IX, where other broken vases of a similar style were found. In note 6, ch. ii, *op. cit.*, p. 237 it is implied that this style of carved vase probably began in E.D. II, as would appear from the discovery of at least one specimen in an E.D. II context; see *O.I.P.* lviii, p. 143, Kh. IV 314, a double stone vessel from Sin Temple VIII therefore E.D. II, yet to be published in detail. But *op. cit.*, p. 69 and fig. 63 make it clear that the majority of these specimens were found in Sin Temple IX, that is in E.D. III context, and this is the period at which on present evidence we may assume that exports to the Indus valley became common but the trade probably began earlier. See also commentary and illustrations in *O.I.C.* no. 19, 1933-4, figs. 53-7 and p. 53.

<sup>2</sup> Amiet, *Elam*, p. 149.

150 miles south of Kerman. Within this great mound, in Period VI, there were many specimens and fragments of elaborately incised steatite bowls of the type we have dubbed Elamite; in addition there was a fragmented model of a human figure in the same material. Here we have an ancient trading station on the road to India, lying just clear of the difficult country on the coastal fringe.<sup>1</sup>

All this I have no doubt was a part of the stock-in-trade which linked Mesopotamia and Elam through Magan and Meluhha with India. I notice in archaeological writing that Meluhha, the name of which figures freely in the cuneiform texts from the time of Ur Nanshe, Sargon and Gudea, is gradually coming to be used by archaeologists as synonymous with India. That trend was begun by my learned colleague S. N. Kramer, but I think it is safer to think of Meluhha as generally coterminous with the great hinterland of territory east of Elam, an intermediary in the transcontinental trade with India.<sup>2</sup>

Consideration of Meluhha leads us to inquire what part the Elamites may have played in trade with India, overland and along the Persian Gulf (fig. 2). Unfortunately the literary evidence here is defective and we have to rely on archaeology alone.

<sup>1</sup> C. C. Lamberg-Karlovsky, Tepe Yahya in *Iran*, vii (1969), pp. 184 f. and map on p. 169. I understand from a letter dated 24 November 1969 kindly sent to me by the excavator, together with a number of illustrations, that many more specimens of this material have been found in the course of the second season's work at the site. There appears to be decisive evidence that some of these steatite specimens are to be associated with the Agade period as is indicated by both seals and pottery, while other specimens are to be dated to E.D. III. Moreover there appears to be a long tradition of carving at this site where some specimens were undoubtedly made locally. It may well be that eventually much earlier antecedents for this kind of workmanship will come to light, and we may still reckon that Elam and Anshan may have been an important source for it. On the present evidence we may take it as proven that some of these vases must date from the mid-third millennium B.C. and reflect a trade which was already flourishing in the E.D. III period of Mesopotamia. I am indebted to Dr. P. R. S. Moorey for the suggestion that these discoveries may be a reflection of an overland trade with India, and the evidence provided by C. C. Lamberg-Karlovsky certainly substantiates this theory which can only be fully proven when more related discoveries come to light in the Indus valley and elsewhere.

<sup>2</sup> M. E. L. Mallowan, 'The Mechanics of Ancient Trade in Western Asia', in *Iran*, iii (1965), pp. 1 f. But note that direct contact between Babylonia on the one hand and Magan and Meluhha on the other appears to have ceased in the Larsa period, when the trade was in the hands of Babylonian merchants rather than foreign sailors. A. L. Oppenheim, 'The Sea-Faring Merchants of Ur', p. 15 in *J.A.O.S.* lxxiv, no. 1 (Jan.-Mar. 1954).

A. L. Oppenheim has demonstrated that in the Larsa period the long distance trade in the direction of India had shrunk, and this appears to coincide with the period at which the Indus valley cities were on the decline.<sup>1</sup> However that may be, there is one most important document for our consideration: a tablet written in the tenth year of Gungunum, king of Larsa, 1923 B.C.,

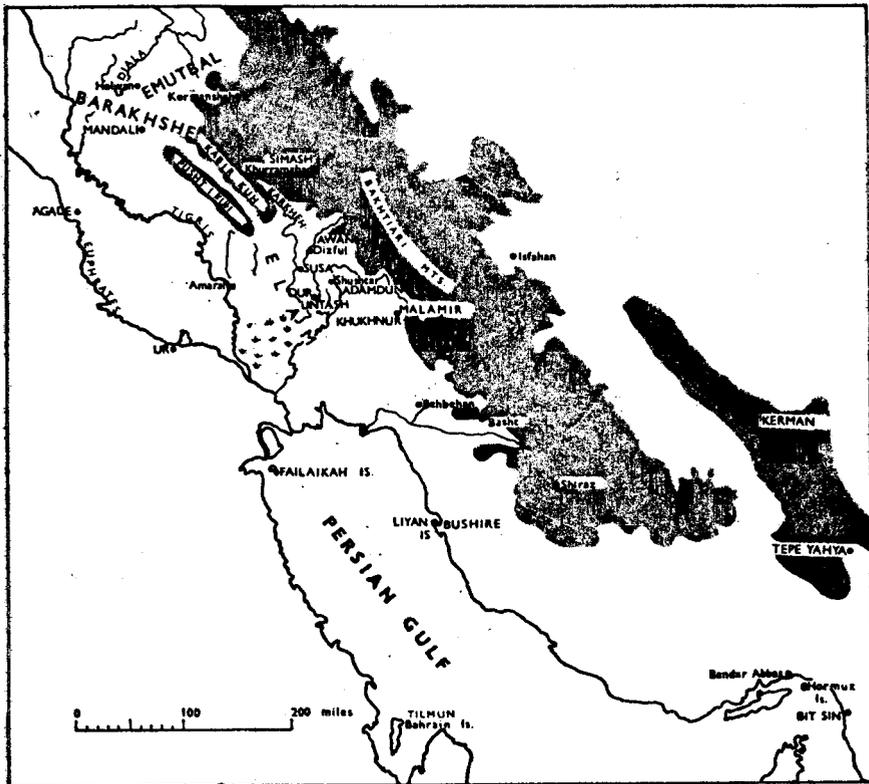


FIG. 2. Elam and Anshan, Babylonia and Emutbal.

relating to the consignment of wool, wheat and perhaps linseed<sup>2</sup> to a trading station not far away on the Persian Gulf. The document bears the stamp of an Indian-style bull's head, as has been well demonstrated by Briggs Buchanan,<sup>3</sup> and indicates

<sup>1</sup> Oppenheim, *op. cit.*, p. 12. No evidence of ivory imports after the end of the Larsa period.

<sup>2</sup> Not sesame, the usual mis-translation in the texts, for Helbaek has demonstrated that this plant was not imported to Western Asia before about A.D. 1000. See M. E. L. Mallowan, *Nimrud and Its Remains*, vol. ii (1966), p. 618.

<sup>3</sup> W. W. Hallo and Briggs Buchanan, *Studies in Honour of Benno Landsberger* (1965). A 'Persian Gulf Seal on an Old Babylonian Mercantile Agreement', pp. 199-209 and pl. XVI.

that this maritime trade which many centuries earlier was doubtless directly connected with the Indus valley had not altogether forgotten those connections. This 'Indianesque' style stamp together with the evidence of many other tablets therefore makes it plain to us that the dynasty of Larsa was, through the port of Ur, conducting an extensive trade on the Persian Gulf and doubtless therefore touching at sea ports in Elamite territory. It seems likely that a trade war was going on and this may account for the fact, known from the historical records, that Gungunum devastated Bashimi, an Elamite city, overran Anshan, and brought the powerful dynasty of Simash to an end.<sup>1</sup>

We may be certain that in the great days of Sargon of Agade, c. 2370 B.C. when ships of Magan and Meluhha were moored on the quays of that king's capital, the Elamites were involved in that trade, for we know that they had an important centre on the island of Liyan near to where present-day Bushire is situated, on the Persian Gulf. At that site early Elamite inscriptions have been found, although the evidence that there was a sanctuary dedicated to the goddess Kiririsha,<sup>2</sup> one of the most powerful in the Elamite pantheon, as early as the third millennium B.C. has now been denied. At a later date under the middle Elamite kingdom she was no doubt well established as the protectress of merchants involved in a distant and hazardous trade. There is no need to assume that the Elamites swayed a maritime empire; but they must have been beneficiaries of the Persian Gulf Trade, not only through trading stations along the Gulf, but through their occupation of sites in the hinterland, as is known from the traces of them which have been found at Behbahan, Basht, and in the district of Shiraz. The ramifications of Elam must have extended far beyond the plains of Susiana

<sup>1</sup> C. J. Gadd in *C.A.H.*, vol. i, ch. xxii (1965), p. 40.

<sup>2</sup> W. Hinz in *C.A.H.*, vol. i, ch. xxiii (1963), p. 22. See now, however, Erica Reiner, in *J.N.E.S.* xxiv (1965), pp. 337 ff., *contra* Hinz. It would appear that the dating of an Elamite royal inscription in Liyan on the Persian Gulf to the middle of the third millennium B.C. is unwarranted, nor is there yet any evidence for projecting the cult of the goddess Kiririsha into this remote period. On the other hand this critic appears to underestimate the antiquity of this site which undoubtedly contains remains of the third as well as the second millennium B.C. It seems highly probable that early Elamite buildings and other remains, perhaps even inscriptions, would be found here if excavations were resumed. I myself examined the site some years ago and believed that I could detect traces of substantial mud-brick buildings. For evidence of early pottery and stone ware see M. Pézard, 'Mission à Bender-Bouchir', in *M.D.P.* xv (1914).

and the mountains of Anshan.<sup>1</sup> This surmise brings me back to the aforementioned document of king Gungunum whose city Larsa was, as we know, later to be dominated by a dynasty that might be described as 'Elamite'. We may take it as probable that at that time many Elamites were scattered throughout the cities of Babylonia: indeed Ishbi-Erra the king of Isin in about 2000 B.C. boasted of his capture of the Elamite 'who was dwelling in the midst of Ur', and indeed at that period other cities including Eshnunna (T. Asmar) on the Diyala were centres of Elamite influence.<sup>2</sup>

However that may be, a notable event in the annals of the Babylonian city of Larsa was the ascent to the throne of a dynasty sired by a ruler named Kudur-Mabuk whose bricks we used to find in the private houses of Ur which at that time was subject to Larsa. One element in that name, Kudur, is Elamite, the equivalent of Kutir; Mabuk is an unknown quantity; moreover his father's name, Simti-Shilkhak, was purely Elamite. Incidentally the memory of this Elamite was long lived, for Nabonidus the last king of Babylon, who excavated in Ur some thirteen centuries later, wrote on a cylinder 'I saw the old inscription [from the time of] the priestess of Ur, daughter of Kudur-Mabuk sister of Rim-Sin, king of Ur who had founded and restored E. GI. PAR'—the name of the High Priestess's Convent which was situated near the ziggurat. But the most interesting information that we have about Kudur-Mabuk is that he, a prince with an Elamite name and of Elamite parentage, was also styled 'father of Amurru, and of Emutbal' which as Gadd has noted lay in the plains east of the Tigris and in front of the mountains, the district traversed by the Diyala rivers.<sup>3</sup> Amurru of course signified the land west or north west

<sup>1</sup> But I would hesitate to see, as Monsieur Ghirshman does, traces of Elamite influence at Sialk, a region which seems outside the sphere unless we except Proto-Elamite Tablets, see *Tchoga Zanbil*, ii, p. 117.

<sup>2</sup> References: C. J. Gadd, *C.A.H.*, vol. i, ch. xxii (1965), pp. 38 f., and Bibliography. Bilalama of Eshnunna besides marrying his daughter to an Elamite, summoned the Elamites to his aid as we learn from a date formula which runs: Year: 'He roused the Elamites'; that is, summoned them to his aid, see *O.I.P.* xliii, p. 184. This evidence agrees well with *Texts in the Iraq Museum*, vol. iv, *Old Babylonian Contracts and Juridical Texts* (Wiesbaden, 1967), nos. 33, 34 which are court decisions made by judges in Eshnunna who call themselves servants of Kuduzuluš a *sukkal* of Elam. We thus have cumulative evidence that not long after 2000 B.C. Elamite writ was powerful in at least one city in the Diyala valley. This text was first noticed by J. van Dijk as I have been informed by the kindness of Professor J. Laessøe.

<sup>3</sup> Gadd, *op. cit.*, p. 47.

of Babylonia, Syria in general, while Emutbal was a territory on the border of Elam and doubtless the Amorite tribes who had settled there were vassals of the Eparti kings of Elam.

Although Gadd suspects that Kudur-Mabuk and his father 'had probably assumed names in compliment to the Elamite court', I see every reason to believe that both father and son had Elamite blood in their veins, for there is at this period ample evidence of intermarriage between widely separated royal houses of different stock.<sup>1</sup>

Whatever the correct answer may be, it is clear that there was intermingling of the Amorite and Elamite tribes as wave after wave of the former moved to the fringes of Iranian territory, and as the latter constantly made their presence felt in Babylonia. A clear understanding of the position helps us to appreciate the highly relevant archaeological evidence which abundantly illustrates the process of technological cross fertilization between the two territories.

This process we may see in the activities of Kudur-Mabuk's sons, Warad-Sin and Rim-Sin, kings of Larsa who were also paramount at Ur. The former incidentally erected a sally port and fort in the north end of the *temenos*, near the ziggurat, in which either side of the gate was flanked by elaborate mud-brick columns imitating palm trunks, a most unusual form of architecture, directly imitated on the ziggurat and temple at Rimah in the Jebel Sinjar as has been demonstrated by Professor David Oates.<sup>2</sup>

Warad-Sin's sister Enanedu was appointed by him as High Priestess to the moon-god at Ur.<sup>3</sup> The record of her work is fortunately inscribed on a clay cone originally deposited in that city. In describing how she erected the walls of her convent she recalls that she inscribed full many foundation records of her priesthood—indeed she wrote of the 216,000 inscribed cones, of which now only a single one survives. It is difficult not to connect these repetitive deposits with those made much later, in the thirteenth century B.C. by an Elamite king at the site of

<sup>1</sup> W. Hinz, *C.A.H.*, vol. i, ch. xxiii (1963), pp. 15, 16. Shulgi and Shu-Sin, kings of the Third Dynasty of Ur, married their daughters to the governor of Anshan; one of them was a sister of Ibbi-Sin, last king of that Dynasty, who was carried captive to Elam at the end of his reign. Ur-Nammu, the founder of the dynasty, married a daughter of a governor of Mari in Syria; see M. Civil, *R.A.* lvi (1962), p. 215; *C.A.H.*, vol. i, ch. xxii (fasc. 28, 1965), 5.

<sup>2</sup> *U.E.* v, pp. 42–3 and *Iraq*, xxix, pt. 2 (1967), pp. 89, 90.

<sup>3</sup> C. J. Gadd, 'Enanedu', in *Iraq*, xii (1951), pp. 27 f., and line 42 with comment on page 38.

Choga Zanbil, again within the precincts of the ziggurat (Pl. VIIa). There, in one of the sealed chambers Monsieur Ghirshman found many hundreds of faience plaques solemnly deposited in perpetuity, and laconically inscribed by the king: 'I. Untash-Gal'.<sup>1</sup> Admittedly these repetitive inscribed deposits had a much older history in Sumer and Babylonia, but it seems not unlikely to me that this otiose form of magic in the capital city Dūr-Untash was in Elam traditionally remembered as the practice of an Elamite royal house once famous at Ur.

This possible link between the foundation deposits of Warad-Sin and those of thirteenth-century Elam may seem more probable when we compare an architectural legacy left by the brother and successor of Warad-Sin, namely the famous Rim-Sin, opponent of Hammurabi, who erected in Ur a temple unique in plan at that site and dedicated it to the god Enki. As we shall see there is in Elam, again at Choga Zanbil, a series of temples on a similar plan which must imply an architectural debt to half Elamite half Akkadian forebears at Ur.

Before we come to describe the Elamite temples which are definitely related to a Babylonian type we must however briefly touch on a problem, the relationship of the great ziggurat at Choga Zanbil to one of its predecessors built by Ur Nammu some eight and a half centuries earlier, at Ur. Either of these two great architectural monuments could justify a lecture. Here I must dismiss the two of them in a paragraph. But neither can be altogether neglected by me because of a remark which I made to Monsieur Ghirshman in the 1950s when I visited him on the site of his excavation. He has done me the honour of recording this in print, and it appears that I said: 'Toutes les ziggurats déjà dégagées en Mésopotamie devraient être refouillées'. I am still prepared to stand by that rather rash remark, doubtless made in a moment of enthusiasm and admiration for the superb architectural monument that my colleague was then excavating; but that does not mean that I should ever expect to find in the Tigris-Euphrates valley any ziggurat which had employed the unique methods of construction that can be discerned at Choga Zanbil, with its peculiar system of internal chambers and chapels. There is no possibility that any known Mesopotamian ziggurat was initially built as a

<sup>1</sup> *Ch. Zanbil*, i, pls. XVIII, XIX, XCVII, XCVIII. Hundreds of these plaques were found in Chamber 23 of the ziggurat. The probable date of this monarch is c. 1265-1245 B.C., see *C.A.H.*, vol. ii, ch. xxix, p. 9, or 1275-1240 B.C. according to Hinz, *op. cit.*, p. 151.

great open and ceremonial courtyard which was then gradually boxed in to make a great tower four stages high. The system of access to the summit is entirely different, and another fundamental difference is that at Ur, and elsewhere in Mesopotamia, the staircases which ascended to the topmost shrine were external, not as at Choga Zanbil, built internally within the core of the building itself. Altogether different were the Elamite glass-studded doors, the system of inner chambers with foundation deposits carefully sealed for eternity. It is indeed possible, though perhaps not very likely, that eventually some internal chambers will be discovered within one or more of the Mesopotamian ziggurats even though some of them, for example that at Assur, have been degutted without showing a trace of any hidden rooms. At Ur it is known that the Third Dynasty structure conceals a much older one of the First Dynasty within it.

The point I wish to make is that while the Elamites had seen, inhabited, and even sacked some of the ziggurat-cities of Babylonia, and must have been deeply impressed by them, we may be sure that they did not, either at Susa or at Choga Zanbil, copy any of these older ziggurats. In the latter city the ziggurat, which was approximately double that of Ur in volume,<sup>1</sup> while no doubt inspired by the great ancient landmarks of Babylonia, is a rethinking, a work of the Elamite native genius which here found architectural expression in a monument so different in conception and execution from its forerunners that it may be accounted as an original work of art.

Thus it should be clear that the Mesopotamian ziggurats are as far removed from those of Elam as the Enki-type temple plans is close to Elamite types: this we shall demonstrate in a moment. Intermediate between the two, however, is the squarish type of temple plan which is a feature of the ziggurat precincts. I refer to the Temple Carré Ouest, the Temple de Gal, the Temple Carré Sud-Est.<sup>2</sup> Each of these with its external buttresses and recesses is in a general way related to temple plans in the Diyala valley, for example at Eshnunna (T. Asmar), and

<sup>1</sup> *Ch. Zanbil*, i, p. 59 gives a list of comparative dimensions. We know virtually nothing about the Susa ziggurat described by Ashurbanipal and we have very little information about Kassite ziggurats, for unfortunately the one at Dur Kurigalzu near Baghdad is ruined and gutted. As Dr. P. R. S. Moorey has pointed out to me, the possible relationship of Kassite architecture and Middle Elamite is interesting and may prove significant.

<sup>2</sup> *Ch. Zanbil*, ii, plan I.

at Khafajah; Naram-Sin's Audience Hall at the former site,<sup>1</sup> and the Sin temples at the latter. It is odd that the arrangement of cella and antecella at one side of the building is one that was characteristic of the Diyala, and indeed elsewhere in the Early Dynastic period in the latter half of the third millennium B.C., and reappeared suddenly in Elam at the end of the second.<sup>2</sup> But as we have already mentioned, Elamites were very familiar with Eshnunna which had far-reaching foreign relations extending to Iran. The daughter of one of its rulers, Bilalama, c. 1970 B.C., a lady named Mekubi, was married to Tanruhatir of Elam.<sup>3</sup> Continuous contact between the two countries makes it easy to reconcile variant types of temple plans which reflect a mutually related though independent architecture.

We now come to a type of temple plan which really is closely comparable in Mesopotamia and in Elam, and figures prominently in Monsieur Ghirshman's second great volume which is concerned with the *Temenos* and *Temples of Choga Zanbil*.

Among the temples there described none is more interesting than the 'Complexe Est' which was situated in the NE corner of the outer *temenos* (fig. 3). Here was a set of four shrines extending over a frontage of 90 metres and 35 metres deep, facing the Passage Royal and linked with it by a paved roadway. Each temple was identified by inscribed bricks, and the first of these against the wall was appropriately dedicated to the archaic Elamite goddess Pinikir whose name had long ago appeared in writing as a witness in the famous treaty between Naram-Sin of Agade and a contemporary Elamite prince. This and the three adjoining temples were laid out on an identical ground plan; the two others were dedicated to IM and Shala and to Shimut and his consort Nin-Ali respectively. A brick podium or stepped altar was erected in the main cella to each divinity, one for Pinikir, two for each pair in the other sanctuaries.<sup>4</sup>

The lay-out of these three temples is of particular interest because it corresponds remarkably with that of the famous temple at Ur (fig. 4*b*) dedicated to the Sumerian god Enki and erected by Rim-Sin the son of the aforementioned Elamite or

<sup>1</sup> *O.I.P.* xliii, fig. 87, opp. p. 100.

<sup>2</sup> On this subject see H. J. Lenzen, 'Mesopotamische Tempelanlagen von der Frühzeit bis zum zweiten Jahrtausend', in *Z.A.* li (1956), pp. 1 ff.

<sup>3</sup> Thureau-Dangin, François, *Die Sumerischen und Akkadischen Königsschriften*, Leipzig (1907), p. 180, xix, 3 and *O.I.P.* xliii, 'The Gimil Sin Temple and the Palace of the Rulers at Tell Asmar', p. 197.

<sup>4</sup> *Ch. Zanbil*, ii, plan II.

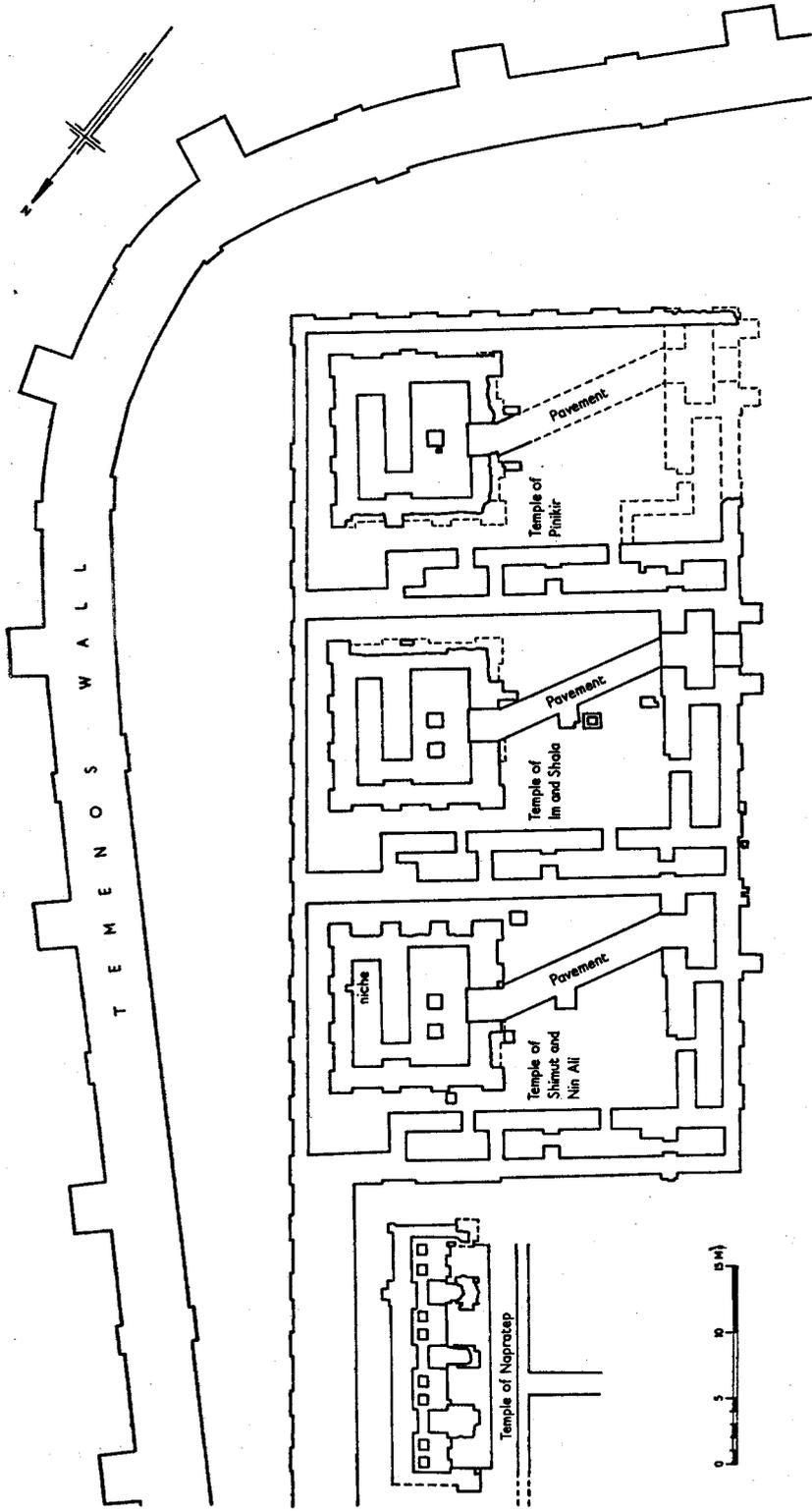


FIG. 3. Choga Zanbil 'Complexe Est'. Enki-type temple plans. (After R. Ghirshman, *Tchoga Zanbil*, vol. ii (1968), plan II.)

half Elamite ruler named Kudur-Mabuk who flourished some six centuries before Untash-Gal.<sup>1</sup>

The planning feature of these shrines which distinguishes them as of Babylonian ancestry is that in each case the sanctuary proper consists of a detached two-roomed building which is situated at the far end of a squarish courtyard; there are intramural service chambers for the priests to the front of the court and on one side of it (fig. 3).

There is however one apparent difference between the plans of the Temple of Enki at Ur (fig. 4), and the corresponding Elamite temples at Choga Zanbil (fig. 3) namely, that in the latter the entrance and approach to the shrine are indirect, or as the French would say, *en chicane*; this oblique approach was explicitly marked by a paved brick roadway which ran from an outer entrance in one corner of the court and led diagonally across it to the cella entrance. At Ur, on the contrary, the approach and all the inner gateways of the temple plan as restored by Woolley were in a direct line through the centre of the building and focused on the middle of the cella. This method of direct access, characteristic of Mesopotamian temples in about 2000 B.C.,<sup>2</sup> is the most striking distinction between Babylonian and Elamite planning and may well correspond with differences of theological concepts.

The fact that no similar buildings have been recovered at Susa in the levels associated with the Sukkal-mah or time of the 'Grand Regents' c. 2000 B.C., where we should expect them, suggests to me that there was at that early period no counterpart in Susiana for this Mesopotamian temple form. But this surmise is subject to the caveat that further excavation might yield the missing link in Susiana itself.

There are moreover other problems. The temple which Woolley found at Ur was ruined down to floor-level and much of the restoration is hypothetical (fig. 4a):<sup>3</sup> we cannot even be altogether certain, though I think it is most probable, that the entrances were plumb in the centre of the building. Nonetheless, in spite of many doubts on matters of detail we may be completely

<sup>1</sup> *Antiquaries Journal*, x, no. 4 (Oct. 1930), pl. XXXVII, opp. p. 324.

<sup>2</sup> But there were admittedly exceptions in Babylonia. For approximately contemporary plans of Mesopotamian buildings with entrances on a direct axis see H. J. Lenzen, in *Z.A.* li (1955), Abb. 37, 38.

<sup>3</sup> *Antiquaries Journal*, x, no. 4 (Oct. 1930), p. 323. Plan on pl. XXXVII (a). The walls were ruined down to pavement level and the plan was traced by observing a fine line of whitewash which had once covered them. The N.E. wing of the building had disappeared.

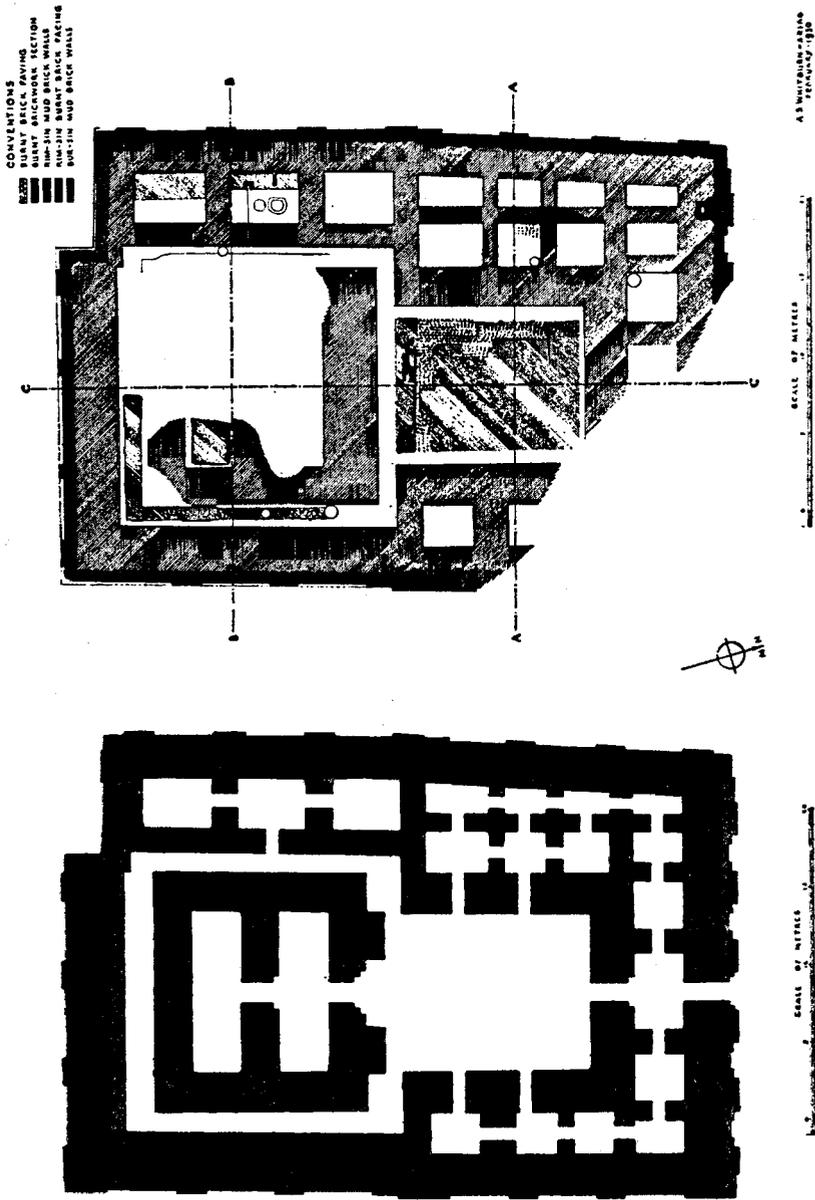


Fig. 4. (a) Ur. Enki temple ground plan as restored. (b) Ur. Enki temple ground plan as found. Plans courtesy of the Trustees of the British Museum, after *Antiquaries Journal*, x, no. 4 (Oct. 1930), pl. XXXVII (a and b).

confident that the Elamite temple of the thirteenth century B.C. was a direct descendant of the nineteenth-century<sup>1</sup> Mesopotamian. What is unsolved in this problem is whether or not Rim-Sin introduced to Ur a plan which at that early date was already known in Elam. But the knowledge that his building at Ur was a restoration suggests a contrary conclusion—namely that this was a truly Mesopotamian plan to which the Elamite was indebted for its inspiration.

In discussing the layout of the Pinikir and associated temples another problem arises. Monsieur Ghirshman invariably refers to the two separate rooms in the shrine at the far end of the court as *cella* and *antecella*, and one of his reasons for so doing is that in the back room of the temple of Shimur and Nin-Ali (fig. 3) there is a small niche, supposedly for the use of the cult, in the long wall. But this is a weak argument, and the fact is that the important room and focus of the cult must have been the one that contained the altar-pedestal or pedestals, much the larger one of the two. The room behind it was too narrow to be used as a *cella*—it was less than 2.00 metres wide and clearly served as a sacristy or storage-magazine for the cult chamber to which it had easy access by a door at one end of the long wall. The minuscule niche would have been a convenient shelf for vessels and ceremonial objects. The same argument applies to many other of the temples which have two main rooms in the service of the cult. The arrangement was known in Mesopotamia in the Early Dynastic period. Later the sacristy at the back of the *cella* was abolished, and where there were two rooms in the use of the cult, the first was the *antecella* and the one behind it the *cella*.

The temple of Pinikir and many other temples at Choga Zambil reveal another feature which corresponds closely with the architecture of Babylonia. Many of its walls are disproportionately thick for the area which they enclose; note for example the great thickness of the back wall of the *cella* (fig. 3), about 1.80 metres, separating it from the sacristy which was not more than 2.00 metres wide. Indeed those parts of the sacristy wall which were buttressed were wider than the chamber itself, and it is obvious that the buttresses themselves were counter-weights against the lateral thrust of the roof. The only conclusion can be that many of the chambers had originally been vaulted, probably barrel-vaulted:<sup>2</sup> there is ample evidence elsewhere of

<sup>1</sup> Rim-Sin, 1822–1763 B.C.—dates given by Gadd in end table *C.A.H.*, vol. i, ch. xxii (1965).

<sup>2</sup> In spite of the scepticism of Wolf Schirmer, in *AFO*, xxii (1968/9),

arched doorways. Here again the architecture can be matched by that of Babylonia around the turn of 2000 B.C. both on the Diyala sites and especially in the Larsa period at Ur. A temple erected at Ur by one of the Larsa kings named Sin-Iddinam c. 1840 B.C. with its massive remains of brick cruciform piers is one of the most notable remains of a once-vaulted building,<sup>1</sup> and the same reconstruction might well be made for the temple adjoining the Palace of the Rulers at T. Asmar and for another known as the E-Dublal-mah at Ur, where a Kassite archway still survived intact at the time of its discovery. The relationship to Babylonia is once again evident, though I do not doubt that in Elam too, for example at Susa, brick vaults on a wide scale were already known in 2000 B.C.<sup>2</sup>

Even more striking perhaps is a contemporary relationship with the buildings of Assyria, strikingly demonstrated by the discoveries of David Oates at Rimah in the Jebel Sinjar, where vaults of a wide span were extensively used on the staircases ascending the ziggurat as well as in connection with other buildings.<sup>3</sup>

At Choga Zanbil the temple of Pinikir was exceptionally rich in small finds. A fine frit statuette, headless, whose dress recalls that of the famous queen of Susa, Napirasu, may represent either the same lady or another Elamite suppliant queen and is an outstanding example of the glazier's technique (Pl. VI);<sup>4</sup> but most interesting is the large number of small offerings in the shape of animals, many in frit, including lions, birds, hedgehogs, tortoises, and several seated monkeys.<sup>5</sup> Ghirshman imaginatively suggests that Pinikir was the special protector of animals at rutting time and that her power over the animal world was comparable with that of the much later Iranian goddess Anahita who may have originated in Elam. We need

p. 85 who perhaps rightly rejects Woolley's conjecture that two of the buildings at Ur were domed. There is however now ample evidence to prove that free-standing buildings as well as tombs were vaulted long before the Parthian period, as has been most recently proved by the work of David Oates at Rimah see n. 3 below.

<sup>1</sup> *Antiquaries Journal*, vii, no. 4 (Oct. 1927), pp. 416 ff.

<sup>2</sup> R. Ghirshman, 'L'architecture Élamite et ses traditions', in *Iranica Antiqua*, v, Fasc. 2 (1965), pp. 93 ff.

<sup>3</sup> *Iraq*, xxvii (1965); xxviii (1966); xxix (1967); xxx (1968). More nearly contemporary are the Kassite vaults at Dur Kurigalzu, in *Iraq Supplement* (1945), pl. XVI.

<sup>4</sup> *Ch. Zanbil*, ii, pl. VII, nos. 1-3.

<sup>5</sup> *Ibid.*, pl. XI, nos. 1-7.

not follow him so far; but it is remarkable that amulets and statuettes particularly of monkeys<sup>1</sup> and tortoises were much favoured in the Larsa–Kassite periods in Babylonia, notably at Ur and Uruk, and it is not to be doubted that once again there is a strong archaeological connection with Elam in the second millennium. The cult of the monkey was, however, widespread and in amuletic form may be traced at Susa, at Brak<sup>2</sup> in Syria, and elsewhere. Monsieur Ghirshman has done well to call attention to the identity of the ancient word for monkey in Akkadian, Sanskrit, Hebrew, Egyptian, and in Greek; in each case the root was *kp*; but that monkeys stood for the concept of fecundity is a far-fetched hypothesis. It is much more likely that, as in Egypt, they were closely connected with worship of the sun, whose rays they sought in the tree tops. And we may never discover by what contortions of the human mind they came to have some special magical significance, though it is obvious that along with the tortoise they gave aesthetic pleasure to the necks that wore them.<sup>3</sup>

The adjoining temples in the Complexe Est, of which Pinikir forms a part (fig. 3), need no detailed description, for they too are repetitive of the plan first demonstrated in the temple of Enki at Ur which, however, was built on a considerably larger scale.<sup>4</sup>

In these temples at Choga Zanbil there was another distinctive feature which doubtless many of these Elamite sites had in common, namely the double-leaved doors brightly decorated with black and white glass studs, iridescent ornaments which added to the polychrome effect of the combination of red brick and whitewash, while the walls were frequently picked out with square enamelled blue plaques and nails, as in contemporary Assyria. But in the abundant use of glass which decorated nearly every building on this site, most strikingly at the entry to the ziggurat, we may discern a craftsmanship which was *par excellence* an Elamite form of ornamentation in buildings, and

<sup>1</sup> I cannot recall that the large collection of Kassite (?) or possibly Larsa monkeys from Uruk has ever been published, but I saw them on the site some time between about 1926 to 1928.

<sup>2</sup> See *Iraq*, ix (1947), p. 97 and reference to examples from Susa in *M.D.P.* vii, fig. 398, and xiii, pl. XXXIX, nos. 5, 7. Monkey from Ischali see Sami Al-Ahmed, in *Sumer*, xxiii, no. 1 (1967), p. 100, fig. 5.

<sup>3</sup> Tortoises, see E. F. Schmidt, *Excavations at Tepe Hissar* (1937), p. 225, fig. 134.

<sup>4</sup> The Ur sanctuary measured about 15.2 × 13.8 m.; Pinikir's was about 8.80 × 4.40 m.

prized also for small carving. Some of this is perhaps unique in Elam, but you will find many parallels in the use of frit in Babylonia, Assyria, and Syria. Here indeed was a common currency of manufacture which found its way to all the prosperous markets in Western Asia—Rimah in the comparatively remote Jebel Sinjar can yield many examples. Much research has been devoted to this subject recently, but we are still in the dark when it comes to detecting the origins and the main centres of production. Perhaps a clue is provided by the secret recipes for the manufacture of glass written down not later than the seventeenth century B.C., by a Babylonian scribe, who is thus proved to have been the proud possessor of a jealously guarded formula.<sup>1</sup> But the more closely the workshops guarded their secrets the more were their meretricious productions prized. Such luxury goods were the leaven that caused civilization to rise. It is by no means impossible that Elam was a centre of production, as well as distribution, for this profitable trade.

Our account of the temples at Choga Zanbil must necessarily be confined to certain aspects of a small selection which are of peculiar interest when compared with older and contemporary foundations in Mesopotamia, but it should not be forgotten that no less than 25 divinities were named on inscribed bricks and that 16 of their temples remain identifiable as having been built by Untash-Gal (fig. 5). The ziggurat itself and the shrines built on it, or in close proximity, were, as might be expected, dedicated to the principal gods and goddesses contemporarily worshipped by the reigning dynasty; Kiririsha and Gal (probably to be identified with Humban),<sup>2</sup> Inshushinak, and the like. The shrines of the archaic gods, and of those from the provinces, were relegated to the far extremities of the inner and outer perimeter where we noted the more striking comparisons with Babylonia. The theologians of this city yielded to none in their imperial snobbery, for the divinities associated with the centre of the city were nominated as the *melki ilani* or princes of the gods. The provincial status of the others was never left in doubt.

When drawing a distinction between the buildings erected in the outer periphery and those which were intimately related to the ziggurat, we should, however, recall that one of those most

<sup>1</sup> C. J. Gadd and R. Campbell Thompson, 'A Middle-Babylonian Chemical Text', in *Iraq*, iii (1936), pp. 87 f. The tablet is dated by the reign of Gulkishar, a king of the First Dynasty of the Sea-Land in the extreme south of Babylonia.

<sup>2</sup> W. Hinz, *J.N.E.S.* xxiv, no. 4 (1965), pp. 351-4.

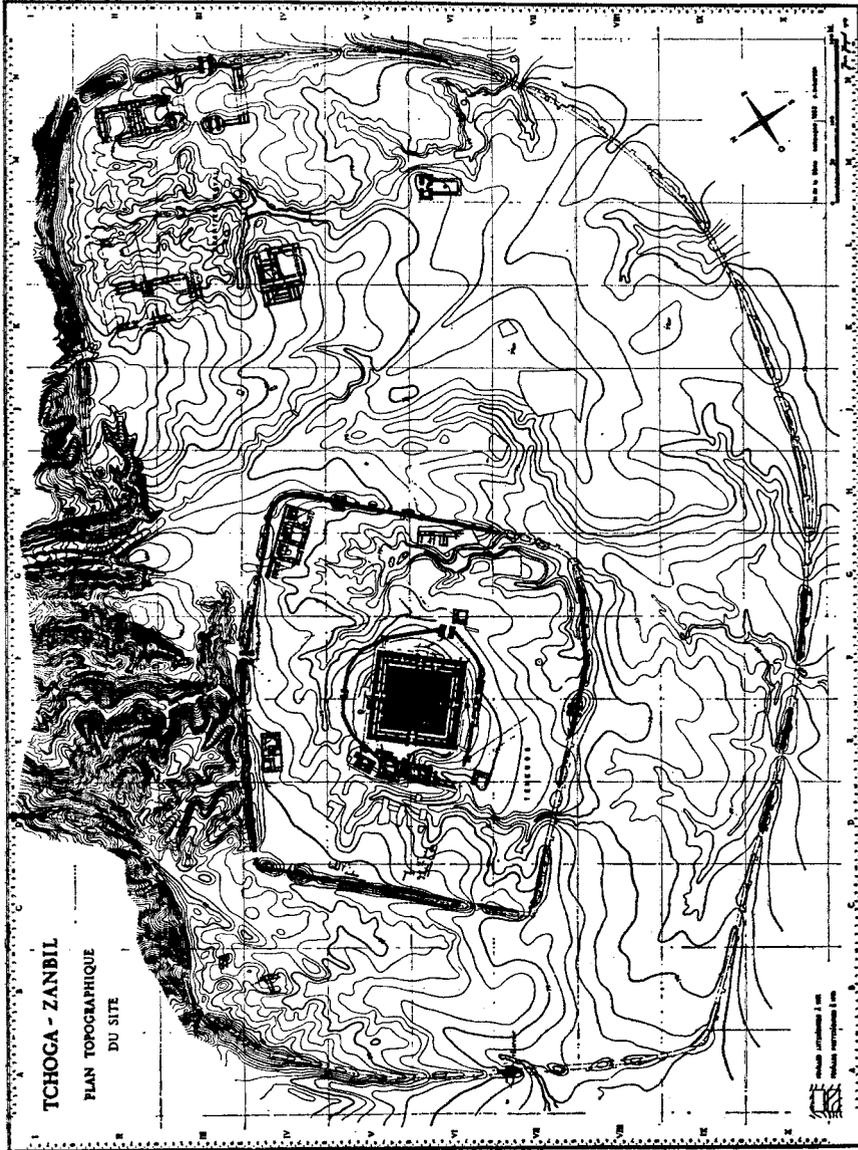


FIG. 5. Choga Zanbil. Contour map of the site after excavations showing inner and outer *temenos* and perimeter of the town wall.

Map courtesy of R. Ghirshman, *Tchoga Zanbil*, vol. i (1966), plan I.

venerated was situated in the 'Quartier Royal' in the far north-eastern sector of the city. Here was a vast and spacious building with over-all dimensions of about 68 by 56 metres (fig. 6) : it has

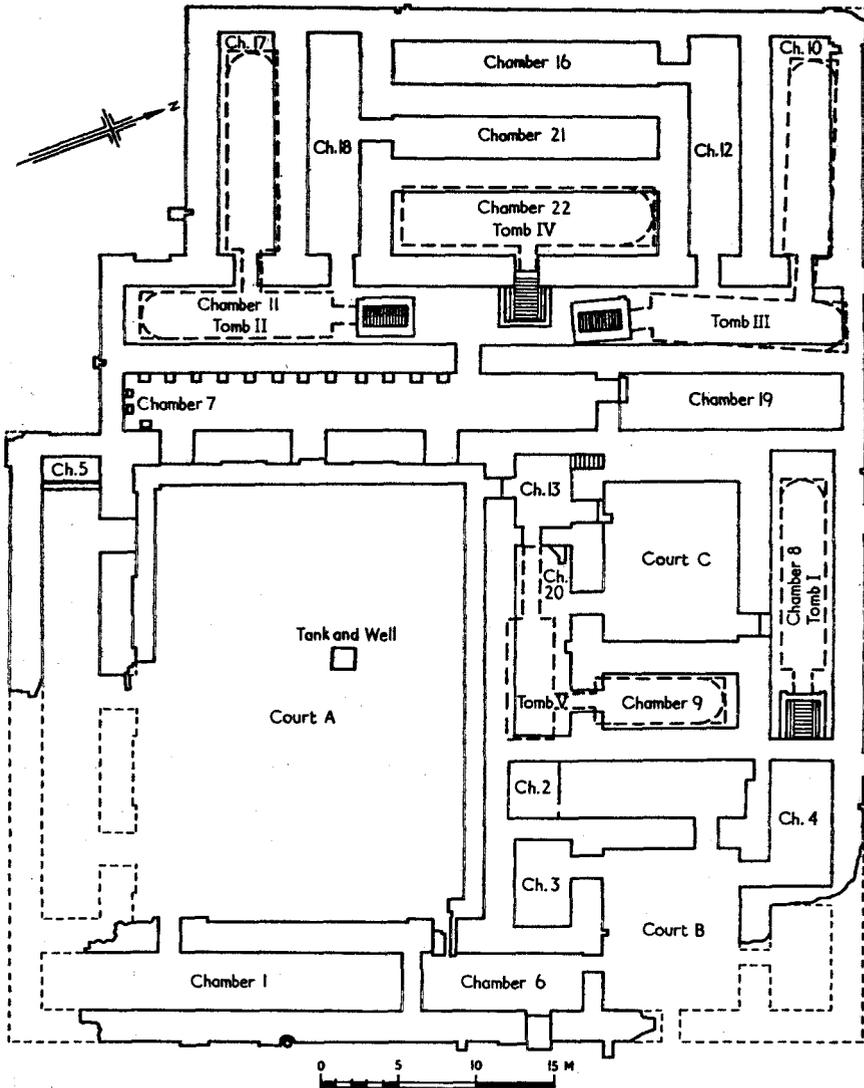


FIG. 6. Choga Zanbil. Plan of Palace and Hypogeum. After R. Ghirshman, *Tchoga Zanbil*, vol. ii (1968), plan XI.

been appositely named the 'Palais-Hypogée',<sup>1</sup> because deep under the palatial superstructure there were five subterranean tombs built for the members of the reigning dynasty. This great

<sup>1</sup> *Ch. Zanbil*, ii, pp. 47 f., fig. 16 opp. p. 48; plan XI.

building consists of four main components: two are courtyards, of which the greater measured no less than 30 by 20 metres and contained within it a lustral basin and well for the purification of the great concourse of people who came to pay their respects to the dead. The third component was a house with a central courtyard and surrounding chambers—a ceremonial residence intended for the king on funerary visits. Beneath two of the long halls under this house there were subterranean vaults, tombs I and V: the latter had been completely plundered and, Monsieur Ghirshman thinks, may once have been exceptionally well endowed, for it lay directly under the royal apartments; the former, tomb I, was sealed and had never been used—proof, if need be, that this royal graveyard had been prepared during the lifetime of those destined to occupy it.

In the fourth component, the great north-western wing, there were no less than five vaults—tombs II–IV of which Nos. II and III comprised two separate chambers—dog-leg in plan. Other parts of this wing were occupied by long and relatively narrow magazines<sup>1</sup> and the front corridor contained 15 whitewashed mud-brick offering tables, doubtless intended for deposits of food and drink during commemorations of the dead. The purpose of the long, symmetrically arranged magazines in the centre of this wing is obscure, but they were certainly intended for the storage of valuable goods, perhaps products of the land brought in by the faithful, and they could have accommodated many persons.

One of the most elaborate of the tombs in this wing was No. II with its two chambers connected by a vaulted doorway. The dimensions of this tomb are typical of the scale on which the others were erected—they were 6.25 and 6.85 metres in length respectively. The formidable barrel vaults, still intact, were no less than 4 metres high and of a similar span; they remained immaculately whitewashed. Access from above was contrived by 17 steps—the actual entrance to the tomb was blocked with mud-bricks, and the top of the shaft had been sealed with a carefully laid brick pavement—the total depth of the shaft was 5.45 metres. The carefully contrived water-proofed brickwork of this and the other tombs, the method of laying the headers and of effecting the junction between the

<sup>1</sup> This appears to be the only wing in the Palace in which roofs consisted exclusively of wooden beams, as was proven by the thick layers of powdered wood. As they spanned a width of 4.20 metres they must have come from beyond Susiana.

springing of the vault and the walls, is of considerable technical interest and needs detailed study, particularly in comparison with methods used contemporaneously and earlier in Assyria, Babylonia and in the Diyala valley. Here is a rich field for architectural research; there can be little doubt that while each locality had its own peculiar tricks, some of the elaborate fund of common technology was based on exchange of professional knowledge over a wide tract of Western Asia.

Within this tomb II all that remained was a little heap of ashes,

ψῆγμα δυσδάκρυτον ἀν-  
τήνορος σποδοῦ

as Aeschylus would have said, and half-consumed human bones; the mortal remains of three persons in the first chamber and of five in the second were identified, and it was established that the offerings which had originally accompanied the dead had been burnt and partially destroyed with them. It appears from the evidence of this and other tombs that cremation must have taken place outside the tomb, possibly in one of the palaces situated in the Quartier Royal, and that thereafter what remained had been collected together and secondarily interred. The poor fragments of offerings that had survived, beads, incrustation, some metal and frit may be accounted trash. Most strikingly associated with the dead were considerable quantities of frit objects, especially vessels and ornaments. It seems certain that at this period much that was devoted to the funeral pyre was a cheap substitute for more valuable originals and it is clear that royalty was no longer prepared to immobilise with the dead the invaluable treasure that more than a thousand years earlier would have accompanied them at Susa and at Ur.

The most remarkable of all the burials, however, and the most problematic, was tomb IV, which had survived intact and had been built on the same generous scale as the remainder (Pl. VIII, figs. 7, 8, 9). In the tomb, on the left-hand side of the entrance, clear of the wall, was the funerary bed made of burnt brick, 2.25 metres long by 2 metres wide by 80 centimetres high, whitewashed all over to receive the dead: the bed head was slightly raised.<sup>1</sup> Upon it was found one intact skeleton in the flexed position and to the side of it two heaps of ashes and calcined bones—the remains of two individuals who had been

<sup>1</sup> *Ch. Zanbil*, ii, pl. XLIII illustrates the interior of the tomb chamber.

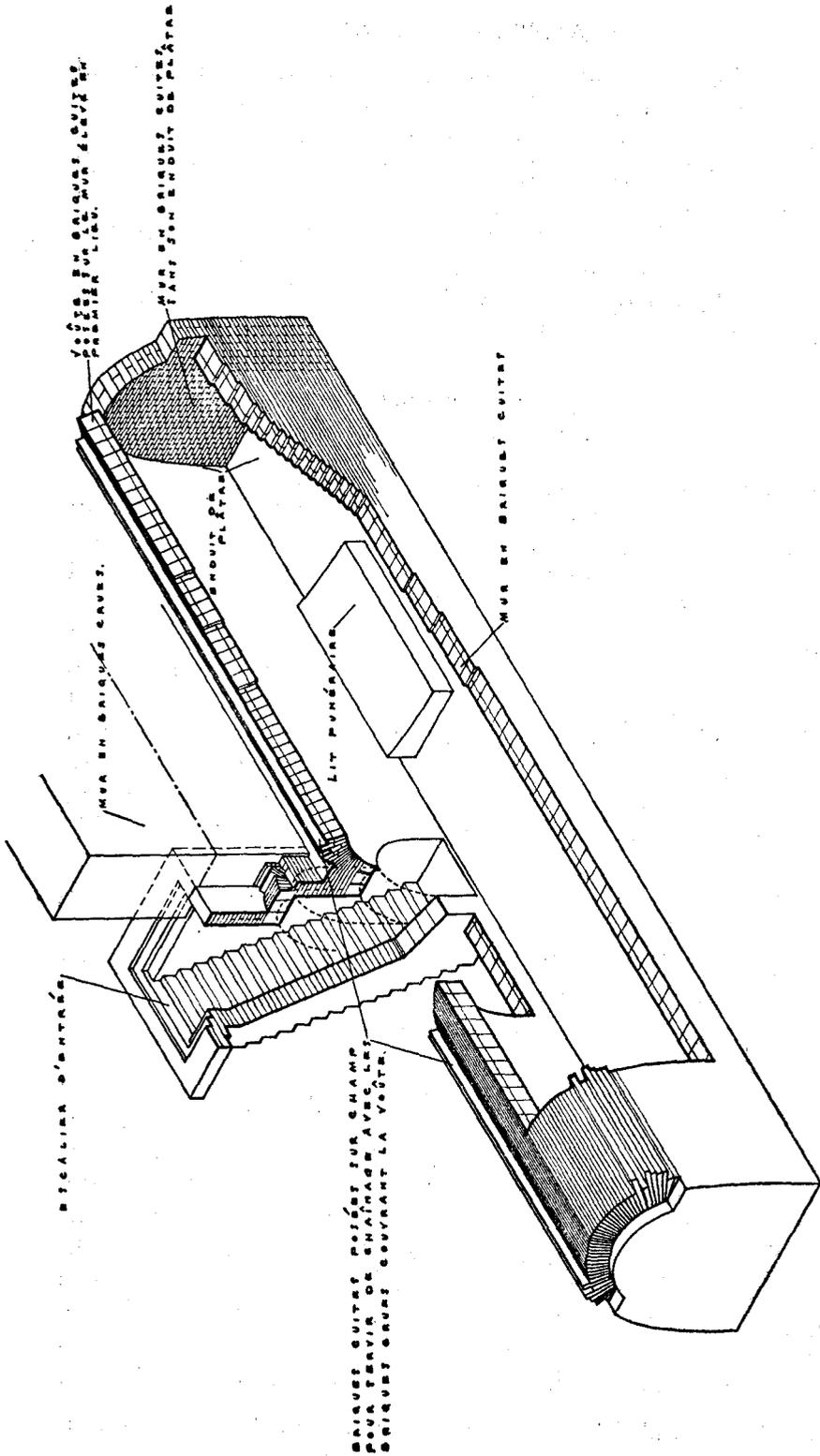


FIG. 7. Choga Zanbil. Section through barrel vault of Tomb IV showing stairs and emplacement of funerary bed.  
 Section courtesy of R. Ghirshman, *Tchoga Zanbil*, vol. ii (1968), fig. 29, opp. p. 71.

cremated; they were wrapped in a woollen cloth which had been dyed red. A few offerings including pottery incense burners (?) and indeterminate objects of glass and bitumen; metal fragments, even a golden vase handle as well as parts of a carved lapis lazuli dagger-handle were found elsewhere in the tomb. All

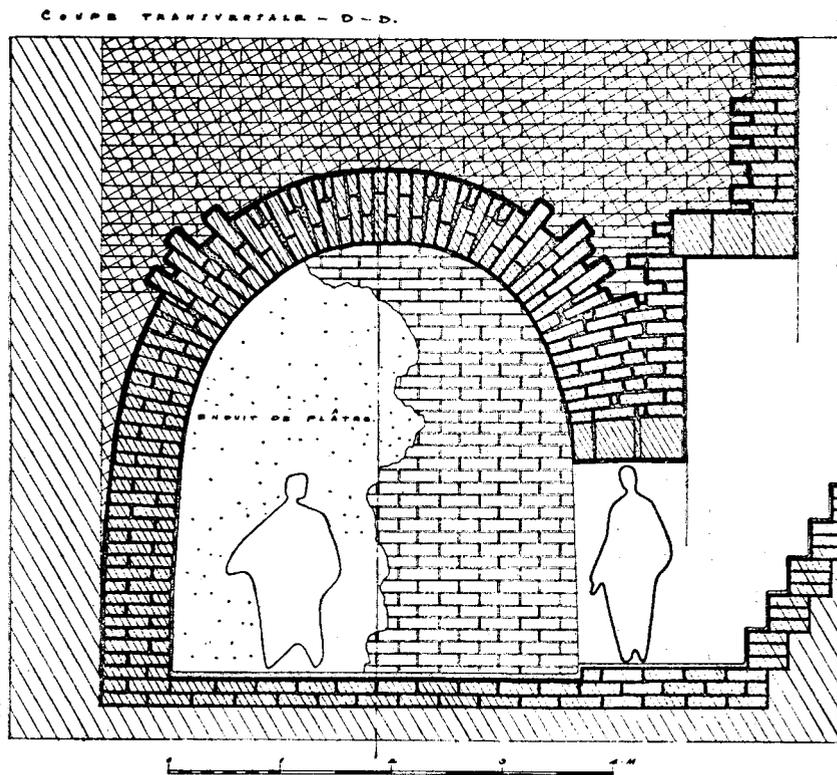
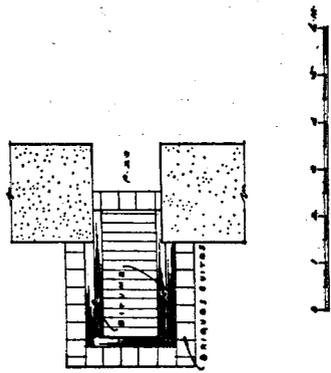


FIG. 8. Choga Zanbil. Section through Tomb IV showing details of brickwork in vault.

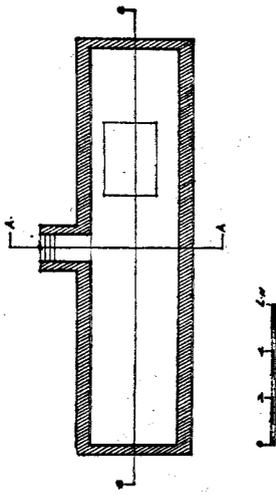
Section courtesy of R. Ghirshman, *Choga Zanbil*, vol. ii (1968), fig. 28.

this was ample evidence of offerings partly consumed by the fire—anything of great intrinsic value must have been abstracted before burial. But the most extraordinary feature of this burial is that while two of the occupants (probably a man and a woman) had been cremated, the third, apparently a woman, was unburnt. Monsieur Ghirshman has drawn an ingenious, and certainly a correct conclusion, that the lady must have been a foreign princess who came from a country or a tribe which did not practise incineration.

PLAN DE L'ENTRÉE DÉTAILLÉE.



PLAN GÉNÉRAL.



- LÉGENDE —
- BRÈCHES SUIVES
  - BRÈCHES CRUES ET TERRE SATUREE
  - SOL VIEUX
  - MUR EN BRÈCHES CRUES
  - CHAMBRE.
  - P. PORTE.

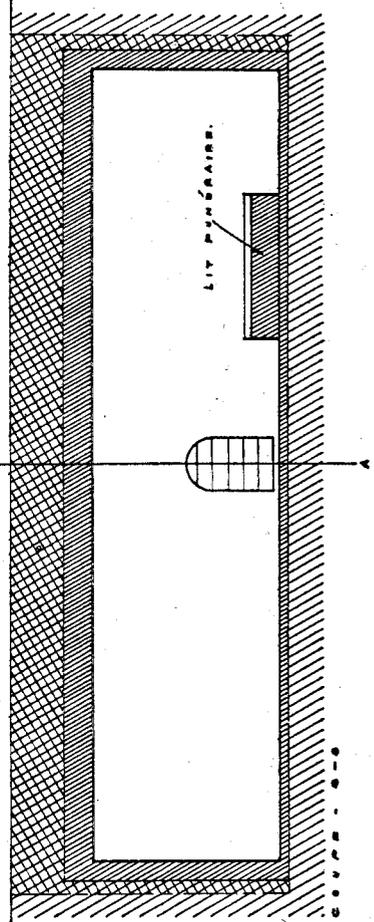
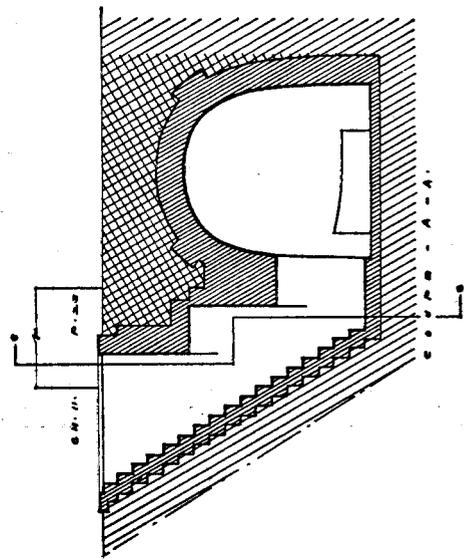


FIG. 9. Choga Zanbil. Section through Tomb IV showing stairs, entrance, and funerary bed.  
Section courtesy of R. Ghirshman, *Tchoga Zanbil*, vol. ii (1968), fig. 27.

We must however recognize that these royal cremations of the thirteenth century B.C. are a remarkable exception to the standard burial practices of the time. Here we have non-Aryan, Elamite examples of burial by fire which we think of as specifically associated with Aryan practice. One thinks immediately of a solitary example of a king buried about two centuries earlier, namely Baratarna king of the Aryan state of Mitanni;<sup>1</sup> but we have to go even further afield—to the Hittites, to discover extensive examples of cremation. Were there certain Elamite tribes that had begun to cremate the dead? If so, this is the first evidence of it—for nothing of the kind has been discovered in the rich burial vaults of Susa, nor at the neighbouring site of Haft Tepe where the subterranean burial vaults were directly connected with a temple.<sup>2</sup> At all events cremation was at this time an expensive royal privilege, only many centuries later extended to commoners.

These Elamite embers remind us, however, very vividly of Hittite and Homeric practices for which there is much literary evidence. A millennium earlier at the site of Chuēra<sup>3</sup> in northern Syria there was a separate mud-brick chamber where rich offerings were deposited for the cremated dead; some poor burials in the upper levels of the royal cemetery of Ur were also partial cremations.<sup>4</sup> These practices were tribal, and there is sporadic evidence of them from the third millennium B.C. onwards. Nonetheless, the royal incinerations of Choga Zanbil which must have been witnessed by a large number of spectators, and entailed an extensive and expensive funerary cult, remain an enigma for the present—especially since there has been no such evidence from the neighbouring site of Haft Tepe where similar important subterranean burial vaults are at present being excavated by Professor E. O. Negahban.<sup>5</sup>

<sup>1</sup> *Harvard Semitic Series*, xiii, no. 165, obv. line 3. A. L. Oppenheim, in *B.A.S.O.R.*, no. 93, p. 16. This king's name appears in Nuzu.

<sup>2</sup> E. O. Negahban in *Iran*, vii (1969), p. 173. See also n. 5 below.

<sup>3</sup> *C.A.H.*, vol. i, ch. xvi (1968), p. 64 and A. Moortgat, *Tell Chuēra in Nordost-Syrien* (dritte Grabungskampagne, 1960), plan V.

<sup>4</sup> *U.E.* ii, p. 142.

<sup>5</sup> Professor Negahban has kindly informed me that at the site of Haft Tepe (for the location see *Iran* v, p. 140) he discovered an inscribed stela in the name of king Tepti-Ahar. Included in this inscription is a reference to the maintenance duties of the guardians of a royal tomb which resembled those of Choga Zanbil in having a vaulted burnt brick roof and skeletons laid out on a large platform. For the occurrence of the name Tepti-Ahar at Susa see Hinz, *op. cit.*, pp. 53 f., Haft Tepe is situated about half way between Susa and Choga Zanbil.

However that may be, it is interesting to speculate on the source from which the Elamites might have found inspiration for these royal vaults. I refer to the great, burnt-brick, corbelled vaults erected by the kings of the Third Dynasty of Ur: possibly Ur-Nammu, Shulgi, Amar-Sin, and other members of the royal family *c.* 2100–2030 B.C. (figs. 10, 11). A brief account of these imposing tombs was first published by the late Sir Leonard Woolley in the *Antiquaries Journal*<sup>1</sup> and in a general way we must inevitably be reminded of the Elamite tombs at Choga Zanbil. At Ur the superstructures were large houses centring round a square courtyard similar in plan to those occupied by the wealthier citizens, more clearly residential, and less obviously ceremonial than the one at Choga Zanbil. At Ur, beneath some of the long chambers lay the great corbel vaults of the kings: blocked doors debarred access from the well-made staircases which led down to the tomb itself (fig. 12). In one of the houses above the tomb there were libation tables, as in the long corridor at Choga Zanbil.<sup>2</sup> Unfortunately the Ur burials, which unlike the Elamite ones may have contained substantial treasure, had been extensively plundered—by whom? We know the answer: by the Elamites, who carried the last king, Ibbsi-Sin, captive to Elam. Inevitably, therefore, at that time the Elamites learnt what a royal neo-Sumerian vault looked like. This knowledge cannot have been without its impact, and I suggest that there is some ideological connection between these two sets of tombs in Babylonia and Elam respectively.

Lastly: it is unfortunate that the bones that survived in the Ur tombs were scattered, and in the *Antiquaries Journal* there is no detailed reference to them. I was present at Ur, at the time, and have a distinct recollection of calcined bones. Was there at Ur in 2000 B.C. any royal cremation? The late Sir Arthur Keith has given us the answer.<sup>3</sup>

<sup>1</sup> *Antiquaries Journal*, xi, no. 4 (Oct. 1931), pp. 345 f. and plan on pl. XLV, contains the preliminary report on these tombs, which are to be more fully published in *U.E.* vi. There were three annexed houses in all, beneath which lay seven corbel-vaulted tombs, of which the largest measured 7·70 by 4·15 metres, with an internal height of 5·50 metres, that is on a scale comparable with the vaults of Choga Zanbil, see p. 278 above. There is a doubt about which of the kings of the Third dynasty of Ur were buried here, possibly the first four, but not the last, Ibbsi-Sin, who must have died captive in Elam—his tablets were found in one of the rooms of the superstructure.

<sup>2</sup> *Antiquaries Journal*, xi, op. cit., pl. XLI, no. 2.

<sup>3</sup> *U.E.* ii, pp. 407–8. The tomb chambers will be more fully published in *U.E.* vi.

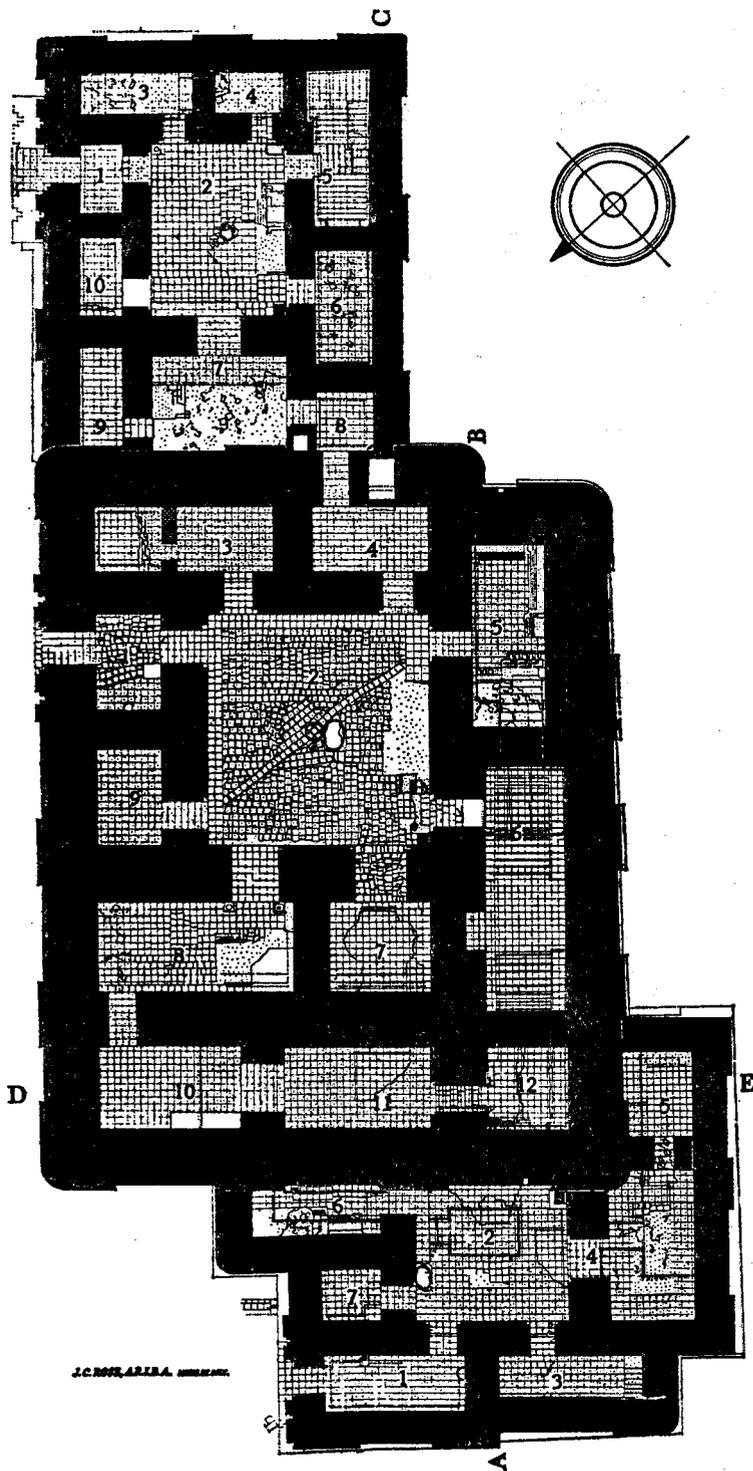


FIG. 10. Ur. Tombs of the Third Dynasty Kings. Ground plan of superstructure and emplacement of subterranean tombs.  
 After *Antiquaries Journal*, xi, no. 4 (Oct. 1931), pl. XLV.

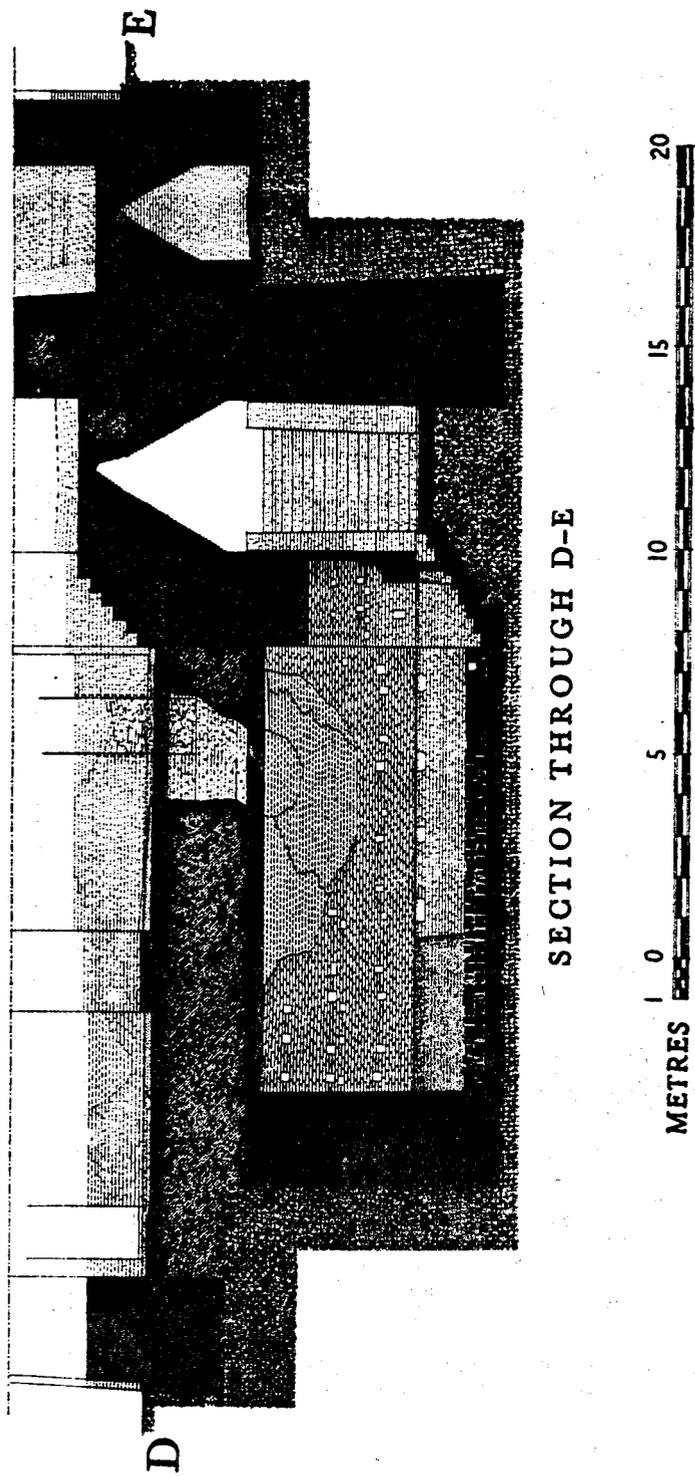


FIG. 11. Ur. Section through Royal Tombs showing stairs and corbel vault below houses, see p. 284.  
 After *Antiquaries Journal*, xi, no. 4 (Oct. 1931), pl. XLV.

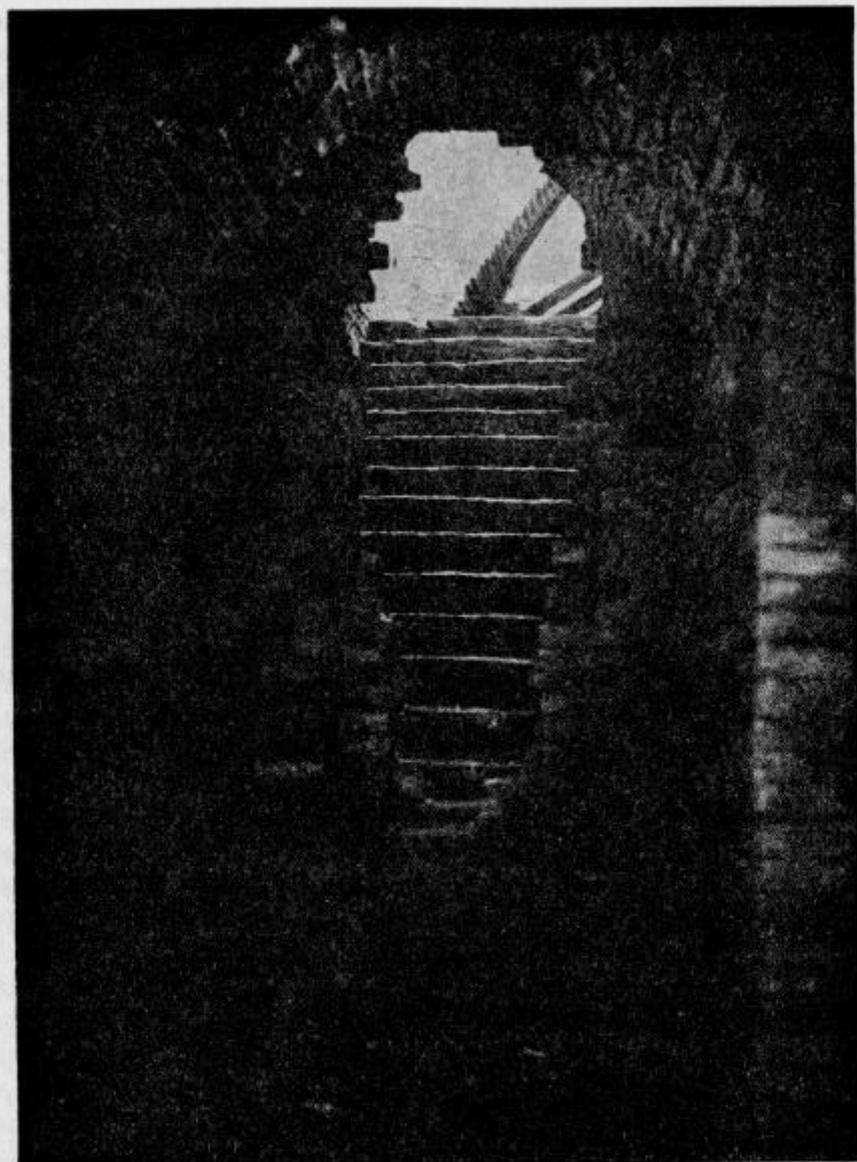


FIG. 12. Ur. View from inside the tomb of Shulgi's building looking up the stairs.  
Photo courtesy of the Trustees of the British Museum, *Antiquaries Journal*, xi,  
no. 4 (Oct. 1931), pl. XLIII.

They are 'calcined'—a condition produced when bones which are dry and free from animal matter are burned. When dried bones—such as those taken from old graves—are subjected to fire, they retain their natural shape and size. It is quite otherwise when bones are burned with their animal matter in them and surrounded by the flesh of the body. They then split, crumble, and become distorted. Such remains are spoken of as 'cremated' bones.

Of the individuals represented by black calcined remains from the long vaulted tomb four are certainly women; the fifth may also have been a woman. The significance of burning human skeletons which must have been dug up some time after burial I do not know.

The explanation can only be that this was a deliberate act of desecration by the Elamites, presumably perpetrated by tribesmen who did not themselves practise cremation. There cannot therefore be any functional connection between these royal burnt bones at Ur and those of Choga Zanbil.

This spacious Palais-Hypogée at Choga Zanbil which we have just described, commemorative of the dead, was clearly intended to accommodate a great concourse of persons who would have accompanied the king on his visits. A glance at the great courtyard (A) on the south-east side of the building is ample proof that it was designed for crowds (fig. 6). We may well ask how many persons might have been assembled in the city in its most prosperous days during the thirteenth century B.C. The place was clearly not primarily residential, but was a show city designed for pilgrim traffic which joined in what Monsieur Ghirshman describes as *processions circumambulatoires*. This intention was clearly indicated by the arrangement of the gates in both inner and outer periphery, and by the paved ways which connected the various buildings.

The house-remains that survived were comparatively insignificant in comparison with the temples and palaces, though we have to allow for the fact that much in the outer town had been swept away by flood water. However that may be, it is interesting and important that we have some basis for calculating the number of persons who had to be provided for on festive occasions.

In the outer periphery, approximately opposite the western corner of the *temenos*, Monsieur Ghirshman discovered an imposing, brick-built reservoir, the capacity of which can be exactly calculated (Pl. VIIb). The reservoir was constructed in two parts, and consists of a great brick water-proofed tank built up against the outer face of the wall and connected by nine ducts

which ran under the wall into a smaller inner basin, gravity fed, from the outer tank. Here the women of the town came to draw their water. The brick reservoir measured 10·7 by 7·25 by 4·35 metres deep and had a capacity of 350 cubic metres. It was brick paved and mortared with an exceptionally hard plaster. I have calculated that its capacity would amount to approximately 72,405 gallons. The basin inside the city wall which had a capacity of 42 cubic metres could have contained approximately 1000 gallons for constant use. If we may accept the contention that the great tank itself was built with the intention of serving the city when it was filled to capacity for one day, we might suppose that it could have supplied rather more than 30,000 persons, even 36,000 persons, assuming an average of two gallons a head, which was probably quite generous in antiquity, even in hot weather. This speculation may seem to be a rash one, but nonetheless on the basis of evidence which we have of the population of Nimrud<sup>1</sup> for example, I should say that the hypothesis that on occasions 30,000 persons were assembled in this city of Untash-Gal is not a bad guess. When the other cities in the same river valley have been excavated our demographic knowledge of ancient Elam will become more precise.

This great reservoir must rank among the important hydraulic installations of antiquity, for it had been fed by a canal which was once nearly 50 kilometres, or say 30 miles, in length and ran all the way from the river Kerkha to the city. The line of this old canal is still traceable (fig. 13) for a distance of approximately 20 kilometres all the way from Haft Tepe, which, as I have already mentioned, is presently being excavated by Professor Negahban. Happily this canal line is still known by the living as the Darius canal. It is also worth recording the statement of Herodotus I, 188, that it was the river Choaspes (Kerkha) which supplied the king with water when he left Susa on his far distant campaigns. In passing it has not often been mentioned that this water after long conservation must have stunk to high heaven. Incidentally it would seem that the reservoir must have supplied the basin at Choga Zanbil through sluice-gates. The principles of constructing them were well known in Mesopotamia.

It will be seen from what we have said that this great site, and indeed the whole of Elam, is still bristling with problems. During the course of this year great expectations have been

<sup>1</sup> M. E. L. Mallowan, *Nimrud and Its Remains*, vol. i (1966), pp. 70-73.



aroused by philologists in another field which may be found to have a bearing on our recognition of the identity of the ancient Elamites. I refer to the first truly promising attempts at decipherment by Dr. Parpola and others, of the hitherto unsolved script of the Indus Valley. The assumption is that the language was Dravidian and this contention is supported by the fact that there is one surviving example of Dravidian language in that area of Baluchistan, namely Brahui. Alluring as this theory may be, a recent article by Professor T. Burrow<sup>1</sup> is sceptical and, for various obviously sound reasons, estimates 'the degree of probability of the Indus language having been Dravidian as considerably less than the authors of the pamphlet'. While this critic acknowledges that the language spoken in the Indus cities may have been an early form of Proto-Dravidian, it has to be borne in mind that the later spread of Indo-Aryan may have 'submerged a much greater variety of languages and language families than the number which has managed to survive'. We have, moreover, to reckon that thousands of years separate Dravidian as we know it from this allegedly early form of it. However that may be, the point that intrigues us is the suggestion in *Antiquity* 171<sup>2</sup> that the Proto-Elamite script of Susa and possibly that of Sialk may be related to the Indian, for at least one sign is identical. Whether or not this supposition can be established must remain doubtful, but it is one more exciting step in identifying the tracts of ancient trade through Elam which linked Mesopotamia with India, and connected it with the country of Meluhha.<sup>3</sup>

The relationship between Elam and the Indus Valley is but one of many problems which, in the years to come, excavation may resolve. The other ones on which I have touched are also, for the most part, concerned with telecommunications in antiquity: the transmission of men, food, raw materials, luxuries, and ideas between one far distant centre and another.

<sup>1</sup> T. Burrow, 'Dravidian and the Decipherment of the Indus Script' in *Antiquity*, xliii, no. 172, Dec. 1969, pp. 274-8.

<sup>2</sup> Gerard Clauson and John Chadwick, 'The Indus Script Deciphered(?)', *Antiquity*, xliii, no. 171, Sept. 1969, pp. 200-7.

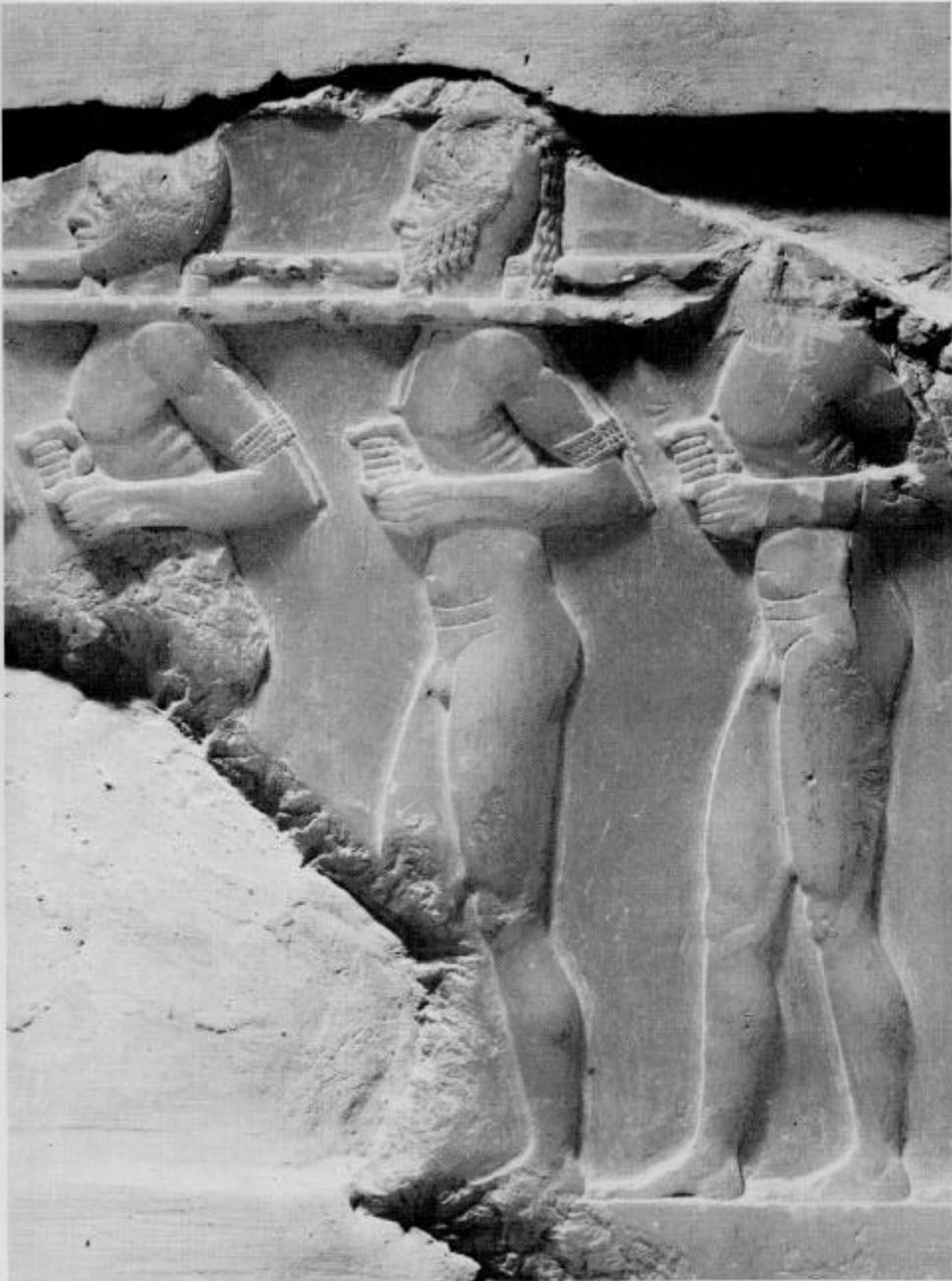
<sup>3</sup> E. Sollberger, *Ur Excavations Texts viii, Royal Inscriptions, Part II* (1965), p. 8, no. 37. Inscription of Ibbi-Sin. It has a reference to an important text that links Anshan and Meluhha, a country that supplied dogs and the Meluhha bird, identified in *C.A.D.* as the francolin. I prefer to think of it as the peacock, which is mentioned in one ancient text as the bird which cries loudly, *C.A.D.* 7, p. 304a; the same bird is mentioned in the Meluhha section of the Sumerian poem 'Enki and the World Order'.

The message of archaeology is one that I find encouraging, for it stresses not what divides men, but the processes that bring them together. Archaeology, which leads us to concentrate on the diffusion and convergence of technology, is a perpetual reminder of the restless, indomitable spirit of man, never satisfied with his present level of achievement; it reminds the optimist of man's infinite capacity for improvement and warns him visually of his propensity towards self destruction. I can only quote in conclusion the refrain from the *Agamemnon* of Aeschylus, 'echo the cry of woe; but may the good prevail!'

αἴλινον αἴλινον εἶπε  
τὸ δ' εὖ νικάτω·

#### POSTSCRIPT

Further discoveries at Tepe Yahyā were reported in *The Times* of September 1 1970. They include uninscribed as well as inscribed tablets on which the writing 'is the same as that on the proto-Elamite tablets found at Susa'. 'These with the tablets found at Uruk are the earliest known written records'. These finds certainly represent the most easterly extension yet known of the early Mesopotamian scripts and we shall await with interest for the expert analysis of them. It remains to be seen if the two forms of writing can be related chronologically and if eventually any linguistic relationship can be traced. No less interesting is the further discovery of carved steatite vessels finished and unfinished and of a steatite mine 'extensively quarried' 'eight hours walk in the mountains, near Yahyā' as Professor C. C. Lamberg-Karlovsky has informed me—in a letter dated September 25 1970. Eventually perhaps we may have to conclude that it was this district of Iran that was the most important source of export in the steatite trade—both east and west, and that Elamite Susiana was a main entrepôt. See page 256 note 3 above, also p. 261 and note 1.



The Nasiriya stele. Persian alabaster. Fettered prisoners in head stocks. (Iraq Museum, Baghdad.) Ht. 21 cm.

*Photograph courtesy of Thames and Hudson, after E. Strommenger and M. Hirmer, Art of Mesopotamia (1964), pl. 118.*

PLATE II



The Nasiriya stele. Persian alabaster. Officers carrying trophies of war. (Iraq Museum, Baghdad.)

*Photograph courtesy of Thames and Hudson, after E. Strommenger and M. Hirmer, Art of Mesopotamia (1964), pl. 119.*



Stoneware vase, decorated with mythological scene in relief. Ht. 20 cm. Probably Early Dynastic II–III (cf. Pl. IV). Temple of Shamash, Mari.

*Photograph courtesy André Parrot and Thames and Hudson, after E. Strommenger and M. Hirmer, Art of Mesopotamia (1964), pl. 39.*

PLATE IV



(a) Steatite bowl decorated with mythological scene in relief. Goddess (?), Indian bulls, running water. Ht. 11.4 cm. Probably Early Dynastic III, ca. 2550 B.C. (British Museum.)



(b) Steatite bowl, continuation of mythological scene illustrated above (a). Goddess (?) holding two serpents above two adorsed lionesses.



(c) Steatite bowl, continuation of scene illustrated above (a) and (b). Theriomachy. Photographs courtesy of Thames and Hudson, after E. Stronmenger and M. Hirmer, *Art of Mesopotamia* (1964), pls. 38 and 39.



Development of scene on stoneware bowl illustrated by Pl. IV (a)-(c). The bowl now in the British Museum probably originated from Sin Temple IX, Khafajah.

*Photograph courtesy Trustees of the British Museum after British Museum Quarterly Vol. xi, no. 3.*

PLATE VI



Choga Zanbil, frit figurine dressed in the style of Queen Napirasu, from the temple of Pinikir.

*Photograph courtesy of R. Ghirshman, Tchoga Zanbil Vol. II (1968), pl. VII, no. 1.*



(a) Choga Zanbil. Massive deposit of knobbed faience and glass plaques in room 26 of the ziggurat.

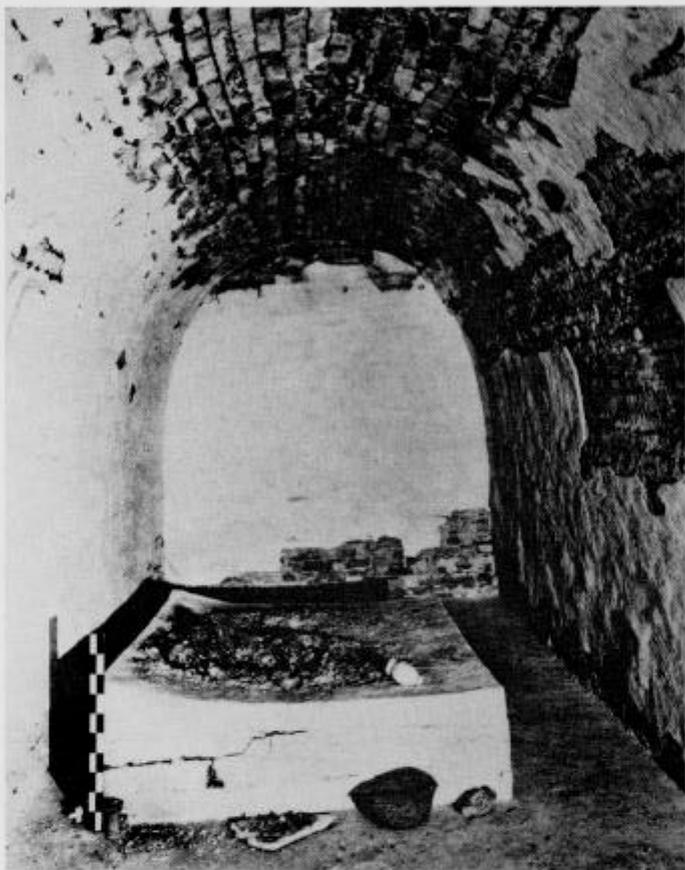
*Photograph courtesy of R. Ghirshman, Tchoga Zanbil Vol. I (1966), pl. XVIII, no. 3 and p. 18.*



(b) Choga Zanbil. The brick-built reservoir showing the great tank and ducts connecting it with the inner basin.

*Photograph courtesy of R. Ghirshman, Tchoga Zanbil Vol. II, pl. LX, no. 1.*

PLATE VIII



Choga Zanbil. Tomb IV, showing the white-washed chamber, funerary bed, cremations, and deposits.

*Photograph courtesy of R. Ghirshman, Tchoga Zanbil Vol. II (1968), pl. XLIII, no. 1.*