



**INDIAN INSTITUTE OF
ADVANCED STUDY
LIBRARY * SIMLA**

...e this History available to readers
...le, it will be issued, in the first
...les. With some exceptions the
...one chapter, but the order of
...correspond with the ultimate
...chapters. In the volumes of the
...the pages will be renumbered
...tter, maps, chronological tables
...be included. The Plates will be
...ate volume.

I. E. S. EDWARDS
C. J. GADD
N. G. L. HAMMOND

SYNOPSIS OF VOLUME I, CHAPTER XII

i. Sources and general character of the period, *p.* 3. ii. The earlier phase (Uruk 4), *p.* 6. iii. The later phase (Jamdat Nasr), *p.* 13. *Bibliography*, *p.* 25.

THE LAST PREDYNASTIC PERIOD IN BABYLONIA

BY THE LATE
HENRI FRANKFORT

Formerly Director of the Warburg Institute, London

REVISED AND RE-ARRANGED BY
LERI DAVIES

VOLUME I, CHAPTER XII

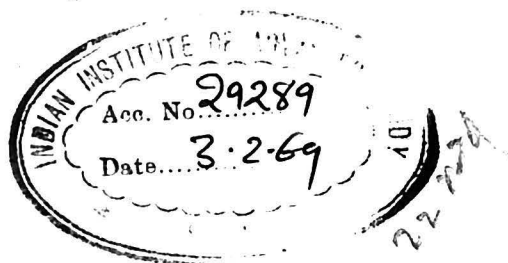


CAMBRIDGE
AT THE UNIVERSITY PRESS

1968

Published by the Syndics of the Cambridge University Press
Bentley House, P.O. Box 92, 200 Euston Road, London, N.W. 1
American Branch: 32 East 57th Street, New York, N.Y. 10022

© Cambridge University Press 1968



PH
930
F844G



Printed in Great Britain
at the University Printing House, Cambridge
(Brooke Crutchley, University Printer)

CHAPTER XII

THE LAST PREDYNASTIC PERIOD IN BABYLONIA

I. SOURCES AND GENERAL CHARACTER OF THE PERIOD

TOWARDS the middle of the fourth millennium B.C., civilization in the valley of the Euphrates and the Tigris was not dissimilar to that of western Asia in general, as described in the foregoing chapters. Everywhere we find farmers and stock-breeders, in possession of all the requisite crafts, obtaining a few commodities from abroad, and little given to change. Similar peasant cultures—settled, stagnant and uncentralized—existed in Neolithic times throughout Europe and Asia, and continued to exist there for centuries after the ancient Near East had evolved a more complex mode of life, and had, through the diffusion of metallurgy, brought about an improvement in the equipment of the populations of Asia and Europe. If we judge by their remains, these people do not appear inferior to the early inhabitants of the ancient Near East and of Egypt described in chapters VII–IX above. We cannot explain why the latter set out on a course which led to achievements surpassing all that had gone before. In prehistoric times the future centres of high civilization showed no signs of being exceptional. On the contrary, each of them formed part of a larger cultural province: Egypt shared its early pre-dynastic civilization with Libya, Nubia and perhaps the Sudan; northern Mesopotamia was at first indistinguishable from north Syria; southern Mesopotamia was intimately linked with Persia. It was the unprecedented development described in this and the preceding chapter which differentiated Egypt and Mesopotamia from their surroundings, as it also established their unique historical significance.

Egyptian tradition did justice to the momentous nature of the change by acknowledging a first king of a first dynasty as its central figure. The peculiar conditions of Mesopotamia—a country without natural boundaries and not, at first, ruled by kings—precluded the clear demarcation of a new beginning in its recorded history; instead of a single monarchy we find autonomous city

4 LAST PREDYNASTIC PERIOD IN BABYLONIA

states, each linking its present to a legendary past. But the actual remains discovered in Iraq leave no doubt as to the sweeping character of the transition from prehistory to history.

In western Asia it is the southernmost part of the Mesopotamian alluvium which is constantly indicated as the focus of the innovations. They took place in Sumer, the southern part of the country subsequently called Sumer and Akkad, the latter being, in general, the north. It is true that the social and linguistic relationship between peoples called Sumerians and Akkadians (that is, speakers of a non-Semitic and a Semitic tongue respectively) is very uncertain in the earliest times of their appearance in history, and there is increasing reason to believe that from the earliest discernible beginning they were already inextricably mixed.¹ Yet all Babylonian tradition looked back, at least, to the Sumerian language as 'original' and of superior dignity; the writing which was invented for it (or which it was the first to assume) was the ancestor of the cuneiform script, and the language of the first inscriptions which can be surely interpreted² is Sumerian, soon to be in possession of a literary as well as a scribal tradition.³

The framework for a relative chronology of the period derives from a deep sounding in the E-anna precinct at Uruk (Warka), and from the superimposed remains of successive temples found there.⁴

At Uruk, likewise, the most important known works of art of the period have been found and, furthermore, the earliest texts. But other sites, too, have contributed to our knowledge. At Ur, layers parallel in time to those at Warka have been investigated.⁵ However, since they consist of rubbish and graveyards, they do not present such clear-cut divisions as a succession of building levels. The same qualification attaches to the discoveries at Kish⁶ and Lagash (Tello).⁷ In addition to these sites where stratified remains of our period were found, we must name those where such remains occurred either as survivals in later layers or as more or less isolated finds: Al-'Ubaid,⁸ Fārah,⁹ Tell Asmar, Tell Agrab.¹⁰ At some other sites important and coherent remains have been found: a well-preserved temple at Tell 'Uqair,¹¹ temples at Eridu,¹² and an insufficiently known but probably secular building at Jamdat

¹ *C.A.H.* 1², ch. XIII, sect. II; §1, 14, Descr. Cat. 1, no. 2; §1, 1, 77 f. See also R. D. Biggs, 'Semitic Names in the Fara Period', in *Or.* n.s. 36 (1967), 55 ff.

² §1, 4.

³ §1, 1.

⁴ *C.A.H.* 1², ch. VIII, sect. I (Uruk-Warka).

⁵ *Ibid.* (Ur-Al-'Ubaid and neighbourhood).

⁷ §1, 2; §1, 12.

⁸ §1, 3; §1, 6.

¹⁰ §1, 5.

¹¹ §11, 8.

⁶ §1, 8; §1, 11; §1, 15.

⁹ §1, 7; §1, 13.

¹² §11, 6; §11, 7.

Našr,¹ the first belonging to the early, the second to the later, part of our period. Finally, we know at Khafāji a succession of temple ruins which illustrate the development of sacred architecture in our period as well as its relation (which is very close) with the succeeding Early Dynastic age.²

The individual character of these several remains will occupy us in the next sections; here it must be said that it is no longer sufficient, as it was at first when the discoveries were made, to describe our period in terms of the sequence at Warka, nor is a distinction of two periods named after sites—Warka and Jamdat Našr—wholly adequate.³ In fact, the very significance of our period is now blurred by the terminology according to which the period is represented by two out of three prehistoric 'periods' which precede the Early Dynastic age. This terminology served its purpose when it was introduced with a view to co-ordinating, in the early 'thirties, a number of excavations undertaken specifically to establish a sequence of prehistoric phases in Mesopotamia. The material remains fitted well into the series of Al-'Ubaid, Uruk, Jamdat Našr, and Early Dynastic periods, and the reader will find these terms to be widely used. But for the historian they are awkward, since it is towards the end of the 'Uruk period' that the momentous change we have described takes place. The early part of this period is purely prehistoric in character and resembles the preceding Al-'Ubaid period, in that it is not confined to the Euphrates-Tigris valley; it extends farther towards the north. The later part of what has been called the 'Uruk period' (i.e. Uruk 5-4) is known only in southern Mesopotamia and comprises all the innovations which constitute the birth of Mesopotamian civilization. These layers, however, resemble in many respects the succeeding phase hitherto called the Jamdat Našr period (i.e. Uruk 3): the continuity is, in fact, so strong that these successive phases are now often comprised in the term 'Proto-literate',⁴ which will sometimes be employed in this chapter.

It is difficult to determine what are the precise layers contemporaneous with the beginning of this formative phase of Mesopotamian culture. In the stratification at E-anna, the site of the Ishtar-Inanna temple at Uruk, eighteen archaic layers are distinguished. These are

¹ §1, 10, See also *C.A.H.* 1², ch. viii, sect. 1.

² §11, 2; see also *C.A.H.* 1², ch. viii, sect. 1.

³ For a discussion of the names to be given to the prehistoric periods in Babylonia, see above, *C.A.H.* 1², ch. viii, sect. 1.

⁴ For a critique of this term see *C.A.H.* 1², ch. viii, sect. 1, where 'Uruk Period' is used to cover the entire cultural development succeeding the 'Al-'Ubaid' period and the 'Jamdat Našr' phase is merely the end of 'Uruk'.

6 LAST PREDYNASTIC PERIOD IN BABLOYNIA

numbered from the top downwards and the 'Proto-literate' period ends with layer 2; layers 3, 4 and 5 certainly belong to it but it is probable that 6, and even 7, belong to it also; the latter is free of 'Ubaid ware (which survives into the prehistoric Uruk period) and contains mosaic cones, which we shall recognize as a distinctive feature of the architecture of 'Proto-literate' times. But the question precisely where, in any given sequence of remains, this period starts, will have to be decided in each case when sufficient material becomes available.¹

The later half of this concluding period, though possessing a recognizable character, continues in almost all respects the traditions of the earlier phase. It is often difficult to decide whether an artifact should be assigned to Uruk 4 or Uruk 3 (Jamdat Naşr phase). The polychrome pottery which counts as the most distinctive feature of the Jamdat Naşr phase existed already in the preceding Uruk 4 phase. The indecisiveness of the situation is illustrated, for example, by the *Riemchengebäude* at Uruk. The excavators assign the structure to the Uruk 4 phase but describe the pottery found therein as typical of the Jamdat Naşr phase. Indeed, at Warka, it is often difficult, if not impossible, to discern whether certain buildings are to be assigned to Uruk 4 or 3; the opinions of the excavators themselves seem often to reflect this uncertainty. Nevertheless, there is a difference between the earlier and later remains. In the beginning, notably in layers 5 and 4 at Uruk, we are confronted with the unheralded emergence of important inventions: Mesopotamian culture seems suddenly to crystallize. In the later layers, at Uruk, and at Jamdat Naşr, Khafāji and other sites where similar remains are found, we observe a decreased creativity and therefore, in the field of art, a loss of quality. But we also note a consolidation of the earlier discoveries and their practical application on a wider scale than before. This phase represents a period of expansion which carried Mesopotamian influence through the length and breadth of the ancient Near East. Thus we distinguish two phases in this final period, the remains of which, respectively, we shall now describe.

II. THE EARLIER PHASE (URUK 4)

While in Egypt the monuments of Early Dynastic times celebrate the divine king, those of Mesopotamia in the like period concern the relations between man and the gods; the earliest monumental

¹ See also *C.A.H.* i², ch. viii, sect. 1 (Uruk-Warka), where there is a discussion of the limitations of the evidence obtained from this sounding.

buildings known are, in the one case, royal tombs; in the other, temples.

At Eridu,¹ a series of eighteen temples was discovered beneath the later zikkurrat of Amar-Sin. The earliest of these (18-6) belong to the 'Ubaid period;² the next series, temples 5-1, may be attributed to the Uruk period. Here we have an excellent illustration of the prehistoric antecedents of the monumental architecture found in the Uruk 4 phase, the 'golden age' of Sumerian architecture. Temples 1-5, which represent the typical tripartite Sumerian plan, are said to have stood on a raised platform. The latest temple (1)³ was raised upon a 'massive terrace' with buttresses and stepped offsets.

It was at Uruk itself, however, that the most impressive monumental layout known to us in this period was revealed. Unfortunately, the various stages of rebuilding at this complex site are often difficult to disentangle; the architectural remains sometimes appear unintelligible owing to later alterations or destruction, and it is at times impossible to attribute buildings with any degree of certainty to the Uruk 4 or Uruk 3 (Jamdat Naşr) phase.

In the Uruk 4b phase, at least three temple complexes existed concurrently. Temples A (on the north-south terrace) and B would appear to be typical Sumerian tripartite temples,⁴ though they were only partially excavated.

Adjoining the north-south terrace was a large courtyard whose walls were decorated in places with cone-mosaic in red, white and black. At the north end of this court were two flights of steps leading up to a small platform which projected from a raised terrace. Set upon this terrace was the 'Pillar Hall', a portico consisting of a double row of four free-standing and two engaged columns, each 2.62 m. in diameter.⁵ An entrance was apparently found at one end, in the axis of the portico. Part of the courtyard wall nearest to the portico on the north-east side was ornamented with a row of small, contiguous engaged columns.

The façade of the stair platform, the columns of the portico and the north-east wall of the court with its engaged columns were all decorated with cone-mosaic.⁶ The portico may have led to a temple beyond but this remains a mystery as it is incompletely excavated.

¹ §11, 6; §11, 7.

² For a discussion of these, see *C.A.H.* 1², ch. viii, sect. 1.

³ §11, 7, 106 f. For a reconstruction of this temple, see §11, 10, pl. 30 on p. 41.

⁴ §11, 5, Taf. 1; G, 7, fig. 16.

⁵ §11, 5, Taf. 1 (Pfeilerhalle); G, 7, fig. 16 (Pillar Temple).

⁶ §11, 3, iv, Taf. 7-9.

8 LAST PREDYNASTIC PERIOD IN BABYLONIA

There is no doubt, however, that the Pillar Hall must have been one of the most imposing monuments of this period.

Level 4a at Uruk is represented by temple C,¹ a very large (54.20 × 22.20 m.) building which would appear to be a combination of two tripartite temples set at right angles, and by temple D, of which enough remains to suggest another tripartite Sumerian plan.

The one remaining temple known to us at Uruk is the 'Stone Cone Temple'.² In both its phases this temple stood in a large courtyard whose walls were decorated with stepped recesses on both sides. The inner walls of the court and the outer walls of the temple must have been covered with red, white and blue cone-mosaics, the remains of which were strewn over the site in large quantities. Again we are confronted by a tripartite plan, but this time with deviations, the most striking of which is an L-shaped room occupying the north-east side of the building. The excavator attributed this temple to the end of Uruk 4 though he admitted the possibility of an Uruk 3 date.

At Tell 'Uqair was found a series of temples, the earliest of which may have been founded in the 'Ubaid period. The most important of these was the 'Painted Temple';³ its exact date remains uncertain but it may be described here as there is some reason to suppose that it may be placed within the Uruk 4 phase. This temple, built of *Riemchen* bricks, was set on a platform about 5 m. high, arranged in two steps, with a buttressed façade and approached by three separate staircases. Above the niches of the façade was a horizontal band of five rows of black cone-mosaic. The temple itself also had a buttressed façade. Its plan represented the classic Sumerian tripartite temple, comparable with those at Warka and Eridu: a central cella with flanking rooms. The cella was approached through doors at the side; there may also have been an entrance at the end opposite the podium, but this was not preserved.

At the north-west end of the cella was a stepped podium 3 ft. high which projected for 12 ft. over a width of 8 ft., to which a flight of six steps gave access. Towards the other end of the cella was a smaller pedestal.

The most remarkable feature of this building was its painted decoration, traces of which survived on every square foot of the inner walls and podium. This was executed in a great variety of colours (except green and blue) on a white ground. The most

¹ G, 7, fig. 16.

² §11, 3, no. xv, Taf. 36.

³ §11, 8; see also *C.A.H.* 1², ch. VIII, sect. 1 (Tell 'Uqair).

usual arrangement consisted of a red wash forming a dado about 1 m. high; above, a band of geometric ornament about 30 cm. high; above this again, a band of animal and human figures. These included quadrupeds (probably bulls) and bare-footed human figures clad in knee-length kilts. Unfortunately these were preserved only to waist height, but it may reasonably be supposed that they represent men bringing cattle as offerings to the deity.

The best-preserved paintings were on the front and sides of the podium: the front bore an imitation of a buttressed façade with patterns in the recess, probably representing cone-mosaics, comparable with that found on the façade of the stair platform in the Pillar Hall at Uruk. To the side were two spotted leopards, one couchant, the other seated on its haunches.

Paintings have not been preserved at other sites but the geometric patterns found at 'Uqair recur at Uruk in E-anna, the area sacred to the goddess Inanna. As we have seen above, some of those early shrines had walls decorated on the outside with many thousands of thin cones of baked clay. These are generally 3-4 in. long and resemble headless nails; their tops are about $\frac{1}{2}$ in. or less in diameter and are often dipped in red or black paint. These cones were inserted, closely packed, into a thick mud plaster, thus covering the mud-brick walls with a weatherproof skin of baked clay cones, the coloured heads of which formed lozenges, zigzags and other geometric patterns in black and red on a buff ground.

This method of covering the walls was laborious in the extreme, and it was later restricted to the recessed panels of the brickwork. In this later form it survived at Uruk into Early Dynastic times, but elsewhere it may well have been confined to the predynastic period. The cone-mosaics must have been used in the beginning throughout southern Mesopotamia, for at many sites where traces of early settlement are found—Ur and Eridu among them—clay cones occur in greater or lesser quantity, although not in properly preserved mosaics. Mosaics were also executed in cones cut from stone and ground into shape.¹ At Eridu, gypsum cones with ends sheathed in copper were found in association with temples attributed to the Uruk period.²

Mosaics probably included representational as well as geometric designs, notably animal friezes such as were rendered in paint at 'Uqair. We cannot prove that these were originally produced by the use of painted cones, but that is suggested by a simplified

¹ In the *Steinstiftmosaik* temple at Warka, see §11, 3, no. xv.

² §11, 7, 107.

type of animal mosaic which was known at Uruk during the later part of the predynastic period: here the animals were modelled in one piece in clay, and the flat plaques so produced were surrounded by cones which covered the rest of the walls. These friezes and the paintings at 'Uqair thus form the prototypes of similar designs executed in inlay work or by means of applied copper figures at Al-'Ubaid in Early Dynastic times.¹ We observe, then, a change of technique, but continuity of usage, in the decoration of early Mesopotamian temples.

Cones of larger and coarser types were used too. Some of about a foot in length served as a border near the upper edge of the artificial temple moulds at Uruk and 'Uqair. But the most accomplished use of cone-mosaic occurs in Archaic Layer 4 at Uruk; here, as we have seen, huge columns, 9 ft. in diameter, are completely covered with small cones forming geometric designs. The same ornamentation adorns the front of the platform supporting the colonnade, and the walls with semi-engaged columns which flank the stairs leading up to the platform. The combination of colouring and texture gives to these wall surfaces an extraordinary richness and beauty.

One of the most important monuments of the 'Proto-literate' period is an alabaster vase 3 ft. high, now in the Iraq Museum at Baghdad.² It was found at Uruk in a Jamdat Naṣr stratum but the style in which it is executed suggests that it belongs to the earlier Uruk 4 phase. Its outer face is covered with reliefs that, in all probability, depict a ritual which took place in the shrine where the vessel was found. The goddess Inanna appears in front of two reed posts with streamers which form her symbol. A naked figure (in Early Dynastic times priests were often naked when officiating) offers the deity a basket with fruit. Behind him are traces of a figure well known from contemporary monuments. He wears a long skirt, a beard, and long hair plaited and wound round the head to form a chignon at the back. This coiffure is worn by rulers in Early Dynastic and Akkadian times. On the vase this personage seems to offer the goddess an elaborate girdle, the tassels of which are held by a servant who follows him. Other gifts offered to the goddess are placed behind her: among them, two tall vases shaped exactly like the one we are describing; two more vases in the shape of animals—a goat, a lion—with rimmed openings on the back (and such vases have actually been found in temples of the Jamdat Naṣr phase at Khafāji),³ two flat dishes with

¹ See *C.A.H.* 1², ch. xvi, sect. iii (Al-'Ubaid).

² G, 6, figs. 87-90; G, 8, pls. 19-22.

³ §11, 1, 43 and notes 64-6.

fruit; two tall baskets with vegetables and fruit; and a curious object, no doubt a piece of temple furniture, which consists of the figure of a powerful ram supporting on its back a two-staged temple tower upon which stand a male and a female figure and the symbols of the goddess.

The ritual scene we have described occupies the uppermost register of the design. A lower register shows a series of naked men carrying baskets of fruit, dishes and jars. The third and the lowest bands of design show rams and sheep, date palms and ears of barley in alternation.

The vase from Uruk is not the only monument of this period which celebrates Inanna as a fertility goddess—a trough in the British Museum¹ shows rams, sheep and lambs beside a reed structure capped by the symbols of the goddess. This building is probably either an archaic type of shrine or the fold of the flock of Inanna. The design also includes an eight-petalled rosette, a stylized flower which often symbolizes the vegetable kingdom which the goddess rules. The same combination of herbivores and plants is common on contemporary seals, be it that cattle are combined with the curving ears of barley, or that the temple animals are shown being ritually fed with barley; or there are also the symbolic rosettes which we have just described.

Engravings on cylinder seals give us a more complete impression of the artistic achievements of the age than the sadly damaged wall-paintings and the rare vases with reliefs. The quality of the seal engravings is often of the highest, and the variety of their repertoire is very great. It would be pointless to enumerate their subjects here,² but it is important to observe (since it shows the extraordinary inventiveness of the age) that every type of design which we meet in later times was known already in the 'Proto-literate' period—with the possible exception of myths, which are commonly depicted in Akkadian times alone. We find in these earlier ages ritual scenes, and even a secular one (the 'king' on the battlefield), in other words, subjects in which the narrative is all-important. But likewise we find heraldic animals, antithetical groups, and similar subjects in which the content matters little and the decorative values count most. We find designs which are symbolical, such as ibexes flanking a pair of snakes and a rosette: in other words, a group of manifestations or attributes of the nature-deities we have discussed. But there are also seal designs consisting of files of animals, as superbly modelled as the symbolic

¹ G, 8, pl. 23.

² General discussions will be found in §1, 1; §1, 4; §11, 4.

12 LAST PREDYNASTIC PERIOD IN BABYLONIA

groups, but of uncertain significance. The seals are larger than those of any other period; some are as much as 2 in. in diameter and more in height. Together with the stone vases they give an impression of perfection in the work of this time.

Among the secular monuments found at Uruk is a black granite stela,¹ retaining in large part the original shape of the boulder but showing on one smoothed face a bearded leader in the act of hunting lions. He uses a spear in one example, bow and arrow in the other, for he is represented twice. There is no inscription; no setting is indicated and there are no followers. The occasion of the hunt remains a mystery, and thus an innovation of great importance in the history of the stela, the free-standing stone set up merely to serve as vehicle for an inscription or design, remains problematical.

- A much finer work discovered at Uruk is a female head,² 8 in. high, fitted originally, perhaps, to a statue of different material. It is made of gypsum and eyes and eyebrows were inlaid, as was usual in the Early Dynastic period. There is a curious contrast of treatment within the work: the face is exquisitely modelled but the hair, parted in the middle, is rendered by a succession of broad flat planes. If, as has recently been assumed, these geometric surfaces were covered with gold-foil engraved to render the hair, the contrast with the treatment of the face would disappear. In any case, the head is a work of rare beauty more in keeping with that of the earlier phase of the 'Proto-literate' period than with that of the later layers in which it was found. It is probably a survival from the earlier phase.

Beyond question the most remarkable invention (if such it was) of the earlier predynastic period was writing, not only for its own importance, but because the beginning of 'history', in however rudimentary a form, was dependent upon this resource. It is now unnecessary to describe at length³ the form of writing which first appeared, so far as we know at present, in the period called 'Uruk 4'. This script is, however, by no means primitive in all respects, and it shows signs of development and formalizing before this first appearance. Only a minority of the signs can be recognized as pictures, and their linear descendants in the cuneiform script, where a good many of them were preserved, came to have meanings which often seem arbitrary, although they must in some way

¹ G, 6, pl. 92; G, 8, pl. 18; see also *C.A.H.* 1², ch. XIII, sect. v. For similar scenes depicted on cylinder seals, see § 11, 9 and references therein.

² G, 6, fig. 105; G, 8, pls. 30 f.

³ A full description and discussion will be found in § 1, 4.

be derived from the original concepts. It is at least probable that the future will reveal earlier and more elementary writings than the tablets of Uruk, but it is hardly to be expected that such will be found elsewhere than in Lower Iraq, which at present claims the glory of being the earliest nurse of man's best achievement. This geographical setting is independent of the question what language it was that the first writing preserves.¹ That in the subsequent stage (tablets of the Jamdat Naşr period) the language is Sumerian has been sufficiently demonstrated, but if it be true that an ethnic substratum existed in the land before a (hypothetical) immigration of the Sumerians, the Uruk 4 tablets could be imagined as expressing that earlier language. At present such questions are quite beyond determination, and although future discoveries may be hopefully awaited it is hardly probable that, upon this first verge of written record, they will be decisive.

III. THE LATER PHASE (JAMDAT NAŞR)

The later phase of the 'Proto-literate' period was one of consolidation, elaboration and expansion. Its innovations were few. Its fine polychrome pottery shows black and red geometric designs on a light-coloured band round the shoulder while the rest of the vessel is covered with deep red or plum-coloured paint.² But the pottery was known already in the earlier phase of the period, and if it seems more characteristic for the later phase, that may be due to the fact that the remains of the latter are so much more numerous.

Temple architecture of this phase is best represented at Uruk by the 'White Temple',³ the latest preserved of a series of shrines whose remains are incorporated in the so-called Anu Zikkurrat—an irregular mound 40 ft. high, with an area of 420,000 sq. ft. Access to the White Temple was by three ramps. The Sanctuary itself measured 60 × 70 ft. (as at 'Uqair) and was surrounded by an open area. It was an elaborate structure, built of sun-dried bricks and whitewashed. The outer walls, and part of the inside walls, showed buttresses alternating with vertical chases or stepped recesses. In the lower part of each recess, horizontal timbers strengthened the brickwork at regular intervals and formed a visible pattern at the same time. Higher up in the recesses were

¹ *C.A.H.* 1², ch. XIII, sect. 1; but the idea of an earlier substrate language is contested above in *C.A.H.* 1², ch. IV, sect. IV. See also above *C.A.H.* 1², ch. VIII, sect. 1 (Eridu).

² E.g. §11, 1, pls. 1, 5, 6; G, 8, pl. VII.

³ G, 7, fig. 14; G, 8, pl. 14.

small windows, triangular, if we may judge by a stone model of which fragments were recovered.

One entered the building through a door in one of the long sides; then, passing through a vestibule, one reached the cella, which occupied the centre of the temple over its whole length and was flanked by two symmetrical rows of smaller rooms; one of these served as vestibule, the others as vestries, stair-wells and storerooms. An altar stood against one of the short walls of the cella, and some distance in front of it a base of masonry may have supported a hearth; this, at least, is the rule in the temples of Early Dynastic and Akkadian times and their evidence would seem relevant since they agree with the 'Proto-literate' temples in the layout of the cella.

An important feature of the Uruk-Jamdat Naşr period at Uruk is the *Riemchengebäude*,¹ an isolated structure measuring about 18 × 20 m., built within a pit dug into the north corner of the Stone Cone-Mosaic temple. The excavators assigned the building of the *Riemchengebäude* to the Uruk 4 phase, but many of the objects it contained were typical of the Jamdat Naşr period.

The building consists of a series of chambers and corridors, but has no doorway in the outer walls through which it might have been entered. The innermost chamber (4 × 6.50 m.) was completely surrounded by a corridor. A blazing fire burnt here but only one wall bore traces of burning. This suggests that the flame was blown in that direction by the wind, which in turn implies that there was no roof.

A rich deposit of objects was found within the building. The plaster of the walls must have been still damp when these were placed there, as impressions of vases were found on the walls in some cases. Among the objects found were hundreds of pottery and stone vases, alabaster bowls, copper vessels, clay cones, gold leaf, and nails with heads covered in gold leaf, weapons (arrow-heads, maceheads, knives, spearheads), and animal bones. In the north-east corridor were found the remains of wooden posts, pieces of black and white stone mosaic and tubular copper sheaths once nailed to posts 1.8 m. long. The excavator considered these to be components of furniture, perhaps settles.² Some had been carefully set down, others were so mutilated that they must have been thrown in from above.

The evidence points to the purpose of the *Riemchengebäude* as being for the ritual dedication and burial of the furniture from a temple which was to be abandoned or superseded by a new shrine.

¹ §11, 3 no. XXI, Taf. 31 (4).

² §11, 3, no. xv, pls. 15 and 42.

It appears to have been built expressly for the purpose, filled with objects before the plaster was dry, and dedicated in a ritual fire-ceremony and buried while the flames still burned in the innermost chamber. It must be stressed that no traces whatever of human remains were found in the *Riemchengebäude*. It might perhaps be regarded as simply an elaborate form of *Opferstätte*, many of which were found at Uruk and assigned to the Jamdat Našr phase by the excavators.¹ Some were found in the E-anna precinct, but with no trace of the buildings which might have contained them. They took the form of trenches dug at a slant and plastered on the inside. Offerings of fish, birds, animals and vegetable matter were placed in the deep end and burnt. The ashes were then swept out and the trough was replastered in preparation for the next sacrifice. In an area known as the Southeast Court, a series of small rooms each contained troughs sunk into the floor. These were sometimes in the form of a shallow dish with a channel projecting at one side. *Opferstätten* seem to have been found at other sites in the Jamdat Našr period, though they are often described by the excavators as kilns or hearths.²

The civilization which had apparently evolved in a restricted area in the extreme south now flourished in a number of settlements further north, for instance in the region to the east of the Diyālā in the latitude of Baghdad. In that region, at Khafājī, we can follow a development in temple architecture which was significant:³ unfortunately we cannot corroborate it with evidence from Uruk since the Inanna temple stood at this time upon a platform which is preserved while the actual shrine is lost. At Khafājī a temple dedicated, in all probability, to the moon-god Sin was founded in this phase (Jamdat Našr). Its plan resembles the earlier temples at Uruk: an oblong cella occupies the centre of the building, with an altar against one of the short walls. A new trend is announced, however, by an element of asymmetry: the small rooms no longer flank the cella. On the side of the entrance there are, as of old, three rooms, one of which serves as vestibule. On the opposite side there is one continuous stairway leading to the roof, with a storeroom arranged underneath the steps. This slight change in plan is the first indication of an impending development which was to change the character of the temple considerably. Hitherto, the shrine had stood unattached to other structures, a self-contained symmetrical unit. Various subsidiary buildings

¹ For a convenient summary of the evidence concerning *Opferstätten*, see § III, 23. See also *C.A.H.* 1², ch. VIII, sect. 1 (Uruk-Warka).

² E.g. in the second courtyard of Sin temple 4 at Khafājī.

³ § II, 2.

16 LAST PREDYNASTIC PERIOD IN BABYLONIA

such as storerooms and ovens were placed more or less haphazardly near its entrance. We notice, at Khafāji, a change from this initial situation to one in which these subsidiary structures were grouped in and around the courtyard and joined to the temple; the stairs leading to the temple roof were shifted to this courtyard and the oblong space on the far side of the cella thus became superfluous and was suppressed. This change was completed towards the end of the 'Proto-literate' period (Sin temple 4) and it changed the cella from a central room, through which one passed necessarily on many occasions, to a secluded chamber placed at the very back of an extensive building. The cella retained this character throughout later times. The temple as a whole obtained, as a result of this development, a much more complex but also a more flexible plan than the isolated symmetrical design used in the earlier phase of the 'Proto-literate' period. We do not know whether the change was correlated with one in function or significance.

At Grai Resh¹ (Jebel Sinjār), excavations yielded a building of the Uruk-Jamdat-Nasr period. It consisted of a long central room with smaller rooms opening off it and may have been a private house or a temple.

It is important to note the variations to which the early temple architecture is subject. We have already noticed that the designs executed in cone-mosaic at Uruk recur in paint at 'Uqair. Another difference consists of the variation in height of the platforms upon which the temples stand: they range from the low socles found in the E-anna precinct at Uruk or at Khafāji to the 15 ft. platform at 'Uqair, while the platform of the 'White Temple' itself rests upon a mound of accumulated débris. Yet the plans of all these temples resemble each other closely. If the opportunity offered by unlimited space is exploited, they merely show a repetition, on a larger scale, of the basic plan consisting of a long central room with suites of rooms on either side. This plan is retained for the main structure and is repeated at right angles and in such dimensions that the area corresponding with the central room becomes a long open court. This was done, for instance, in 'Temple C' at Uruk as we have seen above.

It should be mentioned here that temples built upon platforms have been considered the origin of the stepped tower or zikkurrat,² so characteristic a feature of later Babylonian architecture, the recollection of which is enshrined in the 'Tower of Babel'. The earliest true zikhurrats of which remains have been found are not

¹ § III, 15; see also *C.A.H.* 1², ch. VIII, sect. II and fig. 12.

² § III, 14; § III, 19.

earlier than the Third Dynasty of Ur (2113–2006 B.C.), the best preserved being the great pile at Ur itself. The excavator of this has stated, however, that it incorporated brickwork of the Early Dynastic period,¹ which may indicate that a similar, if smaller, structure occupied the site previously. Recently it has been suggested that two Early Dynastic zikkurrats existed at Kish, but the evidence is not conclusive.² In the absence of ascertained remains of the buildings themselves, pictorial representations of stepped constructions are by some interpreted as showing the building of zikkurrats.³ It does not seem likely that such a structure was part of the temple E-ninnu at Lagash, which was restored, as described by them in detail, in the reigns of Ur-Baba and Gudea.⁴ The elaboration which such a construction acquired in the Middle Babylonian period has been demonstrated by the detailed examination of the zikkurrat at Dūr-Untash (Choga-Zanbil), near Susa.⁵

Outside the field of architecture too, a combination of continuity and change strikes one when one compares the two phases of the period. We have stated already that at Khafājī were found animal-shaped vases of the type depicted on the tall vase from Uruk which probably belongs to the earlier phase.⁶ The low relief of that vase finds a few somewhat coarsened descendants in the vases of the later phase. Most of these, however, are decorated in a different manner. The animals' bodies are rendered in profile in relief, but the head is turned outward, and emerges from the body of the vase in the round. The parts worked in relief are not only heavier than was usual, but certain mechanical tricks replace the uniformly sensitive modelling of the earlier phase. For instance, a group of a lion sinking its claws and teeth in the hindquarters of a bull occurs on a number of vases.⁷ The front paws of the lion show regularly two parallel grooves, the haunches of the bull a scalloped line; in both cases these abbreviations must serve in the place of a plastic rendering of the muscles. Yet these vases are not without merit. The more substantial relief creates a vigorous contrast between shades and highlights well in keeping with the violent struggles which form the subject of the decoration. The same tendencies are noticeable in another class of vases used in the temples. Their basic form is a cup on an ornamental base but the cup, in many cases, disappears within the elaborately carved open-work of the support.⁸ The subject is, again, one of struggle,

¹ §III, 26, 7 and 99.

² G, I, 181–6; §III, 8; §III, 14.

³ §III, 7; also *C.A.H.* II², ch. XXIX, sect. II.

⁴ E.g. G, 8, pls. 26 f.

⁵ §I, II.

⁶ §III, 4, 131 f.

⁷ See above, §II.

⁸ G, 3, pl. 6; G, 8, pls. 24–5.

18 LAST PREDYNASTIC PERIOD IN BABYLONIA

mostly between a male figure and two or four animals, either lions or bulls. The man—if it is a man—is of heroic appearance, broad-shouldered, long-haired, bearded, dressed only in a girdle. In one instance he wears the shoes with upturned toes which are used even today by the northern mountaineers. It is extraordinary that we know absolutely nothing about this figure from any text, for he plays a major part in the repertoire of the Early Dynastic seal-cutters, and is frequently found, in reliefs and on seals, down to neo-Babylonian times. There is no justification for the identification with the hero of the Gilgamesh epic which is sometimes made.

The two groups of stone vases which we discussed as typical of the later phase of the 'Proto-literate' period were made in light-coloured stones, mostly limestone or gypsum. A third class used dark stone, bituminous limestone in most cases. In this material bands and other patterns were gouged out and these were filled with inlaid geometric designs such as triangles, lozenges, concentric circles and rosettes. The materials of the inlays are coloured limestones, shell and mother-of-pearl, and the pieces were set in bitumen. The effect is, again, vigorous and rich.¹

Other works of stone were found in the temples. It seems that the custom of placing figures of devotees before the gods—well testified for Early Dynastic times—was known already in the 'Proto-literate' period. At Khafāji a gypsum statuette of a woman was found, a muscular little person carrying her head rather forward in a strikingly natural pose.²

Animals too were modelled in the round; a wild boar from Ur, carved in soapstone,³ formed part of an implement (it has a cup-like hollow in the back and was attached below); black stone figures of rams, of different sizes, were meant to be attached to a wall.⁴ This is indicated by perforations for copper wire in the backs of the figures. We have met the animal frieze, not only on the alabaster vase from Uruk but also in the cone-mosaics, and we have discussed its appropriateness in a Sumerian temple. The attitude of the rams tallies with that of the animals on the first group of vases we described in this section: their bodies extended along the wall while their heads are turned outward and face the spectator. This attitude survives in the copper bulls which decorated, in a similar frieze, the Early Dynastic temple at Al-'Ubaid.⁵ Other fragments of animal sculpture are more difficult to explain. Some are standing figures with stone bodies and legs of silver or

¹ G, 8, pl. vi.

³ § III, 25, 31 and pl. 37.

⁵ § I, 6, pls. xxix f.

² G, 3, pl. 9B; § III, 6, pl. 1.

⁴ *Ibid.* 42 and pl. 38.

copper; of others, rams, only the heads are known and we do not know whether they formed part of temple furniture or architectural decoration. Some of these heads are, again, modelled with great mastery. A complete figure of a ram with a copper rod fixed in the back¹ recalls the copper rushlight of Early Dynastic times from Kish where the supporting figure is a frog.² Such comparisons do not merely allow us to interpret with some degree of probability the monuments of the 'Proto-literate' age; they also emphasize the continuity of Mesopotamian culture.

A last characteristic category of objects consists of small figures of animals carved in stone. They are pierced and are called amulets, but we do not really know their significance. It is clear that they are in harmony with the religious preoccupation with natural forces; rams, cattle of various kinds, wild herbivores and lions are common among them and a figure of a lioness from Tell Agrab bears the symbol of Inanna in relief on its shoulder. In quality they range from obvious mass products to splendidly finished little carvings. Sometimes they are covered with small inlays of lapis lazuli, appropriate in the case of leopards but also used in other instances. Some of these animal figures show engraved or drilled designs on the base: whether these are stamp seals remains doubtful. The religious significance of this category of charming small-scale stonework is further demonstrated by the occurrence among them of the lion-headed eagle, the embodiment of the dark clouds of the spring storms and their welcome rain. The creature is not shown with spread wings, as in Early Dynastic times, but like a crouching bird of prey. We do not know whether some of these figures belong to the early phase of the period or whether their occurrence in Early Dynastic layers marks a continuity of manufacture or merely the continued use of extant figures.

The same uncertainty attaches to some classes of cylinder seals.³ Some of them (like some of the stone vases) merely continue older motives on a lower level of excellence. There is, on the other hand, a numerous class of cylinders which are found only in the later phase of the 'Proto-literate' period. They are tall and narrow—their height is sometimes three or four times the diameter—and they show striking combinations of various geometric designs. Even this geometric decoration disintegrates towards the end of the period, as do all the other seal designs. For instance, when the drill, a rapid tool, had been used in the early phase its traces were carefully obliterated by the subsequent engraving; in the later

¹ G, 3, pl. 4A.

² *Ibid.* pl. 29C.

³ §III, I, 3 ff.

phase the drill-marks are noticeable, and sometimes even form patterns by themselves. The general impression of late 'Proto-literate' glyptic is that of a mass product; the seals of the earlier phase are, on the other hand, individual works, all of high quality. We know, as a matter of fact, that the number of seals produced in the later phase of this period was enormous, not only because they are found in hundreds in our excavations but also because they are fairly common in Early Dynastic layers and they even turn up in deposits of much later ages, for instance in a temple of the Hammurabi period in Ischali. It is not certain that all engraved cylinders of the late 'Proto-literate' period served as seals; of some classes impressions are not known. But in any case the call for seals must have been great during a phase which was, above all, a period of expansion, especially of trade.

The stone of the seals themselves points to trade; it had to be imported—if only from the Persian foothills. But stone was anyway remarkably abundant in this period. We have mentioned its manifold uses in the equipment of the temples. Both at Ur and at Khafāji private people were buried with a greater proportion of stone vases among their grave goods than at any other age. Lead tumblers also occurred in those graves, as did large copper dishes, sometimes 1–2 ft. in diameter.

With the graves we have entered on a description of secular remains. They were dug under the floors of the houses and the body was wrapped in matting and buried in a contracted position. No cylinder seals and no tools or weapons were found in those graves, in contrast with those of later times. But the houses in which the graves were found resemble those of later times and are undistinguished; they consist of a number of oblong rooms grouped within the available plot of ground without any noticeable order. At Jamdat Naṣr a large building was labelled 'palace'¹ but its plan has not been sufficiently elucidated for guesses regarding its function to be profitable. The building material used throughout the period consisted of small, oblong, sun-dried bricks square in section, called *Riemchen*.

Some figurative monuments which are secular are known. The so-called 'Blau Monuments' in the British Museum² are two tablets of green schist bearing signs and figures which show that they were made during the later phase of the 'Proto-literate' period. It has been suggested that they are the records of some transactions; they show stoneworkers drilling out vases and the bearded long-haired figure in the long skirt (who is the main actor in most

¹ §1, 10.

² G, 8, pl. 15; §1, 4.

scenes of this period) holding on one monument a kid, on the other an object which might well be the tasselled girdle which is offered to the goddess on the alabaster vase from Uruk and also on a seal cylinder.¹

Summarizing our survey, we see the later phase of the 'Proto-literate' period as a consolidation of the achievements of the earlier phase. These were now spread throughout Sumer and Akkad. Moreover, Mesopotamian influence spread throughout the Near East. The most substantial traces of this influence were found in south-west Persia. In Elam alone the Sumerian script of 'Proto-literate' times was imitated. A number of clay tablets bearing 'Proto-Elamite' inscriptions and seal impressions resemble those from the Euphrates-Tigris plain, but the signs are actually different, as is no doubt the language they render, and the seals show in both style and motives peculiarities not found in Sumer. But imported Mesopotamian seals, too, were found at Susa and spread beyond it. At Siālk, near Kāshān, in north-west Persia, Proto-Elamite tablets were found and cylinder seals which might have come from Sumer as well as from Elam, for the simplified designs of late 'Proto-literate' times were common to both. It is even possible that Mesopotamian influence reached Tepe Hisar, near the south-east corner of the Caspian Sea, to judge by the design of a cylinder seal excavated there.²

Another line of expansion led northwards along the Euphrates. We have not yet direct evidence of Mesopotamian expansion along the Middle Euphrates comparable with the situation prevailing in Early Dynastic times, and again under the First Dynasty of Babylon, when this valley fell entirely within the orbit of the southern centre of culture. Yet we must assume close contact to have existed in late 'Proto-literate' times in order to account for the fact that at Tell Brak,³ on a tributary of the Khabur (which joins the Euphrates) a temple was discovered which agrees in many details of its arrangement and equipment with those of Uruk and 'Uqair. At Chagar Bazar, a bulla with Sumerian inscription was found.⁴ Evidence from prehistoric Nineveh shows that a parallel development took place there, and some of the plain ceramic as well as cylinder seal impressions are similar to objects found in Babylonia.⁵

Influence from Mesopotamia reached even farther at this time.

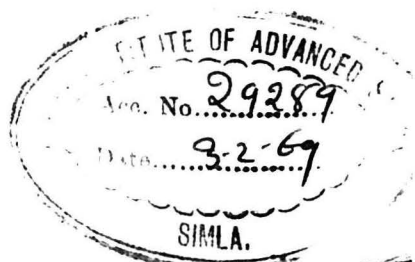
¹ G, 4, pl. III; G, 8, pl. 17 (second from the top).

² §III, 22, 198 f.

³ C.A.H. I², ch. VIII, sect. III.

⁴ §III, 18, 151 (A 391).

⁵ C.A.H. I², ch. VIII, sect. II, and ch. XVI, sect. IV.



22 LAST PREDYNASTIC PERIOD IN BABYLONIA

In the plain of Antioch, at Tell Judaidah, and at Çatal Hüyük in Anatolia, several cylinders were found which must be either imports from Mesopotamia or local imitations of 'Proto-literate' seals. Others were bought in north Syria at a time when travel was less easy and antiquities less valuable than today, so that it is a fair presumption that they too reached north Syria soon after their manufacture in the south. Yet farther to the north, at Alişar in eastern Anatolia, and at Hisarlik, the mound of Troy, fragments of the tall seals, with geometric designs which we have described above, were found. Mention should also be made of the possibility that the idea of writing, and even some of the forms of cuneiform script in the Jamdat Naşr period penetrated as far as modern Romania, where some remarkable discoveries have been made.¹

The south Mesopotamian influence is noticeable in seal impressions on pottery at Byblos and in Palestine, although these may belong to a slightly later date. Only twice afterwards—under Hammurabi and under the New Assyrian empire—did Mesopotamian influence pervade the Near East in this matter. In these two periods it also reached Egypt, and the same is true for the late 'Proto-literate' period. We are not concerned here with the effects of this contact upon Egyptian civilization, then, too, in a formative phase; we want merely to recall that cylinder seals of a Mesopotamian type belonging to the Jamdat Naşr phase have been found in Egypt, two actually in excavated graves of the Naqāda II period at Naqāda.² It is uncertain whether they are of Mesopotamian manufacture or Egyptian imitations of Mesopotamian prototypes. Whether contact was established on the Mediterranean coast or on that of the Red Sea also remains uncertain.³

It is, however, necessary to consider the significance of the period we have described within the early history of Mesopotamia. If we recall its prehistoric antecedents, the changes which it brought about gain the proper relief.

The most important single innovation is the introduction of writing. In the opinion of many scholars the whole history of writing in the West derives from this discovery since they hold (as does the present writer) that the invention of hieroglyphic writing in Egypt was stimulated by a knowledge of the principles of Sumerian writing as it existed in the last part of the 'Proto-literate' period. It has been shown above that Egypt was at that time in contact with Sumer.

¹ § III, 24; § III, 5.

² *C.A.H.* i², ch. ix (a), sect. II, end.

³ For a full discussion, see *C.A.H.* i², ch. xi, sect. vi, and references therein; also *C.A.H.* i², ch. ix (a), sect. II.

The signs of the early script teach us something about the early Sumerian communities. They show the preponderant importance of sheep and goats in their economy. We may assume that the wool trade, which in historical times made it possible to obtain metals and other raw materials which the alluvial plain lacked, existed already in 'Proto-literate' times, although we cannot determine its scope. The sign for 'merchant' exists, at any rate in the earliest script.¹ Cattle and donkeys were kept. We also find the sign group for 'ass of the mountains', which denotes the horse in later times, though not necessarily in the early tablets;² in fact there would appear to be no evidence for the use of the horse before the last quarter of the third millennium.³ Earlier monuments do not depict it and the *equidae* which are shown drawing the Early Dynastic war chariots are probably onagers;⁴ this is confirmed by actual bones found at Tell Asmar.⁵

Fishing and the chase were also of some economic importance: ibex, stag and hunting dogs occur among the signs. Most important, however, was agriculture. Barley was the commonest crop but wheat was well known. The sign for plough lacks the seed-funnel which is shown on Akkadian seal impressions, but this does not prove that it was unknown.

The four-wheeled chariot also occurs as a sign, and it is probable that the wheel was a Mesopotamian invention⁶ since the sledge is known in 'Proto-literate' as well as in Early Dynastic times and the chariot appears as a sledge placed on wheels. We know that these consisted, not of rings with spokes, but of solid circular discs of planks clamped together and provided with a 'tyre' of broad-headed nails driven into the outer edge. The wheels were attached to the axle which, therefore, revolved with them through bearings fixed to the bottom of the chariot. An almost similar type of primitive cart survives in India to this day.⁷ The wheel, once invented, was soon put to another use: wheel-made pottery was known earlier in Sumer than anywhere else: its traces seem to be recognizable in Archaic Level 8 at Uruk. As to other inventions, the signs include a shaft-hole axe which is common among the finds of the Early Dynastic period but very rare before that date. It indicates an advance in metallurgical technique, for it required a closed mould for its casting. Gold and silver were worked as well as copper; this we know from the texts.

¹ §I, 4; §III, 13.

³ §III, 21, 11 ff; §III, 12; §III, 27.

⁴ §III, 3, an exception.

⁶ §III, 2; §III, 20.

² §I, 4, 53.

⁵ §III, 9, 2 ff.

⁷ §III, 16, pl. xxix, 2.

24 LAST PREDYNASTIC PERIOD IN BABYLONIA

There are animal figures carved in stone, the legs of which were probably made of precious metal and added to the stone body.¹

We may end by drawing a conclusion from the texts regarding the political organization of the early communities. The word for 'king' (*lugal*) is not found before Early Dynastic times. The words for 'elder' and 'assembly' do occur, however, on 'Proto-literate' tablets, and it seems, therefore, likely that local autonomy found expression in a system of which feeble traces are found far into historical times and which assigned ultimate authority to the assembly of all free males presided over by the elders.²

The development of cities is a significant feature of 'Proto-literate' times, for it suggests a form of political organization which was not only characteristic of Mesopotamia during the early phases of its history, but which reasserted itself whenever the central government collapsed. We refer to the city state, consisting of one or more cities with the land which sustained their citizens. The fact that the full development of cities like Uruk, Kish and Eshnunna seems to go back to 'Proto-literate' times elucidates the general character of that period, which consists precisely in this, that many usages and institutions which were to remain typical for Mesopotamia then made their first appearance. It is for this reason that we have described this period as the transition from prehistory to history; it saw the emergence of Mesopotamian civilization from a substratum which was neither peculiar to the Euphrates-Tigris valley nor similar to the area's civilization in historical times. The innovations of the 'Proto-literate' period established the identity which Mesopotamian civilization retained throughout its long history and the traditions of the Sumerians—like Egyptian traditions—did not reach back beyond the formative phase of their culture. Beyond this phase they saw, not the prehistoric past which excavations have revealed to us, but the superhuman origin of their society. Legend merged into myth, 'kingship descended from heaven' and was 'in Eridu' and other cities.

But neither the development of cities nor any of the other innovations of this period—the invention of writing, the introduction of metallurgy, the efflorescence of art—can by itself explain the great change from prehistory to history. It is their aggregate which creates the effect we have described and which bespeaks a prodigious quickening of the spiritual life of the times. In this sense Mesopotamian history may be said to begin in the 'Proto-literate' period even though 'historical' texts do not reach back so far.

¹ G, 2, vol. IV, 1992, fig. 1080.

² § III, 10; § III, 11; § III, 17.

BIBLIOGRAPHY

G. GENERAL

1. Amiet, P. *La Glyptique Mésopotamienne*. Paris, 1961.
2. Contenau, G. *Manuel d'Archéologie orientale*, I-IV. Paris, 1927-47.
3. Frankfort, H. *The Art and Architecture of the Ancient Orient*. Harmondsworth, 1954.
4. Frankfort, H. *Cylinder Seals*. London, 1939.
5. Parrot, A. *Archéologie Mésopotamienne*, I, II. Paris, 1946, 1953.
6. Parrot, A. *Sumer*. London, 1960.
7. Perkins, A. L. *The Comparative Archeology of Early Mesopotamia* (S.A.O.C. no. 25). Chicago, 1949.
8. Strommenger, E. and Hirmer, M. *The Art of Mesopotamia*. London, 1964.

I. SOURCES AND GENERAL CHARACTER OF THE PERIOD

1. Biggs, R. D. 'The Abū Salābīkh Tablets.' In *J.C.S.* 20 (1966), 74 ff.
2. Genouillac, H. *Fouilles de Telloh I: Époques Présargoniques*. Paris, 1934.
3. Delougaz, P. 'A Short investigation of the temples at Al-'Ubad.' In *Iraq*, 5 (1938), 1 ff.
4. Falkenstein, A. *Archaische Texte aus Uruk*. Berlin, 1936.
5. Frankfort, H. *Progress of the Work of the Oriental Institute in Iraq, 1934/35* (O.I.C. no. 20). Chicago, 1936.
6. Hall, H. R. and Woolley, C. L. *Al-'Ubad* (U.E. I). London and Philadelphia, 1927.
7. Heinrich, E. *Fara*. Berlin, 1931.
8. Langdon, S. *Excavations at Kish*, I. Paris, 1924.
9. Lloyd, S. 'Uruk Pottery.' In *Sumer*, 4 (1948), 39 ff.
10. Mackay, E. *Report on Excavations at Jemdet Nasr, Iraq*. Chicago, 1931.
11. Moorey, P. R. S. 'A reconsideration of the Excavations at Tell Ingharra (East Kish), 1923-33.' In *Iraq*, 28 (1966), 29 ff.
12. Parrot, A. *Tello: synthèse de vingt campagnes*. Paris, 1948.
13. Schmidt, E. F. 'Excavations at Fara, 1931.' In *M.J.* 22 (Philadelphia, 1931), 192 ff.
14. Sollberger, E. *Royal Inscriptions, Part II* (U.E.T. VIII). London, 1965.
15. Watelin, L. C. *Excavations at Kish*, III, IV. Paris, 1925-30.

II. THE EARLIER PHASE (URUK 4)

1. Delougaz, P. *Pottery from the Diyala Region* (O.I.P. 63). Chicago, 1952.
2. Delougaz, P. and Lloyd, S. *Pre-Sargonic Temples in the Diyala Region* (O.I.P. 58). Chicago, 1942.
3. Jordan, J., Lenzen, H. J. and others. 'Vorläufige Berichte über die... in Uruk-Warka... Ausgrabungen.' I-XI in *Abh. Berlin, phil.-inst. Klasse* (1930-40); nos. XII-XXII in *Abh. D.O.G.* (1950-66).
4. Legrain, L. *Archaic Seal Impressions* (U.E. III). London and Philadelphia, 1936.
5. Lenzen, H. J. 'Die Tempel der Schicht Archaisch IV in Uruk.' In *Z.A.* 49 (1950), 1 ff.

26 LAST PREDYNASTIC PERIOD IN BABYLONIA

6. Lloyd, S. 'The Oldest City of Sumeria: Establishing the Origins of Eridu.' In *Ill. Ldn News*, 31 May 1947, 303 ff.
7. Lloyd, S. and Safar, F. 'Eridu, a preliminary communication on the first season's excavations.' In *Sumer*, 3 (1947), 84 ff.
8. Lloyd, S. and Safar, F. 'Tell 'Uqair, Excavations by the Iraq Government Directorate of Antiquities in 1940 and 1941.' In *J.N.E.S.* 2 (1943), 131 ff.
9. Mallowan, M. E. L. 'A Cylinder Seal in the Uruk-Jamdat Naşr Style.' In *Baghdader Mitteilungen*, Band 3 (1964), 65 ff.
10. Mallowan, M. E. L. *Early Mesopotamia and Iran*. London, 1965.

III. THE LATER PHASE (JAMDAT NAŞR)

1. Buchanan, Briggs. *Catalogue of the Ancient Near Eastern Seals in the Ashmolean Museum: I. Cylinder Seals*. Oxford, 1966.
2. Childe, V. G. 'The First Waggon and Carts—from the Tigris to the Severn.' In *P.P.S.* 17 (1951), 177 ff.
3. Dyson, R. H. 'Shub-ad's onagers.' In *Iraq*, 22 (1960), 102 ff.
4. Falkenstein, A. *Die Inschriften Gudeas von Lagas: Einleitung*. Rome, 1966.
5. Falkenstein, A. 'Zu den Tontafeln aus Tărtăria.' In *Germania*, 43 (1965), 269 ff.
6. Frankfort, H. *More Sculpture from the Diyala Region* (O.I.P. 60). Chicago, 1943.
7. Ghirshman, R. *Tchoga Zanbil (Dur-Untash)*, vol. 1, *La Ziggurat (Mém. D. Iran, xxxix)*. Paris, 1966.
8. Heinrich, E. *Bauwerke in der altsumerischen Bildkunst*. Wiesbaden, 1957.
9. Hilzheimer, M. *Animal Remains from Tell Asmar (S.A.O.C. 20)*. Chicago, 1941.
10. Jacobsen, T. 'Early Political Development in Mesopotamia.' In *Z.A.* 52 (1957), 91 ff.
11. Jacobsen, T. 'Primitive Democracy in Ancient Mesopotamia.' In *J.N.E.S.* 2 (1943), 159 ff.
12. Lambert, M. Review of A. Salonen, *Hippologica accadica*. In *R.A.* 51 (1957), 211 ff.
13. Landsberger, B. 'Mezopotamya'da Medeniyetin Doğuşu'. In *Ankara Üniversitesi, Dil ve Tarih-Coğrafya Fakültesi Dergisi*, 11, no. 3 (1944), 419 ff.
14. Lenzen, H. *Die Entwicklung der Zikkurat von ihren Anfängen bis zur Zeit der III Dynastie von Ur*. Leipzig, 1941.
15. Lloyd, S. 'Iraq Government Soundings at Sinjar.' In *Iraq*, 7 (1940), 13 ff.
16. Mackay, E. and Mackay, D. *Early Indus Civilizations*. 2nd ed. London, 1948.
17. Malamat, A. 'Kingship and Council in Israel and Sumer: A Parallel.' In *J.N.E.S.* 22 (1963), 247 ff.
18. Mallowan, M. E. L. 'The Excavations at Tall Chagar Bazar, and an Archaeological Survey of the Habur Region: second campaign.' In *Iraq*, 4 (1937), 91 ff.
19. Parrot, A. *Ziggurats et Tour de Babel*. Paris, 1949.
20. Salonen, A. 'Das Rad der Altmesopotamischen Wagen.' In *C.R. Rencontre Assyriol. Internat.* 2, 59 ff. Paris, 1951.
21. Salonen, A. *Hippologica accadica*. Helsinki, 1956.
22. Schmidt, E. F. *Excavations at Tepe Hissar Damghan*. Philadelphia, 1937.
23. Van Buren, E. D. 'Places of Sacrifice (Opferstätten).' In *Iraq*, 14 (1952), 76 ff.

BIBLIOGRAPHY

27

24. Vlassa, N. 'Chronology of the Neolithic in Transylvania, in the light of the Tărtăria Settlement's stratigraphy.' In *Dacia*, n.s. 7 (1963), 485 ff.
25. Woolley, C. L. *The Early Periods* (U.E. iv). London and Philadelphia, 1955.
26. Woolley, C. J. *The Ziggurat and its Surroundings* (U.E. v). London and Philadelphia, 1939.
27. Zeuner, F. E. *A History of Domesticated Animals*. London, 1963.

