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Fig. 1—Map of Mesopotamia

TOWN PLANNING IN ANCIENT MESOPOTAMIA¹

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The Country and its Ruins

MESOPOTAMIA is used here to indicate the modern kingdom of Iraq, without the deserts between the Euphrates and Syria (Fig. 1). It covers, therefore, the middle and lower valleys of Euphrates and Tigris, and the foothills of the Iranian plateau, or ancient Assyria in the north, and ancient Babylonia in the south. The natural conditions of this area do not favour architectural development. It is an alluvial plain and the only building material present in quantity is mud deposited by the two great rivers. Sun-dried bricks were, therefore, not only used for private houses, as in Egypt,² but also for public buildings like palaces and temples. The scarcity of fuel limited the use of baked bricks to drains, damp-courses, bathroom floors and courtyard pavements. Since bitumen, which is obtained at Hit on the Euphrates, served as mortar in such cases, these constructions were waterproof. Reeds and the ribs of palm fronds were used for roofs and ceilings, and for all kinds of temporary structures. Only in the north gypsum—the so-called Mosul marble—is obtainable in the mountain, but its transport required so much manpower that its use was restricted to the palaces and temples of the Assyrian kings.

Monumental architecture, using sun-dried bricks in prodigious quantities, achieved its effects by size and surface decoration. The huge walls were divided by a rhythmic repetition of buttresses and recesses, each further enriched with rabbets (Figs. 3, 8, 11). In Assyria the lower part of the palace walls was covered with a revetment of large slabs of gypsum, often decorated with reliefs (Figs. 3, 4, 13, 14). In both north and south glazed bricks, moulded or smooth, were used in panels or to cover larger surfaces (Fig. 23), at least from the last third of the second millenium onward. In private houses none of these costly elaborations occur, and the cities as a whole resembled their modern descendants, with an irregular network of narrow streets dividing the mass of brown mud-plastered houses, while here and there an irregular public place in front of a temple or a government building was left open (Figs. 7, 8).

¹ I am under an obligation to Sir Leonard Woolley who kindly allowed me to use his plans for Figures 17, 18, and 19, and to the Director of the Oriental Institute, the University of Chicago, for the permission to use Figure 11 and for Figures 5, 7-9, 12-16 drawings and photographs made by members of its Iraq Expedition which I directed from 1929 to 1936.

² See this Review xx (1949) 32-52.



Fig. 2—Worshippers before a god and his temple (Seal impression, about 2500 B.C.)

The Mesopotamian plain is dotted with hills which cover the ruins of the ancient cities. It is necessary to understand the process by which these hills or *tells* were formed since it determines the nature and the limitations of our knowledge. This process still continues. Figure 5 shows a site inhabited for some four thousand years or more, the modern Kurdish city of Erbil, known to the Assyrians as Arbil. The narrow streets wind between the mud-brick houses; the dirt is thrown in the street, and rain water and liquid rubbish finds its way through the dirt. The level of the street thus rises continuously, if imperceptibly. Occasionally a house is deserted or collapses, for sun-dried brick weathers quickly and requires continual repairing and replastering. When it is rebuilt, the owner clears the site, but not down to street level. Remaining a metre or so above it, he will not be troubled by the dirt and rain water of the street; using the stumps of the old walls as foundations for his new house, he obtains a solid foundation. Thus the level of the whole town gradually rises. And this process has gone on for thousands of years. Digging down from the surface, we can read the history of our buildings in the succession of stumps of walls resting one upon the other and often continuing an almost identical plan through centuries.

Thus the modern city of Erbil stands on top of a hill containing the ruins of its predecessors (Fig. 6). The mosque forms its centre, as the temple did in the ancient city (Fig. 7). In many details the comparison of the present and past layouts holds good. We mentioned the absence of drainage. In both the ancient and modern cities the streets are narrow and winding to keep out the sun.

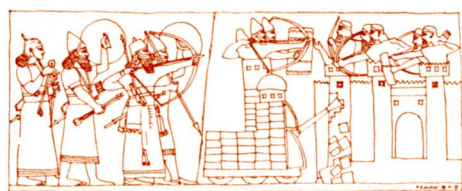


Fig. 4—Assyrians attacking a city with a battering-ram (Ninth century B.C.)

The walls are blank except high up where we find small square windows barred with wooden gratings. A similar grating, of baked clay, turned up in our excavations at Tell Asmar, dating from about 2300 B.C. Even structural features executed in wood can sometimes be reconstructed. A burnt house at Khafaje preserved enough for us to work out its roof



Fig. 3—Assyrians attacking an island city (Ninth century B.C.)

The walls are blank except high up where we find small square windows barred with wooden gratings. A similar grating, of baked clay, turned up in our excavations at Tell Asmar, dating from about 2300 B.C. Even structural features executed in wood can sometimes be reconstructed. A burnt house at Khafaje preserved enough for us to work out its roof



Fig. 5—A street in Erbil

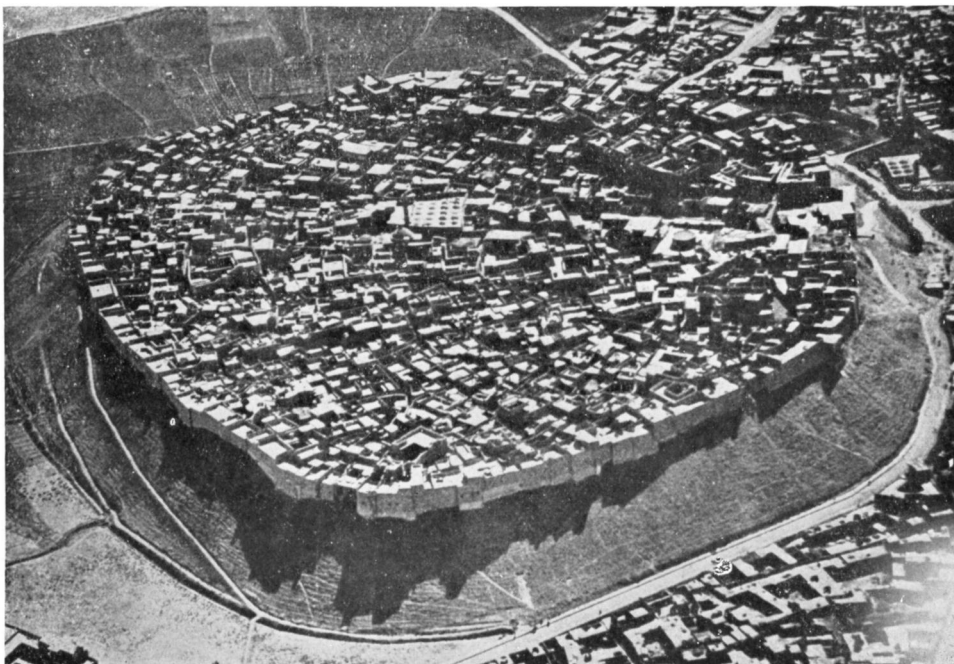


Fig. 6—Erbil
(Royal Air Force Official—Crown Copyright Reserved)

Plate 2

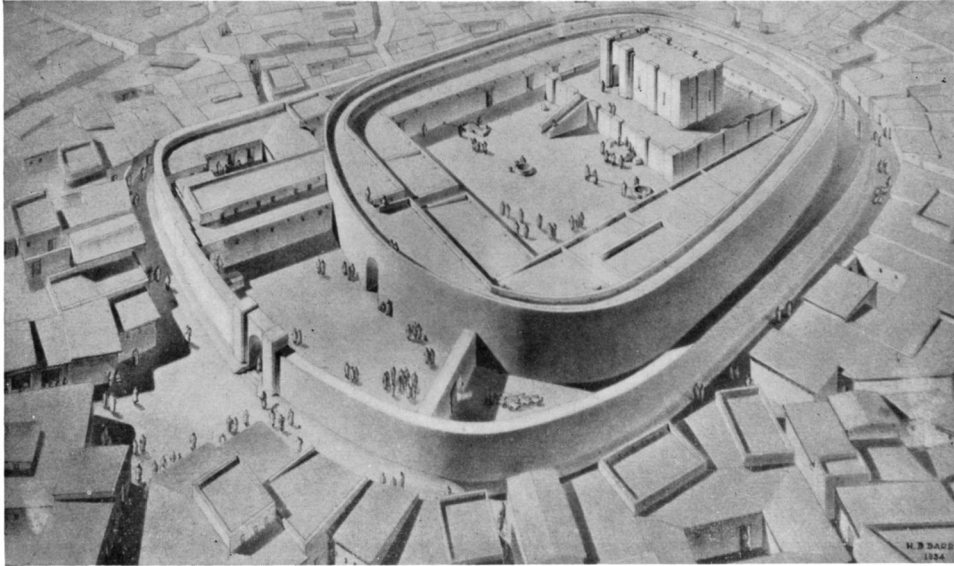


Fig. 7—Khafaje about 2700 B.C.
(Delougaz, *The Temple Oval at Khafajah*, Frontispiece)

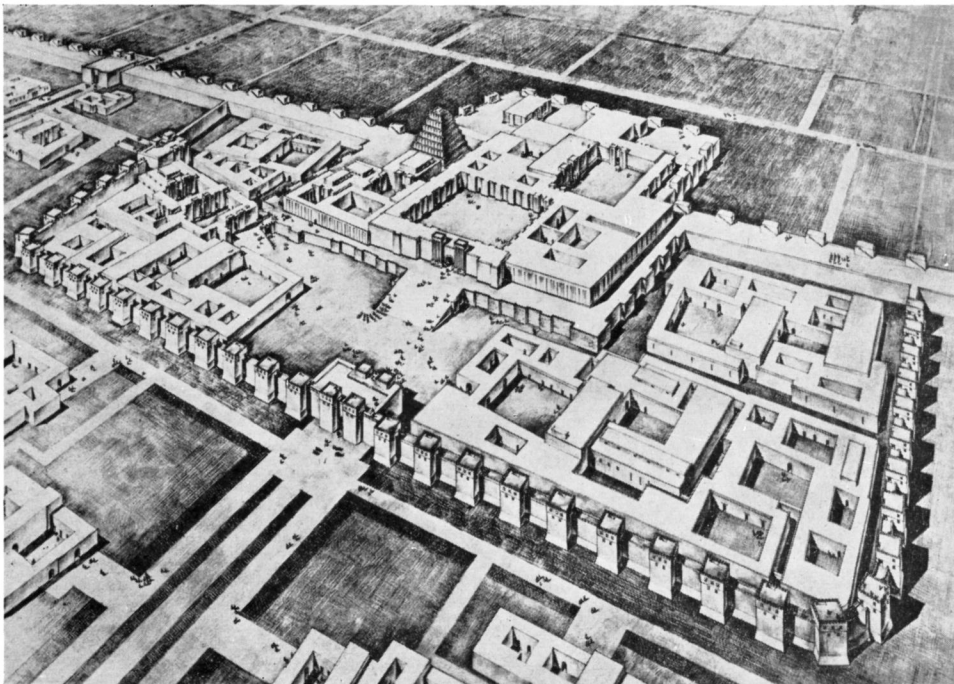


Fig. 8—Reconstruction of the Citadel at Khorsabad
(Loud, *Khorsabad II*, Plate 1)

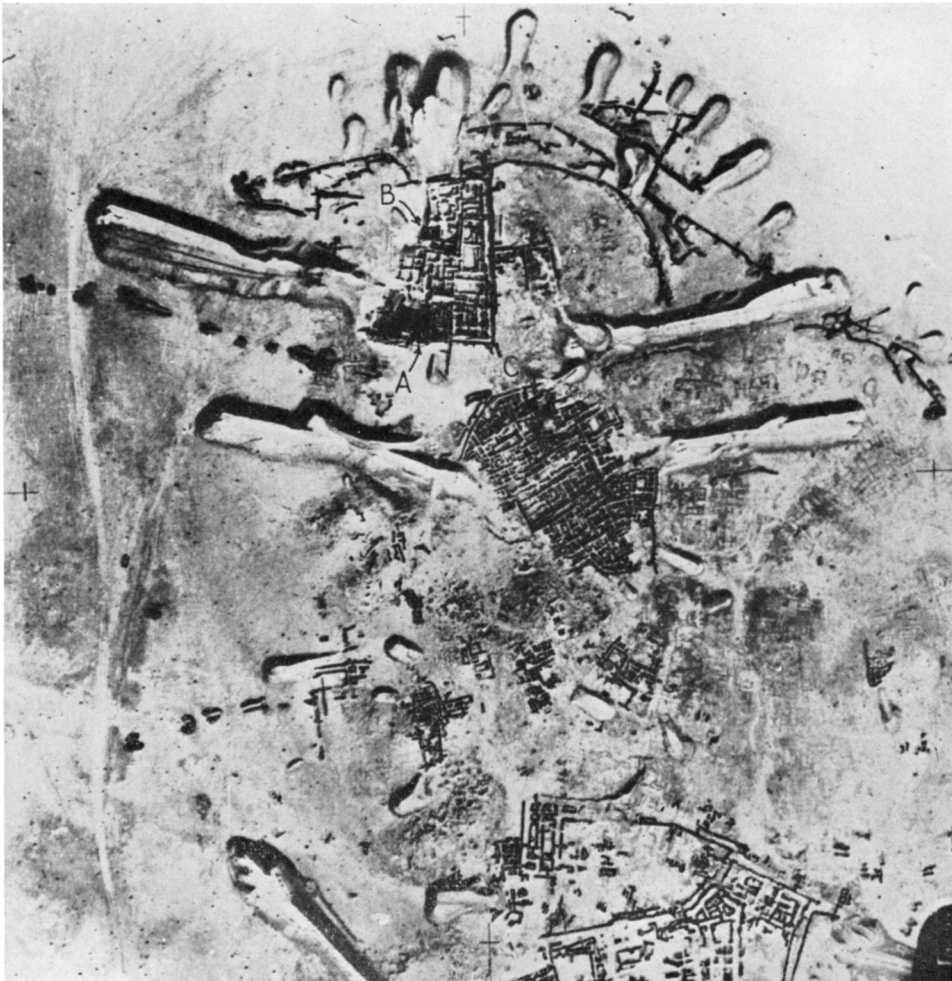


Fig. 9—Tell Asmar (Eshnunna) from the air
(Royal Air Force Official—Crown Copyright Reserved)

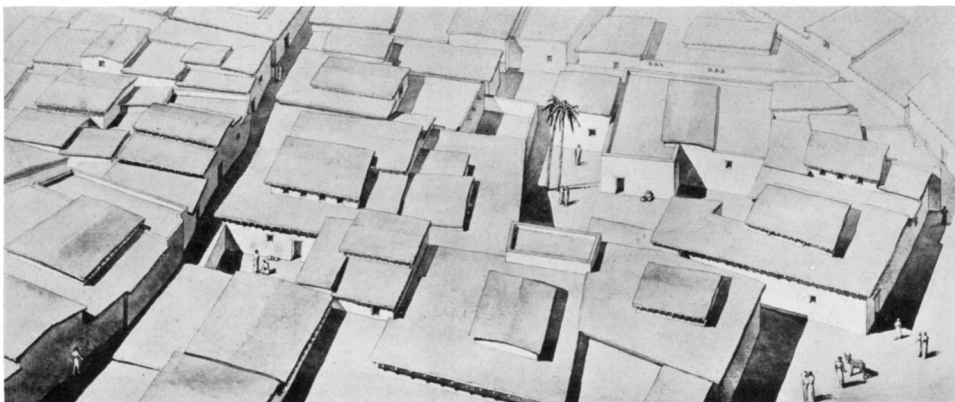


Fig. 10—Restoration of the city of Eshnunna (Tell Asmar) about 2300-B.C.
(Frankfort, Third Preliminary Report, Fig. 13)

Plate 4



Fig. 11—View of Babylon, about 600 B.C.
(after a painting in the Oriental Institute, University of Chicago)

construction: the mudplaster, baked in the fire, showed impressions of beams and reeds; wasp nests, likewise baked, showed the diameter of the rafters against which they had been built. But such cases are rare and our knowledge of architectural practice is very fragmentary.

As regards town planning, our knowledge is even more incomplete. We are, anyhow, dealing with ruins. But even what remains of an ancient city is only sampled by our expeditions. They are never excavated from end to end. Such excavation would require very large sums of money which can be better employed in other ways, since we do not increase our knowledge of the life of the ancients by tracing every house in an ancient town. It is usual to excavate public buildings such as temples and palaces because works of art and written documents are likely to be found in them. In addition samples of the private dwellings are taken, and the outline and fortifications of the city are traced whenever possible.

Because of the incompleteness of our excavations, the layout of the streets and the interrelation of the component parts of the town and of the town and its suburbs often remain obscure. A further obstacle to our understanding lies in the circumstance that we are not confronted with a living, functioning organism, but with a skeleton (and that damaged), preserved in the soil. Imagine the difficulty of recognizing the precise function of a government building if nothing but its plan were available. As a matter of fact, I do not know of a single ancient city in which the buildings housing the administrative offices of government—the treasury, the courthouse or the revenue buildings—have been identified. It is clear that under these conditions many of the questions which interest us cannot be answered.

Age, Significance and Size of Cities

In prehistoric times, in the Neolithic or New Stone Age down to as late a date as 4000 B.C., we find throughout Europe and Asia, and also in the Nile valley, the remains of a peasant population living by mixed farming and settled in small hamlets or villages. The households which composed them seem to have been much alike, each self-supporting and self-contained. There is no trace of differentiation of labour, and there are but few traces of trade with the outside world. The settlements found their *raison d'être* in the protection and mutual advantage of neighbourliness. Occasionally they were surrounded by stockades, or, if built in a mountainous region, by dry-stone walls. But there seems to have been no political coherence and little, if any, political self-assertion on the part of the villagers.

But about 4000 B.C. (or a little later) the stagnancy of this vast expanse of peasant cultures was broken in the ancient Near East. Europe and most of Asia continued to exist on the prehistoric level. But in the valley of the Tigris and Euphrates, and in the Nile valley, a rapid and thorough change can be observed, and that not in isolated groups of remains but in each and every class of archaeological material. On the one hand we find new inventions, on the

other an extraordinary rise in the level of existing crafts—an intensification and articulation of cultural activity in every field. It is, of course, impossible to deal adequately with this subject here. We are confronted with one of the creative crises of which the spasmodic growth of human culture consists. The most important innovation was the invention of writing; but we also find, for the first time, an extensive use of metal for tools and weapons and an unprecedented blossoming out of architecture and sculpture. All these innovations appear together in ruins dated roughly between 3500 and 3000 B.C. Thus, the finds show that the settlements had become the scene of a diversification of interests, of activity, even of material goods, which went far beyond the boldest imagination of the rustic. Here for the first time we are dealing with cities. Instead of a conglomerate of individuals (or households), who are more or less similar and able to exist by themselves, we find a highly articulated community in which the individual members fulfil specialized and interdependent functions. These cities were sharply defined, dynamic, aggressive bodies. Each of them recognized a city-god who symbolized the individuality of the community as well as the supernatural sanction which it was conscious of enjoying as a separate entity. The cities became the seats of a political power more stable and of a wider scope than anything that had gone before.

However important the contrast between urban and rural life may have been, the two never fell apart in the ancient Near East as they have in the West. The earliest cities were small, and they were intimately related with the land. Like the households and hamlets of Neolithic times, these settlements were largely self-contained and self-supporting. Before Roman times there was no trade in staple foods: Jacob had to go down to Egypt to get grain when there was a famine in Canaan. Nor were there large centralized industries. Trade was concerned with the accessories, rather than the necessities, of life. Mesopotamia had to barter for raw materials and exported fine woven cloth and rugs, produced from the wool of its large flocks of sheep, and also jewellery and other finished metal objects. In each city local traders exported chiefly local produce and imported the raw materials locally needed. The sustenance of the city's population derived from the fields surrounding it; and most of the city dwellers owned or rented fields and cultivated them themselves, even if they exercised a trade or craft besides.

There were exceptional cities, such as the caravan cities studied by Rostovtzeff, which were dependent on the trans-desert trade. But they belong to the Hellenistic and later times. In the ancient Near East trading places (*Emporia*) seem to have existed, mostly in or near larger cities. The town of Assur, for instance, sent colonies of merchants into Anatolia where they settled as self-governing communities under the sovereignty of the mother-city and in friendly relation with the local prince. It is possible that in the larger cities of Mesopotamia groups of merchants from other cities lived together as a colony, either in the town, or outside in the suburbs. However, the character of the community as a whole was not affected by such special groups. The city remained a largely self-contained and self-supporting organism.

It would clarify our discussion if we could express the size of these early cities in figures; but that is a hazardous undertaking. We have only a few rather conflicting statements from Mesopotamian inscriptions. But in the Book of Jonah, Nineveh is treated as a marvellously large city. It was said to have a length of 'three days' journey' (Jonah III:3); but we know its longest axis to have measured less than four miles. We may expect a similarly exaggerated description of its population. Now God said to Jonah (IV:10-11):

'Thou hast had pity on the gourd, for the which thou hast not laboured, neither madest it grow; which came up in a night, and perished in a night: 'And should not I spare Nineveh, that great city, wherein are more than six score thousand persons that cannot discern between their right hand and their left hand; and also much cattle?'

The mention of the cattle is interesting since it agrees with observations made in our own work—that within the town wall there were large open areas in which cattle may have been kept and into which herds were probably driven in time of war. But the figure of the supposed population of Nineveh is also remarkable: a city of 120,000 inhabitants was considered almost incredibly large, even at the end of the period with which we are dealing.¹

With the help of my colleague Delougaz, I have tried to gain some idea of the populations of excavated cities. We have started with residential quarters at Ur, Eshnunna (Tell Asmar) (Fig. 9), and Khafaje (Fig. 7), three sites which we know well. Khafaje is eight centuries older than the other two, which can be dated to about 2000 B.C.; but our figures show no significant differences in the densities of their populations. We found about twenty houses per acre, with an average area of 200 square metres per house. These are moderately sized houses; and we reckoned that there would have been six to ten occupants per house, including children and servants. Considering the number of activities which take place in the streets or public squares in the East, and the ease with which older and distant members of the family become dependents in the house of a well-to-do relative, these figures do not seem excessive. They amount to a density of from 120 to 200 people per acre.

We then compared the areas and populations of Aleppo and Damascus, two modern Near Eastern cities which in many ways continue in the ancient conditions; for Aleppo is a great trading centre and Damascus an oasis-city. In both cases we find a density of 160 people per acre, which is precisely the average of our figure. Although the results must remain highly speculative it seemed worth while to calculate the population of some representative ancient cities. Nineveh must remain unknown; it covered an area of 1,400 acres, but we have no means of knowing how much of this was built up. Reputedly the largest city of the ancient Near East was Babylon (Figs. 11, 21). Leaving the suburbs out of account, we get for the walled-in area on the east bank of the

¹ There is a view that the people 'who cannot discern between their right hand and their left hand' are really children. We hold that interpretation baseless, and prefer to see in the statement a description of the simple folk who cannot be held fully responsible for their sins.

Euphrates 500 acres, or, on our estimate, 80,000 people. That figure far surpasses anything known in the case of other cities, and it applies to the city of Nebuchadnezzar, which became the capital of the land after the fall of Nineveh in 612 B.C., at the very end of the period with which we are dealing. Babylon, like modern Baghdad, was in any case exceptionally situated, at the point where the two great routes along Euphrates and Tigris converge. Much more representative are the famous cities of Ur (Figs. 17, 18) and Assur (Fig. 20), each covering 150 acres in the Assyrian period, with an estimated 24,000 people.

For earlier periods the figures are smaller. We have

Lagash	with a calculated	19,000	people
Umma	„ „	16,000	„
Eshnunna	„ „	9,000	„
Khafaje	„ „	12,000	„

This then was the order of magnitude of the cities which we are discussing. Our material does not allow us to trace a development within the period from 3500 B.C. to 500 B.C. We can only say that the rate of change in the ancient world was very slow indeed, compared with that to which we are accustomed; and, in fact, many essential concepts and institutions remained in force throughout this period. The factors governing the planning and growth of cities did not change either.

We shall distinguish cities which were purposefully planned and cities which grew in the course of time.

The Planned City

The clearest example of a planned city is Khorsabad, a new capital founded north east of Nineveh by Sargon of Assyria and dedicated in 706 B.C. (Figs. 8, 12-15). The city covers almost a square mile with its corners orientated to the points of the compass. In each side of the square except the west there are two gates. In the north-west side, however, we find one gate and, astride the wall, an artificial platform, supporting a fortress. A similar fortress is built in the south. The northern fortress contains the palace of Sargon and three temples (Figs. 8, 15). Access to the palace hill was gained by a ramp which starts within an inner enclosure wall: this wall forms a citadel at the edge of the city. It contains several large buildings, official residences, offices of high officials, and a temple (H).

The other fortress (F) is less well known. It may have been a royal residence or the palace of the crown prince.

The plan of Khorsabad strikes us as irregular, but the unequal lengths of the sides of the town wall and the deviation from the right angle in various places are accidental and due to the very imperfect methods of surveying employed by the ancients. We have in principle a regular, geometrical city plan. We do not know why the gates were placed at different points in each of the four sides; but we do know that their number was not determined by the requirements of

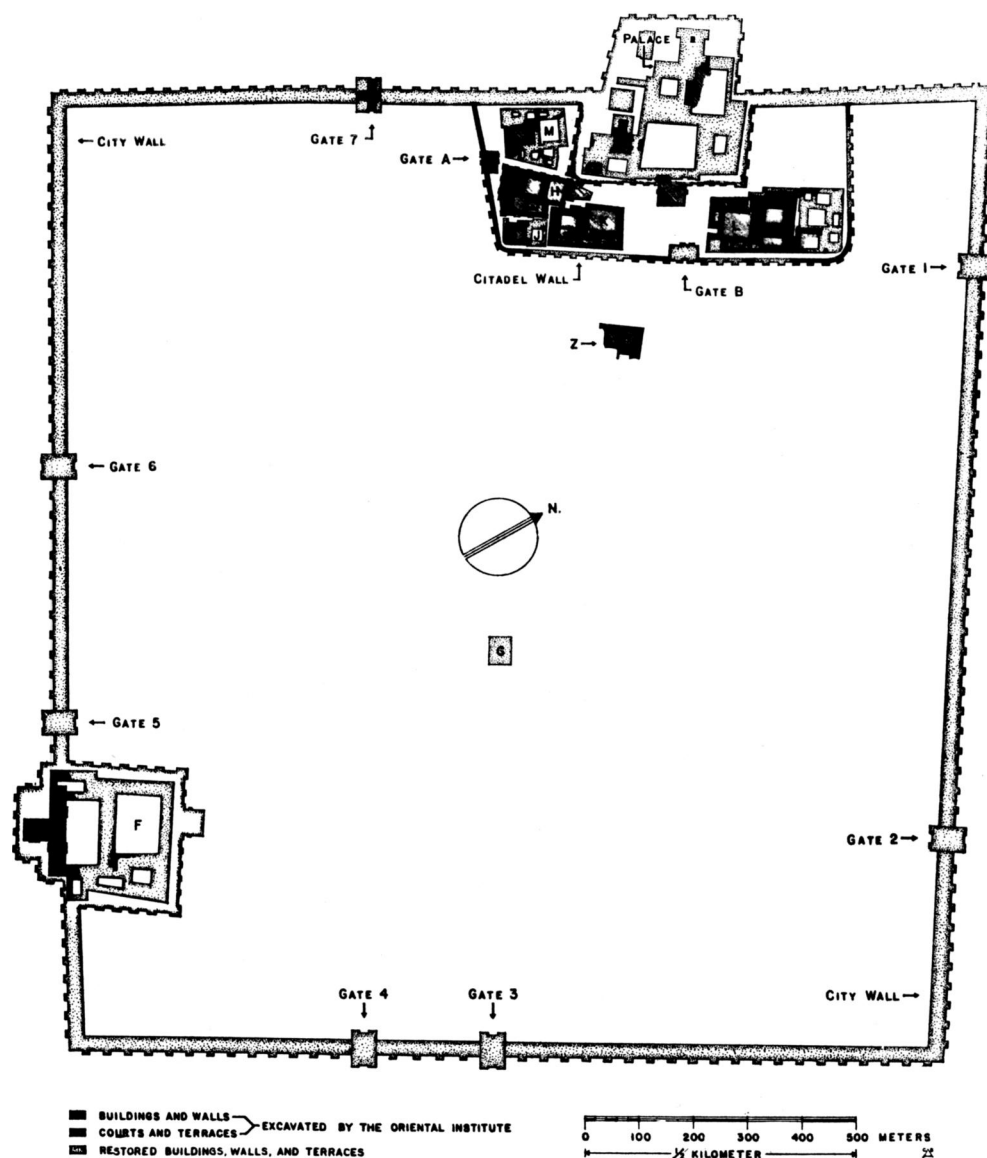


Fig. 12—Plan of Khorsabad
(Loud, *Khorsabad II*, Plate 69)

traffic. The main gate, through which almost all the traffic flowed, was the southern one (No. 5) on the road to Nineveh—hence the extra protection afforded it by the adjoining fortress. The northern gate (No. 1) was on the road to the Kurdish mountains, and it made the north-eastern gate (No. 2) superfluous. Moreover, this last gate faced the *Gebel Maqlub*, a mountain ridge

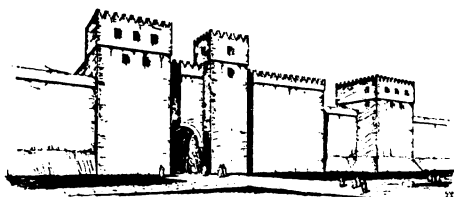


Fig. 13—Gate of the Citadel of Khorsabad
(Loud, *Khorsabad II*, Plate 77a)

which cannot be crossed at this point; and the two gates (Nos. 3 and 4) in the eastern wall were made superfluous by Gate No. 5. We excavated the north western gate (No. 7) and found that it had never been used. The gateway was closed with a dry-stone wall yet the pivot stones were in position, and the pavement slabs were piled up ready to be put in place when the cedar gates were installed. But this never happened. Sargon died the year following the dedication of the city, and it was gradually deserted after his successor, Sennacherib, returned to Nineveh. Khorsabad never assumed the role of first city of Assyria, for which its founder had designed it. But not all the gates would, in any case, have served a useful purpose and this distribution presents an interesting example of planning under the spell of symmetry. They were not placed where existing traffic might have been expected to increase and to require additional accommodation, but they were divided according to an abstract, regular scheme, two on each side of the city; increased traffic would have had to flow according to that symmetrical arrangement.

Of the private houses within the city almost nothing remains; since the site was occupied for only a short time, the accumulation of buildings was not large and the ploughshare has demolished their traces. Of the more substantial remains of the larger buildings in the citadel, sufficient survived to enable us to make a plan (Fig. 15) and a reconstruction (Fig. 8). The extraordinary irregularity of the layout—e.g. the angle which the axis of building M makes to the city wall, the palace wall and the Nabu temple, while its own plan shows

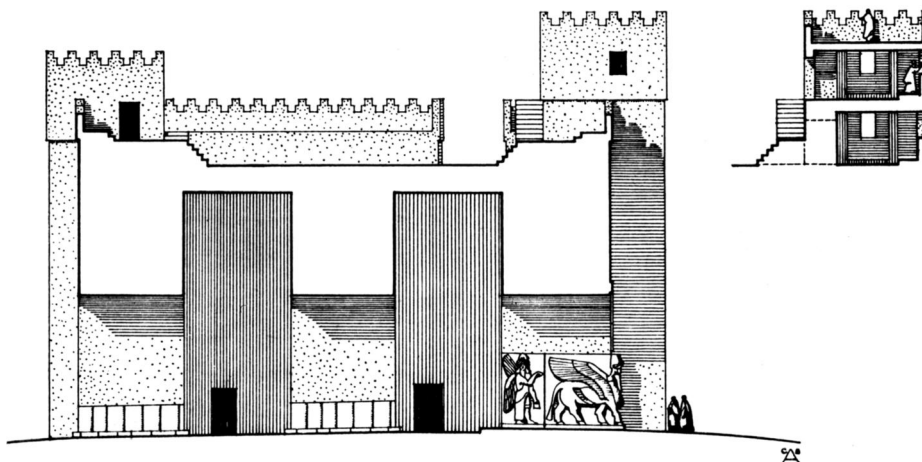


Fig. 14—Section through Citadel Gate of Khorsabad
(Loud, *Khorsabad II*, Plates 77b and c)

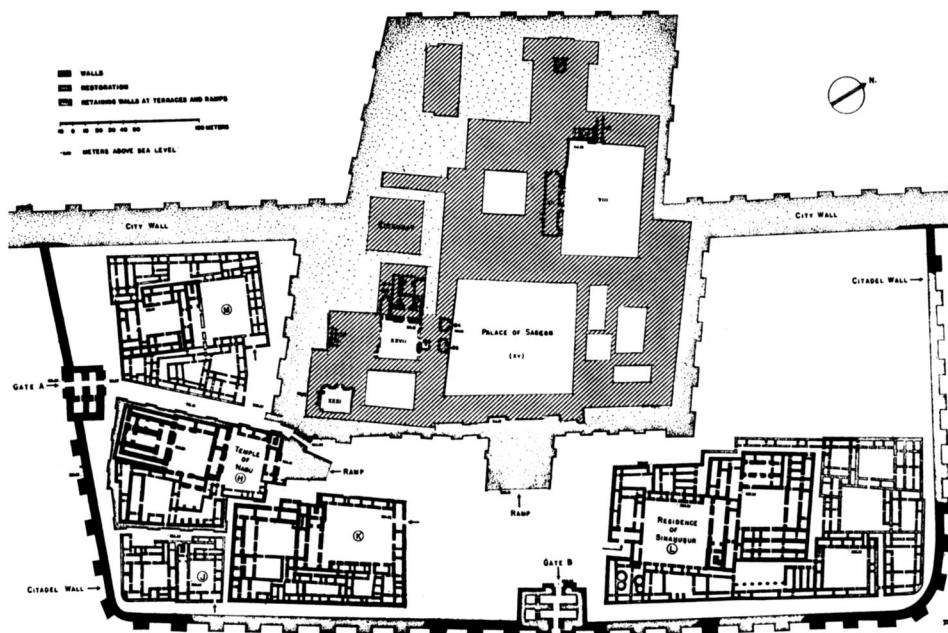


Fig. 15—Plan of the Citadel at Khorsabad
(Loud, *Khorsabad II*, Plate 70)

on either side an irregularly shaped complex added to an oblong central structure—all this shows that city planning did not go beyond agreement as to the buildings to be erected in a certain area while the details were empirically worked out.

In Figures 13 and 14 we show gate A of the citadel, ornamented with splendid sculptured slabs, showing the protective genii of the palace. The gate gives entrance to a narrow street, leading between building M and the Nabu temple and passing under a stone viaduct connecting the palace with the top of the ramp of the Nabu temple. These great ramps facilitated the circulation, and, in the case of the palace, they allowed war chariots to drive up to the palace terrace and city wall if an enemy succeeded in scaling them.

In front of the palace was an open space, the heart of the citadel, and perhaps of the whole city, where the people gathered on important occasions and troops could be mustered. When the defence was reduced to the citadel, the open space allowed the inhabitants of the town to camp there during the siege.¹

Grown Cities

Before we describe the more usual type of city, which has grown from obscure beginnings, we may well return to the question (see p. 101 above) how

¹ In our plans the full black indicates excavation, the dotted pieces are restored. In the case of the palace these restorations are based on the excavations by the Frenchman, Paul-Emile Botta and Victor Place, about 1850. The boulevard in front of the eastern entrance gate of the citadel (Gate B) is not more than the draughtsman's neat fancy.

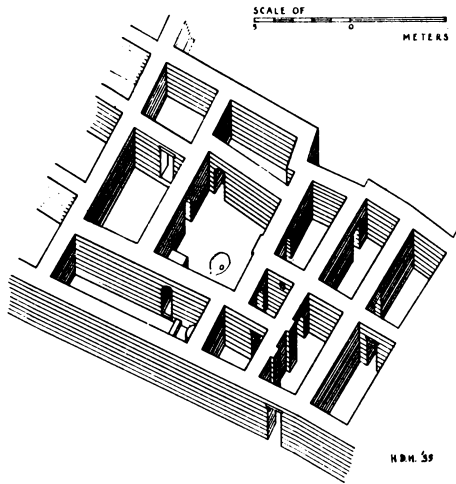


Fig. 16—Restoration of a house of about 2500 B.C. (Frankfort, *Third Preliminary Report*, Fig. 5)

times, even though it continued to be enclosed by the town wall. A little to the south we excavated a section of the residential quarters, continuously occupied from approximately 2700 B.C. until at least about 1700 B.C. Many tests revealed the existence of similar houses to the east, south, and west, but we did not excavate them. South of this appears an area with public buildings. The town continued southward for a distance about half as great as that covered by our photograph. At many points the peculiar way in which grass grows after the spring rains (more quickly in the loose filling than upon ruins of brick walls) reveals the existence of large residential areas to the east. We did not excavate there for that very reason.

Figure 16 shows a restoration of one of the best preserved private houses of about 2500 B.C. Through peculiar circumstances the walls stood to a height of six feet and more. One entered from the street into a small open court with a buttressed wall, turned to the left, and faced the front door of the house; its pivot stone was still in position. A small square window, high up in the wall of the kitchen, and about 1 foot square, allowed the people in the house to identify their visitor. Once admitted, he entered the main room. It had a hearth let into the floor and a mud brick bench against the wall facing the front door. One was obliged to stoop when entering a room, for the arched doorways are not more than 5 feet high.

In our excavations we found no evidence of the existence of open courtyards; and rooms situated like the main room of the house just described received their light through clerestory windows. But at Ur Sir Leonard Woolley found that, at a somewhat later period, houses with open courtyards were the rule, as they still are in Iraq. In Figure 19 the plan and the reconstructed elevation of such a house is shown.

much of an ancient city is generally known. When we look at an air photograph of Tell Asmar (Fig. 9), one of the most completely worked-over sites in the ancient Near East, the limitations of our knowledge become clear. The town wall has been traced in the north and east, but it has been ascertained by search trenches that it was lost in the west as a result of floods and the digging of later canals. Inside the town wall (which dates from about 2000 B.C.) there is another wall about 700 years older. Inside it are contemporary houses and a temple; but this northern portion of the town seems to have been largely unoccupied in later

If we consider the plan of this part of Ur as a whole (Figs. 17, 18), it is quite clear that the ownership of the separate plots determined the line of building and even the course of the thoroughfares. By going into earlier periods one can trace the history of certain features. One finds, then, that the outer walls, and most of the inner walls, are founded on older remains. In other words, the size and the main divisions of a house remain about the same through long periods of time. Sometimes, however, we discover significant innovations. So it appears, for instance, that the space between 3 and 5 in Quiet Street was originally a public alley. We do not know what authority could have prevented

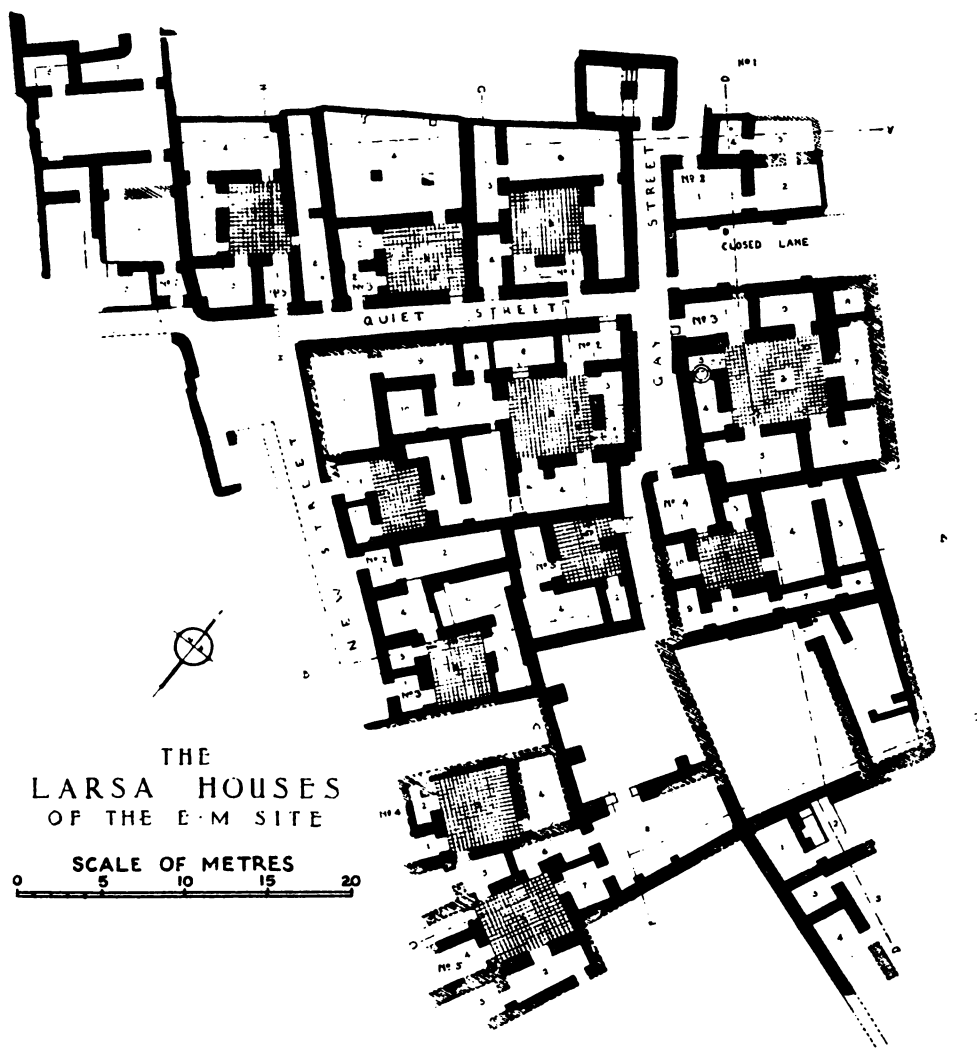
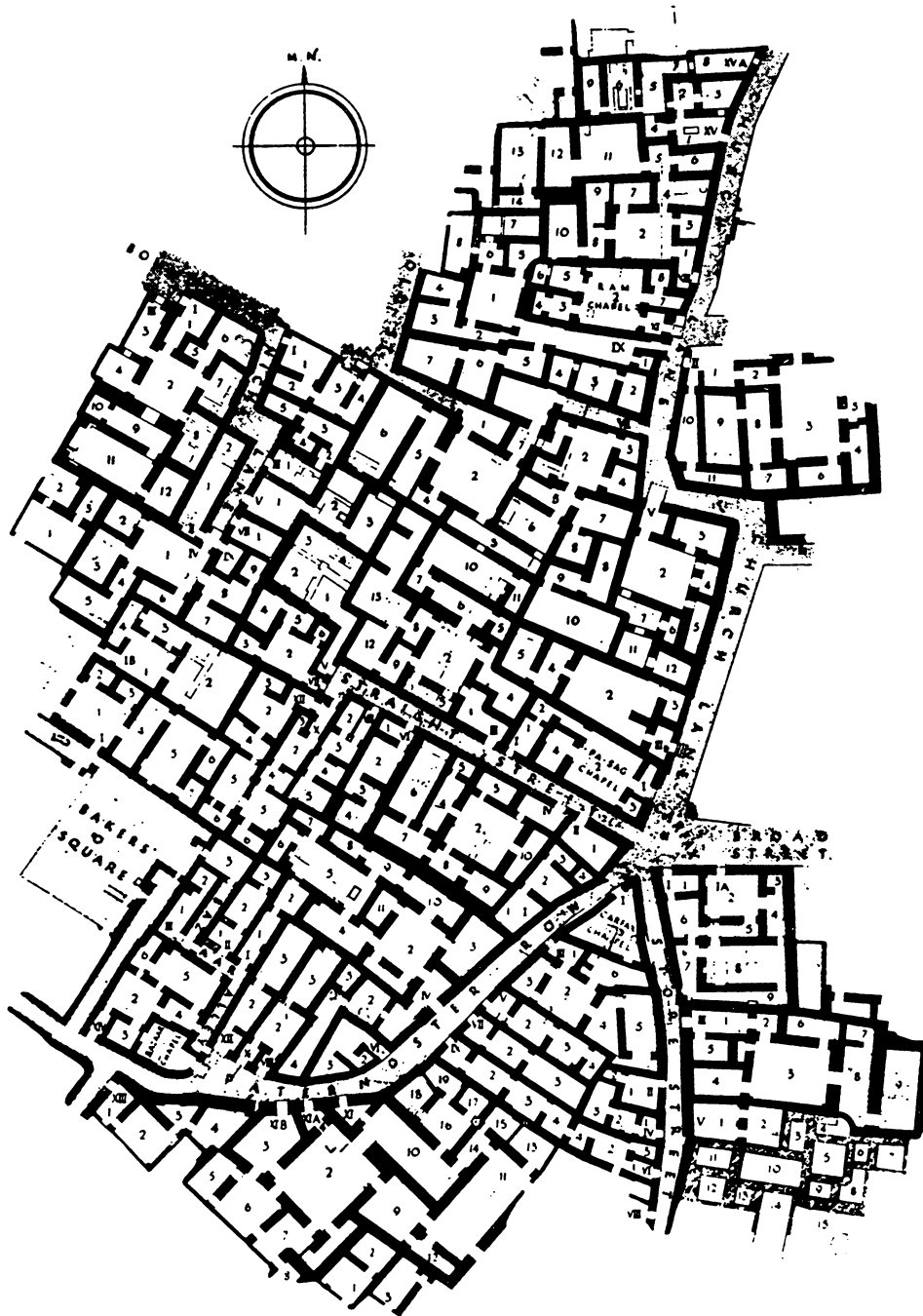


Fig. 17—Private houses at Ur, about 2000 B.C.
(*Antiquaries Journal*, Vol. VII Pl xxxix)

A. H. HOUSE SITE
LARSA PERIOD



MEASURED BY
 C. L. WOOLLEY, HON. A. RIBA
 M. E. L. MALLOWAN
 J. CRAIK SHANK ROSE, A. RIBA

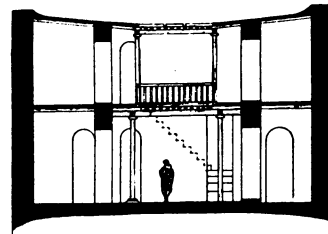
Fig. 18—Private houses at Ur, about 2000 B.C.
 (*Antiquaries Journal*, Vol. XI, Pl. xlvii)

such encroachment; we do know that tradition regarded it as very inauspicious to usurp public space for private use. An omen text reads:

'If a house blocks the main street in its building, the owner of the house will die; if a house overshadows (overhangs) or obstructs the side of the main street, the heart of the dweller in that house will not be glad.'

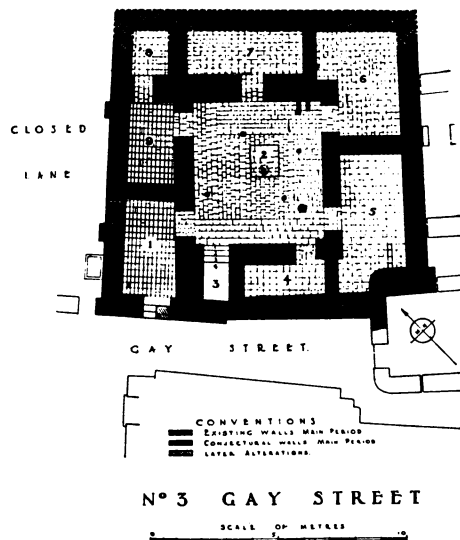
There seems to be no official agent who could prevent the individual builder from encroaching upon the public road. That tradition and public opinion (always strong in early societies) favoured considerateness is shown by the fact that the corners of many houses were rounded off. Since the means of transportation in this period were porters or pack asses, it was a public-spirited act to remove the sharp corners behind which loads could be caught or which would chafe the legs of a rider. Sometimes—in Assur, for instance—we notice that a rich man has had the street in front of his house paved and supplied with a drain.

A somewhat larger section of a residential quarter was excavated by Woolley in another part of Ur (Fig. 18). It gives a better impression of the narrow, winding streets—advantageous since, by keeping the sun off the house walls, they kept the temperature down in summer. Scattered among the houses are small buildings, containing one or two rooms, which may well have been shops. Sometimes the fronts are entirely open, like those of the shops or booths in the bazaars of the modern Near East. At the southern end of the site these shops are particularly numerous. In fact, we seem to have a true equivalent of the bazaars of the present day. The big buildings (XI) with three entrances from the street would then have been a Khan or inn where travelling merchants stayed and displayed their wares, as the excavator suggests. There are also a number of public chapels where statues of deities were actually found. The open space called 'Bakers' Square' was laid out over razed buildings. In the light of our own excavations we



CROSS SECTION.
N° 3 GAY STREET

SCALE OF METRES



N° 3 GAY STREET

SCALE OF METRES

Fig. 19—Plan and Section of a private house at Ur
(*Antiquaries Journal*, Vol. VII, Pls. xli ; xlii)

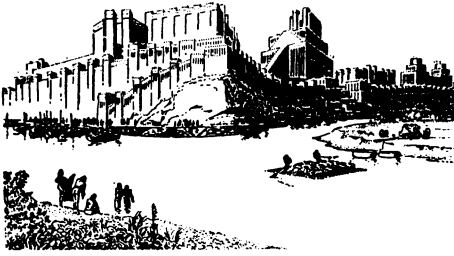


Fig. 20—Assur from the north, about 700 B.C.
(Andrae, *Das Wiedererstandene Assur*, Fig. 1a)

In the modern city it is only round public buildings that we find some planning of separate units. This applies also to the ancient Near East. There was not much architectural organization of the built-up area—it sprawled on the featureless plain. That is characteristic for the early cities. But when they had a temple tower the general aspect becomes a little more satisfactory (as the reconstruction of Babylon shows (Fig. 11)). The temple towers or Ziggurats are great artificial mounds, and their presence in the limitless plain is, even now, in their ruined state, more impressive than one would imagine. Moreover, they are part of the main sanctuary of the city. Thus, the temple tower made the focal point of the communal life the dominating feature of the city's silhouette in a way that was impossible in the towns without temple towers. Khafaje, for instance, possessed an impressive temple (Fig. 7); but it did not stand out as well from the featureless mass of surrounding dwellings, though it was raised upon a platform, as the Marduk Ziggurat of Babylon, for instance (Fig. 11).

The most striking contrast with the usual Mesopotamian city is supplied by Assur, the old capital of Assyria (Fig. 20). Here, for once, the Mesopotamian city builder used a site with a character of its own. The city stands on rocky bluffs skirted by the Tigris, and the ancients chose the steep north end of the site for all their main buildings. Search trenches show that the rest of the plateau was covered with private houses. The great temples stand side by side without interrelation, though the effect is striking in a curiously picturesque way.

In Babylon, built in the plain, the great enclosure of the Marduk temple dominates the skyline but not the plan of the city (Figs. 11 and 21). The plan shows a concentration of all main buildings along the Euphrates, with the Royal Palace forming a citadel at the

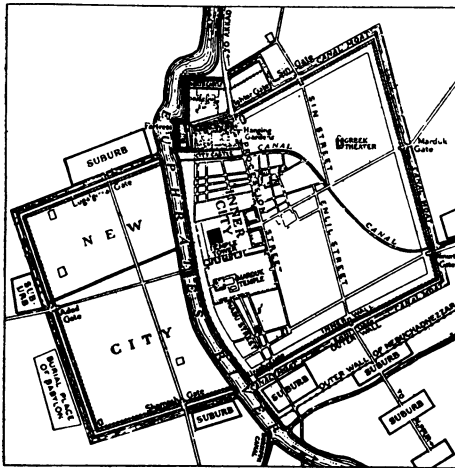


Fig. 21—Plan of Babylon, about 600 B.C.
(after Unger)
(J. H. Breasted, *Ancient Times*, Ginn and Co. New York 1944)

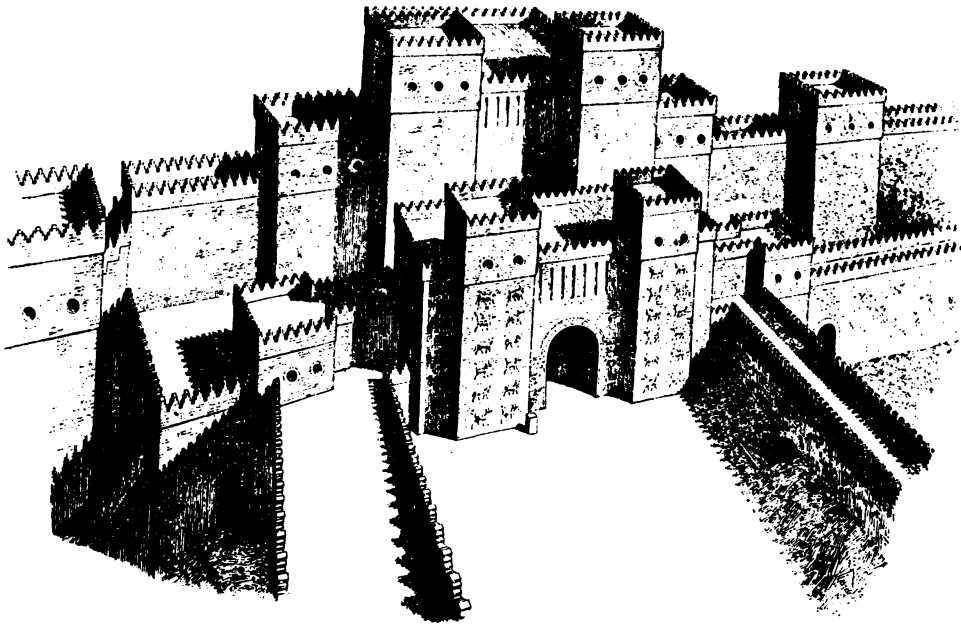


Fig. 22—The Ishtar Gate at Babylon
(Koldeweg, *Ishtar, Tor*, Pl. 20)

north corner, astride the wall, as at Khorsabad. This area is bordered on the east by the great Processional Street which passes through the famous Ishtar Gate in the North decorated with a covering of glazed bricks with sacred animals in relief (Figs. 22, 23). Thus Babylon shows a long sequence of public buildings which form, as it were, the backbone of the city.

Conclusions

Looking back now at these Mesopotamian cities, in so far as they are known to us, I find the points in which they resemble our own almost more striking than the features which we cannot match. And this impression gains in strength if we remember, firstly, the immeasurable gains in technique made since the ancient cities were planned, and, secondly, how incompletely they are known to us. A city like Assur—or, better still, the Hittite capital of Boghazkeuy, in Anatolia—shows that the ancients, like us, knew how to plan a city in mountainous country so that it exploited every feature in the terrain; and that, on the other hand, they did not hesitate to project an entirely abstract scheme upon a site when the circumstances favoured such an undertaking, is shown by Khorsabad. Moreover, it has become evident that the two factors which influence our own town planning most profoundly were similarly predominant in the ancient Near East: the layout centres around the public buildings, on the

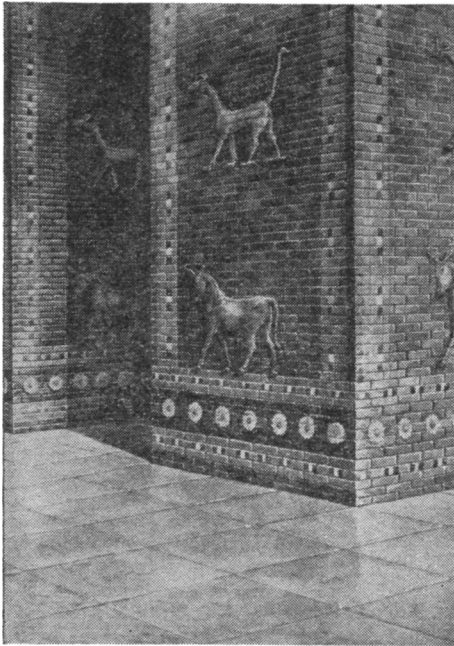


Fig. 23—Lower part of archway in the Ishtar Gate at Babylon
(Koldeweg, *Ishtar Tor*, Pl. 10)

one hand, and the main arteries of traffic, on the other. The latter generally converge upon those buildings which have a significance for the community as a whole. In Mesopotamia their ruins mostly defy interpretation but we can recognize palaces and temples and must remember that the palaces were not, or at least not exclusively, royal residences, but places in which much of the business of government was carried on.

The most striking difference between the ancient cities and our own lies in the lack of any organs which might integrate individual building enterprise and thus achieve co-operation for the common good. I refer to the absence of drainage, the apparent absence of control over the course, width, and accessibility of public thoroughfares, and the absence of maintenance of streets. Sometimes a rich man paved the street in front of his

own house. We also find public works undertaken on a truly epic scale: the Mesopotamian temples show how well the ancients knew how to organize huge communal enterprises. But in those works the members of the community simply submitted to the command of the symbol of their group—be he the king, or the city-god speaking through oracles, omens, and dreams. What seems to have been lacking is a field where individual activities were co-ordinated, not in the service of the king or the god, but amongst the people themselves. We observe the effects of royal commands and the effects of individual initiative. We do not find the beneficial influence of the city ordinance.

A SHORT BIBLIOGRAPHY

(There is no general work on Mesopotamian architecture. Detailed studies of architectural remains found at Assur and Babylon have been published by Koldewey, Andrae, Reuther and Wetzell in *Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft*.)

EARLY CITIES:

Walter Andrae, *The story of Uruk*, in *Antiquity* x (June, 1936).

Pinhaz Delougaz and Seton Lloyd, *Pre-Sargonid Temples in the Diyala Region* (Oriental Institute Publications LVIII) Chicago, 1942.

- Henri Frankfort, *First (etc.) Preliminary Report of the Iraq Expedition*.
(Oriental Institute Communications Nos. 13, 16, 17, 19, 20) Chicago
1932; 1933; 1934; 1935; 1936.
- CITIES OF ABOUT 2000 B.C.
- Sir C. Leonard Woolley, in *Antiquaries Journal* VII, No. 4 (October, 1927) and
XI, No. 4 (October, 1931).
- ASSYRIA:
- Walter Andrae, *Das wiedererstandene Assur* (Leipzig 1938).
- Gordon Loud, *Khorsabad I, Excavations in the Palace and at a city gate*.
(Oriental Institute Publications xxxviii) Chicago, 1936.
- Gordon Loud, *Khorsabad II, The Citadel and the Town*.
(Oriental Institute Publications xl) Chicago, 1938.
- BABYLONIA:
- Robert Koldeweg, *The Excavations at Babylon*, London, 1914.