

Free-standing columns and piers have never played an important part in native Mesopotamian architecture. The aim of this paper is to examine the examples from earliest times until the Neo-Babylonian period, which the chances of excavation have revealed, in an attempt to account for this lack.

In countries where columns and piers are a regular feature of the architecture, for instance in Greece and Persia, the development can always be traced back to wooden prototypes. These were later imitated in stone. In Mesopotamia, however, both these materials are lacking. Trees of the necessary girth, strength and height do not, with the exception of the date-palm, grow in southern Mesopotamia, and are rare in the North. Such wood as there is is sawn up to provide doors, doorjambs, lintels and window-frames. Poplar trees are grown in the North to provide roofing. The same applies to stone. In the South all the stone has to be imported. In the North we find Mosul marble which weathers badly and was unsuitable for the purpose. Mud-brick was used for pilasters,¹ piers, columns grouped together to form a pier (Fig. 8), or decorative free-standing columns (Fig. 9); it was not a strong enough material to be used for slender, weight-bearing columns.

The following examples of free-standing columns and piers in ancient Mesopotamian architecture, up to the end of the Neo-Babylonian period, have been listed in approximate chronological order.

¹ D. Oates, "The Excavations at Tell el Rimah, 1966," *Iraq* 29 (1967), pp.70-95, esp. p.88ff.

Ubaid PeriodEridu

Temple IX (Fig. 1)

The entrance to the shrine has a portico in front of it supported by a pier. No details are given, but the pier was presumably built of mud-brick.

S. Lloyd and F. Safar, "Eridu," Sumer 4 (1948), pp. 115-127, esp. pp. 119-120 and Pl. VI.

Protoliterate PeriodUruk

The Stiftmosaik Temple, Level IVB (Fig. 2)

There is little that survives of the plan of the temple except for a portico consisting of a double row of monumental columns on the edge of the temple platform. There were probably four columns and two semi-circular pilasters in each row. They were made of mud-bricks layed radially, and were coated with a layer of lime plaster. Into this plaster had been stuck clay pegs, the ends of which were coloured black, red and white. They were arranged to form patterns based on the lozenge and chevron, and possibly inspired by the trunk of the date-palm (see p.10). The columns measure 2.62 m. in diameter.

E. Heinrich, UVB 4 (Berlin, 1932), p. 14, Pls. VII, VIII, IXa, Plan Pl. IV.

Early Dynastic PeriodNippur

Early Dynastic II, Temple of Inanna (Fig. 3)

The columns are 3 ft. 8 ins. in diameter. They are made of segmental unbaked bricks and are coated with a thick layer of mud-plaster.

V. E. Crawford, "Nippur, the Holy City," Archaeology 12 (1958), p. 75 ff., esp. p. 81. R. C. Haines, "Further Excavations at the Temple of Inanna," Illustrated London News (Sept. 6, 1958), pp. 386-389, esp. p. 386 and Figs. 1, 4 and 5.

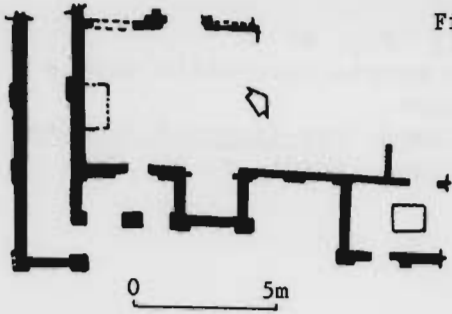


Fig. 1. Eridu: Temple IX

Fig. 2. Uruk: Stiftmosaik Temple

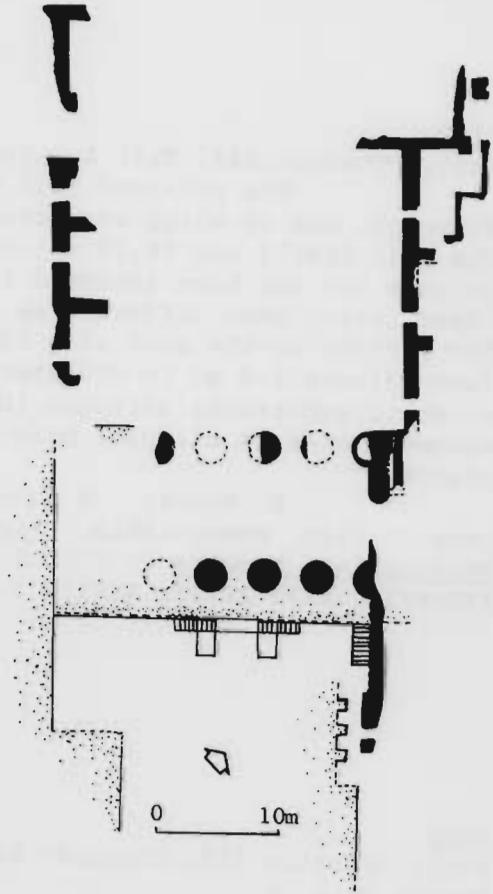
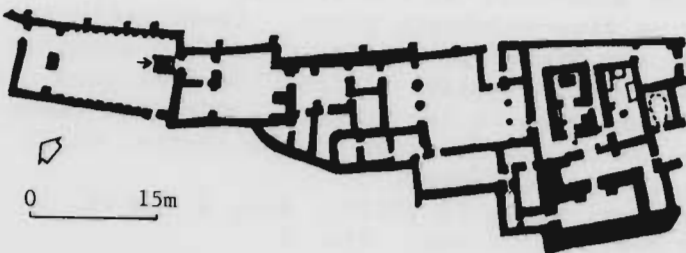


Fig. 3. Nippur: Temple of Inanna



Drawings by
author.

Khafajah

Early Dynastic II, Sin Temple VIII (Fig. 4)

This is the only Sin temple to contain such a feature. The column is of mud-brick.

P. Delougaz and S. Lloyd, Pre-Sargonid Temples in the Diyala Region, OIP 58 (Chicago, 1942), p. 57, Fig. 43d and Pl. X.

Kish

Early Dynastic III, Tell A Palace (Fig. 5)

The pillared hall had four columns 1.50 m. in diameter, one of which was preserved to a height of 1.80 m. The hall itself was 26.70 m. wide and it seems that the columns had not been intended in the original plan but were added later, when difficulties arose in roofing the hall. The portico on the east side of the building consisted of four columns 1.0 m. in diameter. They were built of unbaked rhomboid mud-bricks arranged in two concentric circles around a central circular brick, and were coated with mud-plaster.

E. Mackay, "A Sumerian Palace and the 'A' Cemetery at Kish, Mesopotamia," Field Museum of Natural History, Anthropology Memoirs I, 2 (Chicago, 1929), pp. 95, 99, Pls. XXI-XXII, XXVI-XXVII, XXXII, 3.

Mari

Early Dynastic III, Ziggurat Esplanade and Ninhursag Temple (Fig. 6)

To the southeast of the Ziggurat there was a portico supported on five mud-brick piers. Immediately to the southwest lay the Ninhursag Temple. The main entrance to the temple had a portico built out into the courtyard (cf. Fig. 13) and supported on two columns. Circular stone column-bases were found, but no trace of the shafts, which were probably wooden, was detected.

A. Parrot, Syria XX (1939), Pls. I and VI, 1, Fig. 4, p. 9; and Syria XXI (1940), Fig. 4.

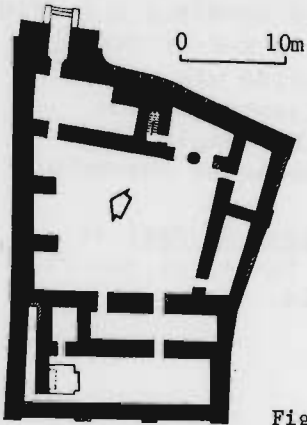


Fig. 4. Khafajah: Sin Temple VIII

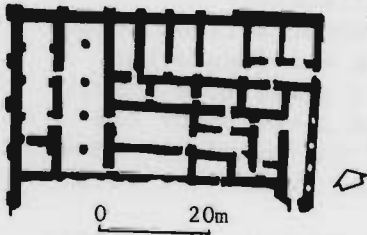


Fig. 5. Kish: Tell A Palace

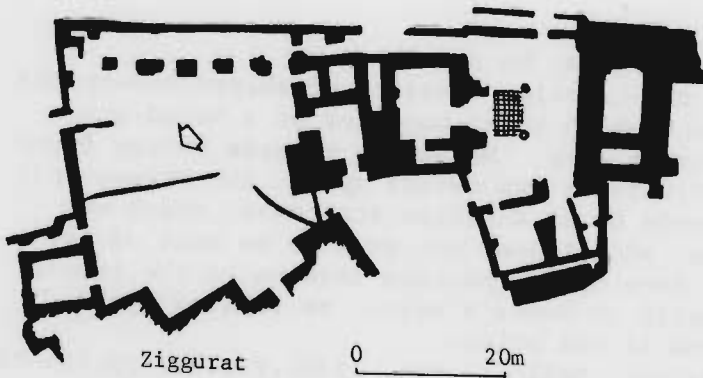


Fig. 6. Mari:
Ziggurat Esplanade

Early Dynastic III, Ishtar Temple Courtyard, Levels c & b (Fig.7)

The columns were made of shaped mud-bricks around a core of mud and plaster. The outside was coated with a thick layer of mud-plaster. The diameter of the columns was 1.20 m. The western part of the temple, including the columns, remained virtually unchanged throughout the two periods.

A. Parrot, Mission archéologique de Mari I: Le Temple d'Ishtar, (Paris, 1956), Pl. IV (Level c) and Pl. VI (Level b), Figs. 5 and 16, pp. 12, 23-24.

Al'Ubaid

Early Dynastic III, Ninhursag Temple

Three columns made of palm-logs coated with bitumen and overlaid with mosaic of triangular, diamond-shaped and square tesserae of mother of pearl, pink limestone and black bituminous shale. A complete example measured 3.30 m. high and 30 cms. in diameter. Four fragments of wooden columns overlaid with sheet-copper which was secured with large-headed copper bolts. One example was 3.60 m. high and about 20 cms. in diameter.

According to Woolley's reconstruction, these and other decorative elements came from the façade and portico of the temple of Ninhursag. It seems more likely, however, that they were looted from the interior of the temple and were stacked at the foot of the platform, ready for removal. We cannot tell, therefore, where the columns once stood.

H. R. Hall and L. Woolley, UE I (Oxford, 1927), Pls. IV, XXXIV 3, XXXV 6 and 7, and XXXVIII (suggested reconstruction), pp. 100-103.

Post-Akkadian Period

Tello

"Le Pilier de Gudéa" (Figs. 8a and b)

This construction consists of shaped mud-bricks forming four columns which stand together on a baked-brick foundation, and form a pier. De Sarzec records having found two of these constructions two meters apart, but Heuzey only found one. It stands by an Akkadian staircase, which was by then out of use, and it does not seem to be part of any building. It may have been a portico leading to the temple of Ningirsu and built in Gudea's reign, as implied by the inscription on some of the bricks.

A. Parrot, Tello (Paris, 1948), Fig.34, pp.156-58.

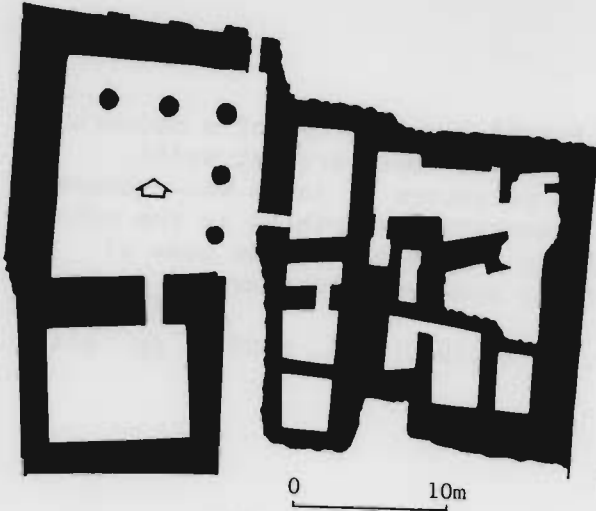
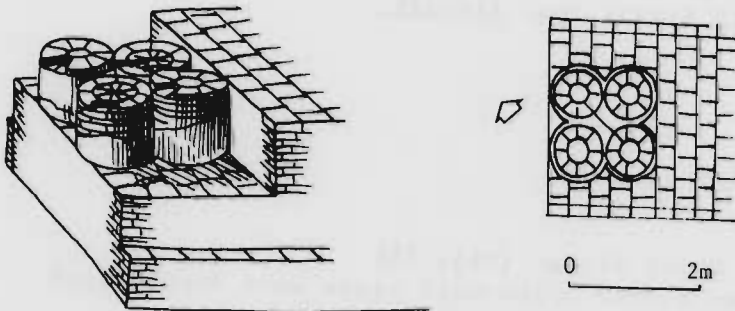


Fig. 7. Mari: Ishtar Temple

Figs. 8a & b. Tello: "Le Pilier de Gudéa"



Third Dynasty of UrUr

Woolley published a photograph of a mud-brick column which stood midway between two parallel walls, against the faces of which pilasters or jambs were attached in line with the column "suggesting something in the nature of a Greek building in antis." The column was made of courses of eight segmentally moulded bricks around a central circular brick.

L. Woolley, AJ X (1930), Pl. XXXVIB, pp. 322 and 323.

The "Bastion of Warad-(or Amar-) Sin" (Fig. 9)

The mud-brick columns used here are not, strictly speaking, free-standing, but are bonded into the walls where they touch them. They are purely decorative and are not structurally necessary. They are built of specially moulded bricks, so as to form an imitation of the trunk of a date-palm (cf. Tell el Rimah), and are 70 cms. in diameter.

L. Woolley, UE V (London, 1939), Pls. XXIX-XXX, LXXI, pp. 42-43.

The "Nigarana" of Sin-iddinam (Fig. 10)

Only the northwest end of the building remains. Two cruciform piers, built of burnt-brick around a mud-brick core, were thought by Mallowan to have supported a vault. The purpose of the building is uncertain, but it may have been a treasury or a mortuary.

M. E. L. Mallowan, "The Nig-ga-ra-na-of Sin-iddinam," AJ VII (1927), pp. 416-421.

Isin-Larsa PeriodUr

House No. 3 in Quiet Street (Fig. 11)

Two square brick-work piers were found which must have supported a wooden gallery.

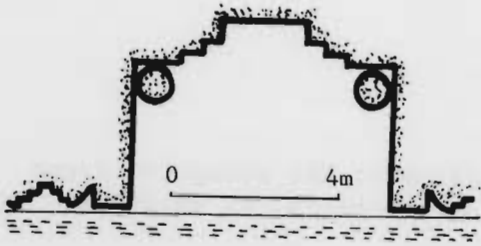


Fig. 9. Ur: "Bastion of Warad-Sin"

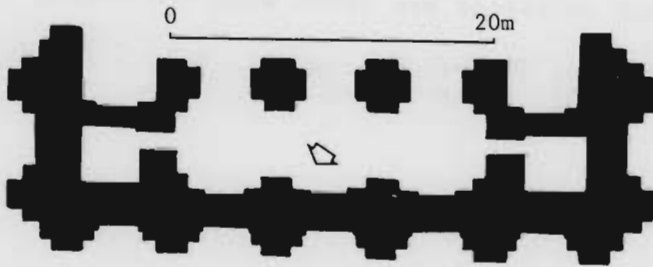


Fig. 10. Ur: "Nigarana" of Sin-iddinam

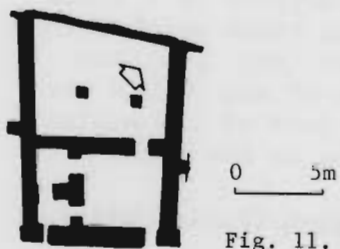


Fig. 11. Ur: No. 3, Quiet Street

House No. 3 in Gay Street (Fig. 12)

The rooms of this, and other houses of the period, from Ur, opened onto a central courtyard in the middle of which was a drain. Woolley suggested that the drain had collected rain-water from an overhanging roof which would have sheltered a gallery, and both would have been supported on wooden columns, as in Ottoman houses in Baghdad. The gallery must have been light, as there were no foundations or solid bases for the columns, but he found a brick wedge and traces of burning which might indicate the position of one of the columns. In none of the other houses excavated was there evidence of columns, piers or galleries.

L. Woolley, AJ VII (1927), p. 397 and Pls. XXXIX, XLIV 1; p. 395 and Pl. XLI.

Fifteenth Century B.C.Nuzi

Palace (Fig. 13)

The main-court entrance to the reception rooms had a portico supported on two square piers, of which the baked-brick bases were found.

House of Shilwi-Teshub "son of the king" (Fig. 14)

No details of the construction are given in the publication, though parallels are drawn with the palace example.

F. Starr, Nuzi (Cambridge, Mass.), Vol. I (1939), pp. 127-340; Vol. II (1937), Plans 13 and 34.

First Millennium B.C.Arslan-Tash

"Bâtiment aux Ivoires" (Fig. 15)

A portico leads from the courtyard to a suite of rooms. A basalt column-base was found there which belongs to a type found at Ashur, Khorsabad (Fig. 17), Sincirli and Lachish (see p. 17). No trace of the column was found, and it was probably wooden. The date of the building is uncertain, but should probably be in the reign of Tiglath-Pileser III.

F. Thureau-Dangin, Arslan-Tash (Paris, 1931), pp. 46-47, Pl. V, 2.

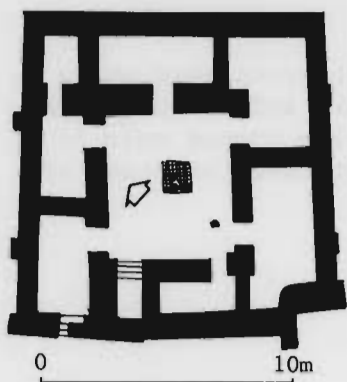


Fig. 12. Ur: No. 3, Gay Street

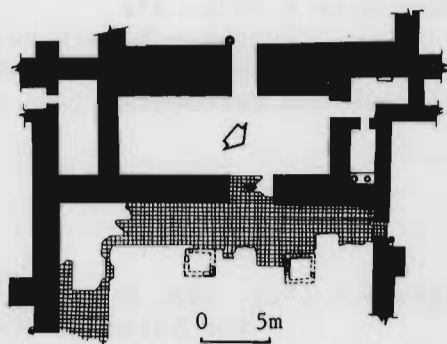


Fig. 13. Nuzi: Palace

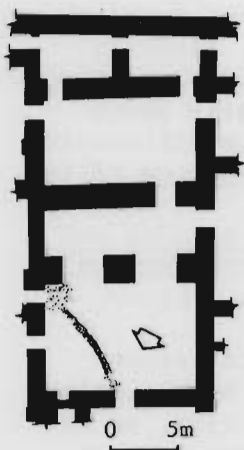


Fig. 14. Nuzi: House of Shilwi-Teshub

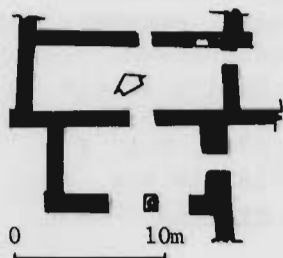


Fig. 15. Arslan-Tash: "Bâtiment aux Ivoires"

Khorsabad (Reign of Sargon II)

Residence L (Fig. 16)

On the southeast side of the courtyard was a colonnade of five stepped mud brick piers and two pilasters, which presumably protected the rooms which opened onto it from the sun. It was not a main thoroughfare, however, as its south end was blocked off.

Residence K (Fig. 17)

Three basalt column bases were found in room 15, where they were stored. They are of a type also found at Nineveh and Carchemish (see p.17).

Palace F (Fig. 18a, b and c)

The palace contains a two-columned portico opening onto a terrace. The basalt column-bases survive and are of a type found at Arslan-Tash, Ashur, Sincirli and Lachish (see p.17). It may have been concerning this building that Sargon wrote in reply to an enquiry about delay in supplying "bases which are beneath the pillars in the vestibule (?)" (L. Waterman, Royal Correspondence of the Assyrian Empire, Ann Arbor, 1930-1936, Vol. I, No. 452).

G. Loud, Khorsabad, Part II: The Citadel and the Town, OIP XL (Chicago, 1938), pp. 30-32, Pls. XXXVIE, LXXII, and Fig. 3; Pls. XXXIIB and XLVIII; Pls. XLIA-C, LXXV and Fig. 2.

There is no evidence whatsoever for reconstructing a columned building or a bīt hilāni on the palace terrace, south of the royal apartments. The ruins, as excavated, are illustrated by both Botta and Place. Place and Parrot have reconstructed columns, though this is the only point their reconstructions have in common. However, there is no justification for this in either reconstruction.

Botta and Flandin, Monument de Ninive (Paris, 1849-1850), Vol. II, Pls. 148-150; Vol. V. pp. 53-55; V. Place, Ninive et l'Assyrie (Paris, 1867-1870), Vol. I, pp. 149-151; Vol. II, pp. 36-42; Vol. III, Pls. 18 bis, 35 (1) and (2), 37 bis; A. Parrot, The Arts of Assyria (New York, 1961), p. 223, Fig. 276.

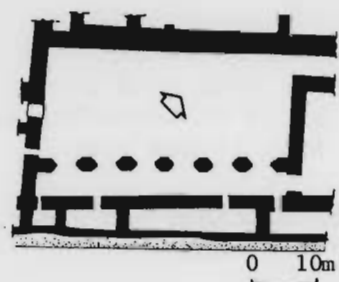


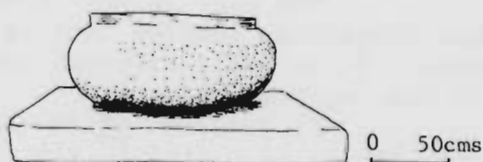
Fig. 16. Khorsabad: Residence L



Fig. 17. Khorsabad: Residence K
Scale 1:10



Figs. 18a, b & c.
Khorsabad:
Palace F



Ashur

The so-called "Akitu House" (Fig. 19 a and b)

There are two building periods, both with piers forming porticos. The first can be attributed to Sennacherib. A column base of the type illustrated in Fig. 17 was also found (see p. 17).

W. Andrae, Das wiedererstandene Assur (Leipzig, 1938), pp. 39-40, Abb. 19 and 20; J. Jordan, MDOG 42 (1908), p. 40, Fig. 11.

Nimrud

The Southwest Palace of Esarhaddon (Fig. 20)

No details of the construction are given.

A. H. Layard, Monuments of Nineveh, First Series (London, 1849), Pl. 100.

Nineveh

The North Palace, on Küyünjik (Fig. 21)

This palace was excavated by Loftus in 1854 and never published. It probably dates to the reign of Ashurbanipal, as all the hunting reliefs other than the Lion Hunt were found here. It is doubtful how much value can be placed on the plan.

C. J. Gadd, The Stones of Assyria (London, 1936), Appendix, Fig. 1.

Layard records having found four column-bases, arranged in two rows, on Küyünjik. From his illustration, the column bases seem to resemble closely those from Khor-sabad and Carchemish illustrated in Fig. 18.

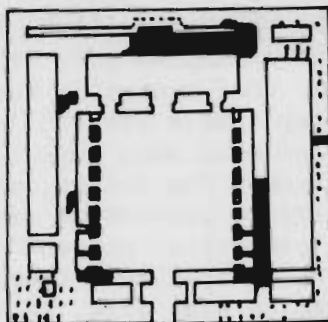
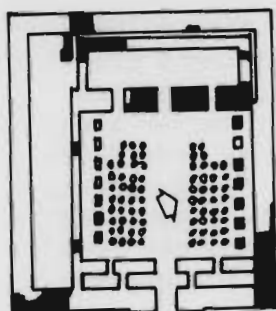
A. H. Layard, Discoveries in the Ruins of Nineveh and Babylon, (London, 1853), pp. 589-590.

Ur

The Harbour Temple of Nebuchadnezzar and Nabonidus (Fig. 22)

The pier in the "Pronaos" is a common feature of Neo-Babylonian temples, but is best preserved in this example. It is built of burnt bricks set in bitumen, and is 80 cms. square.

L. Woolley, UE IX (London, 1962), Pls. 13, 14, 69, pp. 35-40; AJ X (1930), Pls. XXXIVa and XXXVa.



Figs. 19a & b.
Ashur: "Akitu House"

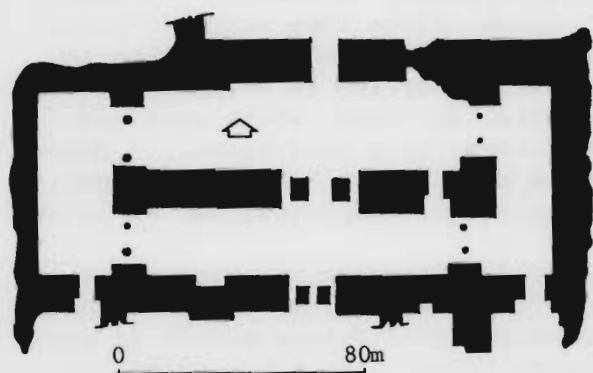


Fig. 20. Nimrud: S-W Palace

Fig. 21. Nineveh: North Palace

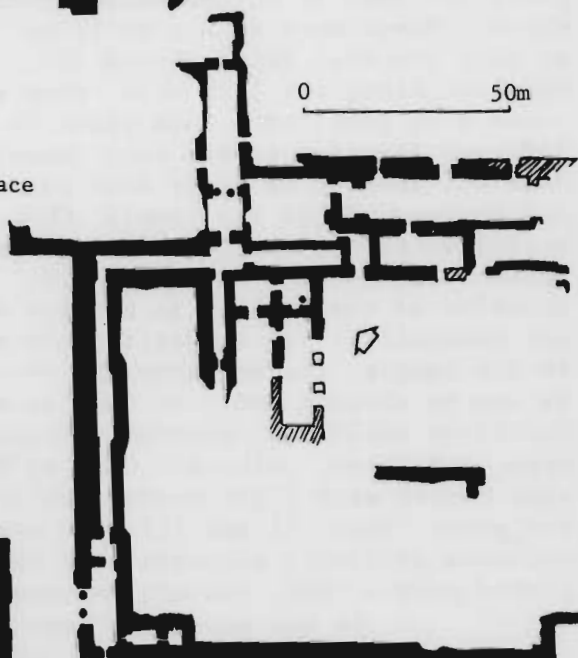
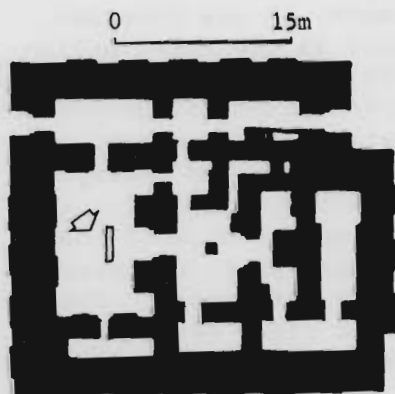


Fig. 22. Ur: Harbour Temple

From the above it will be seen that columns and piers were put to a limited use. When columns are used in architecture, they generally fulfill one of two basic functions: they enable the roofing of larger areas when used indoors, and when used outside, they provide covered ways and porticos. The latter, while being open to air and light, yet afford protection from the rigours of climate and, in hot countries, prevent direct light from reaching the rooms which open onto them. In Mesopotamia, columns are only used at Kish (Fig. 5) to halve the span of a roof. Their use indoors is purely decorative and non-functional in Assyrian palaces, since they stand in pairs in doorways which are narrower in span than the rooms to which they lead. Hence, they never led to a change in the basic proportions of Mesopotamian rooms, which remained only as wide as the longest available roof-beams. A Mesopotamian room could only be enlarged by being lengthened, and reception-rooms, throne-rooms, temple cellas, etc., are all long narrow rooms.

Colonnades occur but rarely, at Kish, Mari, Khorsabad and Ashur (Figs. 5-7, 16 and 19). Columns and piers are used in Mesopotamian architecture mainly in porticos. These were either built out into a courtyard, as at Mari and Nuzi (Figs. 6 and 13), or separated an antechamber, along its long axis, from a courtyard. In both cases they provided a cool place to stand, and supplied indirect lighting to the more important rooms beyond. This does not seem to be their main purpose, however: the columned doorway of the Sin temple (Fig. 4) leads only to a staircase to the roof, and the Assyrian throne-room unit opens directly onto the courtyard. It seems that the chief function of the portico in ancient Mesopotamian architecture was decorative: it emphasized the main doorway, the entrance to the temple, the way into the reception- or throne-room. It was an elegant addition and, as such, it was reserved for large buildings, generally temples in the third millennium, and later, palaces. Only at Ur do we find small private houses with light wooden galleries supported on columns and piers (Figs. 11 and 12). In most other instances, the evidence available suggests that the columns and piers supported only a roof, and not an upper story.

It has generally been taken for granted that columns only occurred in ancient Mesopotamian architecture when the country was subject to foreign influences. There is evidence to suggest that columns and piers would have been used as extensively in Mesopotamia as elsewhere in the Middle East, if the materials had been available. The date-palm is the only tree which is native to southern Mesopotamia

and which could be used for columns; its wood is too fibrous, however, and it is also too useful agriculturally to have been used extensively in architecture. It seems that it did, nevertheless, serve as the wooden prototype for Mesopotamian columnar architecture: we need not look abroad for the antecedents of the Mesopotamian column. In support of this theory we have the elaborately moulded bricks of the Bastion of Warad- (Amar-) Sin at Ur, and of the Temple at Tell el Rimah. These bricks imitated the trunk of the date-palm, which is strongly marked with a triangular pattern where the pruned stubs of old leaves remain. Earlier, we have the same design reproduced in mosaic at Uruk and Al'Ubaid; the Al'Ubaid examples are, in fact, built around a date-palm core. Later the Assyrian palace at Khorsabad had decorative date-palms made of cedar-wood, covered with bronze and, possibly, gold, on either side of one of the entrances.²

The only examples which have come down to us from the second millennium B.C. are piers and columns from two small houses at Ur (Figs. 11 and 12), and in two buildings at Nuzi (Figs. 13 and 14).³

In the first millennium B.C., the Assyrians embarked on campaigns in the west and brought back from their expeditions cedar column shafts and basalt bases, which they built into their palaces. We have both archaeological and textual evidence that the renewed popularity of columns and piers was due to foreign influence. The column-bases were of two types, both originally Syrian. That from Palace F at Khorsabad (Fig. 18) is also found at Arslan-Tash, Ashur, Sincirli and Lachish. The more elaborate column-bases from Residence K at Khorsabad (Fig. 17) are also found at Nineveh and Carchemish.⁴

Textual evidence for the use of columns from abroad is found in inscriptions of Tiglath-Pileser III,

² V. Place, Ninive et l'Assyrie (Paris, 1867-1870), Vol. I, pp. 120-122; Vol. III, Pl. 24: Gate Z to the "Harem."

³ It is probable that Hilprecht was right in dating the columned building found on Peters' Site I at Nippur to the Parthian rather than to the Kassite period. J. P. Peters, Nippur (New York and London, 1899-1904), Vol. II, pp. 172-192.

⁴ R. Naumann, Architektur Kleinasiens (Tübingen, 1955), pp. 130-131; H. R. Hall, Babylonian and Assyrian Sculpture in the British Museum, (Paris, 1928), Pl. 58: a winged bull supporting a column-base (BM 90954).

Sargon, Sennacherib and Ashurbanipal.⁵ Sargon writes as follows:

A portico patterned after a Hittite [i.e., North Syrian] Palace which they call bīt hilāni in the Amorite tongue I built in front of their (i.e., the palace's) gates. Eight lions in pairs weighing 4610 talents, of shining bronze, four cedar columns, exceeding high, I placed on top of the lion colossi and set them up as posts to support their entrances.

This is closely paralleled by the inscription of Sennacherib.

In conclusion, therefore, it seems that attempts were made, during the third millennium B.C., to develop the use of free-standing columns and piers in Mesopotamia. Neither the wooden prototypes, nor the substitution of mud-brick, however, proved satisfactory, and Mesopotamia never evolved a native columnar architecture. Later examples are generally decorative, rarely functional, and are added onto, or built into the native architecture, without altering its basic concepts. From Assyrian times onwards, Mesopotamia was constantly subject to foreign influences and domination, and columns and piers became a regular feature of an architecture, which was itself, to a large extent, imported. As such, they are beyond the scope of this paper.

⁵ D. D. Luckenbill, Ancient Records of Assyria and Babylonia (Chicago, 1926-1927), Vol. I, #804; Vol. II, #84,367,883.