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 1554E, Chen Hao-kai.
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 1556B, Zhang Shao-yuan.
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- 1573B, Eizo Inagaki.
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CHAPTER 55

- 1595A, C. Abel.
 1595B, C. Abel.
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 1597A, HDB.
 1597B, C. Abel.
 1597C, Design Partnership.
 1599A, Paul Rudolph.
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 1603C, Cesar Pelli.

spread to the mainland, stimulating the communities adjacent to the Aegean. By the fourteenth century BC the centre of power and influence had shifted to the Greek-speaking mainland, only to collapse in disarray and poverty by the end of the twelfth century BC. During this period Greeks had migrated from the mainland, across the Aegean to the coastal regions of Asia Minor, and to Cyprus; in the period of revival which followed, a more extensive movement overseas took the Greeks to North Africa (Cyrenaica), to the coasts of the Black Sea, and above all to southern Italy and Sicily. These communities contributed to the development of Classical Greek architecture, often forming distinctive regional variations, that of Sicily and Italy being in its turn influential on the forms developed in Italy in the Etruscan cities and, eventually, Rome. Subsequently, the establishment of Macedonian supremacy over Aegean Greece by Philip II and the conquest by his son, Alexander, of the Persian Empire greatly extended the area of Greek political – and thus intellectual and artistic – domination. Greek architecture, stimulated by Egypt and the Near East, was itself the stimulator of Roman and later European architecture. To all the arts, to literature, and to science, the Greeks brought to bear remarkable qualities of intellect and aesthetic judgement; the architecture of ancient Greece fully demonstrates the levels of their achievement.

Physical Characteristics

Egypt and the Near East

Three broad zones comprise the greater part of the Near East. To the south lies the Arabian peninsula, with its desert extending northwards into Syria, though with fertile highlands in its southernmost region, the Yemen; in a great arc stretching from the Mediterranean coastal plain and the hill country of Palestine through north Syria and Iraq to the head of the Gulf, lies the zone of grasslands, steppes, the Piedmont (foothills) and alluvial river plains known as the Fertile Crescent; and for 2400 km (1500 miles) from west to east extends a chain of mountains and plateaux from the Taurus range and central plateau of Anatolia through the mountains and lakes of eastern Turkey and north-western Iran to the parallel ranges of the Zagros highlands, dividing the wide Iranian plateau from the plains of Mesopotamia. The coastal regions of the Aegean, southern Turkey and the Levant are typically Mediterranean, once forested but now largely denuded of trees. A heavily forested belt stretches along the Pontic coast, the south Black Sea littoral, the south coast of the Caspian Sea being subtropical in vegetation. To the north the Caucasus range forms a clearly defined

frontier of the Near East, both environmentally and culturally.

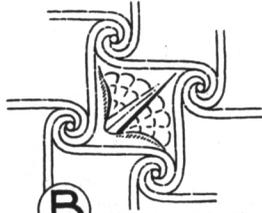
The environment of Egypt was uniquely favourable to early settlement and the development and survival of a centralised state, comprising as it did the long, narrow valley of the Nile, its rich alluvial soil bounded on each side by the arid desert, beginning either with a gentle slope or with a marked escarpment. Whatever the precise local topography, the line between the 'Black Land' of the valley and the extensive delta and the 'Red Land' of the desert was sharp and clear. The reason for this was the lack of any other water supply than that provided by the Nile, a majestic, slow-flowing river, supremely reliable from one year to the next, yet carrying only one-fifth of the volume of silt brought down in a good year by the River Tigris. One outcome of the distinctive form of the settled zone of Egypt was that towns and villages were strung out over long distances, comprising loosely connected compounds. Physical environment and political security alike rendered densely concentrated, walled cities, characteristic of Mesopotamia, inappropriate. Outside the Nile delta (Lower Egypt) these never developed significantly, while evidence of early periods of occupation in the delta lies buried beneath later deposits. Indeed the record of ancient Egypt is overwhelmingly that of the long Nile valley (Upper Egypt), the two regions retaining the memory of their prehistoric existence as separate political entities. In antiquity Egypt proper ended at the First Cataract, where the Nile descends over a band of granite at Aswan; upstream lay Lower Nubia, as far as the Second Cataract, a far more formidable natural barrier and a readily defensible frontier, the present-day border between Egypt and the Sudan.

The climate of the Near East, the Aegean region and Egypt can largely be described in terms of present-day conditions, as changes over the past five millennia or so have been for the most part localised. In the closing phases of the Pleistocene era and following the last glaciation the Near East was, on the evidence provided by analyses of pollen traces in sedimentary deposits, rather colder and drier than today and the tree line was at a lower altitude. In the Levant, sheltered from the effects of the glaciation, thriving stands of trees survived.

There are indications of a climatic optimum in western Iran and Mesopotamia, if not throughout the Near East, round about the middle of the fourth millennium BC. Conditions became rather warmer and more humid, encouraging wider distribution of settlements. The level of the Persian Gulf, and thus by implication general sea levels, rose to about one metre above present-day levels. The tree cover in highland areas rapidly extended. To what degree, if any, this can be seen as a factor directly favouring the rise of towns and cities in southern Mesopotamia is perhaps still a matter for speculation. Rather would such a climatic improvement have stimulated wider



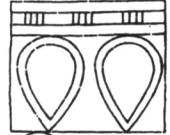
A CONTINUOUS COIL SPIRAL



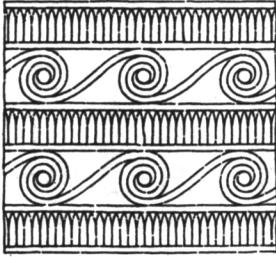
B QUADRUPLE SPIRAL



C LOTUS & PAPYRUS



D GRAPE ORNAMENT



E ROPE & FEATHER ORNAMENT



F SACRED BOAT : THEBES



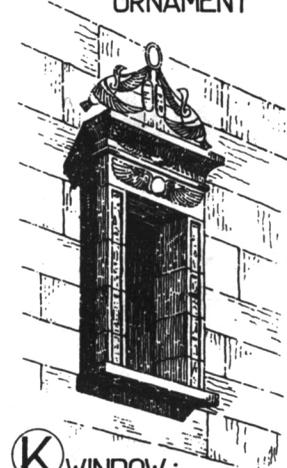
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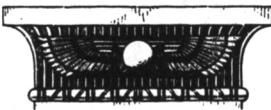
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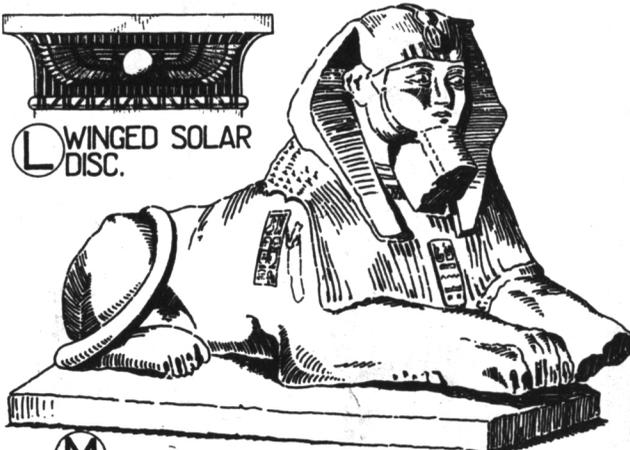
J DOORWAY IN PYLON, PHILÆ



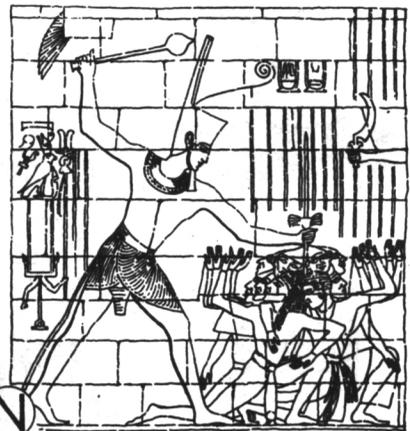
K WINDOW : MEDINET HABU



L WINGED SOLAR DISC.



M GRANITE SPHINX : LOUVRE : PARIS



N INCISED WALL SCULPTURE : KARNAK

Chapter 4

THE ANCIENT NEAR EAST

Architectural Character

In the alluvial plains of the Tigris and Euphrates stone and timber suitable for building were rare or unobtainable except by importation. There was, however, an abundance of clay which, compressed in moulds and either dried in the sun or kiln-fired, provided bricks for every kind of structure. Besides massive, towered fortifications, the outstanding constructions were temple-complexes or palaces, temples being typical of Babylonian architecture and palaces of Assyrian. Buildings were raised on mud-brick platforms, and the chief temples had sacred 'ziggurats' (p.72), artificial mountains made up of tiered, rectangular stages which rose in number from one to seven in the course of Mesopotamian history. Apart from the fortifications and the ziggurats, buildings of all types were arranged round large and small courts, the rooms narrow and thick-walled, carrying brick barrel vaults and sometimes domes. The roofs were usually flat outside, except where domes protruded. Alternatively, in early or commonplace buildings, palm logs supported rushes and packed clay served for coverings, or, for the best work, cedar and other fine timber was laboriously imported. Burnt brick was used sparingly for facings or where special stress was expected. Walls were whitewashed or, as with the developed ziggurat, painted in colour.

Essentially, architecture was arcuated, the true arch with radiating voussoirs having been known by the third millennium BC. For want of stone, columns were not used, except in a few instances in late Assyrian and Neo-Babylonian work. Towers or flat buttress strips were commonly vertically panelled and finished in stepped battlements above and stone plinths below, with colossal winged bulls guarding the chief portals; in palaces the alabaster plinths or dadoes of state courts and chambers bore low-relief carving, the walls above them being painted internally with bands of continuous friezes on the thin plaster coverings. Facing with polychrome glazed bricks, introduced by the Assyrians, was another mode of decoration, especially favoured by the Neo-Babylonians in lieu of sculptured stone slabs, since in Babylonia stone was scarcer than in Assyria.

The architecture of the Persians was columnar, and thus vastly different from the massive arcuated architecture of the Mesopotamian peoples they conquered. Flat timber roofs rather than vaults served for coverings, which allowed columns to be slender and graceful, while with their help rooms could be large where necessary, and of square proportions rather than elongated as the Mesopotamian brick vaults demanded. For ceilings, wooden brackets and beams carried by the columns supported a covering of clay on a bedding of reeds on logs or planks (p.94). The use of double mud-brick walls for stability, as at Persepolis, may have allowed small windows just below ceiling level without their appearing on the severe external facades. Stone was plentiful on the upland sites, but used sparingly for such purposes as fire-temples and palace platforms, door and window surrounds, and for richly ornate columns and relief sculpture, often with figures on a modest scale. The Persians were at first relatively inexperienced craftsmen, and drew upon the superior skills of the peoples of their empire; many of the usages and features demonstrate derivation from Egyptian, Mesopotamian, Syrian, Ionian, Greek and other sources.

It would be accurate to claim that the architectural character of the major buildings erected during many centuries in Mesopotamia, and during the Achaemenian period in Iran, exemplify the two main traditions of the Near East as a whole, that of the alluvial river plains and that of the whole highland zone respectively. These were the traditions of clay and wood.

Examples

The architecture of the ancient Near East is considered under the following headings:

Early Mesopotamian (fifth to second millennia BC)
Assyrian and Neo-Babylonian (c. 1859–539 BC)
Early Anatolian and Hittite (c. 3250–c. 1170 BC)
Canaanite, Phoenician and Israelite (c. 3250–587 BC)

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