## JADWIGA LIPIŃSKA

(Warsaw)

## Considerations on the Origin of Monumental Architecture in Egypt

"With the First Dynasty, monumental brick architecture makes its appearance in form, both as regards material and plan, which recalls the Protoliterate temples in Mesopotamia"

(H. Frankfort, The Birth of Civilization in the Near East. London 1951, p. 103)

"Among the rapidly Egyptianizing forms can be included the niched-brick architecture, which appears for the first time at the beginning of the dynasty in forms more reminiscent of Early Protoliterate architecture than that of later phases [...] Presumably among the Mesopotamian connections of the Late Gerzean were adventurers or skilled craftsmen who introduced the knowledge of such building, even though no examples occur until later. Important though the niched-brick architecture is for cultural development, it provides no chronological synchronism between Egypt and Mesopotamia, as did the earlier materials".

(H. J. Kantor, The Relative Chronology of Egypt and Its Foreign Correlation before the Late Bronze, in: R. W. Ehrich (ed.), Chronologies in Old World Archaeology, Chicago and London, rev. ed. 1965, pp. 14-15.)

... "Also ist die Nischenarchitektur eine genuin ägyptische Entwicklung — wie sie auch in Sumer eingeständig ist".

(W. Helck, Die Beziehungen Aegyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr., 2. Auflage, Wiesbaden 1971, p. 7)

As proved by above citations, a strong disagreement divides the scholars studying the still unsolved problem of the origins of brick architecture in Egypt. The striking similarity of the Mesopotamian temples of the "Ubaid Period (e.g. Tepe Gawra and Eridu)" and Egyptian monumental mastabas of the Archaic Period incite con-

<sup>&</sup>lt;sup>1</sup> H. Frankfort, The Art and Architecture of the Ancient Orient, London, 4 ed., 1970, pp. 18-20.

stantly a lively discussion on the problem of possible Sumerian influence, as in Egypt no antecedants are known to the first great structures of brick, with intricate panelling of walls. W. B. Emery², H. Frankfort³ and H. J. Kantor⁴ are among the scholars convinced of the Mesopotamian origin of inspiration of the Egyptian architects, while H. Ricke⁵, W. S. Smith⁶ and W. Helck⁵ strongly oppose the idea and advocate the purely Egyptian, independent development of both masonry and style.

The striking contrast between meagre remnants of the Predynastic brick buildings in Egypt<sup>8</sup>, and highly skilled workmanship of masons displayed already in the first structures built at the beginning of I Dynasty leaves indeed little doubt to the problem of influence, or foreign help. Poor masonry of the brick lining of the Hierakonpolis painted tomb<sup>9</sup> and the contemporary graves, dated to the end of Naqada II Period, in comparison to the developed and highly efficient work of the architects and masons who constructed both mastabas of Hor-Aha at Naqada<sup>10</sup> and Saq-

<sup>&</sup>lt;sup>2</sup> W. B. Emery, A cylinder seal of the Uruk Period, ASAE 45, 1947, pp. 147-150.

<sup>&</sup>lt;sup>3</sup> H. Frankfort, The Origin of the Monumental Architecture in Egypt, AJSL 58, 1941, pp. 329-358; id., The Birth of Civilization in the Near East, London 1951, pp. 103-105.

<sup>&</sup>lt;sup>4</sup> H. J. Kantor, The Relative Chronology of Egypt and its Foreign Correlations before the Late Bronze Age, in: R. W. Ehrih (ed.), Chronologies in Old World Archaeology, Chicago and London, rev. ed. 1965, pp. 14-15.

<sup>&</sup>lt;sup>5</sup> H. Ricke, Bemerkungen zur Baukunst der Vor- und Frühgeschichte, in: "Beiträge zur altägyptischen Baukunst", 4, p. 46.

<sup>&</sup>lt;sup>6</sup> W. S. Smith, The Art and Architecture of Ancient Egypt, 1958, p. 18.

<sup>7</sup> W. Helck, Die Beziehungen Aegyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr., 2 ed. Wiesbaden 1971, Ä. A., B. 5, pp. 5-6.

<sup>8</sup> Mud bricks were found at Badari in a hut dated by Brunton to the Amratian Period (Badarian Civilisation, pp. 47-48), at Maadi (MDAIK 5, 1934, p. 112), in substructures of the Naqada II graves at Naqada (Petrie, Naqada and Ballas, London 1896, p. 27), also in the so called South Town of Naqada (ibid. p. 54), at Mostagedda (Brunton, Matmar, p. 17 and pl. VIII, XX), and at Hierakonpolis the painted tomb was lined with mud brick (Quibell, Green, Hierakonpolis II, London 1902, p. 23). There is also known a clay model of a dwelling house on a rectangular plan, representing probably mud brick structure. It was found at El Amrah, in grave a 4 (R. MacIver-Mace, El Amrah, p. 42, pl. X, 1-2). Another clay model, found at Diospolis Parva in the grave B 83 rather loosely dated to SD 33-48, represents a corner of a town-wall with two men looking over it (Petrie, Diospolis Parva, The cemeteries of Abadiyeh and Hu, 1888-1889, Egypt Exploration Fund, London 1901, p. 32 and pl. VII). As already H. Kantor pointed out, the sparsity of indications concerning the use of mud brick in the Gerzean Period may well be owing to our complete ignorance of the Gerzean dwellings, (JNES 3, 1944, p. 112).

<sup>9</sup> H. Case and J. Crowfoot Payne, Tomb 100: The Decorated Tomb at Hierakonpolis, JEA 48, 1962, pp. 11-12.

<sup>10</sup> L. Borchardt, Das Grab des Menes, ZAS 36, 1898, pp. 89-90.

qara<sup>11</sup> of not much later date, leads to conclusion, that some foreign factor caused such speedy development as well as the change of form and style of tombs.

The direct confrontation with Sumerians is hitherto not proved, and only theoretically possible via the Red Sea route and Wadi Hammamat<sup>12</sup>. The Mesopotamian imports discovered in Egypt mean only that the long-distance barter trade between both countries existed and was strongly marked especially during the Naqada II Period<sup>13</sup>, but there is nothing positive to prove that this trade was direct and not through intermediaries. And there is a basic difference between the import of goods and of ideas, such as the skill in masonry and style of architecture. Proposed by H. Kantor "adventurers or skilled craftsmen who introduced the knowledge of such building" to Egypt is hardly convincing, as even the author admits the lapse of time in influencing the Egyptians with much earlier architectural forms of Mesopotamia. In view of the reputedly traditional Egyptians, it is difficult to assume that the rulers of the newly unified country adopted the foreign style introduced to them by "adventurers" from a faraway country...

The advocates of the Egyptian, independent origin of the niched architecture, in lack of archaeological evidence, collect the pictorial representations of early buildings. The most important are the series of Horus-names of early kings, inscribed into the emblem serekh, believed to depict the monumental façade of the royal palace. Although the first detailed representation of serekh occurs on the stela of Wadji, a number of sketchy figures date back to the first rulers, and Horus-name of Narmer is frequently represented. The emblem depicts the monumental gateway flanked by panelled towers, the number of separate entrances is varying. The scholars unanimously agree that such palaces were built at the advent of Egyptian state, and possibly even earlier, in the Protodynastic times, and that serekhs prove the existence of monumental brick palaces with panelled walls<sup>14</sup>. The second pictorial evidence of huge brick buildings is provided by images of the conquered fortified towns;

<sup>&</sup>lt;sup>11</sup> W. B. Emery, Hor-Aha, Excavations at Saqqara 1937-1938, Cairo 1939, pp. 11-13.

<sup>12</sup> Kantor, The Relative Chronology, p. 13.

<sup>&</sup>lt;sup>13</sup> Ibid., 11-14; L. Krzyżaniak, Early Farming Cultures on the Lower Nile, Warsaw 1977, pp. 155-156.

This identification, though generally accepted, lacks any direct proof. Taking into consideration the dominating trend in the Egyptian architecture of the Dynastic Period, i.e. the monumentality of tombs and temples in contrast to the modest dwellings—even royal—it is difficult to believe, that the monumental king's palaces, as represented by serekhs, disappeared completely in later times. It is true, however, that the royal residences are known to us only from the period of New Kingdom, and those are appearing as rather low buildings, or complexes of smaller units. Considering the strength of tradition, so characteristic to ancient Egypt, some reminiscences of the early, monumental palaces with elaborately decorated façades should have survived in later structures, but to our present knowledge nothing of this kind can be recognized in actual remains of royal palaces. Already the definition of serekh, as depicting a brick building repeating the pattern of earlier huts of mats lashed to the wooden frames, lacks convincing explanation. The painted ornaments imi-

presumably the earliest examples occur on the famous Tjehnu Palette<sup>15</sup> dated to the reign of King Scorpion, probably the predecessor of Narmer. Such fortresses with buttressed walls and projecting towers are represented on the slightly later Palette of Narmer and on the number of other early dynastic relics, and prove not only the great skill in the mud-brick masonry, but also an advanced stage in the military architecture. Yet there are no such fortresses discovered in Egypt, apart two later constructions of a II Dynasty date, at Hierakonpolis and Abydos. These are probably not real fortifications, but the monumental king's residences surrounded with walls.

The Upper Egyptian sites yielded no proof whatsoever of the existence of developed skill in masonry, and lack of any remnants in Delta dated to these early times leaves the question open. The more so, as the inhabitants of Delta were in that period in constant contact with the territories more advanced in brick architecture: Palestine and Syria. With the closest neighbours, the peoples of Palestine, they maintained the trade relations, and possibly even some military actions were conducted there. In the Early Bronze Age in Palestine existed a number of fortified cities<sup>16</sup>, and brick houses in settlements were much more frequent than in Egypt. The recent excavations brought ample materials concerning the direct contacts of Egyptians with Palestinian cities even before the I Dynasty, and the overland route from Delta was in use<sup>17</sup>.

In the archaeological materials obtained in Palestine even the vertical panelling of walls is ascertained. The excavations in Jericho brought to light the town-wall of the Early Bronze Age, built of rectangular mud bricks. In the course of wall, at intervals, were cavities about 1 m. wide, resembling the discussed niched walls in Egypt. K. Kenyon considers them to be a device to localize the collapse of larger sections of town-walls during the frequent in this region earthquakes<sup>18</sup>. The

tating the mats on some inner walls of early niched structures (cf. W. S. Smith op. cit., p. 18 n. 17) mean only, that the actual mats covered the walls in contemporary dwellings. The entire problem of the meaning of serekh awaits reconsideration, as the hitherto most extensive study of H. Ricke (op. cit., pp. 21-59) is based on the outdated historical data.

Cf. PM V, 105, No 6.
 Cf. CAH<sup>3</sup>, I, 2, Chapter XV.

<sup>17</sup> H. Kantor, The Relative Chronology, pp. 8-11; S. Yeivin, A New Chalcolithic Culture at Tel Erany and its Implications for Early Egypto-Canaanite Relations, in: Fourth World Congress of Jewish Studies, Papers, Vol. I, Jerusalem 1967, pp. 45-48; E. D. Oren, The Overland Route between Egypt and Canaan in the Early Bronze Age, "Israel Exploration Journal" 23, No 4, 1973, pp. 198-205; R. Amiran, An Egyptian Jar Fragment with the Name of Narmer from Arad, IEJ24, No 1, 1974, pp. 4-12; Z. Meshel, New Data about the "Desert Kites", "Journal of the Tel Aviv University Institute of Archaeology" 1, No 4, 1974, pp. 129-143; R. Gophna, Excavations at 'En Besor, "'Atiqot" (English Series) 11, 1976, pp. 3-9; A. Schulman, More Egyptian Seal Impressions from 'En Besor, 'Atiqot 13, in print. <sup>18</sup> K. Kenyon, Archaeology in the Holy Land, London 1965, pp. 105-106.

examination of the preserved parts of the wall proved that the vertical dillatation of it served perfectly well, and that beside the parts collapsed to their foundations, the immediately adjacent sections beyond the cavities stood sound. In the area, where earthquakes occur with great frequency, the builders must have practiced the constructions minimizing the destructive effects.

Both in Egypt and in Mesopotamia the panels served no constructional purpose, they were purely decorative. There is no evidence of panelling being derived from scarps or other kinds of supports; the only site, where the vertical cavities were of sound utilitarian meaning is so far the described above Early Bronze Age Jericho. Such constructions could have influenced Egyptians, and direct contacts with Palestine allowed for training there the masons, or even employing the skilled Palestinian brick-layers in Egyptian constructions, at least at the very beginning of monumental brick architecture in Egypt. Such, much closer foreign connections than assumed by the authors advocating the direct Sumerian influence, can be put forward as a working hypothesis, until the archaeological discoveries prove — or disprove — it.

\*

After the above paper was completed a book *Brick Architecture in Ancient Egypt* by A. J. Spencer was published in 1979. Although the author supports the Mesopotamian influence on early Egyptian brick buildings, he includes a valuable discusion on the use of brick in the Nagada II period (Chapter two: The earliest use of brick in Egypt, pp. 5-6).