Reallexikon der Assyriologie

und Vorderasiatischen Archäologie

Begründet von
E. Ebeling und B. Meissner

fortgeführt von
E. Weidner und W. von Soden

herausgegeben von D.O. Edzard

unter Mitwirkung von
P. Calmeyer · J.N. Postgate · W. Röllig
W. von Soden · M. Stol · G. Wilhelm

Band 8 · 5./6. Lieferung

Moab – Musik

1995

Sonderdruck

Walter de Gruyter · Berlin · New York

phique et raisonnée, c'est-à-dire en dépendance directe de toutes les branches des connaissances humaines". Nous ne pouvons en citer ici que quelques-uns: Mission scientifique au Caucase, études archéologiques et historiques, 2 tomes (1889); Mission scientifique en Perse, 5 tomes (1894-1905); Fouilles à Dahchour, 2 tomes (1895, 1903); Recherches sur les origines de l'Egypte, 2 tomes (1896, 1897); La Préhistoire orientale, 3 tomes (1925-1927).

Notices nkcrologiques: E. Pottier, Jacques de Morgan, Syria 5 (1924) 373-380. - S.Reinach, Jacques de Morgan (1857-1924), RevArch. (1924) 204-222.

F.Tallon

Morphem. Grammatische Morpheme (= kleinste bedeutungstragende Lauteinheiten) fallen in der Silbenschrift des Sumerischen und Akkadischen nur selten mit bestimmten Silbenzeichen zusammen: z. B. iri-a „in der Stadt", wo -a die Lokativpostposition darstellt. Gewohnlich geht die „M.grenze" durch ein Silbenzeichen hindurch: z. B. *sar-ru-um* „König", wo *-ru-* sowohl den Stammauslaut *-r* von *sarr-* als auch den M.anlaut *u-* von *um* (Nominativ Sing.) enthalt.

Vgl. Grammatik* RlA I11 61ia oben.

D.O. Edzard

Moscher s. Muski, Muski.

Motte s. Insekten.

Mozan, Tall.

§1. Excavations and Identification. Tall Mozan was first surveyed and briefly excavated by M. Mallowan in 1934 during a one week excavation; three trenches were dug (the authors have identified them as RØ, GØ, HØ in *fig.1*), and some visible remains were identified (NQ). At first, Mallowan assumed that the site was Roman, and this was one reason for choosing Cagar Bazar for his excavations. The authors first visited the site in 1983, and began excavations in 1984; by 1992, seven seasons of excavations had been completed.

There is no firm identification for the site. Some considerations suggest that it may correspond to ancient Urkis, the major early center of the Hurrians, which was presumably important in the 3rd mill. and then died out by the middle of the 2nd mill. The two bronze lions with the Hurrian inscription of Tisatal were purchased in 'Amuda," a town about 7km west of M. Since Tall Sermola (located in 'Amuda) dates primarily to the latter part of the 2nd mill., it cannot be the site from which the two lions would have come, and the nearest candidate is instead M. In addition, an OB itinerary also suggests that Urkis was in this region. [See p. 393.]

One reason why the question of identification is of particular interest is that much of the material culture in M., as in other sites of north-eastem Syria, exhibits stylistic and technical peculiarities which set it apart from that of the South. If linguistic evidence could be added to match the same distributional pattern, one could identify not only a city, but a territory settled by a Hurrian ethnic group. The closeness of copper mines at Ergani in southern Turkey suggests that the area as a whole, and Mozan in particular, derived much of its wealth from trade in this commodity: M. is the gateway to the north (over the Mardin pass) as Brak is the gateway to the south (over the Singar). Its central position the east-west trade route from northern Mesopotamia to the Mediterranean added to its importance. In addition, the entire area of the Habur plains is extremely fertile and this too would have substantially contributed to its economic significance.

§ 2. Configuration of the site and the Outer City. A central High Mound measures some 18 hectares in size, and stands some 25 m above virgin soil. It has steep slopes for most of its perimeter, which betray the presence of a city wall dating toward the middle part of the 3rd mill. It lost its defensive purpose shortly afterwards, since the slope in front of it, presumably leading to a

moat, was leveled with debris from the middle of 3rd mill. Excavations in KW gave evidence of a mudbrick city wall at least 8m wide and 5m high, with a glacis extending outwards to a distance of 15m, beyond which we presume there would be a moat. Excavations in S_1 gave evidence of a tower-like projection, which jutted out of, and thereby protected, the juncture between two segments of the wall. We have not found evidence of a city gate yet, but in S_1 there are indications of an ancient street surface leading up towards what is today the center of the tell. It appears that the skyline of the city had already reached, by the mid 3rd mill., elevations similar to those of the tell today, because temple BA exhibits strata from that time period just below the modern surface and very near the summit of the tell. The temple may have been raised on a stone platform, and if so it would have dominated the landscape from a considerable distance.

The surrounding plain exhibits cultural materials up to a distance of some 400m from the High Mound, and is ringed on the outside by a continuous rise which parallels the oval contour of the High Mound. This rise is a definite boundary to human occupation, since surface collections (resulting in more than 16,000sherds), the geophysical survey and various soundings indicate that all cultural materials stop abruptly at this rise. The authors call this the Outer City, by which the authors mean that there was a consistent

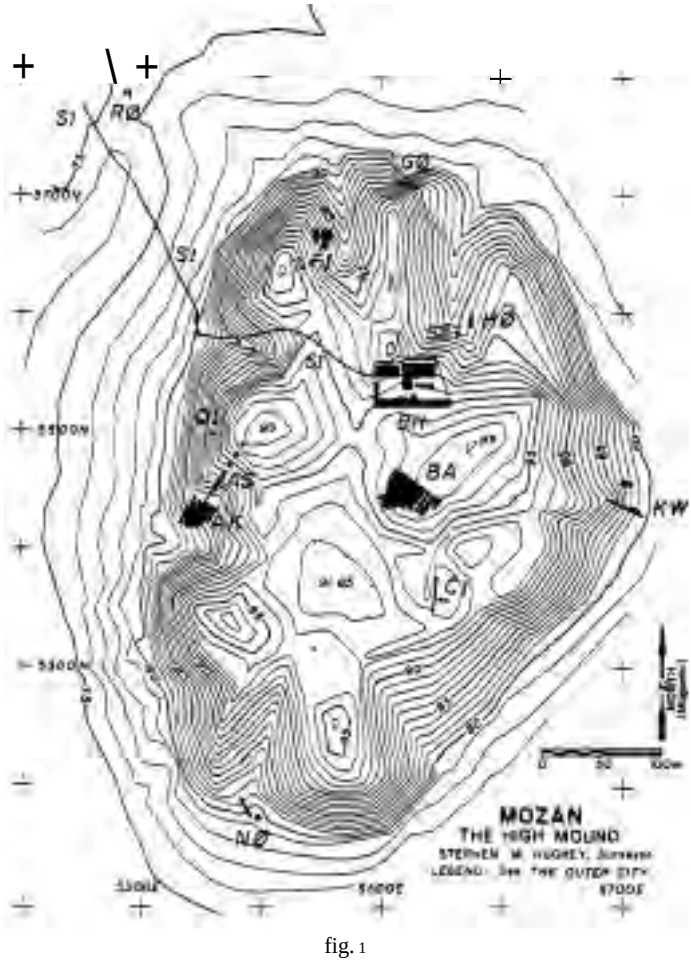


fig. 1

and significant spreading out of the cultural deposit up to, and not beyond, the outer rise–for a total surface of some 135 hectares. Since the wall around the High Mound had lost its defensive purpose by the middle of the 3rd mill. one might suspect that the outer rise represents an outer city wall, but the small soundings carried out so far have proven inconclusive. Soundings OA_4 and OB_I gave evidence of a cemetery, and clear evidence of structural remains was found in OD2 and OE 1.

A detailed topographical survey (s. M.H has been carried out *figs. 1 and 2*), as well as a comprehensive resistivity and magnetic survey J.E.Ericson/M.L.Peterson). The geophysical survey has covered **62%** of the summit of the High Mound above the 90m contour line (equivalent to almost **6** hectares) and significant portions of the Outer City. An important feature of M. is that there is no modem occupation except for a small village on the Western side of the Outer City. The excavations (BH) carried out prior to construction of the expedition house indicated that this was one of the areas with the latest occupation on the tell, dating to the Nuzi period.

fig. 2

§ 3. Chronology. The sequence of occupation at M. begins in the Halaf period. The area of the Wadi Dara in the Habur triangle is of primary importance in this period: over 30 Halaf sites were identified during a survey (G. Bunnens/A. Roobaert-Bunnens/I. Hijara). At M. itself, Halaf sherds were found on the surface of the Outer City only to the south of the High Mound. At the base of the deep sounding (Sz) in the High Mound, Halaf sherds came from just above virgin soil. It therefore may be that occupation on M. began as a small Halaf settlement but that the site did not become important until the 3rd mill.

No early 3rd mill. strata have yet been excavated but in the deep sounding S_2 three small pointed base Ninevite V cups were found in stratum A_{12} next to a carbon deposit which dates to 2920 ± 170 B. C. (UCI-145; 4340 +- 170 B. C.; calendrical date based on Pearson et al. 1986, 937; Vogel et al. 1986, 937). The surface ceramic survey suggested that early 3rd mill. sherds were more prevalent on the northern portion of the mound. The major occupational strata at M. and the largest component to the build-up of the High Mound can be dated to the mid-third mill. From the surface ceramics in the Outer City, this period too seems to witness its major extension and use. The burnt, discarded store room debris found in K_1 as well as the main strata of the temple BA can be dated to this period. It is probable that the city wall around the High Mound was mainly in use within a few centuries at mid millennium. Old Akkadian tablets were excavated in both the upper levels of F_1 and on a major floor in the AK building, where Akkadian seal impressions were also found. Thus the late 3rd mill. occupation may be more extensive than was apparent from the evidence of the surface survey.

From the initial ceramic survey it appeared that 2nd mill. occupation was centered in the highest portion of the mound. This has been confirmed through a small sounding (Q_1)

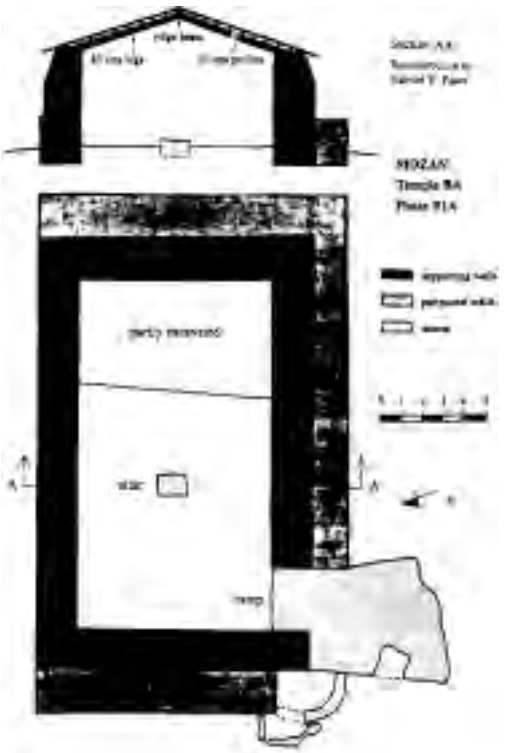


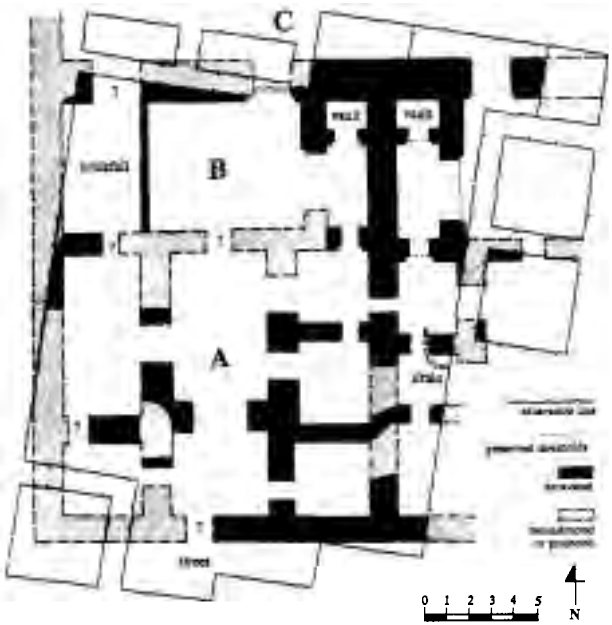
Fig. 3

and from the upper strata of the step trench AS, where traces of a large building have been partially uncovered. The latest levels above the temple BA dated from the Habur period, but no building remains were found. On a lower portion of the High Mound, Area C_1, a single Habur period grave was excavated. The latest occupation dates to the Nuzi period and is characterized by private houses (AS, BH) containing very few small finds. Even the ceramics are of the coarser variety with only portions of two painted goblets found in the excavations.

§4. The Temple BA. Four major phases were distinguished, of which only the earliest can be identified as a temple, on the basis of its plan and furniture. This earliest phase (Bi) dates to the mid-third mill., and is the only one described here *fig.3).*

The floor plan indicates that this temple had a large interior space *(9* x 16, 5m) with a monumental entrance accessed by a long (8m) stone ramp. The foundations were constructed of large and roughly hewn limestone blocks with the mudbrick walls resting immediately on the stone foundations. The plan and the exterior dimensions are similar to those of Temple G in Ebla and the *Aussenbau* in Huera (which however have an access *in antis* as opposed to the M. bent axis approach); at Ebla the walls are twice as thick, which means that the interior space is considerably smaller. A thick, cement-like pavement covered the entire interior space; since there is no trace of drainage, we assume that this room was roofed, in spite of its large size. Given the fact that there are no traces of columns or posts, it has to be assumed that there was a pitched roof - a hypothesis which is confirmed by an engineering study (G.V. Pesce) based on structural evidence. The major piece of permanent furniture is a large stone block (about x 1.5 m), with a depression in the center, which may have served as an altar. Excavations still need to be completed in the rear portion of the temple, as well as in the area adjacent to the building; a series of small rooms flanked the structure in its later phases, to the North and the East.

The earliest phase of the temple was destroyed by fire, and the resulting debris was piled up in the back part of the structure, possibly to serve as substructure for a new



MOZAN - Storehouse AK - Stratum B12

fig. 4

building. While the rebuilding itself belongs to a later phase, the destruction debris still belongs, in the authors' interpretation, to phase B 1. In this heavy burnt deposit, which contained a large amount of ceramics, was found a small lion statue made of limestone (width 10.2 cm; length 15.2 cm; height 12.1 cm). This lion is in a recumbent position with a deeply incised irregular hair pattern and deeply cut eyes which may have originally been inlaid. Legs and paws are indicated on the bottom. The style of this lion is more realistic in the carving of its mane than any of the contemporary mid-third mill. lions from the south. Stratigaphically associated with it is a carbon sample dated to 2435 B. C. +- 60 (UCI-144; *3930* +- 60 B.P.; calendrical date based on Pearson et al. 1986, 934).

In a disturbed portion to the north of the temple was found a small, stone round top stele carved on both sides (triangular in section; width 11.2 cm, height 9cm). One side has a scene of a cattle herd in which all the animals appear to be in movement. The other side shows a man plowing with only the rear portion of his draft animal preserved. Above him a dog was placed. A remarkable feature of the M. plowman is the fact that his right foot shows him to be pushing off as it were from a diagonal line which is carved toward the bottom of the composition. The style of this stele dates it toward the end of ED III or the very beginning of the Akkadian period.

§ 5. The Storehouse AK. At the base of a stepped trench on the western side of the tell, portions of a large storehouse have been excavated. Judging from the layout of the excavated portion, this is the southwestern corner of a building which, once excavated, may be three times as large as the present exposure. The plan *fig. 4*) consists of an accession suite (labeled A on the plan), a large hall with a closet or vault (B), and probably an interior storage area in the back (C); the area to the east appears to have a plan which is the mirror image of the western half.

The authors are assuming an entrance on the lower southern comer, from a street which came from a presumed city gate, some 30 to 50 m to the west: no trace of this entrance exists because at this point only partial foundations remain. The lower courses of the walls are in stone, up to about 1m in height, with mudbrick on top, but they are not plastered. The vault in sector B is a small closet (1.8 x 1.3m) with thick walls, preceded by an ante-room. The notching, or rabbeting, in the doorways is for the most part structural, in that it must have served to house a door panel, the location of the door coinciding in many cases with a strongly marked threshold in the floor. In a floor deposit in front of this vault were excavated some 80 seal impressions, several of which were inscribed. For the most part the seals were rolled on box sealings and a few door sealings. One may assume then that the function of this vault and perhaps the whole building, was that defined in the texts as an É.KISIB, in which important items were stored in sealed containers.

§ 6. Epigraphic finds are for now (1993) limited in number but interesting on many counts.

From F_1 (a residential complex, possibly private in nature) come two tablets which have been published by L.Milano in Mozan 2 (with comments on the stratigraphy by M.Liverani). They are large fragments of a four and a three column tablet, containing accounts of workmen and their supervisors, listed by name, profession and sometime provenience. The language in which the texts are written is Old Akkadian, and so is a majority of personal names, but several names may be explained as Hurrian. They date to the later portion of the Sargonic period.

Eighteen legends on seal impressions were found in the Storehouse AK, together with one complete school tablet, the fragments of two more tablets and one inscribed tag. The epigraphic finds from AK were made in 1992 in the floor deposit from the large hall or court in sector B, of which another half remains to be excavated. The school tablet ($A_{1.69+}$) contains an excerpt of *6* lines from the EDLU E list of professions also known from Abu Salabih (MSL 12, 17:34-39) and Ebla (MEE *3*, 36 *f.*:34-39); some interesting variants are found in the M. text.

These (together with an inscribed sherd from the area of temple BA) are the northern-

most cuneiform texts found in excavations and dating from the 3rd mill.; they are diversified in nature, and come from different stratigraphic settings. There is some evidence of Hurrian onomastics during the Old Akkadian period, and the use of Akkadian may be attributed to actual Akkadian control or possibly only to Akkadian influence. The presence of a school tablet indicates that there was local scribal activity, linked because of its content to that known from Ebla and Sumer.

§7. Seal impressions. From the burnt debris outside the city wall in KW, a corpus of over forty seal impressions rolled for the most part on door sealings was excavated. The date of these sealings is Early Dynastic III, although some indicate that ED II seals were still in use. While some motifs continue into the early Akkadian period, there are no clearly recognizable Akkadian sealings in the deposit. The dating of these impressions is based on comparison with similar examples from Tall Huera and sites in southern Mesopotamia. Prominent among the designs are the nude hero motifs and other animal and human combat scenes.

A second corpus of sealings can be dated to the early Akkadian period; it comes from a floor deposit from sector B of the AK Building in front of a vault. The sealings are found together with epigraphic finds which confirms the Akkadian date suggested by the iconography and the style of carving. The iconography of the sealings reflects what is already known from the Akkadian corpus with some variations. These latter include a seated lyre player and possibly a singer used as a secondary motif under the inscriptions of two seals. A high table is shown in another offering scene. The typical depiction of Samas rising between gates and holding his saw as well as the rare motif of a seated figure with a child are both found in this corpus.

§8. Ceramics and metals. M. is for the most part a 3rd mill. city, although its occupation did last into the Nuzi period. One of the aims of the excavations is to establish a detailed pottery chronology for the 3rd mill. in that region, one that is based on well stratified deposits in different functional contexts. Thus far, some large and well stratified deposits for the ED III and Akkadian periods have been excavated.

For the ED III period the storage room which was burnt and its debris thrown outside the city wall is an excellent example of a functionally exclusive deposit from a single short time period. It contained large plastered vats and small spouted vessels and cups in Simple ware. Also dating to ED III but slightly later than the KW deposit is the pottery from the main level of temple BA and its destruction (Phase B_1A). Typical for this period are medium jars with grooved rims, Simple ware conical cups and Metallic ware jars with rounded or ring bases. For the Akkadian period portions of two buildings containing a large amount of Akkadian pottery have been excavated. This period ceramics are characterized by a later variety of Metallic ware and a continuation of the Simple ware tradition. One tomb with over 50 vessels excavated in the Outer City (OB_1) exhibits the transition between the late Ninevite V tradition and the use of the early Metallic ware. During this transition painted Scarlet ware stands were utilized at M.; they appear to have been manufactured locally since there are both painted and unpainted examples of these stands.

From 3rd mill. contexts a large number of metal objects have been excavated and analyzed: mostly points and pins but also spears, daggers, and one scraper. Metallographic and elemental testing has been carried out (S.Crane) on 65 objects at the Los Angeles County Museum of Art (P.Meyers) and the University of Oxford, Department of Materials (P.Northover). Results show that a range of metal alloys was used: relatively pure copper, copper alloyed with arsenic, or low-tin bronzes. Some recycling of metals is indicated. The majority of these objects were cast, annealed and finished by cold working.

G. Buccellati/M. Kelly-Buccellati, Mozan I. The Soundings of the First Two Seasons, BiMes. 20 (1988); id., Tell Mozan, Syrian Archaeology Bull. 2 (1990) 4–7; id., Tell Mozan, in: Mille et une capitales de Haute-Mesopotamie, Les dossiers d'Archeologie, No.150 (1990) 18–23; id., Mozan, AJA 95 (1991) 712-714; id., Mozan, AJA 98 (1994) 131-133. – M. Kelly-Buccellati, Three Seasons of Excavation at Tell Mozan, in: (eds.) S. Eichler/M. Waf-

ler/D. Warburton:Tall al-Hamidiya 2 (= OBO Ser. arch. 6 [1990] 119-132); id., A New Third Mill. Sculpture from Mozan, Fs. H.J. Kantor (= SAOC 47, 1990) 149-54, Pl. 26. - L. Milano/M. Liverani et al., Mozan 2. The Epigraphic Finds of the Sixth Season, SMS 5/1 (1991). - G.W. Pearson et al., Radiocarbon 28 (1986) 911-934. - J.C.Vogel et al., Radiocarbon 28 (1986) 911-934. - J.C.Vogel et al., ibid. 935-938.
[Addendum 1995: Seal inscriptions (1995) now strongly support the identification of Tall M. with Urkis*.]

G. Buccellati - M. Kelly-Buccellati

^{d}MUs. NinSAR.

Mu'ab(aja) s. Moab.

Mu'ari (^{uru} *Mu-a-ri,mcr)*. Ortschaft in der Region von Ugarit, mehrfach in Stadtelisten genannt (PRU III 189:32; 190:28; 191:26; RSO 7 Nr.42q; alphabet. KTU 4, 355:32; 365:9; 621:5; 629:11; 693:37 u.o), einmal auch als Lieferant von Silber an den GroBkonig (KTU 4.610:10). Nisbe *m^{c}ry* in KTU 4.420: 9.

W. Rollig

Mu'ati s. Nabu.

Mubarra s. Gibil und Girra.

Mubikurra *(Mu-bi/ni-kur-ru:* CIRPL Ent. 41 iv 1; ITT 2/1, 4410:2; 2/2 4528). In altsum. und altakkad. Zeit die Ortschaft, an der die Grenze zwischen Umma und Lagas vom Iturungal* aus im Norden den Tigris erreichte.

RGTC I 122. - A. Falkenstein, AnOr. 30 (1966) 34. - J.S.Cooper, SANE 2/1 (1983) 18f. - W.W.Hallo, Or. 42 (1973) 233 Anm. 33.

W. Rollig

***Mud'engurra.** In Maqlu VI 8 ist ^{d}*Mu-uh*-ra (Muhra*) zu lesen!

Mudimmud s. Nudimmud.

Mudkesda s. Muttergottin.

Mudue *(*^{uru}*Mu-du-e)* AlT 343:23; 458 v.l.; ^{uru}*Mu-tu$^{?}$-e* ebd. 185: 13, Ortschaft im Bereich von Alalah in mB Zeit, von M.Astour und E.Edel nur wegen der vergleichbaren Orthographie mit agypt. *mw-t'* bei Amenophis 111. (Edel, S. 25 Nr. 14) bzw. *m-w-ty-yy* (Thutmosisliste I 218) zusammengestellt, jedoch ohne Lokalisierungsvorschlag. Diese Identifikation wird wohl zurecht von M. Gorg abgelehnt.

M.Astour, JNES 22 (1963) 229 N^{o} 66. - E.Edel, Die Ortsnamenlisten aus dem Totentempel Amenophis III. *(1966)* 25, 80f. - M.Gorg, Agypten und AT II *(1989)* 69f.

W. Rollig

Mudugasa'a s. Nabium.

Miicke s. Insekten.

Miihle. A. I. In Mesopotamien; s.a. Getreide, Mehl.

§ 1. Introduction. - § 2. Lexicon and Technology. - § 3. The millhouse in Ur III texts. - § 4. Work at the mill. - § 5. Later evidence on mills and millers.

§ 1 Introduction. In spite of the wide documentation on mills and milling in ancient Mesopotamia, written sources are rather elusive about technological and management aspects involved with this basic economic activity. Only scarce information is available about the specific role and applications of the tools employed for processing the grain (mortars and pestle, on the one side, grindstones on the other) and about the milling techniques applied to the different products. Also difficult to assess are the quantitative aspects associated with the work at the mill (in terms of production and personnel). Such matters have relevant consequences not only in relation to food quality and cookery habits, but also in relation to the organization and the productivity of labor.

On historical and ethnographic grounds no cultural transition can be established from the use of the mortar and pestle to the use of the grinding slab (A. Maurizio, Histoire de Palimentation végetale [1932] 385ff.) which is documented throughout the history of ancient Mesopotamia in the shape of a "saddle"