## THE EUPHRATES VALLEY EXPEDITION

## Maurits van Loon

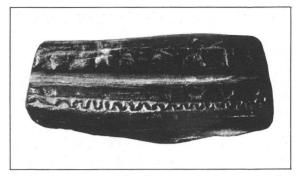
For three months during the fall of 1965 the newly formed Euphrates Valley Expedition excavated the early village mound near Mureybat on the Syrian Euphrates. This first season's work was made possible by a grant from the National Science Foundation. Dr. Maurits van Loon served as director; Dr. James H. Skinner, anthropologist from Columbia University, as assistant director; Rudolph H. Dornemann from the Oriental Institute as historical archeologist; and Mrs. Ghislaine J. van Loon as photographer. The expedition was greatly helped by the Syrian government representatives, Mr. Ali Abu-Assaf and Dr. Toufic Solyman, who worked as full-time archeologists along with the staff.

Tell Mureybat had been noted during a survey of the area to be flooded by a proposed dam in the Euphrates, 75 miles east of Aleppo. A vertical sounding, undertaken in 1964, had shown that two-thirds of this thirty-foot-high mound were built up of human occupation remains without any pottery, indicating a date before 6000 B.C. (the remaining one-third represents the remains of a medieval Islamic fortification).

With the help of 30 local workers (for whom archeological work was new), excavations were extended horizontally from the 1964 sounding to cover 2,400 square feet on the western slope of Tell Mureybat.

As a result, we now know that the early village underwent an uninterrupted development through 17 levels, each distinguished by connected building remains or by continuous bands of ash.

The lower levels contained round houses up to 4 feet long, with walls founded in two instances on disused querns (grinding stones) turned upside down. Red clay walls had melted down and formed a low ridge around the edge of the paved floors. The middle levels were honeycombed by round, vertical pits, lined with red clay and filled with ash and rounded river pebbles. Presumably these had served for the roasting of wild grain, a prerequisite for grinding. A cache of about 100 seeds was found in the vicinity of the fire pits.



Rim fragment of stone bowl, shown actual size, from the pre-pottery settlement at Mureybat.

Typical of the upper levels were rectangular or square houses, built with a curious technique. Limestone had been cut into loaf-shaped pieces and these had been laid like bricks, with red clay covering them on all sides.

The best preserved square house measured only  $12 \times 12$  feet, and was divided into four diminutive rooms of  $5 \times 5$  feet. The rooms had no doors—they were apparently accessible from above—but between two pairs of rooms there were tiny peep-holes. Near a hearth-like depression in the corner of one room the jaw of a large carnivore was partly embedded in the wall. Cattle horns had actually been built into other walls of the same level, calling to mind the foundation sacrifices of much later times.

In the top two building levels, which had burned fiercely (probably in warfare), one could recognize the emplacements both of vertical wooden posts, which had held up the clay superstructure of the houses, and of round wooden beams placed horizontally over the stone wall foundations and covered on all sides with clay.

Out of 70,000 chipped stone pieces excavated at Mureybat about 10 per cent had been retouched to serve as tools: heavy scrapers, "adzes," "picks," and "sledges," perhaps for woodworking, were made of chert (coarse-grained flint) which is abundant among pebbles in the Euphrates River. Light tools, such as burins for chiseling bone and stone, perforators for boring holes in leather, end scrapers for the processing of hides, sickle blades for the

harvesting of wild grain, and tanged points for hunting were made of true flint, balls of which are thickly strewn over the hills nearby. From the middle level up flint pieces outnumbered chert.

Ground stone tools consisted mostly of querns and mortars. Flint balls with traces of use may have been rolled around inside the querns to grind wild grain after roasting. Cylindrical pebbles with traces of use at both ends were apparently used as pestles to crush pigments and the like in the mortars.

The rim of a bowl from one of the upper levels, carved out of soft dark brown stone, carried a wavy band in relief very much like a stone bowl fragment found by Dr. Robert J. Braidwood in the Prehistoric Project's 1964 excavations at Çayönü in Turkey. Limestone disks, perhaps also connected with wild grain processing, showed clear traces of having been fashioned with flint knives out of soft limestone.

A zoölogist specializing in this period, Dr. Dexter Perkins, Jr., from Harvard University, studied a sample of identifiable animal bones from each level in the field. Throughout the sequence of levels he found the same animals represented in the same proportions: 30 per cent were wild cattle, 30 per cent were onager (a wild relative of horse and donkey), and 30 per cent were gazelle. These conclusions are, of course, subject to verification by fuller study of the faunal remains, now to be undertaken by Dr. Pierre Ducos of the French Centre National des Recherches Scientifiques.

A representative collection of vegetal remains was collected by floating soil sample. Careful scrutiny of the vertical faces of the excavation yielded eight additional groups of charred seeds. These are now being studied by Dr. Willem van Zeist at the University of Groningen, Netherlands. Some seeds appeared to be from lentil, bitter vetch, wild barley and other grasses; many of the seeds were from wild einkorn wheat, but no domesticated grains have been recognized to date. Wild barley is known to grow in low, rather desert-like country (such as that around Mureybat), but wild einkorn wheat nowadays does not occur below an altitude of 1,500 feet.

Twenty-one carbon samples were collected. These are now being measured at the University of Pennsylvania in order to obtain radiocarbon dates.

Earlier in this century excavators simply assumed permanent settlements to have been based on the domestication of animals and cereals if they found such indirect evidence as querns and sickle blades. Since then, Dr. Braidwood and others have stressed the need for recovering actual animal and vegetal remains to prove this claim beyond doubt. From a number of sites, in Palestine especially, such direct evidence has remained strangely elusive until now. This has led Dr. Jean Perrot (the excavator of Mallaha in Palestine) to posit the existence of permanent settlements living entirely by hunting and the collecting of wild cereals.

If the rather extensive and well-preserved animal and vegetal remains from Mureybat should really contain no domesticated varieties at all, this would considerably strengthen Perrot's point of view.

For two weeks during the Euphrates Valley Expedition's 1965 season, part of the staff carried out a sounding at a Bronze Age city mound near Selenkehiye on the right bank of the Euphrates.

Tell Selenkehiye lies between the Euphrates and a gap in the hills which points the way to Aleppo and farther west to the Mediterranean. The mound is flat, but surrounded by low ridges from which large blocks of stone—presumably the remains of fortification walls—protrude at points where they have been cut through.

Recent bulldozing for the construction of irrigation channels had exposed three building levels with a total depth of 15 feet, founded on the gravel of the lower river terrace. The pottery on the surface ranges from Early to Late Bronze Age types, but seems to belong for the most part to the Middle Bronze Age, running very roughly from 2200 to 1500 B.C. Little is known so far about the turbulent beginnings of this period, which saw the emergence of powerful new groups like the Amorites.

An area of  $50 \times 50$  feet was cleared, exposing the floor and wall foundations of a large, probably public, building. The northern part was an open court. From there a doorway, with the stone door socket still in place, led into a wide shallow room. To the south was a narrow hall containing two recessed doorways which led off into small **L**-shaped rooms. The four piers framing these doorways formed the central feature of the building.

In the central aisle a vertical sounding was made to investigate the level underneath. After penetrating a layer of gray ash and red



Central part of the Middle Bronze Age building at Selenkehiye, looking east toward the Euphrates. In the center, where two doors once faced each other, a sounding has been made to explore the level underneath.

decayed brick, the sounding hit another clay floor with walls built on a different plan.

The finds from both levels are similar: the pottery includes many cream-colored, thin-walled goblets and footed bowls, with corrugation used as a surface decoration. There were a bronze knife blade fixed by rivets to its handle and a bronze toggle pin, i.e., a pin with a hole through it for a thread. Similar pottery and bronze finds were made at Hama in Syria in a level dated to ca. 2200–2000 B.C.

Most proliferous among the finds were parts of baked clay figurines with round bases for the figurine to stand on. Some represented men with heavy necklaces, flat bodies and either a conical cap or a kind of crown. Most of them, however, seemed to represent females, with caricature-like noses, big eyes made of separate pellets of clay, and elaborate hairdos. The most complete ones show a large flat bun, long corkscrew curls in front of the ears and a fringe above the forehead.

The wheels of little chariots are also very common, and among the animal figurines two unmistakable horses turned up. This was rather exciting since this confirms that the horse had appeared in the Near East by the late third millennium B.C.

The results of this sounding were sufficiently encouraging to warrant the planning of future full-scale excavations at Selenkehiye, possibly as early as the spring of 1967.

Left: Female head of baked clay, 2" high, found in lower Middle Bronze Age level at Selenkehiye.

Right: Horse head of baked clay, 2" high, found in lower Middle Bronze Age level at Selenkeḥiye.



