

## Late Neolithic in the Shahrizor Plain, Iraqi Kurdistan: New Excavations at Shakar Tepe, 2019

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New excavations at Shakar Tepe in the Shahrizor Plain, Iraqi Kurdistan, have revealed late 7<sup>th</sup> millennium BCE layers. Indigenous ceramic and lithic assemblages – chronologically fixed by radiocarbon dates – fill a part of a rather unknown hiatus in the Late Neolithic sequence of the Shahrizor Plain. In addition, they imply the complex patterns of regional relationships in the periods between Neolithisation and urbanisation.

The Shahrizor Plain is an intermontane valley along the Zagros flanks, located in the Sulaymaniyah Gover-

upper level, part of an oven (Str. 1) was recovered in the southeastern corner of the trench. The middle level contains a straight *tauf* wall (Str. 2). Below this wall, in the lower level, thick Late Neolithic deposits extend down to the virgin soil. Eight of the ten radiocarbon dates made on charcoal fall between 6400 and 6000 cal. BCE; two samples containing only small amounts of carbon (<400µg) date slightly older (Fig. 3).

The ceramics from the Late Neolithic deposit can be divided into at least two assemblages. The first as-

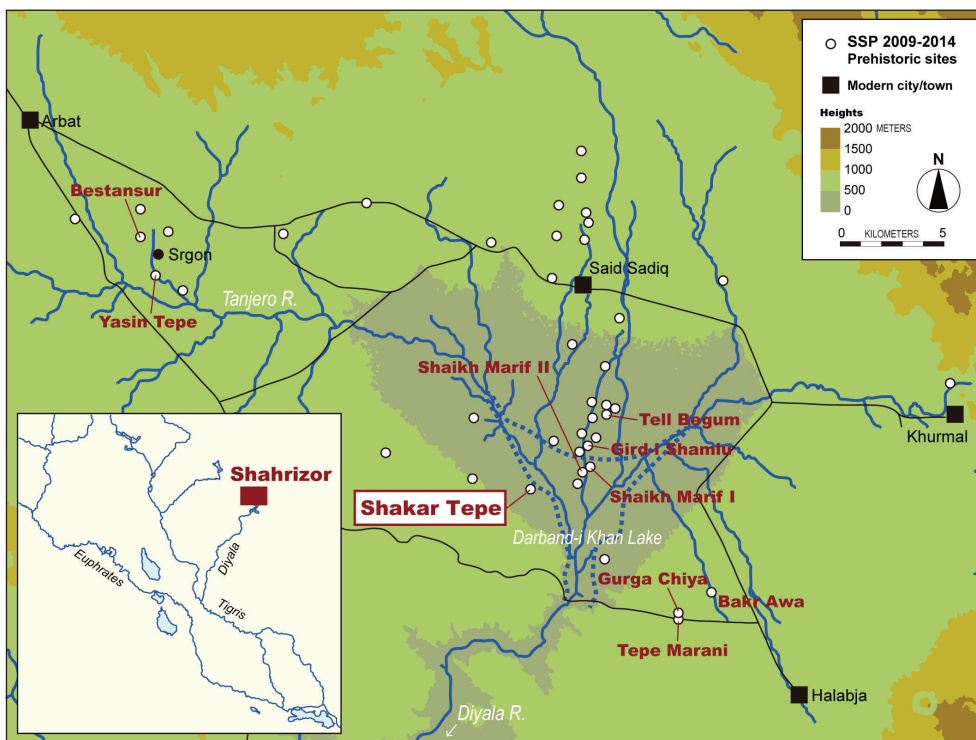


Fig. 1 Location of Shakar Tepe.  
(Map: S. Mühl)

norate, Iraqi Kurdistan (Fig. 1). During the last decade, its local prehistory gradually gained attention (e.g. Nieuwenhuys *et al.* 2016; Wengrow *et al.* 2016; Matthews *et al.* 2019), and a hiatus existing in the local Late Neolithic between the late 7<sup>th</sup> and the mid 6<sup>th</sup> millennium cal. BCE became known (Odaka *et al.* 2019). Our new field project began at Shakar Tepe in September 2019 (Fig. 2), and aims to fill this chronological gap.

Excavations were conducted at the northern edge of the western mound (step trench Operation A: 9.5 x 2.0m), revealing prehistoric deposits of approximately 5m thickness. Most parts of the sequence belong to the Late Neolithic while Ubaid layers were also identified in the uppermost level. The Late Neolithic deposits seem to contain a few occupation levels; a detailed study of the stratigraphic sequence is under way. In the

semblage identified in the upper level contains some ware groups variants, such as “Hassuna-like” fine ware (Fig. 4: 1-9), fine plant-tempered ware (Fig. 4: 10-12) and coarse plant-tempered ware (Fig. 4: 13-17). The “Hassuna-like” fine ware has a compact fabric which includes sands. The surface is mostly buff-coloured, carefully smoothed, and decorated with geometric incisions; repeated short oblique lines (“slashes”) are the most remarkable motifs. This ware group is similar to the so-called Hassuna Standard Incised Ware: More precisely, it represents a local variant of the ware known from Matarrah and Shaikh Marif in the Iraqi Zagros foothills (Braidwood *et al.* 1952; Odaka 2019; Odaka *et al.* 2019). However, the sherds’ fabric (or firing) from Shakar Tepe is generally quite hard while those from Matarrah and Shaikh Marif appear to be “softer”.

Fig. 2 Topographic map of Shakar Tepe. (Map: Y.S. Hayakawa)

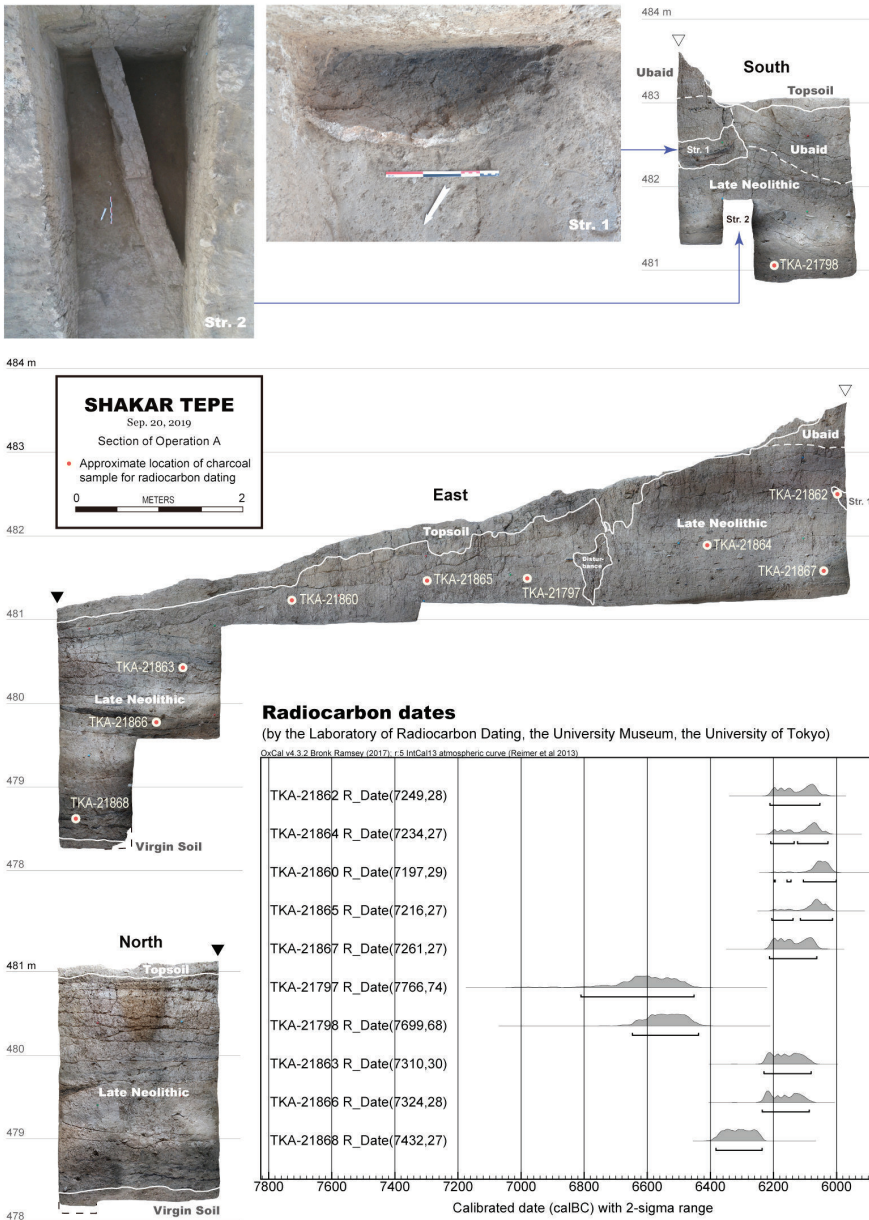
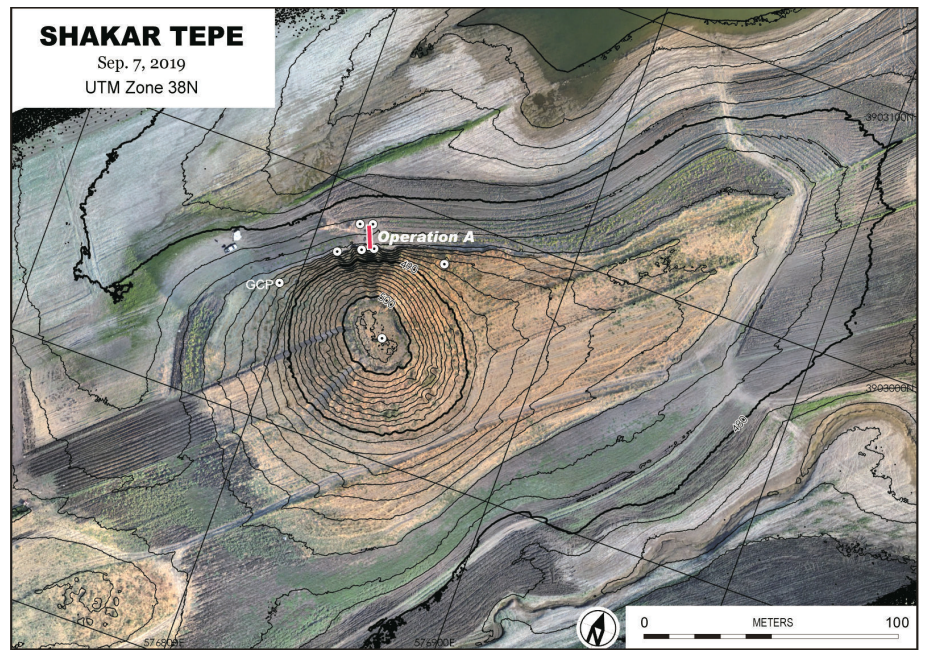


Fig. 3 Section, structures and radiocarbon dates of Operation A. (Plate: T. Odaka)



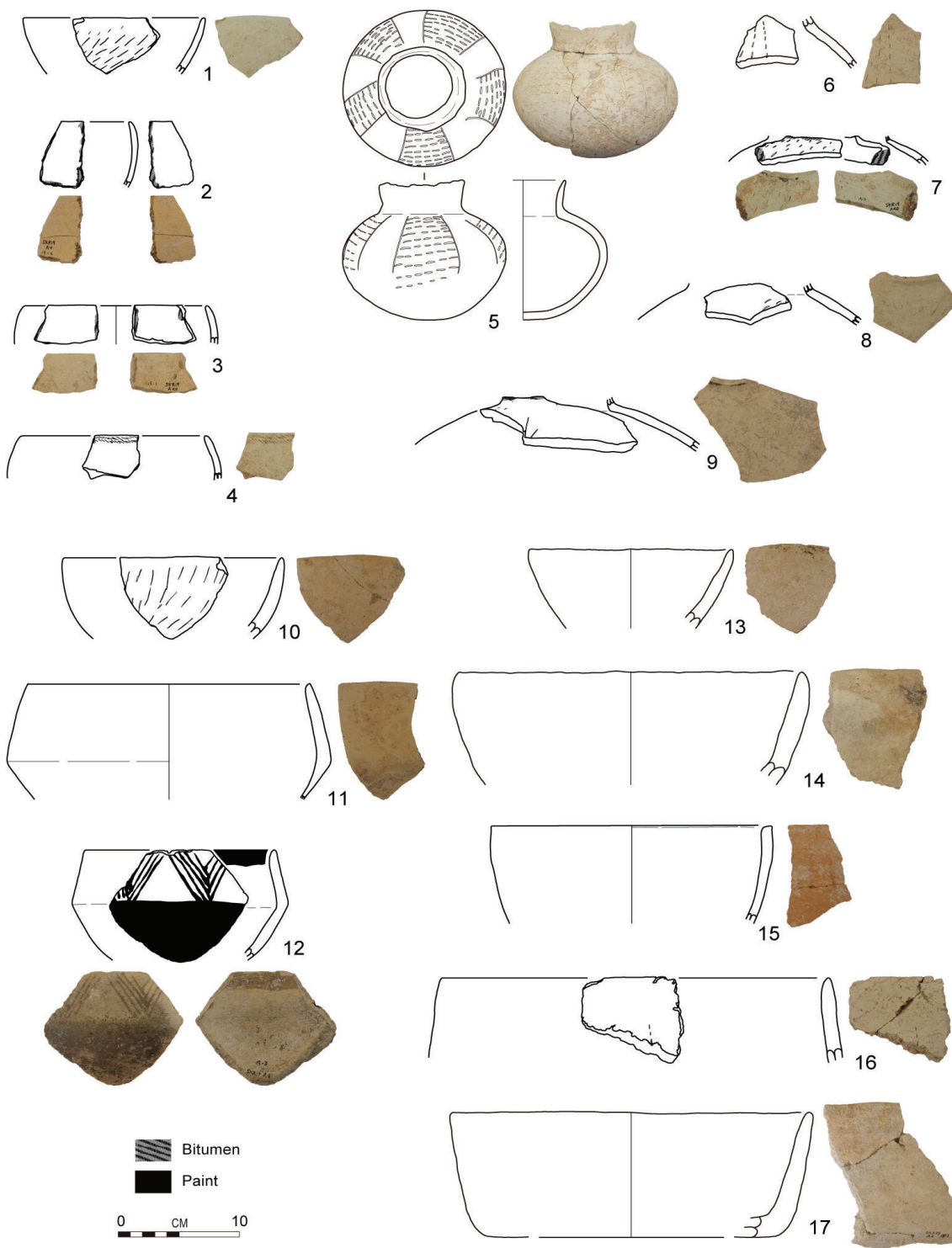


Fig. 4 Late Neolithic pottery from Operation A. (Photos, Drawings: T. Odaka)

The fine plant-tempered ware has also been collected at Shaikh Marif I (Odaka et al. 2019) and was, apparently, also recovered at Qalat Said Ahmadan (Tsuneki et al. 2015). This ware group is characterised by a fine fabric, including a small amount of plants and minerals. The surface is sometimes treated with red-to-dark-brown slip or burnishing, and is occasionally decorated with incisions or paints. Carinated bowls are common in vessel shapes. The coarse plant-tempered wares generally represent thick-walled, large-sized, heavy vessels, including the so-called “husking trays”. A substantial amount of chaff has been added to the fabric which also

contains mineral temper; a dark core is often observed with this ware. Decorations such as incisions, *appliqués* or paint are rarely attested for this ware. This assemblage is likely to be comparable with the early phase of Hasuna period at other key sites in Upper Mesopotamia.

Another ceramic assemblage – exclusively consisting of coarse plant-tempered ware – has been observed in the lower level of the Late Neolithic deposit. Its fabric is more brittle and fragile than that of the upper level, and its sections usually display a dark core. In general, the surface colour is more reddish. This simple assemblage may be comparable with that of the Proto-

Fig. 5 Late Neolithic lithic artefacts from Operation A.  
(Photos: O. Maeda)



Hassuna period in Upper Mesopotamia, or that of the Pottery Neolithic phase at Jarmo (*e.g.* Lloyd and Safar 1945; Adams 1983).

The majority of lithic artefacts recovered from the Late Neolithic deposit are irregular flakes made of local chert. No bullet-shaped blade cores are present; only a few regular blades produced by pressure flaking (Fig. 5: 9-14) were recovered, probably imported from elsewhere. This indicates that the lithic industry at Shakar Tepe is not in line with the local tradition of the M'lefatian industry typical of the Zagros Foothills (*e.g.* Kozłowski 1999; Matthews *et al.* 2019). Instead, it seems likely to be another local lithic industry that developed in this period.

Some examples of very large and crude blades made of local chert (Fig. 5: 1, 3-7) are noteworthy. Two caches of five of these blades, as well as two large blade cores (Fig. 5: 2, 8), were uncovered. The size of the blades is very unusual: The largest one exceeds 16cm in length and 6cm in width. However, their shapes appear not standardised and platform edges are not well prepared before applying direct or indirect percussion. Similar blades, sometimes with sickle gloss along the edges, have been reported from Matarrah (Braidwood *et al.*

1952: Pl. X); no examples from Shakar Tepe bear gloss.

Only 38 obsidian artefacts were found; 16 side-blow blade-flakes (Fig. 5: 15-20) are the most interesting artefact type, since characteristic for Proto-Hassuna and Hassuna contexts of northern Mesopotamia; the examples from Shakar Tepe are those so far excavated from the southernmost site in the Fertile Crescent and suggest a certain connection to the north.

In addition to ceramics and lithics, a stone stamp seal (Fig. 6: 1), a stone pendant/ link (Fig. 6: 2), clay spindle whorls (Fig. 6: 3-6) and bone tools (Fig. 6: 7-8) are noteworthy. Faunal and botanical remains are limited in quantity.

The new evidence from Shakar Tepe fills a part of the chronological gap in the local archaeological records of the Shahrizor Plain and implies the existence of a discrete material culture in this region that has not been clarified until now.

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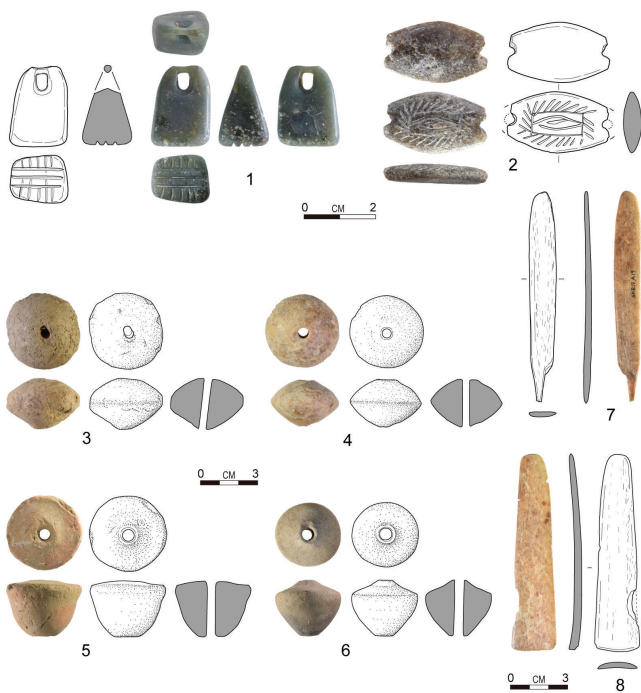


Fig. 6 Late Neolithic small finds from Operation A.  
(Photos, Drawings: O. Maeda)

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