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## A Flint Tool Found during the Fifth Season of Excavations at Gurukly Depe, Southern Turkmenistan (2014)

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### A FLINT TOOL FOUND DURING THE FIFTH SEASON OF EXCAVATIONS AT GURUKLY DEPE, SOUTHERN TURKMENISTAN (2014)

Keywords: Neolithic, Serakhs Oasis, sicle insert

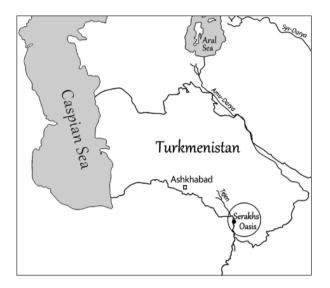
The flint artefact in question (**Fig. 1**) was found during the fifth season of excavations at Gurukly Depe, in Trench 11 I, in a mud brick dump deposit. It can be safely considered as residual.

It was produced of brown yellowish raw material, with minor lighter intrusions in its siliceous mass. Since it was found in the southern part of the country, we can suppose that it is a local variety of flint, widely used by Neolithic inhabitants of this region. It perfectly fits a description given by J. Connolly who says that in the series of lithics collected from the site of Jeitun, some 15 km north-west of Ashkhabad, flints of light and medium yellowish brown colour clearly prevail.<sup>1</sup> A minute fragment of the well-preserved, white cortical surface on the artefact under examination would suggest that the raw material was collected in the vicinity, or directly from its primary outcrops.

From a technical point of view the artefact should be described as an elongated flake with parallel side edges; it is probably not a fragment of a blade, because a small trace of cortical surface is located on the distal, transversal edge of the flake.

Negatives present on the dorsal face of the artefact would point out that the flake was the next of consecutive similar flakes knapped off from the same striking surface. The presence of a partly removed hinge, visible on the right side edge suggests that the point of percussion was slightly moved to the left, in relation to the previous one.

The dorsal face of the right side edge was finally shaped, especially along its proximal part, with an irregular, though clearly visible (functional?) retouch. Single, very fine negatives of functional damage could also be found on the ventral face of the same edge. Very fine traces of similar, though more continuous functional nibbling could be also observed on both faces of the left side edge. The butt,



point of percussion, and the proximal part of a large, wellexposed bulb, are not preserved – they were struck off by a single stroke directed from the dorsal face, applied exactly on the inter negative scar. Undoubtedly, it was an intentional operation, forming a small, but very clear, wellshaped niche, right in the middle of the proximal slantwise edge of the artefact.

Quite massive, slightly slant towards the left, is the distal transversal edge of the flake. In majority it is shaped with a very irregular, coarse retouch. Only its medial part is finally formed by, also irregular, crushing, but more fine edge retouch, which allowed to mark a small niche, being a symmetrical equivalent to a niche present on the proximal edge. Along the entire course of the right side edge, also on its dorsal, but especially ventral face, clear traces of continuous lustre can be observed, even with a naked eye. This lustre bears all features characteristic for "sickle gloss," which appears on working edges of flint tools serving for cutting herbaceous plants rich in silica, such as grassy (graminae) plants, including cereals.

An Environmental-Archaeological Study, Philadelphia 2010, 181.

<sup>&</sup>lt;sup>1</sup> J. CONNOLLY, *The 1994 Knapped Stone Assemblage from Jeitun*, (in:) D.R. Harris, *Origins of Agriculture in Western Central Asia*.

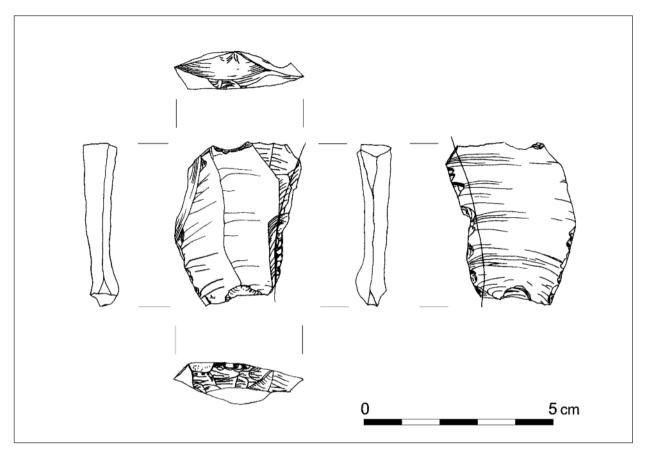


Fig. 1. Flint tool from Gurukly Depe, 2014 (Drawing K. Szymczak). Ryc. 1. Narzędzie krzemienne z Gurukly Depe, sezon 2014.

Taking all this into account, we can assume that the examined find should be interpreted as a sickle insert – one of flint elements forming a sharp working edge of a sickle. The niches on the proximal and distal transversal edges of the implement could help to install it inside a bone, antler, or wooden handle. Many experiments have shown that composite tools like that could be quite effective for harvesting cereals and/or other species of grasses.<sup>2</sup> Similar flint tools are quite common in all lithic assemblages produced by early farming communities, not only these inhabiting the area along the Kopet Dag mountain chain.<sup>3</sup>

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<sup>&</sup>lt;sup>2</sup> G.F. KOROBKOVA, *Orudâ truda i hozâjstvo neolitičeskih plemen Srednej Azii*, "Materialy i issledovaniâ po arheologii SSSR" 158,

<sup>1969, 21,</sup> fig. 3:12. <sup>3</sup> D.R. HARRIS, *Origins of Agriculture...*, 119–124.

#### NARZĘDZIE KRZEMIENNE ZNALEZIONE PODCZAS PIĄTEGO SEZONU WYKOPALISK NA STANOWISKU GURUKLY DEPE W POŁUDNIOWYM TURKMENISTANIE (2014)

Podczas piątego sezonu wykopalisk w Gurukły Depe, w wykopie 11 I, w warstwie depozytu powstałego wskutek erozji ścian wzniesionych z cegieł suszonych, znaleziono przedmiot wykonany z żółtawobrązowego krzemienia z niewielkim wtrąceniami. Ponieważ znaleziono go w południowym Turkmenistanie, można przypuszczać, że jest to lokalna odmiana surowca, powszechnie stosowana przez mieszkańców tego regionu w epoce neolitu. Mały fragment dobrze zachowanej, białej powierzchni korowej na badanym artefakcie sugeruje, że surowiec zebrano

z wychodni znajdującej się w niezbyt dalekiej odległości od stanowiska Gurukly Depe.

Z technicznego punktu widzenia artefakt powinien być opisany jako podłużny odłupek z równoległymi krawędziami bocznymi, który najprawdopodobniej służył jako wkładka sierpowa zamocowana w kościanej, rogowej lub drewnianej oprawie. Wskazuje na to występowanie na jednej z krawędzi charakterystycznego wyświecenia żniwnego.