

## ■ TANZANIA

### Middle Stone Age component at the abandoned Sonjo Buri Village site, Tanzania

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## Introduction

Sonjo Buri is an abandoned Later Iron Age / historic village site situated in the Sonjo Land in the vicinity of the present Sonjo village of Samunge (Seitsonen and Laulumaa, this volume: Figure 1). It lies about 4 km southwest of the mosque of Samunge. Our local workmen guided us to this abandoned site in September 2004. It is said to have been abandoned a couple of hundred years ago (Simon Sereni, personal communication, 12.10.2004), and the radiometric dates for the site support the oral history ( $425 \pm 30$  BP, Hela-1006),  $465 \pm 30$  BP, Hela-1007) (Seitsonen and Laulumaa, this volume). However, there is one recently abandoned solitary Sonjo cattle compound at the site, suggesting occasional later use of the site (Adams et al. 1994; Ojalampi 2005).<sup>1</sup>

## Buri village excavations

The main part of the village site is on a ca. 400 m long and 150-200 m wide hillside terrace. Dozens of platforms, reminiscent of the present Sonjo dwelling platforms, have been dug into the steep hillside. The site is approachable only along a steep winding path running up along the Sariani stream ravine (Figure 1). In the lower limit of the village is a ca. 50 x 40 m large centrally placed level area. This was anticipated to be the *kiritone*, a kind of central square, which is traditionally used in Sonjo communities for ritual activity and by youth for dancing and singing (Simon Sereni, personal communication, 12.10.2004). This interpretation seems probable on the basis of the test excavations.

Close to the southern edge of this was located a dense ca. 15 x 10 m scatter of quartz and chert lithics. This find area was test excavated with two trenches (1 and 2 in the fig. 1; 2 x 1 m and 0.5 x 0.5 m respectively) to investigate the connection between the LIA/ proto-historical Sonjo occupation and the lithic artifacts. One more trench (3 in Figure 1; 2 x 1 m) was opened into a midden on a Sonjo dwelling platform to test the deposits there (see Seitsonen and Laulumaa, this volume).

The stratigraphy of both trenches was similar. From the surface down to the depth of 10-12 cm the deposit was humic greyish-brown sand with few fist sized and smaller rocks, and from there on reddish-brown gravelly sand with more rocks. The decaying bedrock was encountered in the southern part of the trench 1 at the depth of ca. 50 cm. Finds ended in the both trenches after the depth of ca. 50 cm. The majority of the lithic finds came from the lower reddish-brown horizon, whereas all the Later Iron Age / historical finds came from the humic overburden.

## Lithic assemblage

The lithic assemblage from the test excavations clearly has a Middle Stone Age (MSA) character, and is thus well separated from the later Sonjo occupation of the site. However, collecting and re-using of these earlier stone artifacts might have happened in the later times, as suggested by a few flakes recovered while excavating trench 3. Unfortunately there were no faunal remains or other datable material connected to the MSA horizon in trenches 1-2.

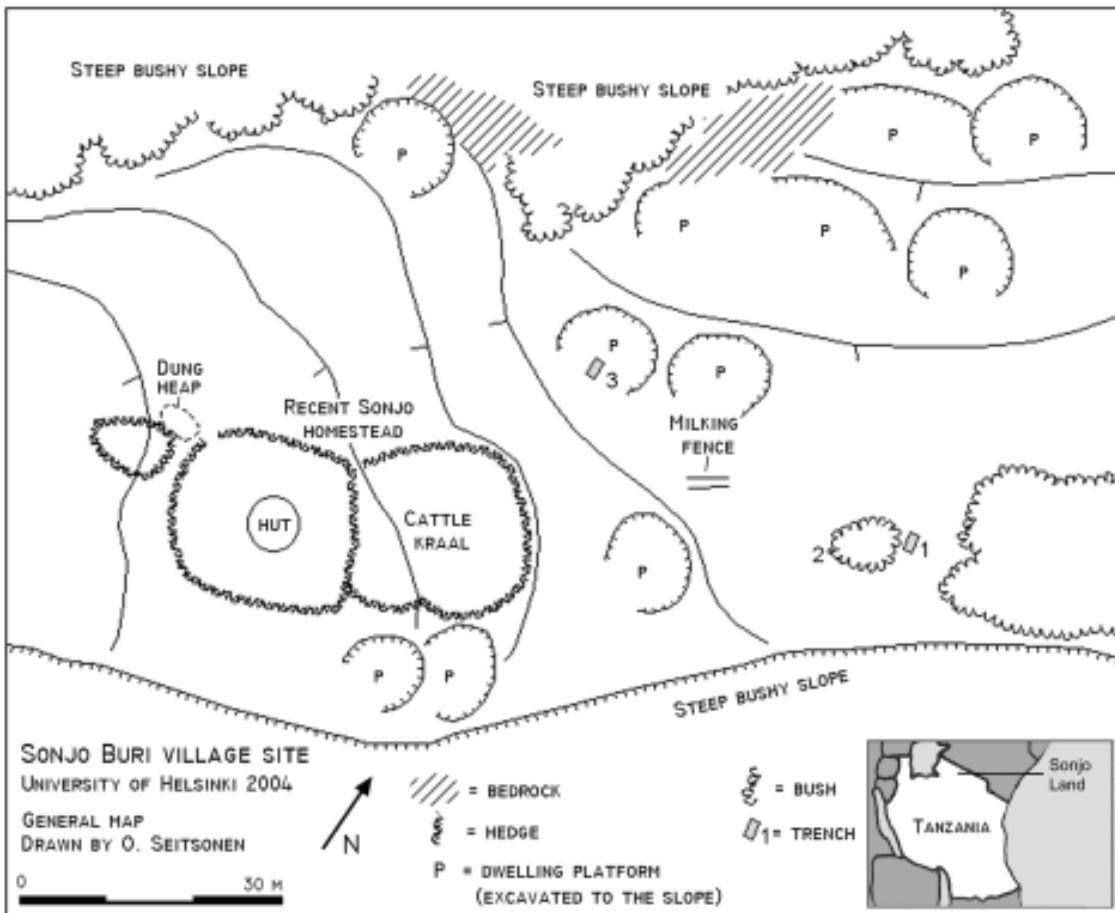
The composition of the collected lithic assemblage is shown in Table 1. The number of tools is low and they have been minimally retouched. But some general notes can be made of them. The most frequent are various types of scrapers, which show a lot of morphological variety (fig. 2.4-9). One denticulate point (Figure 2.1) and another point fragment were also recovered. One of the retouched quartz pieces fits into the size and shape classification of microliths (Figure 2.3). This specimen is casually dulled along two edges with steep retouch into a backed and truncated shape.

Quartz is the dominant raw material (91.7 %), while low percentages of chert (7.6 %) and obsidian (0.7 %) have also been utilized. The locally available good quality quartz nodules, which are readily avail-

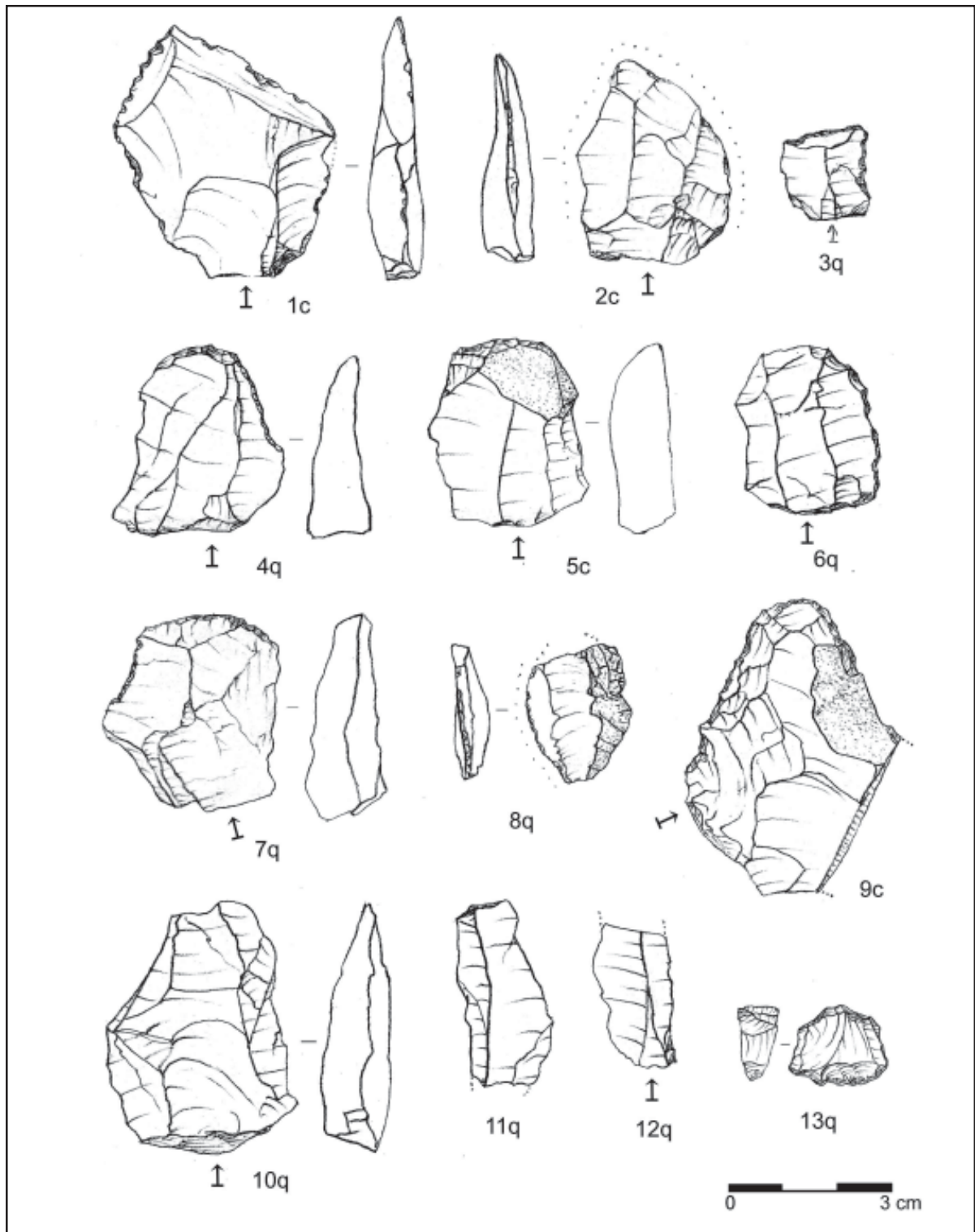
**Table 1.** Lithic assemblage from Sonjo Buri village site (trenches 1-2).

		Chert	Quartz	Obsidian	N
Point (+fragment)		2			2
Scraper	side	1	7		8
	end-side	3	3		6
	end	2	3		5
	notched	1	1		2
	fragment		1		1
Burin		1	4		5
Retouched		2	5		7
Flake debitage		16	326	3	345
Blade debitage		2	23		25
Other debitage		3	24		27
N		33	397	3	433

**Figure 1.** General map of the Sonjo Buri Village site.



**Figure 2.** MSA tools from Sonjo Buri (c=chert, q=quartz). 1: point, 2: utilized flake, 3: backed and truncated piece, 4-9: scrapers, 10: flake, 11-12: blade fragments, 13: core/wedge. All with faceted platforms except 3 and 11-12. (Drawing O. Seitsonen.)



**Table 2.** Measurements of the whole flakes and blades in the assemblage.

Quartz (n=134)	mean	s. d.	min	max
length (mm)	23.05	8.19	8.9	57.64
width (mm)	19.20	6.81	7.80	38.87
thickness (mm)	6.56	2.90	1.68	18.52
w/l (ratio)	0.83	0.83	4.64	0.67
th/w (ratio)	0.34	0.43	0.22	0.48
Chert (n=11)	mean	s. d.	min	max
length (mm)	28.20	5.36	21.34	37.82
width (mm)	25.58	8.70	12.14	44.10
thickness (mm)	7.75	2.84	14.58	3.18
w/l (ratio)	0.91	1.62	0.57	1.17
th/w (ratio)	0.30	0.33	1.20	0.07

able at the site, have provided the main raw material source. More than 80 percent of the quartz implements are of fine translucent variants, which were also used for ca. 80 percent of the retouched quartz tools. This probably mirrors the conscious choices made by the ancient knapper; raw materials with better predictable fracture characteristics have been preferred (Siiriäinen 1977). Chert is of a lacustrine variant with reticulated cortex pattern. It was acquired from some more distant source, however most probably within 20-30 km radius: it exists e.g. on the Crater Highlands west of the rift scarp, out on the Serengeti Plain and along the southwest shores of Lake Natron (Keller et al. 1975:375; Mehlman 1977:118; personal observation, 2004). Chert was preferred for point manufacture, which is easily understandable due to the mechanical characteristics of the different raw materials; it is difficult to chip suitable long and thin blanks from quartz.

Obsidian is an exotic raw material, which must have been imported over a considerable distance, at least 100 km or even more. Its color varies, one of the pieces is opaque green and two are gray, which might provide some tentative idea of their origin. Chemical analyzes have shown obsidian movement over more than 200 km in northern Tanzania already at the MSA times (Merrick et al. 1994:39-43).

The only cores in the assemblage are two small prepared quartz cores, another a fragment, which both have a small faceted striking platform. They probably present the end of longer prepared core reduction sequences, and have possibly been used as wedges after their use as core was over (Figure 2.13). Reduction waste is dominated by flake debitage, but blades are also present (the blade to flake ratio is 1/14) (Figure 2.10-12). All the blades have plain striking platforms. Flakes with prepared platforms dominate (59%), other types include plain (32%), abraded (4%) and cortical (5%) platforms. The shape of the flakes varies from quadrilateral to elliptical to subtriangular.

Length to width measurements of the whole flakes and blades are presented in Table 2. The length-width ratios of less than 1 are more common than higher ones; otherwise said the so-called “side-struck flakes” dominate (Leakey et al. 1972).

Cortex percentages suggest that the reduction started with the removal of cortex from natural quartz and chert pebbles, using the natural cortex surface and scars from previous detachments as striking platforms. After this the reduction seems to have continued mostly using prepared core methods (Clark’s Mode 3 [1969: 29-31]), and after/alongside that also using platform reduction.

Artifacts with faceted platforms and irregular (35%), unidirectional (30%), bidirectional (opposite directions, 25%) or radial (7%) dorsal scar patterns (3% of dorsal faces are totally covered with cortex) hint of the used prepared core reduction methods, and suggest that both the basic Levallois cores and Levallois point cores were used (Clark 1982:254). Based on the debitage morphology, plain platform and disc cores have also been used.

On the basis of the cortex counts and various attributes of the artifacts, it seems that initial reduction (i.e. removing most of the cortex) of all cores took place somewhere outside of our trenches, and after this the reduction proceeded from prepared cores to plain platform ones. No signs of bipolar debitage were observed but this might also be a sampling error, referring maybe different activity areas within the site (thus bipolar and other reduction might have taken place at different parts of the site).

The examination of relative platform size (e.g. Ambrose 2002:17) suggests a high percentage of direct percussion (calculated by the ratios of platform

thickness to flake thickness and platform width to flake width). The crushing of striking platform hints dominantly hard hammer use (clear crushing on ca. 20% and slight crushing on ca. 25% of the pieces). Platform angles of less than 90° observed on some artifacts (16%) could result from bending initiation, which is commonly related to soft hammer striking and/or bifacial reduction, e.g. to using a disc core or making bifacial point (Cotterell and Kamminga 1987; see however Odell 2000:311).

### Nature and dating of the site

Although the site has thus far been only preliminarily tested, some tentative remarks can be made of its general character. The topographic setting of the site, the shallow archaeological deposit, the relatively small area covered by surface scatter, and the collected tool kit suggest the site was a temporary camp site. It could have been for example a hunting station: the good visibility from the site has ensured first class possibilities for observing the game movements (Clark 1968). Unfortunately at the moment we know nothing about other contemporary sites within the Sonjo Land or in its environs. This will hopefully be supplemented with further surveys in the area.

Some of the encountered tools were produced, used and abandoned right at the Buri site, judging from the waste flakes and tools originating from the same raw material nodules (Larson and Kornfeld 1997; Odell 2000). However, it seems that most of the reduction process has concentrated at some other site or activity area within the present site, or e.g. the usable cores were taken along as the inhabitants moved on. The collected quartz cores could have been used as a wedge after its use as a core had ended, and both of them are so small that their use-life as a core might have come to the end when they were abandoned at the site. The overall character of the lithic assemblage suggests a relatively high mobility of its ancient inhabitants (Kelly 1992; Larson and Kornfeld 1997).

Generally the site seems to be dated to the late MSA times, based on the presence of blade technology and hints of microlithization, although at low percentages (Ambrose 1998, 2002; Bower 2005, 2006; Dickson and Gang 2002; Gang 2001; Inskeep 1962; Masao et al. 2003; Thompson et al. 2004; Tryon et al. 2006; Waweru 2002; Willoughby 2006). One way to

date the site could be through obsidian hydration. Presently, the lower MSA occurrence (layers 21-24) at Naseri Rockshelter seems to offer the best parallel for Buri. It is also geographically closest excavated MSA site (Mehlman 1977, 1989). However, verifying this requires further excavations at the Buri site.

Sonjo Buri's MSA component presents an example of a small scale open air site. At least the lower part of the MSA cultural layer seems separated from the overlying Sonjo cultural layer. Open sites are generally less well known than the rockshelter sites where data most typically has been derived (Bower 2005; Mitchell et al. 2006). The limited spatial extent of the site might enable excavating it "entirely", thus deriving important information of the spatial spread of the finds, and of the human activities connected to various areas within the site (Kroll and Price 1991; Mitchell et al. 2006; Stewart 2006).

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### Footnote

1. This paper is based, in part, on the author's Licentiate of Philosophy thesis (Seitsonen 2005).

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