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A TEST PIT AT THE SITE OF GOZ EL-SHOR – MIDDLE OF THE GEZIRA REACH-SOUTH OF KHARTOUM, SUDAN

INTRODUCTION

This test pit has been conducted within the Archaeological, Heritage and Environmental Survey Project of the central Gezira Reach-South of Khartoum.¹ The project has the concession to undertake survey and excavation within an area of 50km² area, starting from the west bank of the Blue Nile, between the areas of Abu Usher in the north and Arbaji in the south. The project covers a 12km area west of the western border of the Gezira Agricultural Scheme.

It is necessary to mention that this site is located to the south-west of the area that has been studied by Balfour-Paul during the 50tis of the last century.² Moreover, the Spanish Archaeological Project did research in the region of the Blue Nile and the Gezira, in the area of the famous Goz culture (Fernandez et al. 2003) 3

GEOGRAPHIC LOCATION OF THE SITE

(14° 28.711' N, 033° 02.035' E)

Goz El-Shor is located in Hassaheissa locality- in the centre of the Gezira (Fig. 1), as an administrative division, to the northeast of the village of Wad El-Hilaio, and to the west of the village of Sheikh Kamal Al-Din, it is about 46km to the west of the Blue Nile, and on the northern border of Manqil district. It is a slightly elevated Goz located in the centre of the agricultural lands and extends over an area of 500m². Acacia nubica trees spread densely on the outskirts of the site. It is a substantial Prehistoric site “probably

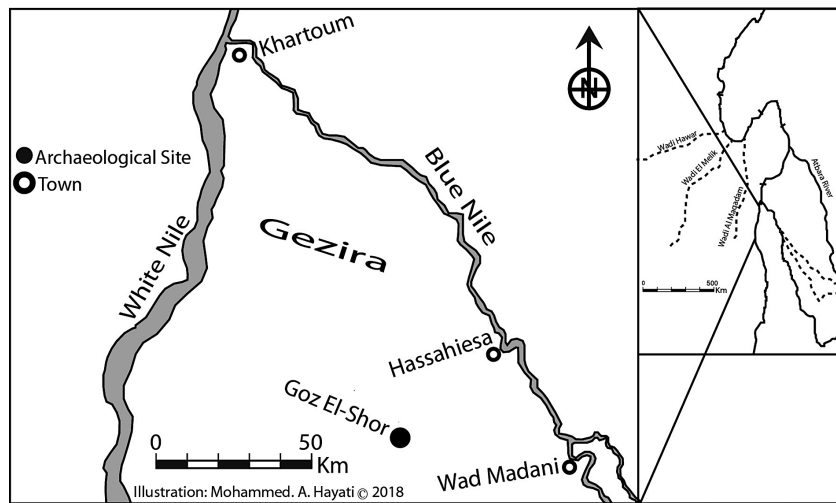


Fig. 1: General view of the site within the Gezira area.

Neolithic” consisting of numerous archaeological finds on the surface, with particularly dense remains of small-sized grinding stones, which are distinctive in their production, as they are made of sandstone and gneiss. There is also a density of pottery sherds in a variety of shapes and numerous distinct types of decorative motifs scattered on the surface. It is noticeable that there is a scarcity of microlithic finds on the surface of the site, while there is an abundance of land snails (*Limicolaria*). There are also heaps of grinding stones on the surface of the site, which seem to have been gathered by people to border graves, perhaps during the historic periods, as four mounds of this type of heap were found. This site has been subjected to random digging by gold miners.

THE TEST PIT

One of the heaps with a concentration of remnants of grindstones was selected for the test pit to identify the nature of the ground beneath the surface and to determine the total depth of the archaeological layers; 10 cm was planned to be the depth of each removal. When the surface finds were collected they

1 Hayati 2018.

2 Balfour-Paul 1952.

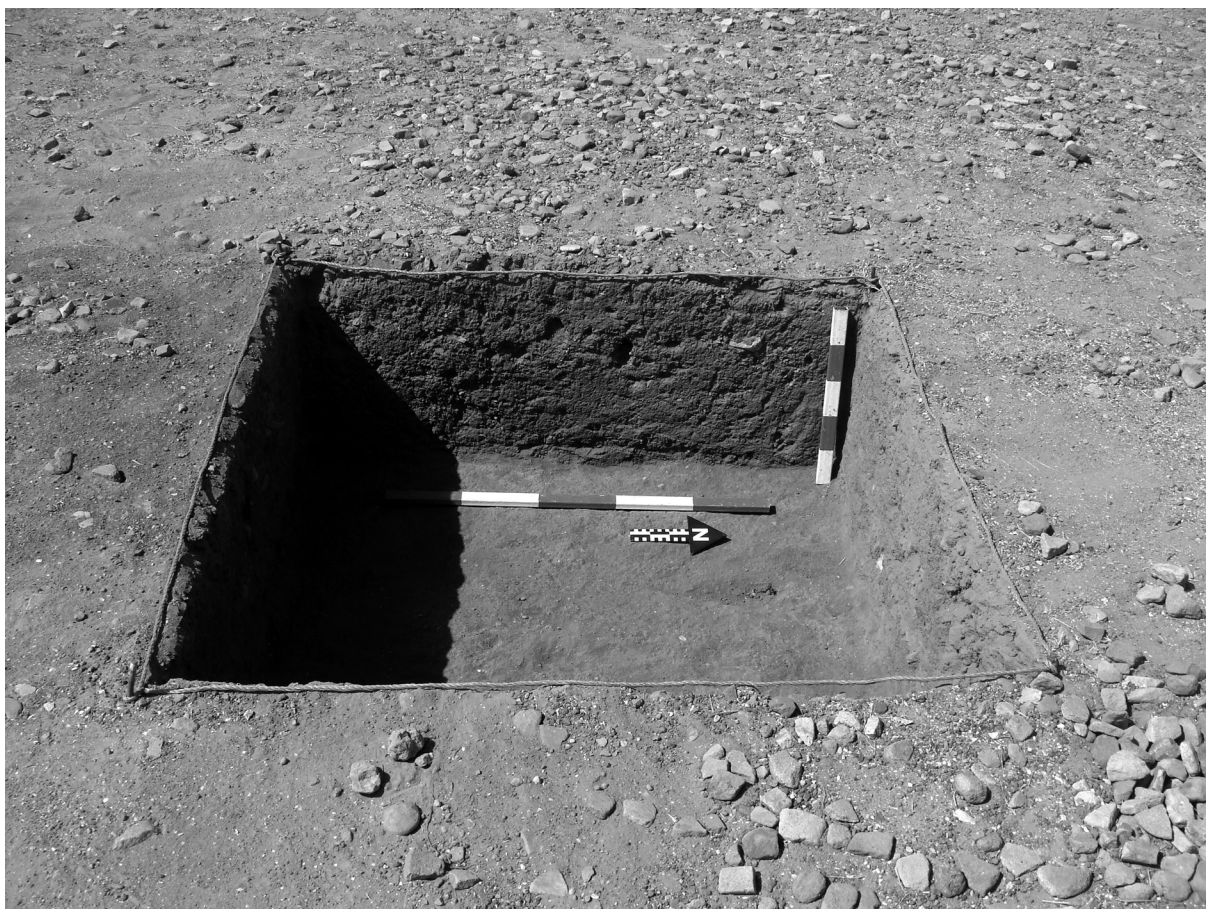


Fig. 2: General view of the test pit.

yielded a majority of grindstones that totaled 206 pieces found within the space of the square, as well as 120 pottery sherds (Tab. 1). They were small in size, which is different from the finds in the rest of the parts of this site; this relates to relatives of the deceased having collected the grindstones and small pieces of pottery to constitute the superstructure of the tomb. No microliths were present on the surface. In addition, some snail remnants were spread on the surface of the square.

At the level of the first layer, the soil was fragile and incoherent, as it contained a large number of small-sized snails. Also, the number of grindstones decreased in comparison to the number found on the surface, as well as the number of pottery sherds, which were mostly undecorated. When the second and third layers were excavated, they presented the same type of soil and the same types of archaeological finds. Then the excavation continued and when the fourth layer was dug down to the depth of 40cm the archaeological finds became abundant. In addition, the soil is brittle in most parts of the square, except in the north-east side. Also, at the bottom of this layer, remains of roots of a tree were encountered. At the level of the fifth layer, the thickness of the removals

was changed to 20cm instead of the previous 10cm, as the archaeological finds decreased in number and the ground became more solid than before. In the sixth layer, at a depth of 70cm, a human skull smashed over the course of time appeared. The skull is adjacent to the north wall of the square at a 60cm distance from the north-west corner. It appears that the rest of the skeleton is lying in a north-south direction, with the head at the south, while the rest of the skeleton is outside the perimeters of the square, but in the second season, it appeared that this area contained many burials which may date to the Neolithic. This layer was filled by Mollusca with a variety of shapes. The seventh layer, which reached to a depth of 90cm, showed an increase in the solidity of the ground with an apparent change in the ground nature, with the abundance of pebbles, while the archaeological finds significantly decreased in number. This decrease continued when the eighth layer was excavated, and when the depth reached to 110cm; however, archaeological finds were completely absent at the depth of 120cm, which means that the lowest layer indicating human occupation in previous times was at this level (Fig. 2).



Fig. 3: Numerous motifs of the pottery from the test pit. (First row: dotted straight lines and zigzag lines. Second row: impressions, geometric motifs and dotted zigzag lines. Third row: impressed and straight lines.)

ARCHAEOLOGICAL MATERIAL RECOVERED

Pottery

Various shapes of pottery sherds have been found; in terms of size of the sherds, and the pottery thickness as well, there is an obvious diversity in the motifs varies from geometric, straight lines, dotted straight lines and various motifs. Furthermore, the surface treatment varies from piece to other (Fig. 3). Generally, the motifs were based on the dotted straight line as a basic form, and then developed from it to other forms. Therefore, we found several motifs of dotted straight lines, with multiple geometric forms, in addition to zigzag decorations. Moreover, there are some motifs that seem to be stamps or impressions of rods. However, the dotted zigzag motifs appeared in the whole range of decorations (Tab. 3) (Fig. 4), what refers to that the area has been witnessed the culture of late Mesolithic and early Neolithic, then, it has persisted up to late Neolithic. Moreover, some undecorated pottery was found (Fig. 5). The potter had treated the surface and designed some textures that appeared around the rims of some vessels. It is clear that greatest attention was given to the patterns

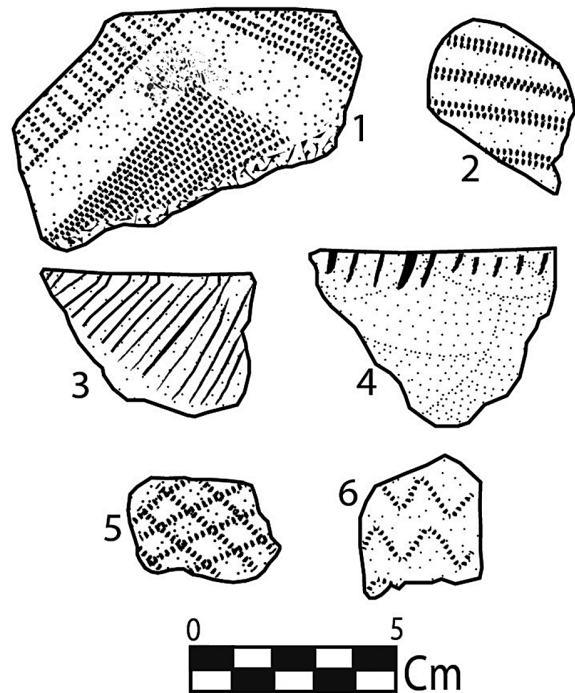


Illustration: Mohammed. A. Hayati © 2018

Fig. 4: Illustration of multiple motifs which refer to a diversity of decorations (1-2: dotted straight lines; 3: straight lines; 4: scribbles of combs; 5-6: geometric forms.)



Fig. 5: Undecorated pottery, also showing the surface treatment patterns.

while decorating all parts of the pot, especially near the rim. Also found were patterns close to scribbles of combs, which bears many similarities to the large Neolithic site of Shaheinab,³ and other sites in central Gezira (Hayati 2017).⁴ As well, there is an obvious cultural and geographic affinity between this site and Jebel Moya according to the similarity of pottery motifs and small adzes, located more than 140km toward the south.⁵ Therefore, some of the cultural similarity could be observed through the pottery.⁶ Most of the pottery motifs relied on combining patterns, with straight lines, dotted straight lines and geometric motifs, zigzag motifs, and rippled decoration. Despite differences, the ceramic assemblage shows considerable variety, and there is an obvious cultural coherence among whole of the region of the Gezira, because the similar motifs were found in distant sites toward the north such as Abu Gwaili, Goz Al-Rehaid and Al-Sedaira.⁷

3 Arkell 1953, 29–35.

4 Chlodnicki 1984, 34.

5 Hayati 2016.

6 Addison 1949.

7 Hayati 2017, 66.

Stone Implements

A huge number of small grind stone tools was spread on the surface of the site, although there are no nearby raw material sources to manufacture this observable number of stone implements and their remains. Generally, it is obvious indisputably that the Neolithic community in this area used several shapes of grind stone tools for many purposes (Fig. 6) (Tab. 2). Nevertheless, the dominant features of this tools are small pieces, representing lower grind stone, while most of them seem to be upper grind stones, in addition to cylindrical hammers, as well as some stone rings; however, the majority are broken. The whole of these tools are made of gneiss and sandstone, because of its abundance in central Sudan, and the rarity and distance of the quarries from the center of the Gezira. Therefore, the raw material catchment areas are located in 80km and more within the Gezira. One of them is Jebel Moya that lies in the southern part of the great Gezira plain between the Blue and White Niles about 250km south-southeast of Khartoum,⁸ in addition to Jebel Tomat that is situ-

8 Brass 2009.



Fig. 6: Several forms of grinding stone tools.

ated some 50km northeast of Rabak town, and ca. 10km east of the White Nile at Esh-Shawal village,⁹ as it is in the west of our study area about 80km.¹⁰ Virtually, most of the raw material representing solid sand stone, gneiss and few rhyolite. Generally, there is a similar shape and size of grindstones at Shaheinab as the main example in central Sudan.¹¹ In spite of the wealth of grinders on the site, it was very rare to find retouched tools or microliths even flakes or blades within the site stratification. This is an obvious phenomenon observed during the general survey in several of the sites.

Faunal Remains

The site stratification contained animal remains consisting of broken fragmentary bones that most of it possibly had been used for food. The remains might represent bones of several wild animals, or there is a strong possibility that they are remains of domestic goat or sheep. It could be very interesting when we get the laboratory results of studies of bone samples. As well, some of the layers contained some Mollusca, such as land snails, *Limicolaria martensiana* that spread in central Sudan.¹² These were found in several layers in varying percentages, particularly

⁹ Clark/Stemler 1975.

¹⁰ Hayati 2016.

¹¹ Arkell 1953.

¹² Lario e.a. 1997, 585–586.

in the first and second layers they were abundant. It is most probable that the inhabitants used them for food because we also found accumulations of Mollusca remains; this possibility has to be studied in near future. We are waiting the analysis results of the faunal remains, the study is still ongoing.

CONCLUSION

This site is considered to be one of the largest pre-historic sites south of Khartoum. It is located in an isolated area, if we compare it with the other sites in the centre of the Gezira Reach; otherwise, it not very far from a series of sites that lie along the palaeochannels.¹³ Although it is surrounded by farms, one main factor keeping it intact is its location near the current cemetery, which has given it a sacred location and prevented people from encroaching on it. This site is distinctive mainly through an abundance of the archaeological materials on the surface, in addition to its stratification. We have excavated some other sites in the Gezira Reach but they did not have a significant stratification, therefore, the site Goz El-Shor needs to be excavated with grid squares cover whole the site.

The stratigraphy showed that the site is rich of archaeological artifacts, grind stone tools or pot-

¹³ Williams e.a 2006.



tery, which indicates there is a cultural diffusion along the Gezira, that has been controlled by the water resources represent in the Blue Nile and the Palaeochannels. It seems that this site represents a cultural existence of the Neolithic in the Gezira Reach where no systematic excavations have been conducted; thus, we must devote our work on this region that has not previously been of sufficient archaeological interest. It is notable that there is good

technique and distinctive industry visible in most of the archaeological finds, especially in the pottery, in addition to the density of grindstones. Furthermore, the organic material which reflect the richness of the environment could reveal some aspects of food production in central Sudan when it can be considered in conjunction with future extensive studies.

Layer	Lithic tools		grinding stones		Pottery		Bones	Mollusca	Period
	N.	%	N.	%	N.	%			
0			206	63%	120	37%			Neolithic
1			24	59%	17	41%		Found	Neolithic
2			8	16%	43	84%	found		Neolithic
3			3	15%	17	85%			Neolithic
4			53	28%	134	72%			Neolithic
5			14	18%	64	82%			Neolithic
6	2	3%	11	15%	60	82%			Neolithic
7			19	23%	77	65%			Neolithic
8			2	4%	43	96%			Neolithic

Tab. 1: General inventory of the archaeological remains.

Layer	Lower Grinding Stones		Upper Grinding Stones		Hammers		un known		Raw Material					
	N.	%	N.	%	N.	%	N.	%	Rhyolite		Gneiss		Sandstone	
									N.	%	N.	%	N.	%
0	154	74%	27	13%			27	13%	10	5%	187	90%	9	4%
1	13	54%	8	33%			3	13%			24	100%		
2	5	63%	2	25%			1	13%	1	13%	7	88%		
3	2	67%	1	33%							3	100%		
4	23	43%	5	9%	4	8%	21	40%	1	2%	52	98%		
5	7	50%	2	14%			5	36%	1	7%	12	86%	1	7%
6	6	55%	2	18%			3	27%			11	100%		
7	9	47%	4	21%			6	32%	1	5%	18	95%		
8	1	50%					1	50%			1	50%	1	50%

Tab. 2: Grind stone tools and their raw material.

Layer	Decoration				Geometrics		Dots		Strait Lines		Zigzag		impressions		Varia	
	Decorated		Un decorated		N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
	N.	%	N.	%												
0	47	39%	73	61%	10	21%	10	21%	13	28%	6	13%	6	13%	2	4%
1	4	24%	13	76%			1	25%	1	25%			2	50%		
2	11	26%	32	74%			2	18%	7	64%			2	18%		
3	6	35%	11	65%			1	17%							5	83%
4	22	25%	101	75%	4	12%	4	12%	4	12%	3	9%	9	27%	9	27%
5	18	28%	46	72%			5	28%	11	61%	1	6%	1	6%		
6	15	25%	45	75%	3	20%	3	20%	4	27%	2	13%	3	20%		
7	23	35%	42	65%	8	35%	2	9%	9	39%			1	4%	3	13%
8	9	21%	34	79%	1	11%	3	33%	2	22%			2	22%	1	11%

Tab. 3: Numerous motifs of the pottery decorations.



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ZUSAMMENFASSUNG

Die Testgrabung am Fundplatz Goz El-Shor wurde im Rahmen des Archaeological, Heritage and Environmental Research Project of the Central Gezira Reach durchgeführt. Das Projekt hat zum Ziel, Gebiete südlich von Khartoum zu erforschen, die bisher noch kaum archäologisch untersucht wurden. Die Ausgrabung am Fundplatz Goz El-Shor zielt darauf, die Kulturabfolge sowie die Mächtigkeit der archäologischen Schichten festzustellen. Der Platz ist eine der größten prähistorischen Fundstellen in der Gezira und befindet sich in einer dicht besiedelten Region, was eine Ausgrabung dringend nötig macht. Es wurde eine Fläche von 1 x 1m geöffnet und stratifiziert ausgegraben. Dabei wurde eine große Menge archäologischer Artefakte gefunden, darunter vor allem Reib- und Mahlsteine, aber auch Keramik und Schnecken. Anhand von Vergleichen lassen die Funde sich vor allem in das Neolithikum datieren. Die Tiefe des Schnittes erreichte 1,2 m und belegt archäologische Straten an diesem Fundplatz, während andere prähistorische Fundstellen im Arbeitsgebiet nur Oberflächenfunde aufweisen. Die Dichte der Funde an diesem Platz zeigt, dass die menschliche Präsenz durch Wasserressourcen im Blauen Nil und Paläokanälen begünstigt wurde. Der Fundplatz ist in einem guten Zustand und sollte in der Zukunft ausgegraben werden.