

EL-SOUR: LATE NEOLITHIC SITE IN THE NEIGHBORHOOD OF MEROE FIRST AND SECOND SEASONS 2005-2006

The site of Meroe has seen much archaeological interest since the beginning of the 20th century, mainly focused on its Kushite (Napatan and Meroitic) and Post-Meroitic remains. The results and reports of archaeological excavations, which took place at Meroe as “a single unit” indicated the general interest in the site. For this reason, beside others, the Department of Archaeology, University of Khartoum began a new survey project, concerned with sites of all periods in the region to the north of Meroe, extending as far as Mutmir. Survey and test excavations were begun within a concession held by the Department, directed by Prof. Ali Osman in 2004 and by the author in January-February 2005 and February-March 2006.

One site discovered during this survey was located east of the village of el-Sour, north of the Royal City of Meroe. This large Neolithic site does not appear to have been previously recorded, although it is located no more than c. 750 m from the last archaeological unit identified by Garstang in the city of Meroe area (i.e. M622). This is the first substantial Neolithic site discovered in the neighborhood of Meroe, and bears many similarities to the large Neolithic site at el-Kadada, which lies about 30 km upriver from Meroe.

THE SITE

The site of el-Sour ($16^{\circ}57'045''$ N / $33^{\circ}43'133''$ E) is located about 35 km north of Shendi, 1.5 km from the right bank of the Nile and west of the Khartoum-Atbara railway [Fig. 1]. It was discovered during a field-training season of the Department of Archaeology, University of Khartoum, in February-March 2004. It occupies an area of approximately 176 x 90 m (64 x 90 m for the main *kom*) and while generally flat, it features two low mounds in its eastern part [Fig. 2]. The nearby village extends over much of the western part, while the central part of the site has been much disturbed by tracks running across it.

Following the discovery of the site, surface collections and limited test excavations were carried out in 2005 and 2006. A 2 m grid was laid out on the east side of the site covering an area 12 by 12 m, later extended 26 m northwards, with each square numbered (A1, A2, B1, etc.). Nine squares within the grid were excavated. In the absence of obvious stratigraphy, deposits were excavated in arbitrary layers 10 cm deep. During the first season, four squares (A7, B5, D5, F5) were dug down to undisturbed natural deposits at a depth of c. 60-65 cm. A controlled surface collection of all artifacts from the grid was also

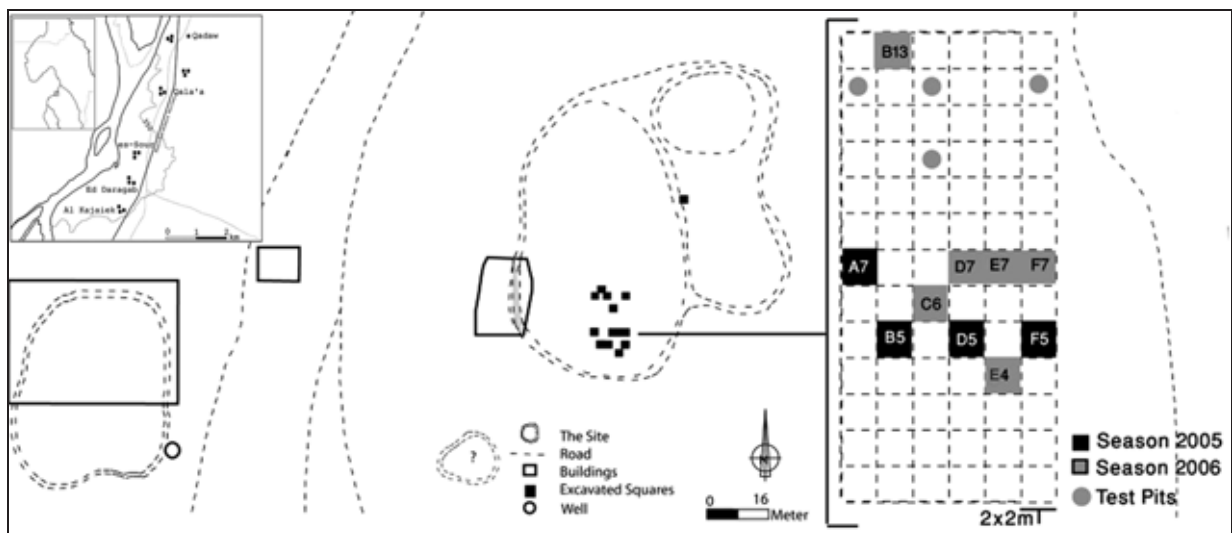


Fig. 1. Plan of El-Sour with location of trenches excavated in the 2005 and 2006 seasons

made. The main goal of the 2006 season was to extend the excavation to encompass the whole area of the site. Six squares were excavated (B13, C6, D7, E4, E7 and F7). The material from the 2006 season will be only briefly described in this paper, which is devoted mainly to the 2005 findings.

Surface deposits were generally quite fragmentary and included small quantities of bones, shells and ostrich-egg shells. Level 1 (0-10 cm) was mainly sand with some small quartz pebbles and sandstone fragments. Two complete pot-graves and a fragmentary skull were found in the south trench wall of square D5. Three fragments of human figurines were also found in square D5, square E7 and square F5. Level 2 (10-20 cm) saw a clear change in the composition of the soil in all squares. It now comprised a mixture of sand, ashy soil and pebbles with large quantities of fragmented bones, shells and ostrich-egg shells. A lip-plug, shell implement and fragment of a female figurine

were found. Level 3 (20-30 cm) contained very similar material and also produced two bone artifacts, two figurines and large quantities of fragmented bones, shells and ostrich-egg shell beads. Levels 4 (30-40 cm) and 5 (40-50 cm) were similar, if looser in consistency, but two figurines and six beads were found. From Level 6 (50-60 cm), deposits included more clay soil and sand, while the density of finds declined, with little bone. Two well-preserved skeletons in coffins of reeds (*khaesh*) were discovered in squares D7 and C6 respectively. The absence of grave goods and other diagnostic characteristics made it impossible to classify the graves by culture. In Level 7 (60-70 cm), the soil in squares B5, D5 and F5 changed to a mixture of sand and clay and no archaeological material was found below a depth of 60 cm. One square (A7) yielded 15 lithic artifacts and 45 potsherds in the first 5 cm of this level, but no fragments of bones or shells [Table 1].



Fig. 2. General view of the El-Sour site, view from the south

STONE ARTIFACTS

The lithic inventory includes debitage, cores, a few retouched tools, grinders and hammerstones. The finished tools are few and poorly made. They exhibit a somewhat limited technological and typological variability. The occurrence and density of artifacts was variable but continuous, from the surface down, although the largest group was concentrated in the top 50 cm of deposits.

Preliminary analysis of the material from the first season confirms that it was largely debitage (84%), composed of shattered fragments, broken flakes, small chips and chunks. Retouched tools formed 12.9% of the assemblage. With the exception of a single piece of fossil wood and sandstone used for pounders/grinders, all the excavated material is quartz [Fig. 3]. Rhyolite

Table 1. Distribution of sherds and other finds across excavated levels

LEVEL	LITHIC		SHERDS		GRINDERS		BONES & SHELLS	
	2005	2006	2005	2006	2005	2006	2005	2006
Surface	63	85	221	223	—	47	present	present
1 (0-10 cm)	413	498	1007	2052	9	15	present	abundant
2 (10-20 cm)	712	357	1002	1092	22	26	abundant	abundant
3 (20-30 cm)	513	227	759	731	10	22	abundant	abundant
4 (30-40 cm)	392	183	419	359	8	6	present	abundant
5 (40-50 cm)	130	20	181	105	7	3	present	present
6 (50-60 cm)	45	53	85	126	—	8	present	present
7 (60-70 cm)	18	—	45	—	—	—	—	—
Total	2286	1423	3719	4688	56	127		

and granite tools were not found in the excavated squares, although some tools of these materials were collected from the surface. The majority of lithic artifacts are finished scrapers. Backed tools, a few crescents and grinders make up the bulk of the remainder. The flakes themselves vary considerably in size and shape from small flakes to irregular large flakes. Although only a small sample of chipped stone artifacts has been examined, it is possible to describe the site's industry as a flake-based one, with some larger but poorly-made quartz tools being produced on small blades. Cores (3.1%) are generally of simple forms and were used primarily for flake production.

No polished stone tools and gouges of the type found at El-Shaheinab were found, except for a small fragment of a granite palette found on the surface. However, one interesting find was a small rhyolite artifact of characteristic shape and two small hollows on both faces [Fig. 4]. Its function



Fig. 3. Ceramic human figurines from el-Sour



Fig. 4. Quartzite poulder from El-Sour

remains uncertain, although the shape suggests that it may have been a fine polishing/grinding tool or palette. The example from El-Sour is very similar to specimens found at El-Kadada (Geus 1984: 69, Fig. 5). Parallels are also known from Eastern Butana and a site near Kassala (Marks *et alii* 1986: 47). The ground-stone sample recovered from the 2006 excavations is large. This includes disc grinders and pounders.

Almost 1528 lithics discovered in the 2006 season have contributed to an understanding of the predominantly lithic technology at El-Sour. These tools are simple flakes and have no or only minimal retouch. Formed tools are limited to a few classes. Scrapers and backed tools predominate. The debitage, which amounts to more than a half of the 2006 assemblage, shows considerable variability.

Other formed tools include borers, burins, crescents and retouched and un-retouched blades. Retouched blade forms include endscrapers, burins and backed pieces. Unfortunately, none is complete. It is odd, however, that our sample contains only one identifiable, broken polished axe. The majority of the formed tools were made of quartz. Poor and medium grades of quartz are available in the immediate vicinity of the site.

CERAMICS

The ceramic assemblage comprised 8407 sherds. Of these, 4916 (58.5%) were decorated (first season: 1941, second season: 2975). Two complete pots were found.

The collection from the first season consisted of 3272 body sherds, 446 rim sherds and only one identifiable base and respectively from the second season, 4279 body sherds, 686 rim sherds and 15 bases. The fragmentariness of the material and poor preservation meant that not all of the pieces could be analyzed. The assemblage classified here consisted of 657 sherds, all of which are decorated.

The pottery is hard, well fired and polished. Sherds range in thickness from 10 to 4 mm. Some are polished both inside and outside. A colored polished slip was evident in some examples. The decoration generally covers most of the surface, extending to near the rim or to the rim itself. The predominant surface color of the potsherds is grey to dark grey to brown and black. Red-coated sherds were also recorded. Most of the variations in color appear to be due to variations in firing. Rim sherds account for 12% of the total assemblage. The rims are simple in shape but vessel shapes at the site include a range of mainly open-mouthed vessels. The preferred vessel forms seem to be a medium-size open bowl and hemispherical vessels [Fig. 5]. Undecorated sherds

are often characterized by a scraped or wiped surface, with good burnishing on some examples.

Decoration is the primary classification criterion for the ceramics assemblage at this stage in the research. The ceramic collection from El-Sour included all the techniques and motif types favored in the Khartoum Neolithic of the Central Nile Valley [cf. *Fig. 5*]. A variety of

techniques was employed, including impressing, incision, rocker stamping and combing, giving in effect a number of ornamental motifs [*Table 2*].

Rocker stamping was the preferred technique accounting for more than 60% of the total. The impression technique stood for more than 19.5%, incised lines 8.4% and the rest 12.1%. Other

Table 2. Distribution/percentage of ceramic motifs across levels of El-Sour excavation grid squares (2005 season)

=100%	L7	L6	L5	L4	L3	L2	L1	LAYERS (SEASON 2005)
50 100%	0	2 4%	0	2 4%	18 36%	17 34%	11 22%	Incised lines
3 100%	0	0	0	0	0	0	3 100%	Single incised line
2 100%	0	0	0	2 100%	0	0	0	Curvilinear
8.4%								AVERAGE
363 100%	10 2.8%	10 2.8%	23 6.3%	47 12.9%	81 22.3%	73 20.1%	119 32.8%	Rocker zigzag dotted straight lines
10 100%	5 50%	0	0	1 10%	0	2 20%	2 20%	Rocker zigzag dotted curved lines
2 100%	1 50%	0	1 50%	0	0	0	0	Rocker zigzag incised curved lines
19 100%	0	0	0	5 26.3%	5 26.3%	6 31.6%	3 15.8%	Rocker zigzag incised straight lines
60%								AVERAGE
78 100%	4 4%	6 7%	6 6%	3 3%	19 19%	22 22%	17 17%	Impressed complex dotted straight lines
18 100%	0	0	2 11.1%	1 5.6%	6 33.3%	1 5.6%	8 44.4%	Impressed dotted straight lines
7 100%	0	0	0	0	1 14.3%	4 57.1%	2 28.6%	Impressed single dotted straight line
1 100%	0	0	0	0	0	1 100%	0	Impressed Vs + dots
3 99.9%	0	1 33.3%	0	0	1 33.3%	0	1 33.3%	Impressed Vs
46 100%	2 4.3%	0	2 4.3%	4 8.7%	10 21.8%	11 23.9%	17 37%	Rippled
5 100%	0	0	0	2 40%	2 40%	0	1 20%	Combed wavy lines
24%								AVERAGE
6 100%	0	0	0	2= 33.3%	1 16.7%	0	3 50%	Geometric
0.9%								AVERAGE
44 100%	0	2 4.5%	0	4 9.1%	5 11.4%	15 34.1%	18 40.9%	Varia
6.7%								AVERAGE
657 100%	22	22	34	74	149	152	204	Total Sherds analyzed from 2005 season

Neolithic sites in the area offer a similar picture with rocker stamping predominating: 45% at Geili, 58-72% at Nofalab, and 50% at El-Shaheinab. Similar decorative patterns and/or techniques are found at other Neolithic sites in the Central Sudan, especially at Zakiab and Um Direiwa. At Kadero, however, rocker stamping accounts for 36% of the total, while incised motifs account for more than 18% (against 8.4% at El-Sour). Rippled pottery is less abundant than at El-Kadada.

From the above descriptive analysis, it is clear that the El-Sour ceramic assemblage is broadly similar to other Neolithic sites in Central Sudan but the potential differences deserve additional investigation.

POT-BURIALS

One important discovery were pot-burials. In the Middle Nile region, the practice of pot-burials was first discovered at El-Kadada and seems to have been restricted “to children up to six years old” (Geus 1984: 28). In the case of El-Sour, two such pot-burials were discovered during the test excavations [Fig. 6]. Unfortunately, the two skeletons were mostly very fragmentary. The pots are large (mouth diameter of 35-40 cm) and decorated in the rocker-stamp technique. Offerings associated tentatively with the burials were also identified in the form of both parts of grindstones found beside one pot; fragments of ostrich eggs, shells and one bead may indicate the types of offerings placed inside the pot.



Fig. 5.

Other finds of potential importance were six fragments of human figurines [Fig. 7]. Two of them represent a human head, with no prominent features, very similar to examples found at el-Kadada (Geus 1984: 22). The hair of one figurine is decorated with rippled decoration. The others are incomplete human figurines, each one comprising the torso of a female body. Unfortunately, the upper and lower parts of the figurines were lost. The purpose of these pottery figurines remains unclear, although it is often assumed that they have a religious significance.

Other artifacts were rare at el-Sour. During the first season only two beads made of egg-shell, a carnelian bead, one lip-plug and one ivory artifact were recorded [Fig. 8]. The ivory tool could have been used as an awl/perforator, but it could have been equally well a personal adornment. During the second season 19 bone and carnelian beads, a lip-plug and a single shell object, the latter a comb for decorating pottery, were registered. Other typical Neolithic bone artifacts, such as harpoons and gouges, were not found. Bone tools are absent from most other Neolithic sites in Central Sudan, although recent finds in more arid areas further north have suggested that this may be due to poorer preservation.

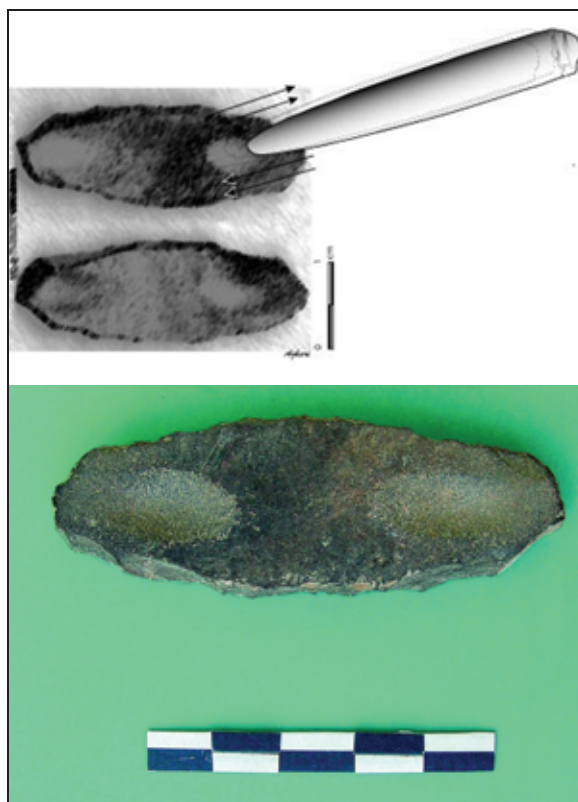


Fig. 6. Rhyolite artifact and drawing reconstruction of hypothetical function; the object being polished is an ivory awl-like tool found on the same site (see Fig. 8 below)

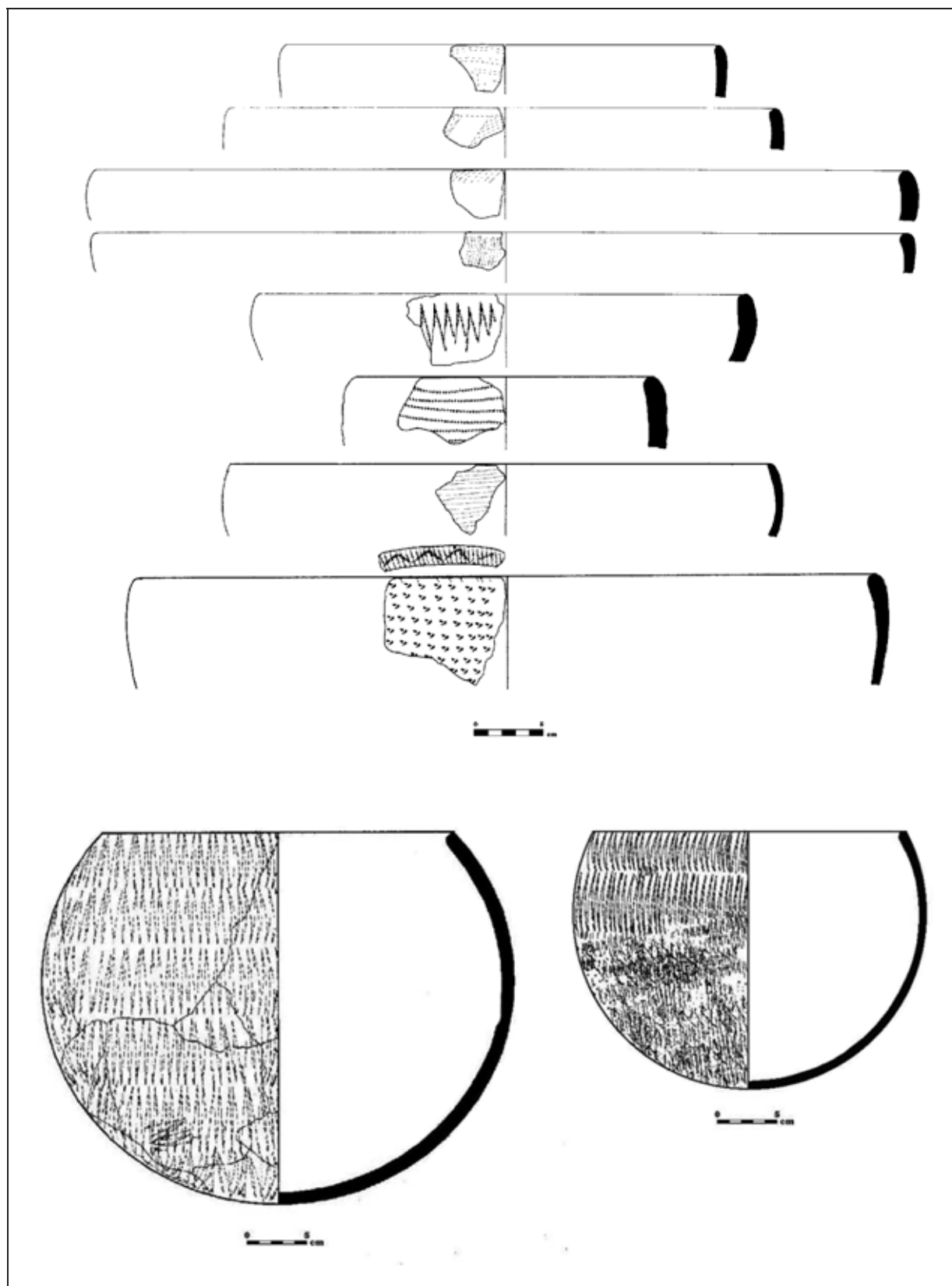


Fig. 7. Principal forms of pottery and decoration from El-Sour

CONCLUSION

As yet no Neolithic adult burials have been found and the area of the site so far investigated would seem to represent a settlement area. As at El-Kadada, child burials, which the pot-graves represent most likely, may have been buried within the settlement area, apart from the main cemetery. Further excavations will be required to determine whether any structural features survive on the site, although it is possible that it has been severely deflated. More testing and survey work is also needed to see if there is an associated cemetery in the vicinity. In the absence of radiocarbon dates the exact date of the site remains as yet uncertain, although there are enough similarities with material from sites such as El-Kadada to suggest a date in the later Neolithic period (late 5th-4th millennium BC).

The most distinctive features of the El-Sour material suggesting a date in the later Neolithic include the high flake index, pottery decoration styles, special types of lithic artifacts and pot-

burials, along with carnelian beads and human figurines. Gouges, a typical tool at earlier sites such as El-Shaheinab, are absent. However, the character of the pottery assemblage needs to be further explored, not least because so much of our published comparative data relates to assemblages derived from cemeteries (e.g. El-Kadada or El-Ghaba) which cannot be seen as 'typical', and may differ significantly from those from settlement sites. Such differences may also explain the absence of items such as polished stone axes, mace-heads and palettes (all likely to be prestige objects) from this settlement site.

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