ETHIOPIA

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Preliminary Results of an Archaeological Reconnaissance of Tigrai, Northern Ethiopia

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Introduction

In July 1993 and June 1996 the author conducted a preliminary archaeological reconnaissance along the foothills of the Temben Mountains and the eastern escarpment of the Agame region of Tigrai, northern Ethiopia (Figure 1). Since this re-

gion had never been explored by archaeologists, the aim of these pilot surveys was to document archaeological occurrences, particularly rockshelters and caves, belonging to the LSA and/or Neolithic and to determine potential sites with reasonably stratified deposits for future excavation.

These surveys yielded a total of 41 sites composed of rockshelters (many containing rock art) and open air sites. Of these, five were located in Agame while thirty six were in Temben. SASES coordinates (Nelson 1971) have been assigned to these sites (Table 1). The presence of rock art and other LSA/Neolithic sites makes this region an important area in the understanding of the evolution of food production in the region. The following is an outline of the results of the survey.

Open air sites

During the course of the surveys several potentially stratified open air sites were encountered:

Figure 1: Map showing location of study area.

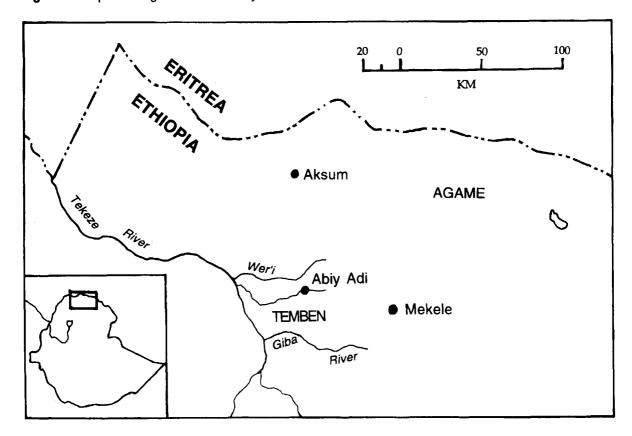


Table I: Some sites recorded in this study.

Local name	SASES#	Site type	Stone artifacts*	Ceramics	Rock art**
Ba'ati Barud	EgJw2	rockshelter	none	none	D
Embahmedin	EiJu I	rockshelter	m, b, s	present	none
Mai Da'ero	EiJu5	open air	b, bc	present	
Enka'a Dewel	EjJu8***	open air	m, b, bc	present	
Shegalu	EiJu12	open air	m, b, c	only one sherd	
	EiJu13	rockshelter	flakes; m	present	none
Dabo Zellelew	EiJu17***	cave	b, bc	present	SH, D, GEO
Danei Tikun	EiJu18	rockshelter	flakes	present	GEO
Mihdar Abur	EiJu22	rockshelter	none	none	SH, GEO
Danei Kawlos	EiJu23	rockshelter	flakes	present	?
	EiJu30	rockshelter	flakes	present	GEO
Mai Ila	EiJu31	open air	b, bc	present	
	EiJu35***	base of a hill	b, bc, gs, m	present	
Tselim Ba'ati	EiJu36	rockshelter	flakes, bc	present	SH, D

Notes:*

m=microlith, b=blade, bc=blade core, gs=grindstone

** D=Dahtthami style; SH=Surre-Hanakiya; GEO=geometric

*** a site that also contains bone fragments

some of them contain noticeably dense concentrations of artifacts and potsherds, although at EjJu12, despite the presence of very dense stone tools (with a high frequency of blades) only one sherd was observed. Some of the sites also include bone chips. At EjJu8, for example, there is a combination of blades and blade cores, backed pieces, potsherds, and bone fragments. These were undoubtedly in situ as they are being eroded out from the ground. EjJuS, 8, 12, 31, and 35 are recommended for excavation because of the presence of dense artifacts in association with sherds and/or bone fragments in a probably undisturbed context. While most of the artifacts are flakes, there are considerable numbers of blades and blade cores, and some microliths. However, only a few scrapers were observed. Raw materials included chert (of different colors), obsidian, quartz, and agate. Chert and agate assume a major and minor portion of utilized raw materials respectively. While many of the artifacts show differing degrees of edge damage, others are very fresh. Stone artifacts were almost always found in association with potsherds of different texture, size, inclusion, decoration, and color. Color ranged from light gray to orange, red, and black. In addition to color the potsherds varied in thickness, temper, slip, and burnish.

Quartz outcrops were observed within 150 m distance from some of the sites (e.g., EjJu35 and EjJu36). A few kilometers north of the town of Abiy Adi on the Temben-Adwa road are also concentrations of blocks of quartz. Quartz artifacts may therefore be of local origin. Chert and obsidian nodules

were also noted on the bed of the Tanqua river that flows near the town of Abiy Adi.

Rockshelters

Along the foothills of the mountains surrounding the town of Abiy Adi are numerous sandstone rockshelters that contain traces of early occupation. Although some of the shelters have stone floors, others have dirt floors with potentially stratified and excavatable deposits. In the slopes leading to many of these shelters are exposures of artifacts associated with potsherds which give the impression they are *in situ*. Artifacts, raw materials, and ceramic remains of the rockshelters were similar to those of the open air sites. Some of the shelters have a significant archaeological potential and do not seem to have been disturbed. Future excavation of these sites (particularly EjJul, 14, 17, and 23) would almost certainly be worthwhile.

A number of these rockshelters also contain rock art. Most contain petroglyphs with only geometric motifs; several of the petroglyphs are superimposed by recent engravings consisting of peoples names. Four sites, however, clearly represent animal and/or human figures that can be placed in the already established, albeit tentatively, historical framework for the Horn of Africa (Brandt and Carder 1987; Cervicek 1979). All sites containing engravings and/or paintings were photographed and all visible zoomorphic and anthropomorphic figures were traced. The following is a brief description of the rock art at three rockshelters (Ba'ati Barud, Mihdar Ab'ur, and Tselim Ba'ati) and one cave (Dabo Zellelew). Ba'ati Barud is located in the Agame region of eastern Tigrai while Tselim Ba'ati, Mihdar Ab'ur, and Dabo Zellelew are found in the Temben region of south-western Tigrai.

Ba'ati Barud (EgJw2)

This rockshelter is 30.40 m in length, 3.80 m in width, and 3.85 m in height. It contains more than 30 visible individual paintings, the overwhelming majority being humped cattle. At least three human figures and other geometric figures are also depicted. Only one of the cattle is painted in black color while all the rest are executed in reddish brown pigment. All except one of the paintings are flatwashed. The rockshelter contains five panels.

The first panel features cattle and a human figure; the second displays many cattle; the third panel shows fat tailed sheep; the fourth panel contains the only cattle that has been executed in outline; and the fifth panel has faint traces of paintings. Unfortunately, the shelter has a rocky floor with no visible artifacts.

Mihdar Abtur (EjJu22)

This is a large rockshelter (c. 60 m wide) that faces southeast. It has a predominantly rocky floor but contains numerous traces of engravings of geometric figures. At least one naturalistic humpless cow and one stylized bovid were also observed. However, no cultural material was observed in the vicinity of this shelter.

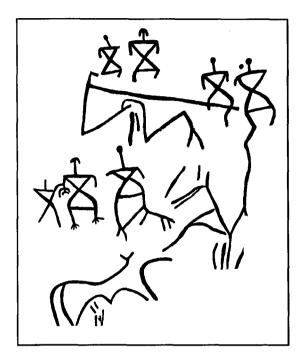
Tselim Ba'ati (EjJu34)

This very large rockshelter contains paintings only. Two styles can be recognized. There is a large panel of faint traces of paintings in black among which ostriches are clearly visible. These paintings are small and naturalistic. These were undoubtedly executed first as they are superimposed by a different style of paintings in tan pigment of humped cattle, a dog, and human figures (two of them riding a horse/donkey/mule (?)). There were a few artifacts and potsherds on the floor of the shelter. However, there was significant cultural material scattered all around the slope leading to this site. Unfortunately the slope is relatively steep; excavation would therefore be difficult.

Dabo Zellelew (EjJu17)

Unlike the preceding sites, this is a cave which contains both engravings and paintings. The cave is 4.6 m wide at the entrance but narrows down to only 80 cm at 14.4 m toward the interior from its opening. The cave is reported to extend for "many kilometers" in the mountain but at present is blocked (at 14.4 m) by artificial stone piles supposedly to protect ovicaprids from entering deeper into the cave. The rock art is concentrated mainly at the entrance. Past the entrance no rock art is visible, for the walls and ceiling of the cave are covered with soot. Facing north this cave contains rock art on both sides of the entrance. The western side contains geometric

Figure 2: Part of the upper panel of the engravings of Dabo Zellelew, showing "hourglass" human figures and humpless cattle.



engravings. On the eastern side are engraved humpless and longhorned cattle together with other geometric motifs. At least seven "hour-glass" style human figures are also represented (Figure 2).

Some two meters inside the cave there is a small "hallway" that bifurcates from the main floors of the cave and leads to a window-like opening. Along the walls of this "hallway" are some paintings in white pigment. However most of the wall is covered with soot and only two outline depictions of cattle can be identified, others being just faint traces. This is the only part of the cave that contains paintings. Beyond the drip line of the cave is an area with visibly thick soil deposit containing dense cultural material (artifacts and potsherds) including bones. This site certainly deserves further documentation and test excavation.

Discussion

The cattle engravings of Mihdar Abtur and Dabo Zellelew are similar to those found in Shepe and Galma (Anfray 1967, 1976; and personal observation) in southern Ethiopia with the exception

that while the Shepe/Galma engravings show the cattle in teas relief those of Dabo Zellelew/Mihdar Abtur are pecked outline representations of cattle. Also, unlike those of Shepe/Galma, the newly discovered sites contain human depictions and geometric figures. The human figures of Dabo Zellelew are engraved in what is known as "hour-glass" style (Figure 2). Graziosi (1964) reports a somewhat similar "hour glass" figure from Adi Qanza in Eritrea.

Stylistic differences in the rock art tradition was first recognized by Breuil (1934) who, based on the superimposition of figures at Genda Biftou in eastern Ethiopia, inferred eight series of paintings. Two decades later Clark (1954) proposed three main stages in the development of rock art in the Horn: (1) the earliest naturalistic paintings; (2) the conventionalized paintings and engravings; and (3) the highly schematized series of paintings. Based on the execution of the art, he also suggested a relationship between the art of the Horn and those of the Sahara. Bailloud (1965) also recognized an "archaic" series of paintings which he called the "Ourso style" and a later "Laga Oda style", terms derived from two of the thirteen rock art sites he visited in eastern Ethiopia. Based on artifactual occurrence he referred to the makers of the art as "Wiltonian" cattle/sheep herders.

More recently Cervicek (1979) has termed the rock art style of the Horn and Arabia as "Ethiopian-Arabian" where he also distinguishes two main stages in its development: the "Surre-Hanakiya" stage and the "Dahthami style proper", names that were derived from sites in Ethiopia (Surre) and Arabia (Hanaklya and Dabthami). The former contains paintings of humpless cattle and sheep. These were, during the succeeding "Dahthami style proper" stage, replaced by zebu (and later camel) paintings/engravings. In the 1980's, Brandt and Carder (1987) and Carder (1988) synthesized the rock art of the Horn and sought their behavioral correlates.

Whatever the terms, there is an agreement among workers that the naturalistic paintings were executed earlier than the more conventionalized and schematic representations. Based on their execution the Dabo Zellelew and Mihdar Abtur engravings as well as the naturalistic paintings at Tselim Ba'ati can be placed in the earliest "Surre-Hanaklya" stage of rock art tradition in the Horn. The Dabo Zellelew and Ba'ati Barud paintings as well as the superim-

posed schematized paintings of Tselim Ba'ati belong to the later stage ("Dabthami style proper") of rock art in the Horn.

Unfortunately, however, no direct radiometric dates of this art is available. Thus based on archaeological data and hypothesized migrations of early pastoralists as well as the thematic content of the rock art, investigators have suggested a mid-Holocene (c.5000-3000 BP) date for the "Surre-Hanakiya" style and a late Holocene date (c.2000 BP) for the "Dabthami style proper" (Brandt and Carder 1987; Cervicek 1979).

As mentioned earlier some of the rock art in the Temben region belong to the early stage of this rock art tradition. The new rock art finds in this part of Ethiopia therefore indicate the presence of a food producing economy (of pastoralism and/or agropastoralism) in the area since the mid-Holocene times.

Conclusion

The present archaeological evidence indicates that the Temben and Agame regions were occupied by LSA and/or Neolithic peoples. Unfortunately, however, the culture history of the region is virtually unknown. Immediate attention should therefore be given to topological and chronological reconstruction. Many of the sites have an excellent depositional context and future excavation of these should enable us to establish a chronometrically dated culture history as well as the economic and social organization of the prehistoric inhabitants of the region.

The concentration of sites at the Temben region makes it an important avenue for the understanding of the LSA/Neolithic of northern Ethiopia. Not only does it contain potential stratified sites but as it is situated between two previously excavated but widely separated localities, Lalibela/Natchebiet caves near Lake Tana (Dombrowski 1970) and Gobedra rockshelter near Aksum (Phillipson 1977), inter-site comparison of archaeological evidence are possible. The discovery of new rock art sites and the presence of other reported sites in this hitherto uninvestigated area of northern Ethiopia makes the region an exciting place for further archaeological investigation. Investigating the rock art of the region in conjunction with other

nearby sites should provide a much fuller picture of the prehistory of the area.

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