

New sites of South Ethiopian rock engravings : Godana Kinjo, Ejersa Gara Hallo, Laga Harro, and remarks on the Šappe-Galma school

Jean-Loïc Le Quellec; Gizachew Abegaz

Annales d'Ethiopie, Année 2001, Volume 17, Numéro 1

p. 205 - 224

[Voir l'article en ligne](#)

Résumé : Nous présentons ici trois sites totalement nouveaux découverts en 1999-2000 par Gizachew Abegaz dans la zone de Dilla, ainsi que des nouvelles données sur un site déjà connu, celui de Soka Dibiôa, avant de situer l'ensemble dans le contexte artistique régional de l'école Sappe-Galma.

Avertissement

L'éditeur du site « PERSEE » – le Ministère de la jeunesse, de l'éducation nationale et de la recherche, Direction de l'enseignement supérieur, Sous-direction des bibliothèques et de la documentation – détient la propriété intellectuelle et les droits d'exploitation. A ce titre il est titulaire des droits d'auteur et du droit sui generis du producteur de bases de données sur ce site conformément à la loi n°98-536 du 1er juillet 1998 relative aux bases de données.

Les oeuvres reproduites sur le site « PERSEE » sont protégées par les dispositions générales du Code de la propriété intellectuelle.

Droits et devoirs des utilisateurs

Pour un usage strictement privé, la simple reproduction du contenu de ce site est libre.

Pour un usage scientifique ou pédagogique, à des fins de recherches, d'enseignement ou de communication excluant toute exploitation commerciale, la reproduction et la communication au public du contenu de ce site sont autorisées, sous réserve que celles-ci servent d'illustration, ne soient pas substantielles et ne soient pas expressément limitées (plans ou photographies). La mention Le Ministère de la jeunesse, de l'éducation nationale et de la recherche, Direction de l'enseignement supérieur, Sous-direction des bibliothèques et de la documentation sur chaque reproduction tirée du site est obligatoire ainsi que le nom de la revue et- lorsqu'ils sont indiqués - le nom de l'auteur et la référence du document reproduit.

Toute autre reproduction ou communication au public, intégrale ou substantielle du contenu de ce site, par quelque procédé que ce soit, de l'éditeur original de l'oeuvre, de l'auteur et de ses ayants droit.

La reproduction et l'exploitation des photographies et des plans, y compris à des fins commerciales, doivent être autorisés par l'éditeur du site, Le Ministère de la jeunesse, de l'éducation nationale et de la recherche, Direction de l'enseignement supérieur, Sous-direction des bibliothèques et de la documentation (voir <http://www.sup.adc.education.fr/bib/>). La source et les crédits devront toujours être mentionnés.

**NEW SITES OF SOUTH ETHIOPIAN ROCK ENGRAVINGS :
 GODANA KINJO, EJERSA GARA HALLO, LAGA HARRO,
 AND REMARKS ON THE ŠAPPE-GALMA SCHOOL**

Jean-Loïc LE QUELLEC* AND GIZACHEW ABEGAZ**

Résumé : Nous présentons ici trois sites totalement nouveaux découverts en 1999-2000 par Gizachew Abegaz dans la zone de Dilla, ainsi que des nouvelles données sur un site déjà connu, celui de Soka Dibiča, avant de situer l'ensemble dans le contexte artistique régional de l'école Šappe-Galma.

Mots-clefs : Art rupestre, préhistoire, protohistoire, domestication, bovinés (*Bos primigenius*), néolithique.

Summary : We present here three totally new sites discovered in 1999-2000 by Gizachew Abegaz in the area of Dilla, as well as new data on a site already known, that of Soka Dibiča, before setting the whole back in the regional artistic context of the Šappe-Galma school.

Keywords : Petroglyphs, prehistory, protohistory, domestication, bovids (*Bos primigenius*), neolithic.

1 - GODANA KINJO

It is a small site discovered by Gizachew Abegaz in July 1999, 25 kilometres away to the south of Dilla at an altitude of 1830 metres above sea-level and whose coordinates are 06°18'05"N / 38°20'12"E (see map, No. 9).

The locality is a seven metres wide and two metres high rock-shelter, open to the west in an escarpment called Dayo and overlooking twenty odd metres below the river Godana that flows up north (fig. 1, 2). The figures are made up of four representations of bovids turned to the right, that is southward. It is hard to make out the sex of the first one (fig. 3), which is also the biggest one (L = 58 cm) but compared with the engravings of Šappe (fig. 17, 18) it could be a cow because the udder seems to be drawn behind the umbilical zone ; one of the horns is pricked up whereas the other one bends downward. There is a smaller bovid just below (L = 26 cm) scarcely indicated by a contour forming a "U" and with long, thin horns. There is yet another bovid (L = 38 cm) to the south but hardly legible and with horns forming elongated

* UMR 7041 ("Archéologie et Sciences de la Société"), CNRS. Brenessard, 85540 St. Benoist-sur-Mer (France).

** P.O. Box 120, Jinka (Ethiopia).

pincers (fig. 4, 5). The last is pictured 2.30 metres away ; it may well be a male (L = 33 cm) with a distinct penis ; it shows one horn pricked up and the other bending downward (fig. 6) like the first representation mentioned for this site.

2 - EJERSA GARA HALLO

This site is made up of only one horizontal engraved piece of rock about three metres long and 2.30 metres wide discovered by Gizachew Abegaz in October 2000, about six kilometres away to the north-west of Dilla and forty odd metres above the river Ejerssa (see map, No. 4). It shows a highly probable anthropomorph (h = 17 cm), a circular sign and six figures of bovids (L = 17 to 30 cm) among which only one could be a male with the indication of the penis sheath. The surface of the rock is rather uneven and several engravings have much suffered from erosion (fig. 7).

Six Bovid in the so-called Arabo-Ethiopian style can be made out: one with asymmetrical horns, two with long horns forming an arc of a circle widely open, and one with extremely incurvated horns. The horns of another cannot be distinctively made out, and the head of the last one is destroyed by a natural cupule. The asymmetrical horns remind us of what the Hamar call *kamara*, a term describing “a particular horn formation in which one horn bends upwards and the other bends forwards” (Lydall & Strecker 1979:202, n. 123). The most interesting thing here is that the Bovid are clearly associated with two signs. The first one is a circle placed above the upper horn of a bovid (fig. 8, 9). Engraved circles are already known in Ethiopian rock art: one thinks of the concentric circles at Borosa (Anfray 1998), where they are joined to meandering lines, but the figure at Ejerssa Gara Hallo must be best compared with the Gesuba rock-shelter in Sidamo, where the bovids show technical and stylistical similarities with the petroglyphs of Ejerssa Gara Hallo and where circles are well attested, one of them appearing above a zebu. The second sign cannot be interpreted with assurance, but it is reminiscent of an anthropomorph (fig. 9). In such a case, we could have a scene representing a man jumping over a bovid, according to the ritual of taurokathapsia (Le Quellec 1993), still practiced by the Hamar/Bašada (fig. 10) – but with *Bos indicus* – at about 150 kilometres southwest of our area (Haberland 1959, pl. 45:1 ; Lydall & Strecker 1979:175, n. 31; Mohaupt 1995).

Since Ejerssa Gara Hallo is inland at about 20 kilometres of the western bank of Lake Abbaya, and since Gesuba is 45 kilometres inland from its northwest side (at 06°41'45" N / 37°30'35" E), this leads to the question of the relationship between the two sides of Lake Abbaya at the time where the engravings were made.

3 - LAGA HARRO

This locality was discovered by Gizachew Abegaz in November 2000 (see map, No. 2) and is only 300 metres away to the north of the site of Šappe discovered by F. Anfray in August 1965 (Anfray 1967). You can notice there a piece of rock (fig. 11) showing the engravings of two bovids (fig. 12), one anthropomorph holding a spear (fig. 13) and a *jäbäna* (ጃባና meaning “coffee pot” in Amharic) with six cups lined up in two rows (fig. 14). One of the bovids (L = 41 cm) seems to mount the other

one (L = 50 cm) but nothing indicates that it may actually be the representation of a coitus. The anthropomorph (h = 55 cm) is unique to date in Ethiopian engraved rock art and the frame of the spear can be made of nothing but metal. The coffee-pot and cups also are the only representations of this kind known at present and nothing allows us to set them apart from the objects of this kind currently used in the country.

4 - SOKA DIBIČA

Apart from these totally new sites we succinctly present that of Soka Dibiča which is 29 kilometres away to the south of Dilla along the right bank of the river Boyo at an altitude of 1855 metres above sea-level and whose coordinates are 06°17'40"N / 38°19'48"E (see map, No. 7).

The engravings of Soka Dibiča were discovered by accident in 1993 by Gizachew Abegaz and Xavier Gutherz who drew a freehand sketch of three engravings at that time (Joussaume, Barbier & Gutherz 1994:10). The representations count ten specimens which all are bovids cut in "taille d'épargne", spread on three west-facing blocs overlooking the river thirty odd metres below. The first block is one metre and a half long and bears only one bovid (L = 36 cm) whose horns form a widely open arc of a circle with the tip of the lower horn in contact with a small circle. The second block just underneath the previous one is two metres long and shows three engravings : two big bovids facing each other and a third one above the one on the right (fig. 15). The one on the left (L = 43 cm) has got horns forming a well-open arc of a circle ; the upper one is incomplete but the tip of the lower one is in contact with a small circle like the previous specimen. This animal seems to confront another bovid (L = 39 cm) whose male sex is clearly indicated and whose horns correspond to the "pincers-like" type. Most probably, the third animal (L = 35 cm) also belongs to the "pincers-like" type although one of the horns cannot be seen. About one metre away from the block previously described there is a 2.20 metres long piece of rock with six other representations of bovids with horns forming an arc of a circle or pincers ; their length varies between 40 and 47 cm, and none of them shows any indication of sex. Three of them are turned to the right and in front of two other bovids facing them ; one last animal is drawn in a vertical position on the left of the whole (fig. 16).

5 - REMARKS

All these engravings of bovids share an undeniable "family likeness" : the legs are always pooled to one thick line, the head is reduced to a minimum (if not absent), the horns are long and always directed toward the front, there is never any indication of the tail nor of any other anatomic feature (eyes or ear). The sex can only be determined for certain when the udder is present (fig. 3 ?) because the ventral protuberance sometimes present may as well represent either the penis or the umbilicus (fig. 6, 7 at the bottom).

Another important point is that all these engravings depict humpless longhorns (the so-called *Bos africanus*, a domestic variety of *Bos primigenius*), a type already known in the Nile Valley ca. 6000 BP but today confined to a very small region of

western Africa.

The family likeness thus defined is shared in the same area with the site of Šappe (map. No. 3 and fig. 17 to 19) and all the mentioned localities are spread over a distance that does not exceed forty kilometres.

Šappe (Chabbe, Shepe) is the name usually given to a rock art site first described by F. Anfray (1967), but according to local information, the precise toponym seems to be Manceti (Joussaume, Barbier & Guthertz 1994:7 ; Joussaume 1995:52). Although we had not planned to propose a new study of this already known site, we had the surprise of discovering there some unpublished engravings, below a rock fallen off the cliff. Due to high water during the rainy season, these engravings could not be properly documented, but we could take some preliminary photographs (fig. 17). The reason why these engravings have not been brought to attention before may be because they belong to a whole set that has fallen off since F. Anfray went there. On a photograph published by him (Anfray 1967, fig. 3) three people can indeed be seen studying very closely some engravings at their height but now these figures are not accessible any more : in year 2000 we had to take pictures of the same images with a telephotolens because the ground ensuring to get near them has disappeared and they are now several metres away from the observants (ex. : fig. 18, 19).

At Šappe, the art depicts humpless cattle sculpted in *champlevé*, now out of reach due to the deepening of the river, a fact which implies a considerable lowering of Lake Abbaya waters since the figures were engraved. Thus hydrological parameters could be of some help in dating the art, as the fluctuations of the major lakes of the Rift Valley during the Holocene are well-studied: after the maximum of 9500 to 8500 BP and a general lake regression in the centuries around 7500 BP, the periods of expansion were short-lived compared with phases of contractions to low (or saline) levels near those of today, stabilized since ca. 3000 BP (Butzer, Isaac, Richardson & Washbourn-Kamau 1972). In the Ziway-Salla basin, a drying episode from 8000 to 7200 BP was followed by a rise in lake levels and then another arid phase about 5900 BP (Gillepsie, Street-Perrott & Switsur 1983). Another recession took place at 4800 BP (Street 1979), before the onset of current climate, with a final rather minor rise in Ethiopian lake levels ca. 2000 BP (Grove 1993). It can be suggested that the engravings could have been made at Šappé/Manceti slightly before an arid phase such as the one indicated by the lake recession at 4800 BP, but it would make no sense to discuss such a tentative assumption without a detailed geological study of the site. Moreover, a comparison of the present state of the site with the photographs published by Anfray some 33 years ago indicate that modifications of the river level could have well occurred during the end of the XXth century.

The engravings of Šappé, considered by some authors (Anfray 1967) as "sculptures" have been attributed by P. Červíček (1971:130), followed by R. Joussaume (1981 :169, 1995:55), to the Arabo-Ethiopian style so defined by P. Červíček (1971) at Laga Oda (Ethiopia) and Surre (Arabia) : "In this style, the body of the cattle is shown in profile and so are the legs ; the fore-legs and hind-legs are pooled to one thick line respectively, the hoofs being sometimes shown from the front, making a pincers-like impression, but more often the legs have rounded ends dismissing the hoofs entirely. The neck, head and the ears of the cattle are shown from above, the horns from the back (looking precisely as in the frontal view) as if the head of the

animal were turned away with no respect to the on-looker”.

The following arguments have been used to reinforce this attribution:

1- On one of the Šappe/Manceti engravings, “ there is a group of lines engraved on the hind legs that are reminiscent of the paintings of Laga Oda (Harar) ” (Joussaume, Barbier & Guthertz 1994:7);

2- at Šappe/Manceti as in Laga Oda, “ there are bovids with one of the horns carrying something extra ” ;

3- at Šappe/Manceti, “ certain bovids display an engraving on the neck and identical examples can be found in the Harar (Laga Oda) ” (*ibid.* :10).

We do not intend to discuss here the validity of the concept of a unique Arabo-Ethiopian style found in Eritrea, Ethiopia, Arabia, Yemen, Upper Egypt, Lower Nubia, Northern Darfur, and even in the Ennedi Mountains and the Libyan Desert (Červíček 1971:130, Clark 1977:75), but such a vast repartition is somewhat problematical. Concerning the Šappé engravings, we are prompted to make the following observations:

1- It is very hard to venture sound comparisons between engravings and paintings : if a group of parallel lines can effectively be seen on the hind legs of one of the bovids engraved at Šappe/Manceti (fig. 19), and on those of one of the bovids painted at Laga Oda, we have counted about 60 other bovids at Laga Oda, and 70 at Šappe/Manceti. However, if no other bovid presents such stripes in Šappé/Manceti, at Laga Oda, at least 13 of the specimens show similar lines on their neck, a feature without exact homologues at Šappe/Manceti.

2- The alledged parallelism between the two sites cannot rely on the “ horn carrying something extra ”. At Šappe/Manceti, the upper horn of at least 40 bovids is adorned with a kind of triangular stream (fig. 18-19), whereas at Laga Oda, it is only possible to notice one forked horn – in fact a very different feature (cf. Červíček 1971, fig. 45 ; here : fig. 22, No. 2).

3- The pendeloques under the neck are rather different in the two sites: subcircular, triangular and/or vertically developped at Šappe/Manceti (fig. 19) rectangular and parallel to the whole neck, with stripes, at Laga Oda (cf. Červíček 1971, fig.2, 45 ; here : Fig. 22, No. 4).

4- The comparison between the necks of the bovids in both sites is highly weakened by the fact that, at Šappe/Manceti, the neck is always very short or absent and in the direct prolongation of the dorsal line, whereas at Laga Oda, a discontinuance between the neck and the dorsal line is visible in most cases (cf. Červíček 1971, fig 1, 2, 4, 6, 7, 8-16, 18, 19, 21, 25, 38, 45).

5- Characteristic features well attested on one site are absent on the other: the voluminous udders of Šappe/Manceti (fig. 18) find no homologues at Laga Oda, (Fig. 22, No. 5) but the ears which are well-indicated on at least 12 bovids (Červíček 1971, fig. 12, 14, 16, 22, 33, 38, 45, 47) of Laga Oda (Fig. 22, No. 1) have no counterpart at Šappe/Manceti... not to mention the fact that anthropomorphs or sheep are lacking at the latter whereas they are well attested at the former (Fig. 22, No. 3, 8). Finally, all the bovids from Laga Oda have a long, thin tail with sometimes the indication of the tassel (fig. 22, No. 9) whereas this appendix is rare and without the tassel at Šappe/Manceti ; the joint and shape of the legs are sometimes indicated at Laga Oda (fig. 22, No. 6) but never at Šappe/Manceti ; in most cases the legs are thin and

sometimes end in a twofold hoof at Laga Oda (fig. 22, No. 7) but never at Šappe/Manceti where on the contrary they are very thick, rigid and more often than not have rounded or square ends.

Drawing interregional comparisons is indeed very interesting and may prove cultural relations, but it appears that such bridgings must rely on strict stylistic and technical typologies. One cannot spare defining precise local styles, before trying to elucidate the chronological and cultural oppositions or similarities between different areas. In this perspective, F. Anfray (1976 :53) had already noticed the similarity of style between the engravings of Šappe and the small set of those of Galma (fig. 20) to the extent that we can certainly talk about a Šappe-Galma Style.

F. Anfray published a photograph of a group of six humpless bovids and, in 1993, the cliff, engulfed of clay, could be partially cleared by R. Joussaume and S. Barbier, who discovered four other bovids and published a sketch of the whole frieze (Joussaume, Barbier & Guthertz 1994). Our local informants told us that the precise name of the site was Anšimalčo Kinjo, Anšimalčo being the name of the river, and Kinjo having the same meaning as in Godana Kinjo (*i.e.* : “rock, stone”). So it appears that this name could mean “the [engraved] stone of the river Anšimalčo”, Galma being the name of the whole area ; The coordinates of the engraved cliff, at an altitude of 1966 metres, are 06°17'23" N / 38°20'23" E. The engravings are on the righthand bank of the river and the herd is facing the stream, but F. Anfray (1976:54) noted that other pictures may well exist under the clay on the other bank, and after having cleared a part of the cliff, R. Joussaume suggests that “there well may be others”. During our visit, the dramatic lack of time and the rainy season (the river level being very high) regrettably disallowed any attempt to clear new parts of the cliffs, or survey other sections of the river. But we could verify the technical and stylistical similarity of the Anšimalčo Kinjo engravings with those of Šappé. They are characterized by the so-called “champlevé” technique or “taille d'épargne” featuring the cutting out of an exoperipheral depression, and the polishing of the endoperigraphical surface (fig. 20). On some of the Anšimalčo Kinjo bovids, the cutting out is particularly deep, with a maximum of 2.5 centimetres, as shown by the cross-section we could take of one of the engravings (fig. 21).

Thus it is perfectly clear that all the engraved sites at Šappé (Anfray 1967), Galma (Anfray 1976), Soka Dibiča and Godana Kinjo belong to a single artistic school, which can be differentiated from the Arabo-Ethiopian paintings of the Harar area, on the basis of the following stylistic criteria :

- “champlevé” technique : deep cutting out of the exoperigraphic surface, giving the illusion of a true relief ;
- endoperigraphic surface usually polished (not always) ;
- monothematic figures : humpless longhorns with a minimal or absent head ornated with horns more often than not forming an arc of a circle or pincers, or else one being pricked up and the other bending downward ; no internal anatomic features and rare indication of the tail ; no tassel ; possibility of indication of a huge udder ; and with very thick, rigid legs pooled to one whose ends are rounded or square.

At the present state of the researches, this school has no exact counterpart elsewhere in Ethiopia, and must correspond to some cultural community, still to be determined. Two cultural features appear to have been valued by the artists of this

school : the stream or the circle appended to one of the horns, and the globular, circular or triangular pendeloques under the neck of the bovids. It is to be stressed that all the sites of this school presently identified are on the banks of deep narrow rivers, obviously inaccessible to real cattle – a fact arguing for some symbolic function of the art.

We propose to call this artistic current the “Šappé-Galma school”, and the planning of future researches could aim at determining the geographical extension of this group, acting as a visual demarcation for a limited cultural area. Concerning the themes depicted in this Šappé-Galma school, two important points must be stressed : the engravings represent only bovids, and all these bovids depict humpless longhorns (*Bos primigenius f. taurus*). No domestic cattle is known in Africa before the VIIth millenium BP, and the humpless longhorns have vanished from Ethiopia without trace, although they could have made some genetic contribution to the present-day zebu races (Blench 1993:75). The zebu (*Bos primigenius f. indicus*), which appears to have a comparative advantage in arid zones, originates in India and was not brought to Africa before 2500 BP, most probably by the Indian Ocean route. At first sight, these facts seems to imply that the bovids of the Šappé-Galma school must have been engraved between *ca.* 6500 BP and 2500 BP.

More precisely, the oldest phase of the Ethiopian-Arabian style (the so-called Surre-Hanakiya style) have been tentatively dated to 5000-3000 BP (Červíček 1979), that is to say after the mid-Holocene period of aridity. But the earliest archaeological evidence for domestic cattle in Ethiopia consists of rare fragments not earlier than 3500 BP. At the double rock-shelter of Laga Oda in Hararge province, phalanges of domestic *Bos* were found in a level dated to *ca.* 3510 ± 105 BP (Clark & Prince 1978, Clark 1988:63). At Lake Besaka in the Southern Afar Rift, domestic cattle have been provisionally identified on the basis of several teeth found in the latest occupation level dated by charcoal to *ca.* 3460 ± 280 BP and associated with a low level of the lake (Clark & Williams 1978, Clark 1988:63, Brandt 1982). These dates are consistent with the evidence from the eastern Sudan, from Asa Koma (Djibouti) and from the Gogosiis Qabe rockshelter at Buur Heybe in southern Somalia (Brandt 1986, Brandt & Carder 1987:197). It is thus clear that peoples of the Rift Valley had already adopted the pastoral way of life by the middle of the IVth millenium BP (Fattovith 1988:86). On the other hand, some clay figurines of Hawlti show that Pre-Axumites were still breeding humpless cattle during the first century AD (Contenson 1963), whereas the oldest figure of a zebu in Ethiopia is an Axumite sculpture found at Zeban-Kutur (Akkele-Guzay) and wearing an inscription dated from *ca.* 200 AD (Anfray 1990:14). It is generally admitted that the general replacement of *Bos primigenius f. taurus* with *Bos primigenius f. indicus* must have occurred during the return to more arid conditions, shortly after the last Holocene humid phase, and most probably during the III-IVth centuries AD (Clark 1954, Červíček 1979).

So one cannot rule out the possibility that the bovids of the Šappé-Galma school could be much more recent than usually said, particularly at Šappé where some of the engravings seem to have been cut out with a metallic tool. Future researches will have to verify such a point of great value for dating the art. It would also be interesting to specify the relationships between the images from this school and those which are the closest ones among the representations of the style called Arabo-Ethiopian, that

is those of the labelled “Surre-Hanakiya” style by Červíček (1971).

As for the other engravings presented above (those where the images of bovids are not made according to the “champlevé” technique but simply represented by the scarce drawing of the contour) we can suppose that they are even more recent. The two bovids from Laga Harro let us think so because neither the technique, nor the patina can help us set them apart, on a chronological point of view, from the anthropomorph holding a spear most probably made of metal and from the coffee set which are on the same slab. In the present state of affairs nothing then forces us to put all the Ethiopian engravings of bovids in an hypothetical, prehistorical or protohistorical, “pastoral period”.

BIBLIOGRAPHY

- Anfray (Francis) 1967. Les sculptures rupestres de Chabbè dans le Sidamo. *Annales d'Éthiopie* 7:19-32.
- Anfray (Francis) 1976. Les sculptures rupestres de Galma dans le Sidamo. *Annales d'Éthiopie* 10:53-55.
- Anfray (Francis) 1990. *Les anciens Éthiopiens. Siècles d'histoire*. Paris: Armand Colin.
- Anfray (Francis) 1998. Notes de protohistoire éthiopienne. Sura et Borosa. *Archeologia africana – saggi occasionali* 4: 12-18.
- Blench (Roger) 1993. Ethnographic and linguistic evidence for the prehistory of African ruminant livestock, horses and ponies. In: T. Shaw, P. Sinclair, B. Andah & A. Okpoko (ed.), *The Archaeology of Africa. Foods, metals and towns*, London: Routledge, pp. 71-103.
- Brandt (Steven A.) 1982. *A Late Quaternary Cultural/Environmental Sequence from Lake Besaka, Southern Afar, Ethiopia*. Berkeley: PhD., Univ. of California.
- Brandt (Steven A.) 1986. The Upper Pleistocene and early Holocene prehistory of the Horn of Africa. *African Archaeological Review* 4:41-82.
- Brandt (Steven A.) & Carder (Nanny) 1987. Pastoral rock art in the Horn of Africa: making sens of udder chaos. *World Archaeology* 19 (2): 194-213.
- Butzer (Karl W.), Isaac (Glynn L.), Richardson (Jonathan L.) & Washbourn-Kamau (Celia) 1972. Radiocarbon Dating of East African Lake Levels. New observations provide fresh insights into late Quaternary paleoclimates. *Science* 175:1069-1076.
- Červíček (Pavel) 1971. Rock Paintings of Laga Oda (Ethiopia). *Paideuma* XVII: 121-136.
- Červíček (Pavel) 1979. Some African Affinities of Arabian Rock Art. *Rassegna di Studi Etiopici* 27:5-12.
- Clark (John Desmond) 1954. *The Prehistoric cultures of the Horn of Africa*. Cambridge: University Press.
- Clark (John Desmond) 1977. The domestication process in sub-Saharan Africa with special reference to Ethiopia. In : Higgs (Eric) [dir.], *Origine de l'élevage et de la domestication*, Nice: IX^e Congr. UISPP, colloque XX, pp. 56-115.
- Clark (John Desmond) 1988. A review of the archaeological evidence for the origins

- of food production in Ethiopia. In : Taddesse Beyene [ed.], *Proceedings of the Eighth International Conference of Ethiopian Studies* 1:55-69.
- Clark (John Desmond) & Prince (G. R.), 1978. Use-wear on Later Stone Age Microliths from Laga Oda, Harraghi, Ethiopia, and Possible Functional Interpretations. *Azania* 13:101-110.
- Clark (John Desmond) & Williams (M. A. J.) 1978. Recent archaeological research in southeastern Ethiopia (1974-1975): some preliminary results. *Annales d'Éthiopie* 11: 19-44.
- Contenson (Henri) 1963. Les fouilles à Haoulti en 1959. Rapport préliminaire. *Annales d'Éthiopie* 5: 41-52.
- Fattovitch (Rodolfo) 1988. Remarks on the late prehistory and early history of eastern Ethiopia. In : Taddese Beyere (ed.), *Proceedings of the VIIIth International Conference of Ethiopian Studies*, I: 85-104.
- Gillepsie (R.), Street-Perrott (F. A.) & Switsur (R.) 1983. Post-glacial arid episodes in Ethiopia have implications for climate prediction. *Nature* 306: 681-683.
- Grove (A.T.) 1983. African Climate in the Holocene. In : T. Shaw, P. Sinclair, B. Andah & A. Okpoko (ed.), *The Archaeology of Africa. Foods, metals and towns*, London: Routledge, pp. 32-42.
- Haberland (Eike) 1959. *Altvölker Süd-Äthiopiens*. Stuttgart: W. Kohlhammer Verlag.
- Joussaume (Roger) 1995. *Tiya, Éthiopie des mégalithes. Du biface à l'art rupestre dans la Corne de l'Afrique*. Chauvigny: APC (Mém. XI).
- Joussaume (Roger) 1981. L'art rupestre de l'Éthiopie. In: *Préhistoire africaine, Mélanges offerts au Doyen Lionel Balout*, Paris, A.D.P.F., pp. 159-175.
- Joussaume (Roger), Barbier (Sylvie) & Gutherz (Xavier) 1994. L'art rupestre du Sidamo (Éthiopie). *International Newsletter on Rock Art* 9:7-11.
- Le Quellec (Jean-Loïc) 1993. Scènes de Taurokathapsia au Sahara central. In : *L'arte e l'ambiente del Sahara preistorico : dati e interpretazioni. Memorie della Società Italiana di Scienze Naturali e del Museo Civico di Storia naturale di Milano XXVI(II)*: 319-324.
- Lydall (Jean) & Strecker (Ivo) 1979. *The Hamar of Southern Ethiopia, II: Baldambe explains*. Göttingen : Klaus Renner Verlag ("Arbeiten aus dem Institut für Völkerkunde").
- Mohaupt (Nicole) 1995. *The Dances of the Youth, as Reflection of Gender Relations and a Gerontocratic Society in a village of Bashada*. Hausarbeit zur Erlangung des Akademischen Grades eines Magister Artium vorgelegt, dem Fachbereich Sozialwissenschaften der Johannes Gutenberg Universität Mainz.
- Street (F. A.) 1979. *Late quaternary lakes in the Ziway-Shala basin, southern Ethiopia*. Cambridge: Unpublished PhD thesis.

LEGENDS OF THE FIGURES

Map : Location map of the sites mentioned in the text.

Fig. 1 : Overall view of the site of Godana Kinjo (Photo JLLQ). The numbers correspond to those on the situation map (see fig. 2), ie. From left to right : 1 = fig. 3 ; 2 = fig. 4 and 5 ; 3 = fig. 6.

Fig. 2 : Situation map of the engravings from the site of Godana Kinjo (see fig. 1 and 3-6).

Fig. 3 : Godana Kinjo : Engraving set No. 1. The bigger bovid is made according to the technique used in Šappe, but in a more rudimentary way (the lowering of the exoperigraphic surface is not complete and the inside surface is not polished). The tip of the horn bending downward is appended with a small pendeloque. The smaller bovid below is a simple line engraving. This group of pictures had unfortunately been redrawn with chalk before our visit (photo JLLQ).

Fig. 4 : Godana Kinjo : Engraving No. 2. Line engraving of a bovid, hardly visible because located on the very spot of a heavy run-off flow (photo JLLQ).

Fig. 5 : Godana Kinjo : Sketch of the bovid on fig. 4 (Computer-aided design : JLLQ).

Fig. 6 : Godana Kinjo : Pecked line engraving of a bovid partially polished but unfortunately redrawn with chalk by unscrupulous visitors (Photo JLLQ).

Fig. 7 : Ejersa Gara Hallo : Overall view of the engravings, made from a group of photographs (Photos : GA, Computer-aided design : JLLQ).

Fig. 8 : Detailed photo from the panel of Ejersa Gara Hallo (Photo : GA).

Fig. 9 : Detailed sketch of the bovid, the circle and the anthropomorph from Ejersa Gara Hallo. Compare with the photo published by E. Haberland, here fig. 10 (Computer-aided design ; JLLQ, from photo GA).

Fig. 10 : Ritual of jumping over bovids among the Hamar (photo from Haberland 1959). Compare with fig. 8 and 9.

Fig. 11 : Laga Harro : Overall sketch (Computer-aided design ; JLLQ, from photos GA).

Fig. 12 : Laga Harro, detail : Two engraved bovids (Photo GA).

Fig. 13 : Laga Harro, détail : Engraving of a character holding a spear most

probably made of metal (Photo GA).

Fig. 14 : Laga Harro, détail : Engraving showing a coffee-set with the *jäbāna* (𐤗𐤏𐤍 “coffee-pot”) and six cups (Photo GA).

Fig. 15 : Soka Dibiča : View of one of the engraved blocks. The well-visible bovid on the left is made according to the same “reserve” technique used for those from Šappe and stylistically comparable to them. The same is true of the other two on the right, more difficult to make out (Photo JLLQ).

Fig. 16 : Soka Dibiča : View of the third engraved block. You can make out three bovids on top of each other and turned to the right with behind them yet another one represented in vertical position. There are two more bovids turned to the left on the right side of the block but very difficult to make out. All those figures are made according to the same “reserve” technique used for those from Šappe and are stylistically comparable to them (Photo JLLQ).

Fig. 17 : Šappe : Engravings from a collapsed block. This picture was made from a photomontage of two different shots and then turned upside down. At the moment, the set is actually on the lower side of the collapsed block (photo JLLQ).

Fig. 18 : Šappe : One of the engravings from the main panel. You can notice the huge udder, the vertical dividing lines partially splitting the legs block, and the triangular pendeloque appended to the upper horn. The whole exoperigraphic surface is lowered (and you can see here and there the traces of the tool used for this task) whereas the inside surface is thoroughly polished. The very voluminous udder bears the same sort of “dividing line” as the legs (Photo JLLQ).

Fig. 19 : Šappe : One of the engravings from the main panel but this time with a non-polished inside surface. Notice the lowering of the exoperigraphic surface, and on the hind-legs the vertical dividing line and horizontal stripes, as well as the elongated pendeloques appended to the neck of the animal and its upper horn (Photo JLLQ).

Fig. 20 : Anšimalčo Kinjo (alias Galma) : Partial view of the engravings. Notice the analogy of style with the engravings from Šappe (Photo JLLQ).

Fig. 21 : Anšimalčo Kinjo : Section of one of the engravings on the top righthand corner of fig. 20 along the line A-B (Computer-aided design : JLLQ).

Fig. 22 : Differences between the paintings from the Laga Oda-Surré school (LOS) described by P. Červíček (1971) and the engravings from the Šappe-Galma School (ŠG) :

1. The ears *may* be represented at LOS, *never* at ŠG.
2. Twofold horns at LOS, triangular pendeloque appended to the upper horn at

ŠG.

3. There are anthropomorphs at LOS, not at ŠG.

4. The pendeloques are striped, rectangular and developed parallel to the neck and along its whole length at LOS ; subcircular, triangular and/or vertically developed at ŠG.

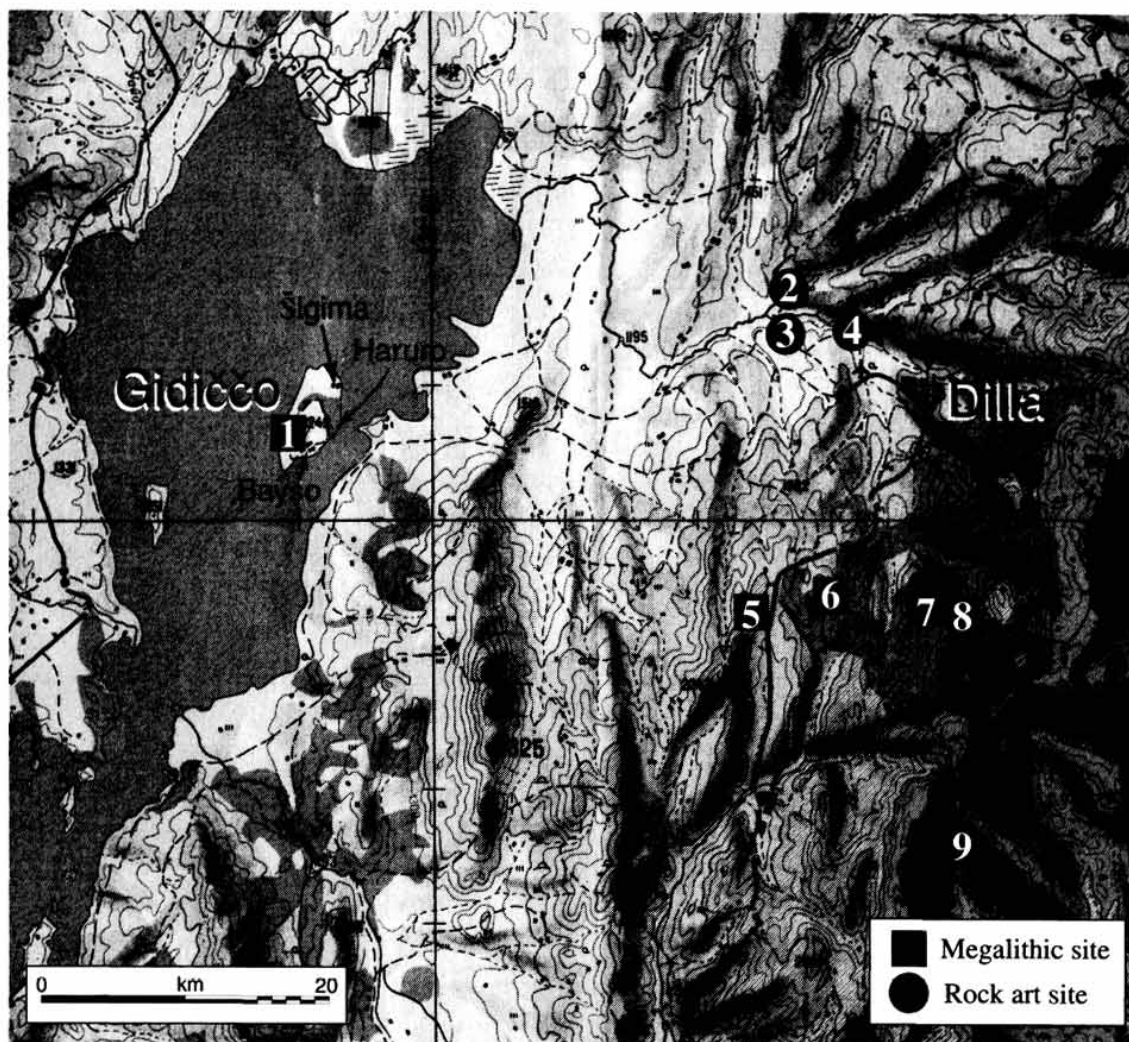
5. The cow udders are subtly indicated at LOS (only the teats are visible), and hypertrophic at ŠG.

6. The shape and joint of the legs are sometimes indicated at LOS, *never* at ŠG.

7. The legs are very often thin at LOS and sometimes end in a twofold “pincers-like” hoof which is never to be found at ŠG (where at the very most you can sometimes notice a vertical dividing line partially splitting the legs block).

8. The sheep are present at LOS, unknown at ŠG.

9. All the bovids from LOS have a long, thin tail with sometimes the indication of the tassel ; this appendix is rare at ŠG, and never shows the tassel.



- 1 – Bayso.
- 2 – Laga Harro.
- 3 – Šappe/Manceti.
- 4 – Ejersa Gara mallo.
- 5 – Tutitti.
- 6 – Tuto Fela.
- 7 – Soka Dibiča.
- 8 – Anšimalco Kinjo.
- 9 – Godana Kinjo.

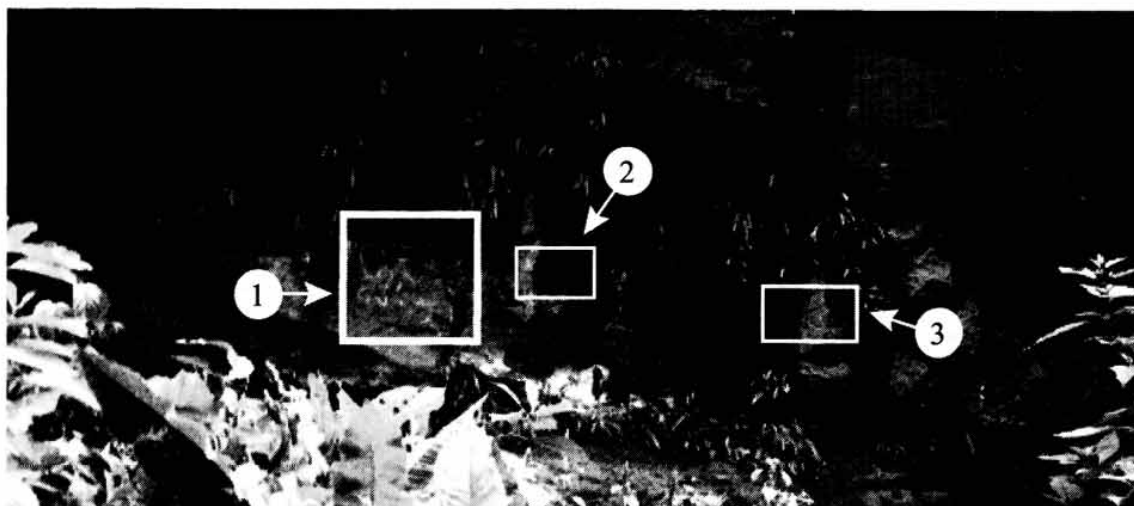


Figure 1

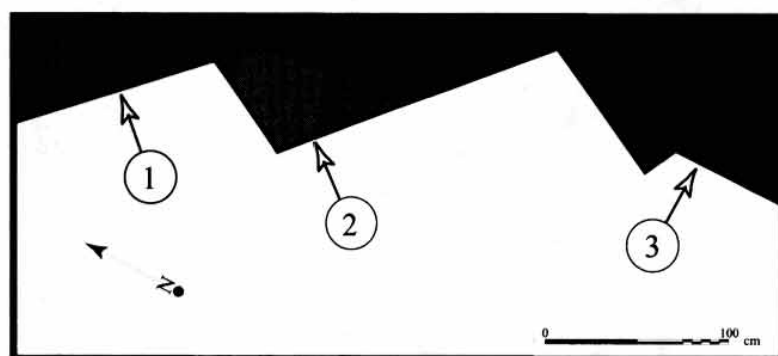


Figure 2



Figure 3

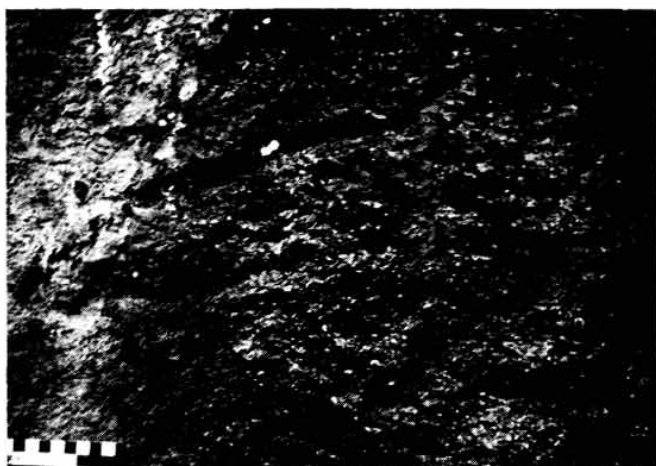


Figure 4

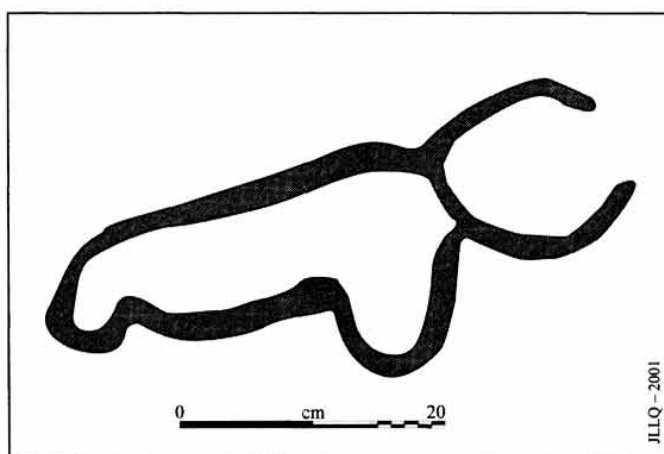


Figure 5



Figure 6

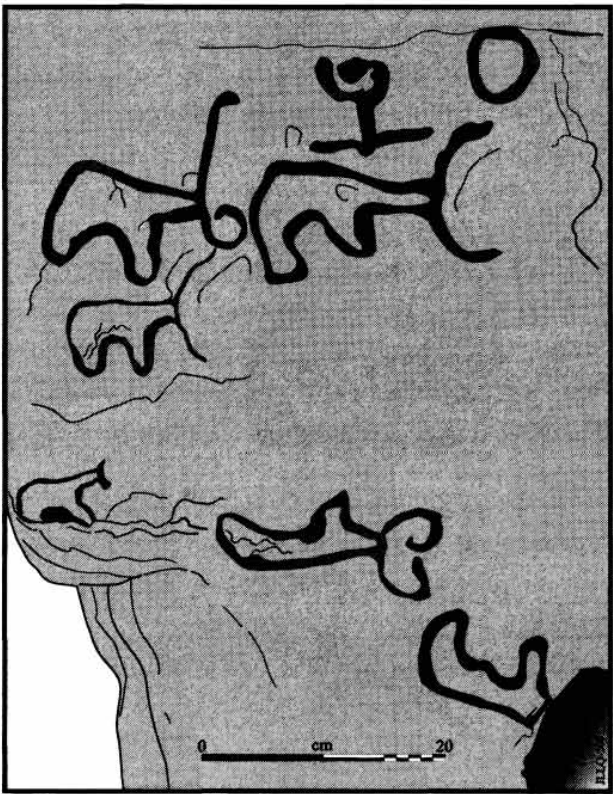
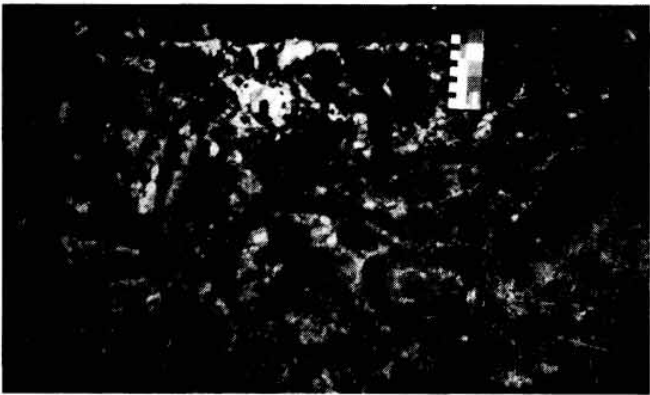


Figure 7



Firgure 8

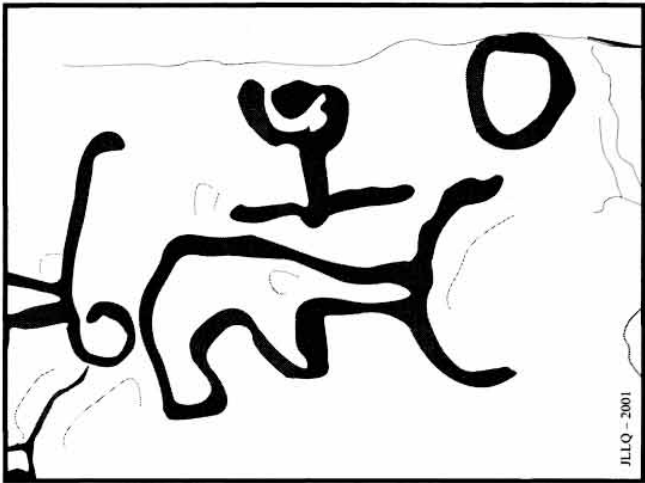


Figure 9



Figure 10

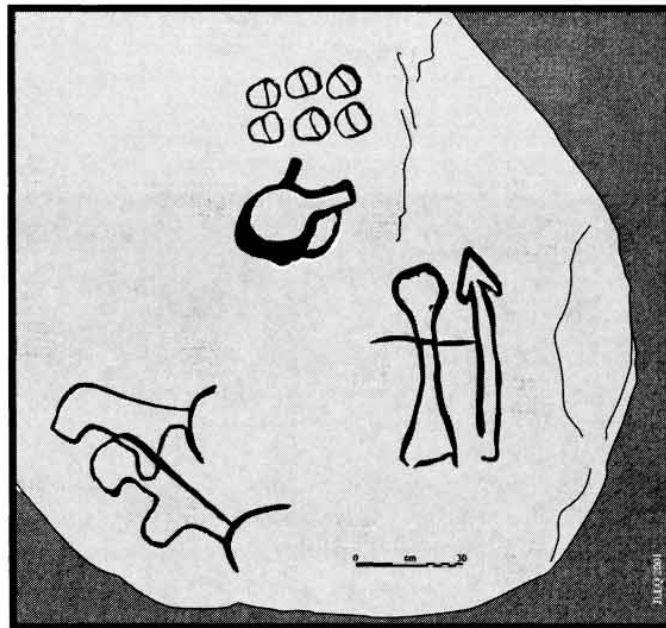


Figure 11

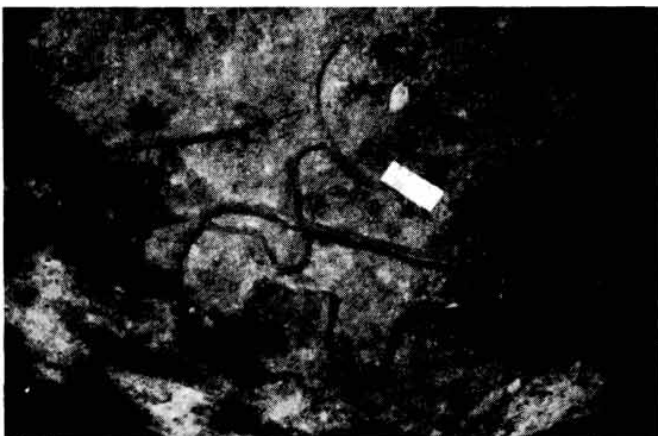


Figure 12

Figure 13



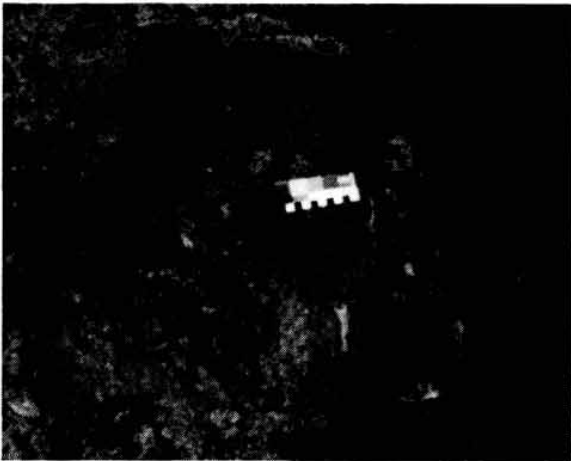


Figure 14

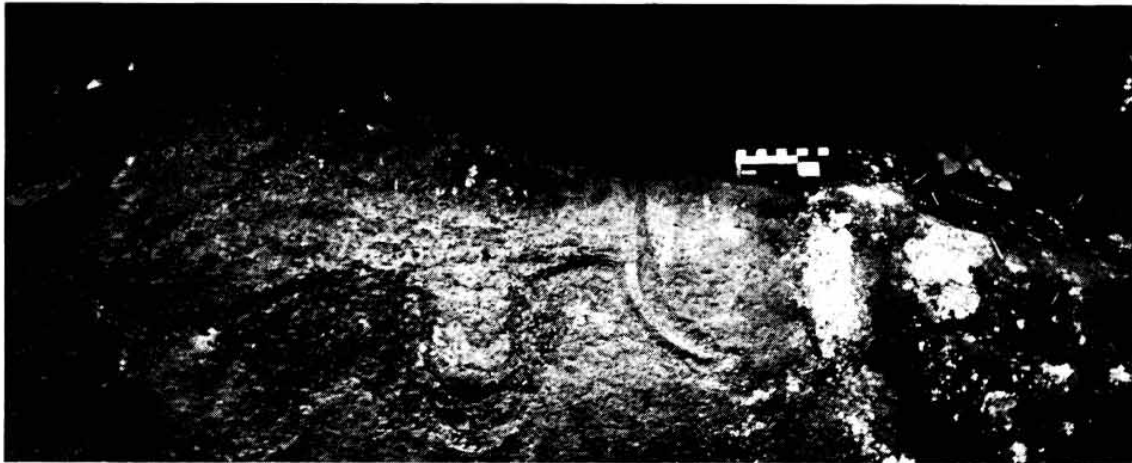


Figure 15

Figure 16





Figure 17



Figure 18

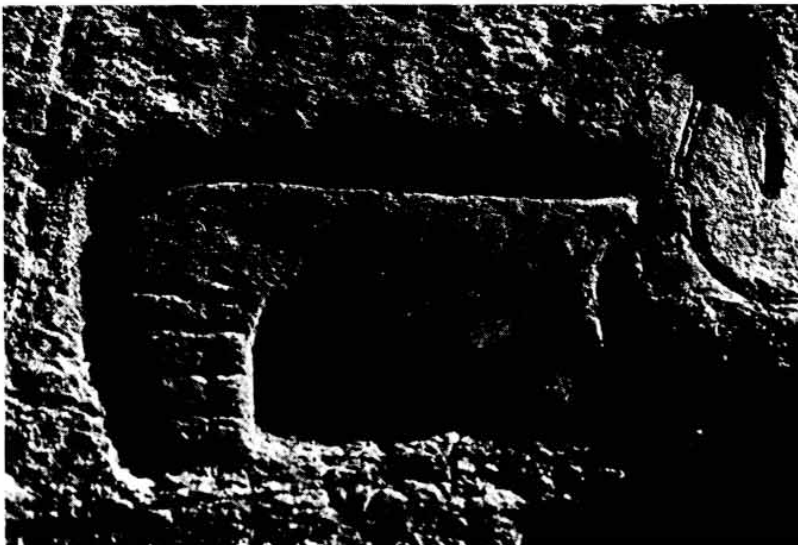


Figure 19



Figure 20

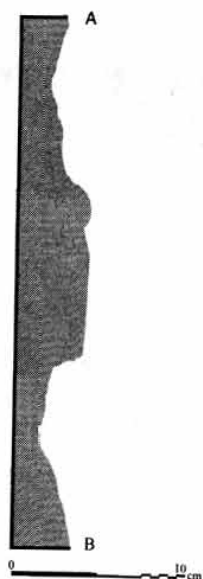


Figure 21

Figure 22

