

EARLY HOLOCENE BURIALS IN CENTRAL SAHARA :
ARCHAEO-ANTHROPOLOGICAL EVIDENCE FROM THE TADRART ACACUS
(FEZZAN, LIBYA)

Savino DI LERNIA*
Giorgio MANZI**

The Tadrart Acacus is a Silurian-Devonian sandstone massif characterising the south-western corner of the Libyan territory. Close to the Algerian border, it is divided from the Tassili-n-Ajjer by the Uadi Tanezzuf, and delimited at east by the Uan Kasa erg. It is part of the orographical systems around the 20° parallel, that on the whole constitutes a strong discontinuity in the Sahara desert. During the dramatic environmental changes at the end of the Pleistocene and in the early Holocene, these massifs acted as ecological basins, where human frequentation is attested even in the hyperarid phases of the desertification processes (Fig. 1).

Multidisciplinary researches were developed in the context of the Italian-Libyan Joint Mission in the last years (1990-1993); they are founded on a project mainly directed to the Acacus paleoenvironmental and paleoethnological reconstruction at the Pleistocene-Holocene boundary (Cremaschi, n.d.). The aim is the contextualization of the extraordinary evidence characterising the massif, first of all the rock art expressions (engravings and paintings). Viewed in the wider Saharan context, special emphasis is given to the neolithisation processes, the settlement-choice modalities, and the regional features of the prehistoric human frequentation.

In this direction, the analysis of the burial evidence represents a specific area of research, strictly related to the identification of human groups which inhabited the region, and to the study of their life condition as well. We had here the opportunity to combine both archaeological and physical anthropological specialisations since the first phases of research planning; this was also applied during the analysis and discussion of the results. Thus, it was possible to collect information on the field - e.g., for the interpretation of post-depositional processes - which are irrecoverable in successive phases of the analysis and are crucial for the comprehension of specific aspects; it also allows the integration of different sources of data in an unitary perspective.

In a first phase, the elements of specific interest are represented by sites of central-southern Acacus, where the presence of human skeletal remains is documented since the end of the 50s (Mori & Ascenzi 1959; Mori, 1965). Last

* Università di Roma "La Sapienza", Dipart. di Scienze Storiche, Archeol., Antropol. dell'Antichità, Piazzale Aldo Moro 5, 00185 Rome, Italie.

** Università di Roma "La Sapienza", Dipartimento di Biologia Animale e dell'Uomo, Piazzale Aldo Moro 5, 00185 Rome, Italie.

missions (1991 and 1992) allowed to re-consider two of these sites - **Imennenaden** and **Uan Muhuggiag** - while for another one - **Fozziaren** - a brief review aimed at the understanding of the complex issue is reported (Fig.2).

The site of Fozziaren (Mori, 1965) is located on a terrace along the homonymous uadi, in the southern part of the massif; it is characterised by "pre-pastoral" painting traces. For damages caused by the recent Tuareg salt procurement, the surface of the archaeological deposit is strongly disturbed, as well as the remains of some skeletons. On the basis of earlier anthropological observations (to be verified), the burial site refers at least to 6 individuals (2 children and 4 adults). Mori (1965) also notifies the presence of mummified organic tissues and traces of vegetable fibres. The stratigraphic sequence is composed by two main units: the upper one included the skeletons and was radiometrically dated to about 7.900 BP, whereas the lower unit dates to 8.072 BP (+/- 100). Without further specific informations, dotted wavy line pottery is also reported to be present (Barich, 1987b:115-116). Nothing more is possible to say at the moment about the archaeological context of the Fozziaren burial area.

The site of Imennenaden is composed by an articulated shelter with engravings, located on a terrace at around 1130 m asl in the upper stretch of the Uadi Imha. During the last mission it has been possible to locate the area of the burial already seen in 1961. It is situated few centimetres from the rock wall profile and is strongly disturbed, with poorly preserved few bone residuals. They are referable to at least two individuals, one of whom is a neonatal infant. On the basis of the position and orientation of the adult vertebral axis, it is possible to infer that the body was inhumed on his back with the head toward east.

The disturbance of the deposit does not allow punctual analyses; accordingly, it is not possible to say much about the archaeological context: the presence of a ceramic fragment with "dotted wavy line" decoration - unfrequent in the central Acacus - opens the question of the human presence on the Acacus terraces in the Early Holocene.

The other case-study regards the Uan Muhuggiag shelter, in the central expanse of the Uadi Teshuinat, at around 900 m asl. In both the local context and the whole Saharan region, Uan Muhuggiag represents a site of primary importance because of the complex of artistic, archaeological and anthropological evidence collected in the past. Some excavation essays were carried out, concerning both the archaeological features of the inner deposit and aspects of burial nature (Mori, 1965; Barich, 1987c). At this regard, in 1959 a mummified child burial dated to 5400 years BP came to light (Mori & Ascenzi, 1959): UMG.H1 or Muhuggiag 1 (Di Lernia & Manzi 1992:165). It has been deposited on his right side in an antelope skin wrapping, covered by vegetable fibres. This burial lay at the base of the stratigraphic sequence, in a small hollow 25 cm wide and 3 cm deep. As grave goods, the child had a necklace and two fragments of grinding stones, external to the wrapping. The anthropological evidence refers to 24-30 months old child, with "negroid" features.

In 1991, an excavation sample carried out in the uadi area facing the shelter brought to the discovery of a burial located at the base of a 2 metres deep stratigraphic series: UMG.H2 or Muhuggiag 2 (Di Lernia & Manzi, 1992). The archaeological content allows to clearly separate the two upper levels from the subsequent ones, given the presence of pottery only in the first and second stratigraphic units. The elements referable to the burial - preliminarily dated at around 7.800 years BP - are a simple grave structure, characterised by a stone heap in correspondence of the cranium and two covering sandstone slabs (Fig. 3).

The skeleton is in anatomical connection and represented in many of its elements, even if poorly preserved. The body, deposited in supine position with the head toward west, has hyperflexed pelvic limbs and the thoracic ones bended on the trunk, with the feet under the pelvis and both the hands at the sides of the face. The only element of grave goods is represented by a square-shaped sandstone fragment located above the chest (Fig. 4).

The cranium appears strongly dolicomorphic, with rounded occiput and a robust mastoid process, marked temporal lines, strongly worn dentition; the skeleton has long-limbed proportions and medium robustness; its stature can be estimated to be more than 170 cm.

At the moment, the analyses of the burial evidence and human remains in the Tadrart Acacus still are in a preliminary phase. So far, despite the manifest differences, there are some features shared by two of these sites (Imnennenaden and Uan Muhuggiag) that can be stressed: 1) the burial localisations inside or in the proximity of rock shelters; 2) their association with rock art expressions, that suggested in the past interpretations of funerary nature; 3) the extended supine positions of the body, that appears to be rare in the Sahara context; 4) the east-west orientation of the bodies (in spite of the variable position of the head); 5) the rarity of absence or grave goods.

Considering also the Fozziaren area, then, these few provisional examples put anyway in evidence an interesting "plurality" of manifestations linked to the funerary practices: a) the different areas chosen for the burial (uadi or terrace); b) the characteristics of the body preparation; c) the modalities of the burial realisation. At the present state of research it is problematic to offer an interpretation of this plurality, looking at the archaeological record as a whole. Independently from the rock art manifestations (engravings and paintings), material culture is represented by homogeneous features, like the decorative techniques and motives of the pottery, as well as the technology and typology of the lithic industry. The only exception seems to be the single "dotted wavy line" fragment of pottery at Imnennenaden, but it is too little in order to suggest real differences with the other sites. Until few years ago, while this decorative syntax was considered exclusive of the northern and southern Acacus (Barich, 1987b:116), it was more recently (1990-1993 researches) documented also in the central area of the massif. Besides Imnennenaden - where the "dotted wavy line" fragment is uncontextualized - elements of this pottery are represented at the

Uan Afuda cave in the Uadi Kessan (Cremaschi & Di Lernia, n.d.), a tributary of the well known Uadi Teshuinat.

In this complexive frame, even if strongly provisional, it is possible to make some tentative considerations. Besides the present absence of burial sites in the northern Acacus - maybe due to random factors - we observe a recurrent way to bury the body, without particular preferences of its location inside the shelters; lacking relationships with sex or age; a certain heterogeneity in the body preparation (partial or total mummification).

With this in mind, and moving from the analogies to the differences, the only significative exception is just UMG.H2 for the complexive features of the burial, probably also for the more complete data collection. UMG.H2 is at the moment the only occurrence of a burial outside the shelter, even remaining in the proximity of the shelter itself, and it is the only one for which it is possible to observe a certain "investment cost" in building the burial (Tainter, 1978): the digging of the pit certainly had a greater expense than in other cases, as well as the related structures (stone circles; flat covering stones); together with UMG.H1, it furthermore represents the only single burial. Notwithstanding the absence of other circumstantial elements, these features of UMG.H2 should be stressed, waiting for further analyses, just in progress.

Finally, the lack of burial sites in the beginning of the Holocene, i.e. before 8.000 BP, in spite of the well represented human frequentation in the northern (Ti-n-Thora: Barich, 1987a) and central Acacus (Uan Tabu: Garcea, 1992; Uan Afuda: Cremaschi & Di Lernia, n.d.) could be referred to the approach of previous researches, without excluding cultural and social specificities of groups with acquisitive economies.

REFERENCES

AA.VV., 1986,

Arte preistorica del Sahara. De Luca, Firenze.

BARICH B.E., 1987a,

The Wadi Ti-n-Thora Facies. in Barich B.E. (ed.) 1987 - *Archaeology and Environment in the Libyan Sahara. The Excavations in the Tadrart Acacus, 1978-1983*. B.A.R. Internat. Ser., 368, London : 97-112.

BARICH B. E., 1987b,

Research in the Central Acacus Massif. in Barich B.E. (ed.) 1987 - *Archaeology and Environment in the Libyan Sahara. The Excavations in the Tadrart Acacus, 1978-1983*. B.A.R. Internat. Ser., 368, London : 115-122.

- BARICH B.E. (ed.), 1987c,
Archaeology and Environment in the Libyan Sahara. The Excavations in the Tadrart Acacus, 1978-1983. B.A.R. Internat. Ser., 368, London.
- CREMASCHI M. (ed.), N.D,
 Wadi Teshuinat (Tadrart Acacus, Libya). The history of man and environment in Central Sahara from the late Pleistocene to the Early Holocene. *Quaderni di Geodinamica Alpina e Quaternaria.*
- CREMASCHI M. & DI LERNIA S., N.D,
 The transition between late pleistocene and early holocene in the uan afuda cave (Tadrart acacus, Libyan, Sahara). Environmental changes and human occupations. *Quaternaire* (in press).
- DI LERNIA S. & MANZI G., 1992,
 La sepoltura preistorica di Uan Muhuggiag - UMG.H2 - e le nuove ricerche nel Tadrart Acacus (Sahara libico). *Origini*, XVI:161-180.
- GARCEA E.A.A., 1992,
 Il problema dell' adattamento dell' uomo all' ambiente sahariano nelle trasformazioni climatiche degli ultimi 20.000 anni. in Lupacciolu M. (ed.) - *Arte e culture del Sahara preistorico: 57-62.*
- LUPACCIOLU M. (ed.), 1992, *Arte e Culture del Sahara Preistorico.* Quasar, Roma.
- MORI F. & ASCENZI A., 1959,
 La mummia infantile di Uan Muhuggiag. Osservazioni antropologiche. *Riv. di Antropol.*, XLVI: 125-148.
- MORI F., 1965,
Tadrart Acacus. Arte Rupestre e Culture del Sahara Preistorico. Einaudi, Torino.
- TAINTER J.A., 1978,
 Mortuary practices and the study of prehistoric social systems. *Advances in Archaeological Methods and Theory*, 1:105-141

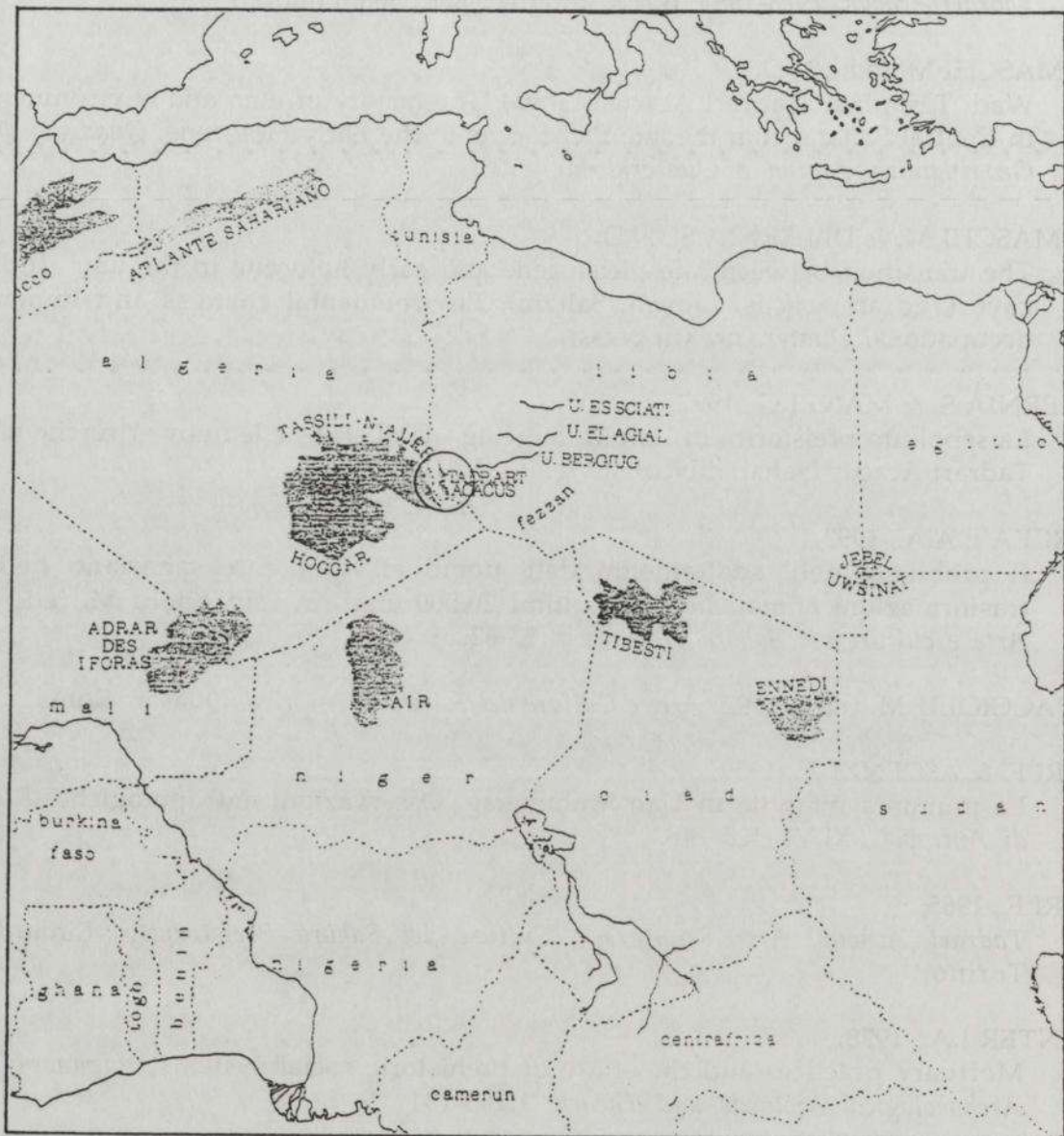


Fig. 1 : The Tadrart Acacus Massif, in the north-African context (after AA.VV., 1986).



Fig. 2 : Tadrart Acacus (Libya), distribution of the sites discussed in the paper :
1)Uan Muhuggiag; 2)Imnennaden; 3)Fozziaren.



Fig. 3 : Stratigraphic section of the Uan Muhuggiag H2 burial (after Di Lernia & Manzi, 1992).

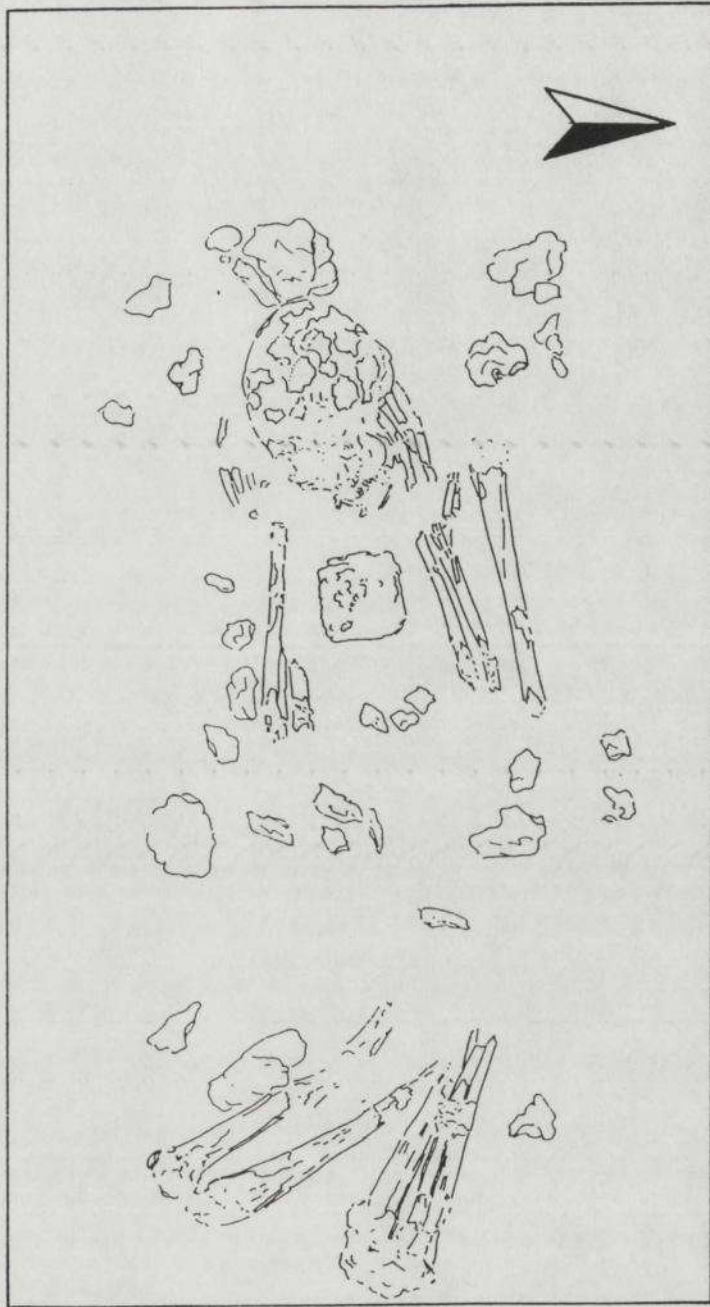


Fig. 4 : Sketch of Muhuggiag 2 skeleton after the removal of the covering stones (drawn by R.Caciagli).