6. A Fossilized Mandible from Near Wadi Halfa, Sudan

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could as well have been employed by the Arambak as by their neighbours. If they did, the kamanggabi, as standing figures with eyes (sc. heads) at their waists, are also members of the complex of war, hunting and fertility spirits represented by naturalistic figures with ventral heads, known in spectacular examples from the nearby Yuat River and even further afield.

Notes


2 Illustrated in Kunstkiste am Sepik, Museum Fur Volkerkunde, Basel, 1960, Plate IV.


A Fossilized Mandible from near Wadi Halfa, Sudan. By George J. Armelagos, Department of Anthropology, University of Colorado, Boulder, Colorado. With six figures

The University of Colorado Nubian Expedition consisting of Dr. Gordon W. Hewes, Director, Eugene McCluney, Duane Quiatt and Minor Van Arsdale discovered an area of heavy concentration of paleolithic material to the north-west of the village sites which they were excavating (fig. 1). While surveying the area, McCluney accompanied by Dr. Dexter Perkins, a paleontologist with the Museum of New Mexico Expedition, found the mandible in two pieces lying close together on a wind-eroded surface of site 6B28 associated with an upper paleolithic assemblage.

A preliminary analysis of the cultural material by Dr. Joe Ben Wheat, Curator of Anthropology at the University of Colorado Museum, has revealed the presence of three assemblages among six sites in the square kilometre in which the mandible was found. The assemblage of site 6B28 consists of stone tools utilizing a derived Levallois technique according to Wheat. The cores are usually discoidal. Fan-shaped single-ended cores are found with some frequency. The most common tools are small Levallois flakes, denticulate flakes, small side scrapers, medium-to-small-sized backed bladelets and a few burins. Wheat further states that the Levallois flake technology appears as the major distinguishing factor of the assemblage.

The pleistocene fauna is composed primarily of fossilized bones of bovids with the exception of a leporid mandible.

The larger of the two mandibular fragments was 108 mm. long and consisted of the major portion of the right body. The break along the oblique line and near the mandibular symphysis both display extensive erosion which would indicate that the post-mortem breaks are not recent. The fragment contains roots of the three molars, the alveolus for the pre-molars, a canine root, a lateral and right central incisor root and possibly the root of the left central incisor. Although there are no remains of the actual left central incisor, there is some indication that attrition may have occurred. The teeth display extensive post-mortem erosion. Radiograph examination revealed no dental anomalies.

The smaller fragment is 66 mm. long. A vertical break posterior to the third molar and an oblique break below the area of the left lateral incisor display extensive erosion. This fragment of the left body contains the roots of three molars, alveolus of the second premolar, the roots of the first premolar and the root of the canine and a portion of the alveolus for the left lateral incisor. The mental foramen is 18.5 mm. below the alveolar border which is not as eroded as on the right side. The height just posterior to mental foramen is 26 mm. The width is 12 mm. which gives an index of robustness of 46. The mental angle as computed from radiographs is 82.5°.

Although a reconstruction of the mandible has not been attempted, one possible way in which these two fragments may articulate is shown in fig. 6.

Acknowledgments

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FIG. 2. FOSSILIZED HUMAN MANDIBLE ON WIND-ERODED SURFACE OF SITE 6B28
Note flake tools. Scale is in centimetres.

FIG. 3. LATERAL SIDE OF RIGHT BODY OF MANDIBLE
Drawings (figs. 3-6): M. Anderson

FIG. 4. MEDIAL ASPECT OF RIGHT BODY OF MANDIBLE

FIG. 5. LOWER BORDER OF RIGHT BODY OF MANDIBLE

FIG. 6. OCCLUSAL SURFACE OF BOTH FRAGMENTS OF MANDIBLE

Notes
The expedition, which was financed by grants from the National Science Foundation and United States Department of State, was engaged in salvage archaeology of a number of village sites on the west bank of the Nile across from Wadi Halfa, Sudan.


2 Dr. Peter Robinson, Curator of Geology for the University of Colorado Museum, collected samples and has made this preliminary analysis.


4 This method of measurement was used by Thomas Murphy in 'The Chin Region of the Australian Aboriginal Mandible,' Amer. J. Phys. Anthropol., Series 2, Volume XV (1957), pp. 517-35.

5 The mandible is the property of the Sudan Antiquities Service and will be returned to Khartoum after the present study has been completed.