LUPINE PUBLISHERS

Journal Of Anthropological And Archaeological Sciences

DOI: 10.32474/JAAS.2021.06.000233

ISSN: 2690-5752

Review Article

Ancient West African and Saharan Foragers Mortuary Practices

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Received: November 23, 2021 **Published:** December 20, 2021

Abstract

The thesis of this paper is that "mortuary practices" encoded in elaborate mortuary programs that includes the handling of the deceased bodies and their inhumation in their final resting place recapitulates their lives and as such, can be read as their "curriculum-vitae". The contribution thus sets out to explore and bring to light pieces of social singularities fossilized in the archaeological record at a limited number of sites in West of Africa. The approach adopted is spatial and bio-archaeological, the deduction of information about behavior, lifestyle, diet, and health out of skeletal remains. The sample is a longitudinal one, ranging from 13,000 to 3000 years BP. It investigates Late Pleistocene and Holocene foragers burials from Iwo Eleru in southwestern Nigeria (West Africa) and Shum Laka in Southwestern Cameroon (Central Africa) and attempts to paint the "portraits" of the remote deceased individuals. Each of the selected case study is unique, refers to specific circumstances, without any claim at cultural connection or continuity.

Introduction

More than sophisticated studies of material culture remain, mortuary evidence provides access to profound insights into past and present communities lives and values [1-10]. As paradoxical as this may appears at first glance, burial is much more an issue for the living members of the communities than for the deceased individuals. It is the living members performing the funerals and burial processes who make decisions about which ones of the many aspects of the deceased individuals' life to transfer in the grave.

As far as Africa is concerned, the cognitive break-through that resulted in the institutionalization of burials took place during the latter part of the Late Pleistocene. Isolated human burials are found in different sites in East Africa, North Africa, the Nile Valley, and West Africa. They range in date from ca. 80.000 to 9000 BP and are documented at Taramsa I, Shum Laka, Mbi-Crater, Wadi Kubbaniya, Amekni, Ti-n-Hanakaten, Iwo Eleru, to mention but the most important finds (Figure 1). Formal disposal areas-cemeteries-emerged during the later part of the Iberomaurusian period in North Africa, at such sites as Mechta el Arbi, Afalou Bou Rhummel, Columnata, Beni Saf, Taforalt, and in Nubia at Jebel Sahaba [11-15]. From that period on, and in varying degrees according to time and places, burial practices in isolated graves and cemeteries became integral part of the human cultural package. It goes without saying, but worth emphasizing nonetheless, at this juncture of this paper: burials and cemeteries are more than simple spots in the landscape. They are manifestations of the operation of social practices and institutions that connect both worlds: that of the living and that of the dead. This paper sets out to explore and bring to light pieces of social singularities fossilized in the archaeological record of two Late Pleistocene to Late Holocene West Africa Foragers sites [4]. The approach adopted is spatial and bio-archaeological, the deduction of information about behavior, lifestyle, diet, and health out of skeletal remains [16, 17]. The sample is longitudinal and ranges from 13,000 to 3000 BP. It includes a Late Pleistocene forager burial at Iwo Eleru in southwestern Nigeria, and Early and Late Holocene ones at Shum Laka in West Africa. Each of the selected case study is unique, refers to specific circumstances, without any claim at cultural connection or continuity.

The man from iwo eleru: requiescat in pacem

The rock-shelter of Iwo Eleru, with a rather large overhang, is located at 7° 25' N and 5° 20' E in southwestern Nigeria (Figures 1 & 2). The site, containing the skeleton of an adult male, was excavated in the 1960s by [18, 19]. Recent research [20] that point to the mix of archaic and modern human traits suggests the age of Iwo Eleru man to range from 11 000 to 16 000 BP. Intersecting excavation trenches of the platform deposit have revealed a 1.50 m thick cultural deposit with no obvious stratigraphic break [18].

A microlithic industry with segments, borers, scrapers, trapezes, trapezoïds, points, and truncated blades, all made on quartz and chalcedony, was predominant in the lower part of the deposit. Pottery and ground stone axes were recorded in the upper part of the archaeological sequence. The poorly preserved human skeleton was found at the bottom of the excavation trench in the driest part of the rock overhang. The deceased, a middle-aged adult male, 35 to 45 years old was laid on the bedrock, in a tightly crouched position between two large collapsed stone slabs. The exposed site stratigraphy does not reveal any disturbance suggesting the excavation of a grave pit. The Late Stone Age layers pass across above the skeleton without any interruption [18]. The deceased was certainly laid to rest between two large stone slabs, and was very likely protected from scavengers with leaves, grass, and thorny branches and twigs. Later occupations sediment and refuses spread and covered the facto burial of Iwo Eleru man.

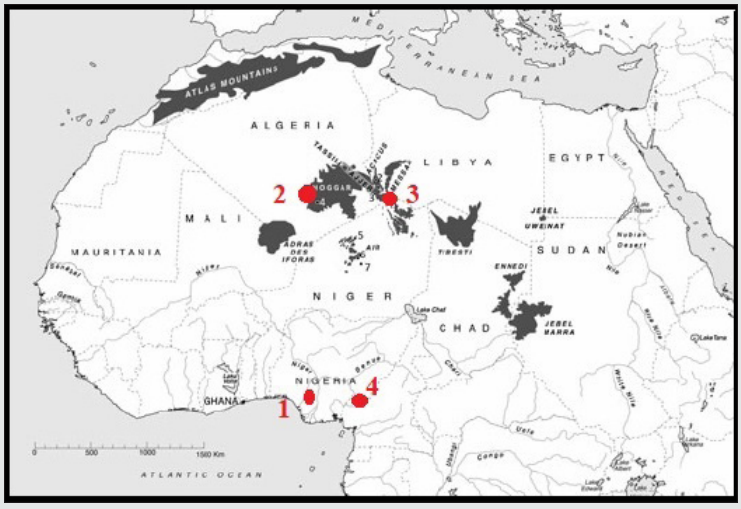

Figure 1: Location of the sites discussed in the text (adapted from Biagetti and Di Lernia 2013).

Figure 2: View of Iwo Eleru rock-shelter (Source: Allsworth, Harvati, and Stringer 2010).

The deceased had severe dental attrition. Don Brothwell explains that the teeth are worn down to the gums in great sweeping oblique curves running in different directions, only leaving small crescents of enamel on the higher parts [18]. The observed wear pattern could have resulted either from craft activities, or feeding habits, or a combination of both. Basket and reed mats makers often use their teeth to split the straw and reed in their craft activities. The tearing effect could have also been produced by stripping and eating raw and sometime sandy fibrous tropical tubers [19]. Iwo Eleru archaeological record points to the implementation of peculiar mortuary practices. The deceased person was laid to rest on the floor of a rock-shelter, between 11000 and 16000 BP, prior to the initial occupation of the site by groups of Late Stone Age foragers. The mortuary program implemented by these Late Pleistocene foragers included:

a) The selection of the most appropriate place, here the rock-shelter.

b) The deposition of the body on the rock-shelter floor.

c) The positioning of two parallel large stone slabs along the deceased body; and

d) Probably the protection of the body with leaves, twigs, and tree branches.

Ceremonies and rituals may have been performed. It is also probable that the standard practice there, at that time, for a certain kind of death, may have required the placement of the lifeless human body in a meaningful natural feature. It could have been a hole in the ground, a river, a large tree, a cave, or a rock-shelter.

The grand-mother and her shrouded grand children at Amekni

Amekni, in the southwest of the Ahaggar mountain-range, is located in a granite boulder zone, at the foot of one large boulder. The site was settled at the end of the Early Holocene, from the 7th to the 6th millennium BCE by groups of pottery-making foragers. Amekni excavations revealed the presence of three Early Holocene burials (21, Holl 2013) of a woman with two children. The woman was 40-50 years old and the children, 2-3 years old for the younger and 5-6 years old for the older. The children appear to have been wrapped in animal skins and buried in a crouched position. The 40–50-year-old woman is an unlikely mother for both children; more probably, she could have been a grandmother, real or classificatory.

The shrouded child from Ti-n-Hanakaten

Ti-n-Hanakaten, a rock shelter located at the junction of the Tadrart Acacus and the Tassili-n-Ajjer, some 150 kilometers southeast of Djanet, has an impressive 5-m thick archaeological deposit. The site occupation sequence stretches over 20000 years, with loose traces of Acheulean material culture. The longest part of the cultural deposit was accumulated during the Epipalaeolithic, before and after the advent of pottery. The excavation revealed a child burial dated to ca 6 000 B.P. devoid of any grave goods. The body of the deceased was tightly crouched, wrapped in animal skin, laid in a circular pit filled with grass and straw, and closed with a stone slab smeared with red ochre.

Shum Laka: A Gallery of Holocene Foragers' Portraits

Shum Laka rock-shelter is located at a relative high altitude, approximately 1600 m above sea-level, at 5° 51' 31'' N and 10° 4' 40'' E in Northwestern Cameroon volcanic highlands (Figures 1 & 3). It is at the foot of a waterfall and overlooks the Laka valley. The rock-shelter measures 1,181 m^2, 54 m in length Northwest-southeast, 25 m in width southwest-northeast, and 8 m in height at the entrance [22-24].

The site cultural sequence made of four depositional units ranges in date from 32000 to 3000 BP. The Pleistocene deposits (P, S, and Si) are dated as far back as 32000 BP. The Holocene deposits on the other hand (T-deposit, A-Layers, with ochre ash and grey ash layers) accumulated between 10000 and 3000 BP [24]. Even if the complementary localities of the Shum Laka foragers groups are not yet known, it is axiomatic that this rock-shelter was one of the many sites settled on a seasonal basis [25]. Nine burials with a total of 18 individuals were found in the excavated 82 m^2. They are distributed in two subsets. The earlier, with three burials, dates to 7100 – 6900 BP and the latter, with 6 graves is dated to 3300-3000 BP (Figure 3). What is the pattern of use of Shum-Laka for the interment of the deceased members of the forager's groups? Are the burials dispersed or clustered? If clustered, is this clustering intentional or accidental. These questions are important to settle the issue of the presence or absence of a cemetery. As a formal disposal area for the dead, a cemetery is more than a group of graves. It is a social institution, part of a group's cultural landscape.

Figure 3: View of Shum-Laka rock-shelter.

The Early Burial Sequence (7100–6900 BP)

The Early burial sequence is made of three features (Figure 4, Table 1), Burial 1, 2, and 3, found in the north and west of the excavated unit [24]. Shum-Laka 1, a 30-year-old male, was 1.63-1.66 m tall. He had calculus deposit and advanced wear on three canines and one incisive: the latter probably resulting from the use of the teeth in craft activities. He suffered moderate osteophytosis on some vertebras and inflammation on limbs. He also appears to have had two healed fractures, on the clavicle and left humerus [24]. The cause of death is not known but is very likely derived from the cumulated effects of poor health and aging. He died probably of old age in 7040+/-80 BP and his body was simply laid in a sleeping position on the bedrock, as was the case for the Iwo Eleru man, at some 8 m from the shelter entrance. His skeletal remains were exposed at 0.70 m below the surface. He was oriented north-south, laid on the right side, tightly flexed, the head raised, hands under the right cheek, facing south to the shelter entrance, with the body covered with stones. Burial 2 is located at 3 m of the rock-shelter entrance, in the west half of the excavated unit at approximately 5 m south of the previous one. It contains the remains of 2 sub-adults, Shum-Laka 2-SEI and Shum-Laka 2-SEII. The former, Shum-Laka 2-SEI is 4 years old (3-6 years) boy who suffered from growth arrest crises manifested by Harris lines. He may have been weakened by infectious desease shortly before his death in 7150+/-70 BP. He was buried at 0.65-0.95 m below the surface in a tightly contracted position, with the knees at the chin, oriented West-East, laid on the left side and facing north.

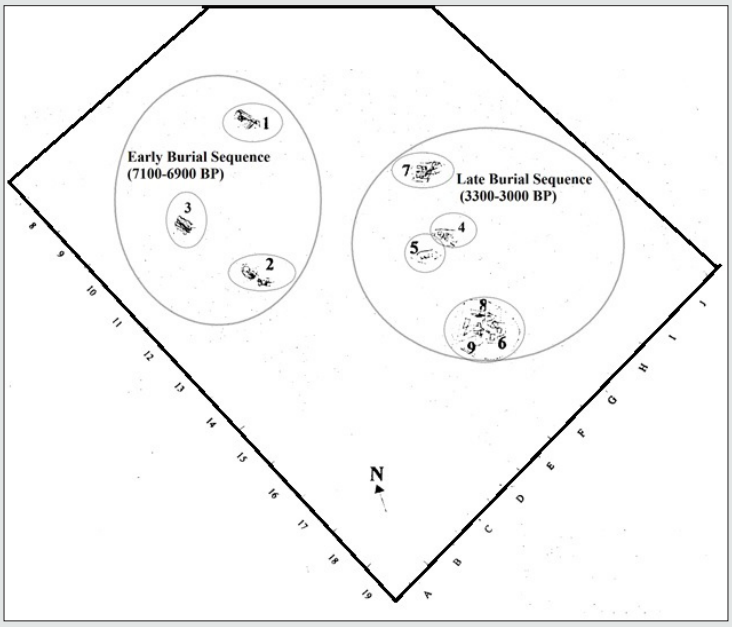

Figure 4: Early and Late Holocene burial clusters from Shum Laka.

Table 1: Demographic Profile of Shum-Laka deceased population.

Age group	Child	Teen	Young Adult	Adult	Middle aged adult	Total
Early Burial Sequence (7100-6900 BP)						
Female	-	-	-	-	-	-
Male	1	1	-	1	-	3
Unknown	-	1	-	-	-	1
Total	1	2	-	1	-	4
Late Burial Sequence (3300-3000 BP)						
Female	3	-	1	-	1	5
Male	3	-	-	1	2	6
Unknown	1	1	-	-	1	3
Total	7	1	1	1	4	14

Shum-Laka 2-SEII is a 15 year old individual of unknown sex. He/she had experienced abnormal dental retention and absorption and presents a dental fracture that could be related more probably to a trauma than to a development effect [24]. Evidence of slight enamel hypoplasia on five teeth (right M2, P2, left M2, M2 and P2) points to childhood nutritional disturbances that occured during the 6th and 7th years. As suggested by the hypertrophy of the supinator crest, Shum-Laka 2-SEII practiced throwing, of spears very likely. He also experienced chronic trauma on his left foot that led to a very localized vascular disturbance [24]. He died in 7150+/-70 BP and was buried in a half flexed half stretched position, the left arm stretched, the right one folded at right angle. Shum-Laka 2-SEI and 2-SEII, the former on top of the latter, were buried simultaneously in the same grave-pit measuring 1 m in length, 0.60 m in width, and 0.30 m in depth at 0.65-0.95 m below the surface in the site cultural deposit. The burial pit was surrounded and piled with stones. Shum-Laka 3, found in a secondary burial, is represented by a series of limb bones located at 2.5 m of the shelter entrance, exposed at 0.60 m below the surface. The selected bones, a right and left femur, right radius, and right fibula, were arranged in a bundle oriented west-east in an elongated pit, 0.75 m long, and 0.25 m wide, surrounded by stone blocks from the limestone deposit. Some animal bones, an antelope tooth and a fragmented cercopithecus fibulae, were found associated with the deposit. It is however not clear if this association was intentional or a mere coïncidence. Shum-Laka 3 was a 1.64 – 1.66 m tall 18 years old male. He was a right-handed individual with well-marked muscular attachments on the femur, fibula, humerus, and ulna. The hypertrophy of the supinator crest of both ulnae where inserts a short muscle for supination, is the most striking morphological feature…. It may reflect activities such as throwing which involves abrupt angular displacement of forearm and shifts from forearm supination to pronation [24]. An inflammation due to a strained ankle was unhealed at the time of Shum-Laka 3 death in 6870+/-80 BP. Each of the three burials recorded in this early burial sequence phase is unique, in terms of body arrangement and implemented mortuary program. Despite overlapping readings of standard deviations, the sample of radiocarbon dates, ranging from 7150+/-70 BP to 6870+/-80 BP, supports this suggestion. Accordingly, Shum-Laka rock-shelter was not a cemetery during the earlier part of the Holocene.

The Late Burial Sequence (ca 3300 – 3000 BP)

The Late burial sequence, made of six graves dated to ca 3300 – 3000 BP, are located in the eastern half of the excavated part of the site (Figure 4, Table 1). The grave of Shum-Laka 4 was found at 7 m from the shelter entrance, at 0.25 m below the surface. The deceased is a 8+/-2 years old girl. She presents evidence of enamel hypoplasia, slight lines and pits on a number of teeth. It is the case for right M1 and I2, and left M2, C-, suggesting nutritional deficiences and/or infectious diseases all along her short life. The first health crisis documented by small and large single pit on the left lower canine occured when she was 6-9 months old [24 Table 1]. The second crisis, recorded as slight line on the right first upper molar, happened at 2 – 3 years of age. The third, registered as very slight lines on the right upper second incisive, occured at 4 – 5 years; the fourth, seen as slight lines on left lower canine, at 5-7.5 years ; and finally, the sixth and last one, recorded on the left second upper molar occured in her last year, when she was 8-10 years old. She died in 3045+/-60 BP. She was buried in a grave pit 0.70 m long, 0.50 m wide, and at least 0.10 m deep, in a very flexed position, oriented SW-NE, laid on the left side, and facing north.

Shum-Laka 5 burial was found at 4-5 m from the shelter entrance at 0.25 m below the surface (Figure 4). It was at less than one meter from Shum-Laka 4 grave. The deceased is a 4+/-1 years old child, very likely a girl [24]. She has slight calculus on the inside face on the left upper canine and right lower second molar and died in 3045+/-60 BP. She was buried face up, laid on the back, oriented NE-SW in a small pit measuring 0.50 m in length, 0.25 m in width, and 0.10 m in depth. Shum-Laka 6-SE III and SE IV grave is part of a cluster of three burials located in the southern portion of the excavation (Figure 4). It is a double primary interment found at 5 m from the rock-shelter entrance, at 0.75 – 0.95 m below the surface. Shum-Laka 6-SE III is a 1.53 – 1.55 m tall young adult female, aged 20 – 30 years at time of death. She presents well marked muscular attachments on clavicles, humeri, and ulnae, on both sides but much more pronounced on the right one. The hypertrophy of the ulnae supinator crest suggests that the supinator muscle of the elbow … could have been involved in a repeated activity [24]. Slight fine linear calculus deposits were observed on right M2 and M2, as well as left M1, M2, and M3. She has several carious cavities, some light and other large and deep penetrating, on right M1, M2, and M3, and left M1, M2, and M3. As indicated by slight enamel hypoplasia lines, she went through several episodes of nutritional and/or health stress in her childhood. The earliest, recorded on the right lower first molar, occured when she was 2 – 3 years old ; the second, when she was 4 – 5 yrs ; the third at 5 – 6.5 yrs ; and the fourth at 6 – 8 years of age [24, Table 1]. Shum-Laka 6-SE III died in 3300+/-90 BP. She was buried in a grave pit 1.30 m long, 1.00 m wide, and 0.25 m deep, in a flexed position, oriented South-North, laid on the left side, and facing west.

Shum-Laka 6-SE-IV shares the same grave with Shum-Laka 6-SE III. She is a mature to old adult female, 1.43 – 1.48 m tall and 30 – 50 years old. She has well marked muscular attachments on the humeri and ulnae, with assymetry suggesting that she was right-handed. She had severe dental and bone pathologies. [24] have diagnosed a periodontal disease, with loss of alveolar bone, tooth loss, and hypercementosis, dental impaction, abnormal dental position, osteoarthritis, and hand enthesophyte. Three stages of alveolar bone loss, from moderate to complete loss have been documented. A moderate bone loss, with the tooth still in place and more than half of the root exposed, is attested on left I1, P1, P2, and M1, and right P1, P2, M1, and M2. Severe bone loss, characteristically tooth evulsion with alveolus still visible, is documented on right I1 and C- and left I1, I1, I2, and C-. And finally complete tooth loss with obliterated alveoli was more pervasive. It is recorded on all mandible right teeth with the exception of the canine, and right I2 and C-, left P1, P2, M1, and M2, and C- Arthritis, a degenerative joint

disease with bone destruction and proliferation is recorded on all cervical vertebras but the atlas, on sacral element, and on left and right ulnae. The lesion are present on both the superior and inferior aspects. The vertebral body of the fifth cervical is also completely squashed and deformed, especially on the inferior face such as for the second and third cervicals [24]. Ageing, combined to heavy manual labour are frequent causes of arthritis. Neck osteoarthritis particularly is due more generally to carrying heavy loads on the head [26-28].

Shum-Laka 6-SE IV pathologies are clearly related to ageing processes. She died in 3300+/-90 BP and was buried in a twin grave, oriented South – North, laid on the right side, more or less slightly flexed, and facing East. A buffalo rib, probably an accidental association, was found in the pit fill. Shum-Laka 8 burial contains the burnt skeletal remains of two adult individuals arranged in three bones deposits at 0.85 m below the surface, and associated with Shum-Laka 6-SE III and IV grave. The space occupied by this deposit followed mainly a west-east axis, similar to the direction of the flexed lower limbs of skeleton SE IV [24]. The recorded bones deposits are made of a cranial vault and tibia fragments in pile A, long bones and cranial vault fragments in pile B, and finally, long bones and mandibulae fragments in pile C. Shum-Laka 8-A and B are two robust adult males. The younger was 30 – 35 years old and the older, 40 – 45 years old. The latter and older individual has a carious cavity in the left M3. They were very likely cremated and some of their skeletal remains selected and buried. The association with Shum-Laka 6 –SE III and SE IV appears to have been accidental even if it is very tempting to link these burial events. In that perspective, the burial cluster with tomb 6 and 8 may have featured the association in death of four adults ; two young to mature adult male and female aged respectively 30 – 35 and 20 - 35 years and two mature to old adult male and female, 40 – 45 years old for the former and 30 – 50 years old for the latter. This clustering does not appear to have been intentional as suggested by the case of burial 9 discussed below.

Shum-Laka 9 remains are also part of the same burial cluster. They were found at 0.65 to 0.95 below the surface, precisely on the same level and under the ribcage and the upper arms of skeleton SE III [24]. The skeletal remains of the adult individual of unknown age and sex are fragmentary and disarticulated. They were very likely cremated at high temperature (ca 800°) and buried in a pit 1.20 m long, 0.70 m wide, and 0.30 m deep. The remains, chalky and whitish in color, include fragments of most of the anatomical parts of human skeleton, skull, teeth, vertebraes, ribs, scapulae and clavicles, hands, sacrum, coccyx, and coxal bones, long bones, feet, and undetermined long bones, pointing to the burial of a complete cremated individual. The hypothesis of an early deposit, the upper part of which had been disturbed by a later primary interment, would explain the presence of burnt bones in the upper and intermediate levels of the burial unit 6 [24].

There is, accordingly, a succession of two distinct mortuary programs in this part of the site. An earlier tradition of cremation documented by burial 8 and 9 with predominantly adult males. And a later double primary interment with two mature to old adult females that has partially disturbed the previous burials. It is worth emphasizing the fact that the cremated remains proceeded from the implementation of two mortuary programs. In one, that of Shum-Laka 9, the whole body was represented in the tomb. In the other, that of Shum-Laka 8-A and B, selected bones of two adult males were collected and buried in three distinct piles. Burial 7 is a collective interment located in the east central part of the excavation, at 1.5 m from Shum-Laka 4 (Figure 4). It was reached at 0.75 m below the surface, in a pit measuring 1.00 m long, 0.60 m wide, and 0.45 m deep. 237 skeletal remains belonging to seven individuals, all children, were recorded. Several cranial vault and long bone fragments showed traces of heating [24]. The feature includes a combination of primary and secondary interments. Primary burials are represented by Shum-Laka 7 – F, a 5 – 7 years old child and Shum-Laka 7 – A, 10 – 16 years old. The disarticulated remains belong to five children, aged 2-4, 3-5, and 5-9 years. The sample of seven children includes at least 3 boys, 1 girl, and 3 individuals of unknown sex. Some of the children represented in this collective burial present a number of pathologies, dental enamel hypoplasia and hypocalcification, scaphocephaly, Harris lines, and evidence of trauma [24]. Evidence of enamel hypoplasia was found on the right and left M2 of a 4-5 year old child and enamel hypocalcification on the left M2 of a 3 – 4 years old one. Another child aged 2-3 years presents a case of scaphocephaly, a premature fusion of the saggital suture, that constrains brain development and generally results in elongated skulls. Harris lines, pointing to nutritional stress resulting in arrested growth, are documented on four individuals. It is the case for the right femur, radius, and left tibia Skeleton F, one of the associated primary burial of a 5 – 7 years old boy. The nutritional stress and arrested growth occured in the fifth, sixth, and seventh years. The three remaining cases from children aged 2 – 4 years are represented by the right radius, fibula, and left femur, pointing to a crisis that occured just a few months before death [24, Table 1]. Finally, Skeleton F, a 5 – 7 years old boy was injured by a stone arrowhead stuck in his left illium. It is clearly the decisive cause of death even if the young was already seriously weakened by successive severe nutritional deprivations.

Burial 7 is particularly puzzling and difficult to interpret. Some bones are burnt. Part of skeletons A and F present anatomic connections suggesting that they were primary burials. There is a concentration of a series of cranial vaults on the east flank of the pit. Is it possible to reconstruct the interment sequence? Is this association accidental or intentional? As can be reconstructed from the series of the burial photographs and drafts [24], the burial deposit is on the average 0.40 m thick, with the lower limbs of skeleton F slopping down to 0.60 m below the surface. Burnt bones and younger children remains, amounting to 215 bones out

of a total of 237, are found at depth ranging from 0.15 to 0.40 m. There seems to have been two successive but separate interment sequence. The first and earlier one consisted of a double primary burial of an injured 5 – 7 years old boy (skeleton F) and a 10 – 16 years old teenager of unknown sex, superimposed at the bottom of the burial pit. They died in 3180+/-80 – 3025+/-60 BP. Because of the post-depositional disturbances, the original position of both bodies could not be reconstructed accurately. Skeleton A was «laid slightly ventrally and on its left side with the back of the vertebral column close to the western limit of the burial pit [24].

The second and latter interment concerns the remains of five younger children aged 2 – 4, 3 – 5, and 5 – 9 years. The bones are disarticulated, and highly fragmented. Some are burnt. Four cranial vaults of individual 2, 3, 5, and 7 are arranged along the east flank of the burial pit. The burial pit, sub-circular in shape, 0.60 m long and 0.50 m wide, was delimited by large stone blocks and dug down to 0.40 m where it disturbed the previous twin primary burial. The bodies of these deceased children were entirely or partially cremated prior to final interment. In fact, burial feature 7, with first a double primary burial, disturbed by a second interment of cremated skeletal remains, presents a reversal of the southern burial cluster 6, 8, and 9, where earlier cremated remains (burial 8 and 9) were disturbed by a later double primary burial (Burial 6). Shum-Laka Late burial sequence dated to ca 3300 – 3000 BP is particularly interesting. There are two distinct mortuary programs, one based on the use of cremation and the other articulated on primary burials. There are seven cremated individuals and six primary burials, two of which are twin interments. In all the cases, most of the deceased, 9 out of 14, are children. The recorded differences in mortuary programs and the patterns of overlap and disturbances, point to the use of Shum-Laka rock-shelter by distinct or connected foragers groups during the Late Holocene. Interment may have been singular and infrequent, unfit for the concept of a cemetery.

A Rock-shelter with burials, Not a Cemetery

Shum-Laka rock-shelter was infrequently used for the burial of deceased foragers during the Holocene period. The early and late burial sequences are made of isolated episodes of interment. None of the graves was marked or discernable from the site surface. The practice of grave-good is non-existent. The recorded adults, both male and female, were relatively robust individuals, 1.42 to 1.66 m tall, with well-marked muscle attachments. Dental diseases were frequent pointing to a carbohydrate rich diet. Dental wear, like the flatness of the occlusal wear on molars, marked wear on anterior teeth [24], suggests a coarse diet. There is some evidence of violence and nutritional stress appears to have been frequent. The demographic profile of the deceased population reveals interesting variations (Table 1). Most of the Early burial sequence deceased are male: a 4-year-old boy with a 15-year-old individual of unknown sex in Burial 2, a 18 years old male in Burial 3, and finally, a 30 years old mature adult in Burial 1 (Table 1). The profile of the Late burial sequence population is much more diverse and almost at equilibrium, with 6 males, 5 females, and 3 individuals of unknown sex. The male fraction is distributed into 3 boys and 3 adults, the female one into 3 girls and 2 adult females (Table 1).

Concluding Remarks

The sample of case studies selected and discussed in this paper is a longitudinal one, stretched from 13,000 to 3000 BP. The events under scrutiny took place in different climatic and environmental circumstances, at Amekni (Hoggar, Algeria) and Ti-n-Hanakaten (Tadrart Acacus) in the Central Sahara on the one hand, and Iwo Eleru (Nigeria) and Shum Laka (Cameroon) in Equatorial central/ west Africa on the other hand. A bioarchaeological approach [29] to human skeletal remains reveals significant information about the life courses of the deceased, their curriculum-vitae being registered in their bones. At the very end of the Pleistocene, around 13,000 BP, an adult male who used his teeth for his craft died and was respectfully laid to rest on the floor of a rock-shelter at Iwo Eleru in southwestern Nigeria [30-37]. During the Holocene, 2 children, 2-3 years old for the younger and 5-6 years old for the older were buried at Amekni in the Hoggar with a 50 years old woman [38-49], a child, of unspecified age, was carefully wrapped in an animal skin shroud and buried at Ti-n-Hanakaten rock shelter in the Algerian part of the Tadrart Acacus, and finally, 8 children were buried in two distinct chronological segments in Shum-Laka rock shelter located in southwestern Cameroon grass-field at 1600m above sea-level was used as a burial place by mobile Holocene equatorial foragers (Lipston et al 2020, Orban et al 1996, [24].

References

1. African Union Interafrican Bureau of Animal Resources (2010) Framework for Mainstreaming Livestock in the CAADP Pillars,.
2. Kitching PR, Hammond J, Jeggo M, Charleston B, Paton D, et al. (2007) Global FMD control – Is it an option? Vaccine 25(30): 5660-5664.
3. Paaryb (2014) Pan African Animal Resources Year Book paaryb_20160203_2014_en.pdf
4. Rutebarika (2012) Foot And Mouth Disease In Uganda: Situation analysis in Uganda Spatial distribution and trends. At the Global Foot-and-Mouth Disease Research Alliance meeting 17thto 19thApril 2012 Hazy-view, Kruger National Park South Africa.
5. Baluka SA, Ocaido M, Mugisha A (2014) Prevalence and economic importance of Foot and Mouth disease, and Contagious Bovine Pleuropneumonia Outbreaks in cattle in Isingiro and Nakasongola Districts of Uganda 2(4): 107-117.
6. Catley A, Berhanu A (2003) Using Participatory Epidemiology to Assess the Impact of Livestock Diseases. FAO-OIE-AU/IBAR-IAEA Consultative Group Meeting on Contagious Bovine Pleuropneumonia in Africa 12-14 November 2003, FAO Headquarters, Rome, Italy.
7. CAHO (2011) A manual for practitioners in community - based animal health outreach (CAHO) for highly pathogenic avian influenza.
8. Queenland Government (2019): Clinical signs of Foot and Mouth Disease.
9. AU-IBAR (2014) Standard Methods and Procedures (SMPs) for Control of Foot and Mouth Disease in the Greater Horn of Africa. Nairobi
10. FAO (2005) Livestock Sector Brief. Lao Peoples Democratic Republic. FAO, Rome, Italy.

DOI: 10.32474/JAAS.2021.06.000233