

ANTHROPOLOGICAL REMAINS FROM THE MIDDLE BRONZE AGE BURIAL PITS IN ASHQELON

YOSSI NAGAR AND LILLY GERSHUNY

The poor preservation of the burial pits exposed at Ashqelon (see Gershuny, this volume) was partially responsible for the very fragmentary and badly preserved anthropological finds. The *kurkar* sandstone, the high salt contents and possibly other unknown factors contributed to the crumbling state of the bones and their complete disintegration. The human remains included bones of adult individuals, men and women, as well as children. A summary of the human bones is presented in Table 1.

Twenty-two of the excavated pits (30%) contained human bones. Of the pits with bones, only 16 pits yielded skulls or remains thereof (Pits 130, 146 [2 skulls], 147 [2 skulls], 160–164, 200, 204 [3 skulls], 205 [4 skulls], 206, 207, 210, 216, GZ Pit 10 [2 skulls]). These were positioned at various locations: six skulls were placed in the eastern side of the pit (Pits 146, 160–162, 164, 206), two skulls in the southeast (Pits 146, 204), eight skulls in the north (Pits 147 [2 skulls], 163, 204, 205, 210, 216) and one skull in the northwest (Pit 130). There is clearly no preference for any particular placement within the pit, and although our sample is rather small, it appears that the decision of where to place the skull in the pit and the general direction of the bones was determined by the prevailing circumstances of every individual pit, i.e., its size, the number of offerings and the number of interred individuals.

The number of buried individuals per pit was analyzed and the results show a varying distribution of individuals per pit. There are sixteen pits with a single individual (Pits 130, 137, 138, 140, 143, 160–164, 200, 206, 210, 212, 213, 216) and six pits with multiple individuals, which include three pits with two individuals (Pits 146, 147, Giv'at Ziyyon Pit 10), two pits with three individuals (Pit 204, the second pit was not analyzed) and one pit with four individuals (Pit 205). Although there are more pits with a single interment, it does not necessarily point to a preference of single burials and in this case, our small sample prevents any substantial conclusions.

Human skulls were associated with platter or carinated bowls. Six skulls were found on the side or under the side of a platter bowl (Pits 130, 146 [2 skulls], 163, 164, 204); only one of them was that of a child. Carinated bowls were associated with four skulls (Pits 147, 162, 207, 210), belonging to either a child or a young adult, and only in two cases to adult individuals.

Table 1. Summary of the Human Remains

Pit No.	Description
130	Fragments of a cranial vault on the side of a platter bowl
137	Fragments of limb bones; not diagnostic, yet they were not of children
138	Fragments of limb bones; not diagnostic, yet they were not of children
140	Fragments of limb bones; age and gender could not be estimated
143	Fragments of limb bones; age and gender could not be estimated
146	Fragments of a cranial vault, analyzed with a thin cross-section; 17 deciduous teeth and permanent tooth germs indicate a child, 2.5 years of age, and 2 other teeth indicate an adult individual; the child's bone fragments were found close to two platter bowls lying one atop the other, and above the bowls was the adult's skull; the child's skull was in the southeast and the adult skull, in the east
147	Half of a left-side mandible with first and second molars, first premolar, canine and lateral incisor; 6 teeth of the maxilla were found separately; within the carinated bowl (260/5) were 7 mandibular teeth with light wear, which belonged to a young adult aged 20–25 years; the gender of the individuals could not be identified; both skulls were in the north of the pit
160	Humerus, radius and ulna, palm bones and fingers in anatomical articulation, at a right angle to the bones of the forearm; the epiphyses of the phalanges and the humerus are entirely closed, indicating an adult individual (<16 years); the dagger (270/3) found next to the lower limbs of the individual could possibly indicate a male; maximum length of ulna is 262 mm, pointing to an estimated height of 171 cm (Bass 1987); the skull was placed at the eastern side of the pit
161	Humerus, radius and ulna, palm bones and fingers in anatomical articulation; the epiphyses of the phalanges and humerus are entirely closed, indicating an adult individual; maximum length of the ulna is 270–272 mm; the skull was placed in the eastern side of the pit
162	Fragments of a mandible, molars of the maxilla, long upper limb bones and lower limb bones of an adult individual; based on the tooth wear, the age is estimated at 40–50 years (Hillson 1986); the cranial fragments were lying in close proximity to a carinated bowl, at the eastern side of the pit
163	Cranial fragments under the side of a platter bowl at the northern side of the pit; other bone fragments were too broken to determine gender or age
164	Fragmentary lower limb bones with a bronze knife between them; cranial fragments were found under the side of a platter bowl at the eastern side of the pit
200	Jar burial (300/1) with long bone fragments and 6 teeth; the cortical cross-section of the limb bones is very thin; the different phases of teeth eruption indicate a child, 6 years of age (Hillson 1986)
204	Fragments of a cranial vault under a platter bowl (304/7) at the northern side of the pit; the long bones were found nearby had a fairly thick cortical cross-section, perhaps indicating a male individual; below the layer of vessels and under a jug (304/16), two individuals were found, a female in the west and a male in the southeast: (1) fragments of a cranial vault, left side of mandible and maxilla and one deciduous tooth; the mandible is rather delicate, possibly indicating a female, and the wear of the teeth points to an adult, 20–30 years of age (Hillson 1986); the mandible and maxilla have numerous absent teeth (multiple agenesis), left upper second incisor, left lower second premolar, left lower second molar and lower canine; (2) fragments of an adult cranial vault; the mastoid process is developed, indicating a male individual; the upper lateral incisor has a light wear, pointing to an age between 20–30 years (Hillson 1986)
205	Bones and skull fragments of at least four individuals: a child <11 years of age, two adolescents aged 12–18 years and an adult aged >45 years, whose skull was possibly placed in the north of the pit; the estimated ages are based upon tooth eruption and attrition rate (Hillson 1986); one individual was laid with the pottery vessels, while the other three were laid below the pottery vessels; it is impossible to ascertain which was the upper individual, but in Pit 204, the upper individual was the older one, and this may be the case for this pit as well

Table 1. (cont.)

Pit No.	Description
206	Fragments of a cranial vault and long bones of an adult individual found at the lower level of the pit; the bone fragments were very fragile and imbedded in hard sandstone clumps, yet the individual seemed to have been placed in anatomic articulation; the cortical cross-section of the bones was rather thin and the upper teeth (canine, premolar and incisor) had very light attrition, pointing to a young adult aged 20 years; the skull was placed at the eastern side of the pit
207	Fragments of a cranial vault and a few long bones; the cortical cross-section of the bones is thick, indicating an adult individual; the cranial vault fragments were found inside a carinated bowl (307/8) in the northern side of the pit
210	Fragments of a cranial vault with a very thin cross-section, placed at the northern side of the pit; few fragments of long bones and one deciduous molar; the teeth eruption stage indicates a child of 3–4 years of age (Hillson 1986); these fragments were “glued” to a carinated bowl (310/6)
212	Fragments of long bones, possibly upper limbs; age and gender could not be estimated
213	Non-diagnostic fragments of long bones, as well as fragments of an animal’s cranial vault
216	A fragment of a mandible; all teeth were broken post-mortem, and fragments of a cranial vault in the northern side of the pit, indicating an adult individual
GZ Pit 10	Upper first and second molars showing characteristic wear of an individual aged 20–25 years; a second fragment of a mandible with a permanent first molar and a second molar that did not erupt indicate another individual, 8–9 years of age

This brief description of the anthropological remains shows that burial was performed according to circumstances that prevailed at that time. It might be suggested that Pits 204 and 205, with multiple interments, represent eminent families within the community, yet other single burials carry some distinct finds.

REFERENCES

- Bass W.M. 1987. *Human Osteology: A Laboratory and Field Manual* (3rd ed.). Columbia, Mo.
 Gershuny L. This volume. Middle Bronze Age Burials in Ashqelon.
 Hillson S. 1986. *Teeth*. Cambridge.

