Chapter 6.2

THE PLASTERED SKULLS[1]

Denise Schmandt-Besserat

Abstract: *The chapter analyzes Skull 88-1, the most spectacular plastered skull from 'Ain Ghazal, placing it in the PPNB plastered skulls tradition by comparing and contrasting it to parallel evidence from ever-larger contexts: (1) the fourteen decapitated heads at 'Ain Ghazal, including five plain, three painted, and six plastered skulls; (2) the assemblages of plastered skulls in seven other Levantine sites including Jericho, Beisamoun, Kfar HaHoresh, Yiftahel, Tell Aswad, Tell Ramad, and one Turkish site, Kösk Höyük. Lastly, skull removal and plastering are considered in light of ancient Near Eastern iconography and early historical texts presenting decapitation as an abomination.*
Key Words: *plastered skull, plastered face, funerary ritual, ancestor cult, necromancy*

While surveying the tell of 'Ain Ghazal at the end of the 1987 season, members of the expedition spotted fragments of a human skull exposed in the profile of a bulldozer trench in a nearby highway construction site. Full excavation in 1988 revealed that the skull had a covering of plaster modeled in the form of a remarkably naturalistic face (Fig. 6.2.1) (Simmons, Boulton, and Roetzel Butler 1990). The discovery was significant because Skull 88-1 offers a striking example of a funerary practice already illustrated at 'Ain Ghazal and in several other sites in the Levant and Turkey.

The custom of reconstructing the features of the dead with plaster in the Levantine Neolithic has been the subject of several outstanding works. G.O. Rollefson (Rollefson 1990) has discussed the use of plaster at 'Ain Ghazal; Y. Goren (Goren and Goldberg 1991; Goren and Segal 1995), W.D. Kingery and P. Vandiver (Kingery, Vandiver, and Prickett 1988; Kingery, Vandiver, and Noy 1992) have investigated the composition of the material. In particular, a thorough analysis of the plaster and manufacture of three 'Ain Ghazal specimens was performed by Carol A. Grissom and Patricia S. Griffin (see C.A. Grissom, and P.S. Griffin in this volume). Furthermore in her Ph.D. dissertation, M. Bonogofsky has treated the skeletal aspect of the 'Ain Ghazal plastered skulls (Bonogofsky 2001). In the present study, I am not reiterating the results of these publications, but rather I build upon them to analyze Skull 88-1 as an art historian by comparing and contrasting it with parallels at 'Ain Ghazal and elsewhere. The description of the material is mostly drawn from my own observations, since I was fortunate to study first hand not only plastered skulls from 'Ain Ghazal but also the specimens from Jericho at the Jordan Archaeological Museum in Amman, the Rockefeller Museum in Jerusalem, the Ashmolean Museum in Oxford, the British Museum in London, and the University of Sidney. I also had the opportunity to observe the Kfar Hahoresh skull and one of the two examples from Beisamoun at the Israel Museum in Jerusalem, and finally, the Tell Ramad specimens on exhibit at the National Museum in Damascus. Only the Turkish authorities did not grant permission to view the skull of Kösk Höyük in the Nigde Museum. In what concerns the interpretation, K. Kenyon (Kenyon 1957: 62-64) and others after her have considered skull plastering in the light of ethnographic data with the far away and unrelated cultures of New Guinea. I have preferred to investigate the symbolism of skulls in the ancient Near East as reflected in art and cuneiform texts and how it could shed light on the Neolithic data.

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[1] The dates mentioned in this chapter are expressed as non-calibrated radiocarbon dates, reflected by the use of the lowercase "bc" referent.
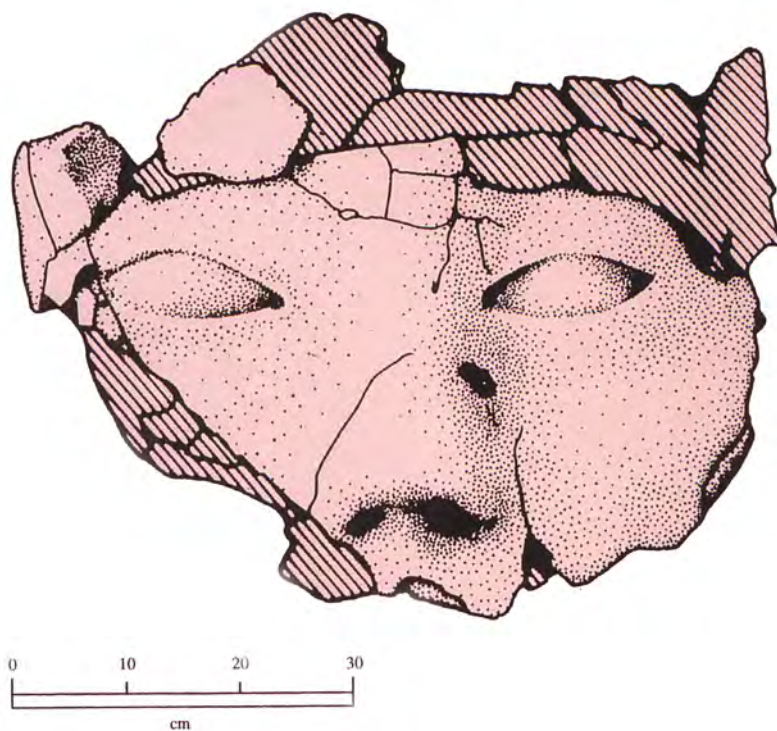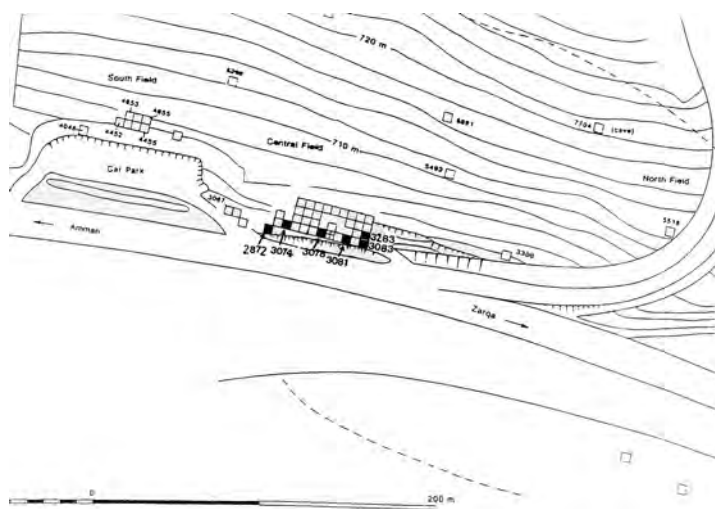
I. PLASTERED SKULL 88-1

Skull 88-1 came from Square 2872 in the so-called Central Field of the 'Ain Ghazal excavations (Fig. 6.2.2). It was buried in a small pit dug below a building of the Middle Pre-Pottery Neolithic B-3 period (MPPNB-3), dated ca. 7000-6700 bc (Simmons, Boulton, and Roetzel Butler 1990: 108) and probably close to 6800 bc (Rollefson, Kafafi, and Simmons 1989b: 23; 1991: 113). Because of the bulldozer work in the area it is difficult to fully assess the way the cranium was deposited. According to a personal communication from Gary Rollefson, it was placed face up. No other plaster pieces were associated suggesting that the skull was already fragmentary when it was buried. It was mixed, but not directly associated with, other human bones from a different individual, including a cranial bone consisting of the fragment of an occipital, left parietal, and temporal bone. According to the excavators, the mixing of bones may have occurred when the pit intruded into an earlier burial as it was being excavated in antiquity (Simmons, Boulton, and Roetzel Butler 1990: 108).

Fig. 6.2.2. Skull location in 'Ain Ghazal Central Field. Drawing by Muwafaq Bataineh.

The skull was below a painted plaster surface regarded by the excavators as the floor of a domestic house (Simmons, Boulton, and Roetzel Butler 1990: 108-109).
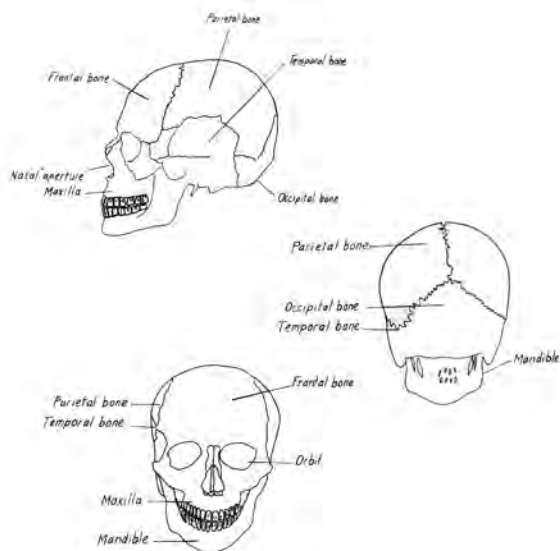
The Cranium

The cranium was restored in the laboratory in 1988 and again in 1996. At first, it was embedded into a thick plaster base that had the disadvantage of consolidating a deformation caused by dirt between the bone joints (Pl. 6.2.1a). In 1996, after the skull fell from the exhibit shelf where it was displayed, the forty-four bone and plaster fragments (Pl. 6.2.1b) were cleaned and anatomically

Fig. 6.2.3. General anatomy of a
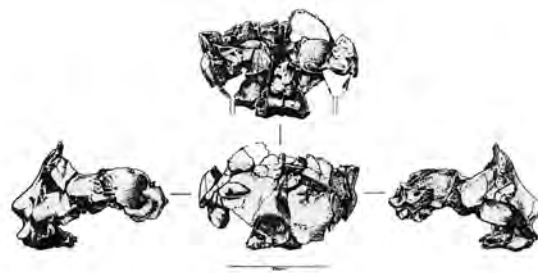skull. Drawing by M. Bataineh.

Fig. 6.2.4. 'Ain Ghazal skull 88-
1. Drawing by H. de Reede.

reassembled by Dr. Friedrich Zink, Conservator at the Museum of Jordanian Heritage, Irbid (Pl. 6.2.1c-d). I owe much of the information presented below to Friedrich Zink who, in 1997, kindly shared with me the notes he had kept during the restoration.

The bone thickness of Skull 88-1 suggests that it belonged to an adult male of thirty or more years of age. The cranium is not only fragmentary, but also incomplete. The three remaining separate pieces represent parts of the frontal, temporal, parietal, and occipital bones, but the upper part of the cranial vault is entirely missing (Fig. 6.2.3). The only plastered section of the skull is ca. 14 cm wide and 12 cm high. It corresponds to the center of the visage, from above the mouth to just above the right brow (Pl. 6.2.4). The mandible was removed. It was broken off by force, as is attested by a small fragment still attached to the right of the upper jaw. Finally, the teeth alveoli of the maxilla, which are sharp, suggest that the upper dentition was extracted *post mortem*, presumably in preparation for the plastering treatment. Cut marks taken as evidence for defleshing are reported both in the occipital area (Simmons, Boulton, and Roetzel Butler 1990: 108) and on the right temporal bone (Rollefson, Kafafi, and Simmons 1989b: 23; 1991:113). On the other hand, F. Zink observed no traces of scraping on the bones proving that the soft tissues were easily removed.

The Plaster

The yellowish plaster used to recreate the facial features is hard and brittle. It covered the entire face, visibly extending over the forehead and the ears, while leaving the top and back of the head bare. The maxilla is now empty, but traces of plaster filling in two tooth alveoli at the back of the maxilla suggest that the upper jaw was also covered. The fresh plaster was applied directly over and adhered perfectly to the cranium showing that the bones were thoroughly cleaned before the treatment. The plastering consisted first in placing small lumps of plaster inside the cranium in front of the orbital and nasal cavities. The three plaster pads took different shapes. A quadrangle, ca. 3.2 by 4 cm and 2 cm thick, was placed in the left orbit, a round ball ca. 3.5 cm in diameter in the left, and what remains in the nasal cavity is a triangular plug, ca. 2 cm across. There is no evidence of any stuffing to hold the pads. The plaster placed in the cranium served then as a base for the face reconstruction. The lumps were pushed enough to protrude outside the skull and be modeled into eye lobes and a nose. Above, a surface layer was applied over the entire face. Thin over the nose, it thickened on either side to form the cheeks, reaching about 2 cm at the ear. There was no adhesive involved. Except for the smooth finish, there is no surface treatment and, in particular, no polishing or burnishing and no paint.

The facial features recreated included forehead, brows, eyes, nose, cheekbones and ears. Lips and chin may have been modeled but are not preserved. The eyebrows are sensitively rendered with a smooth naturalistic arch. The bridge of the nose is broad. The nose is short, wide, globular, and slightly up-turned. Long, linear nostrils are traced far apart diagonally into the plaster with a pointed tool. They are ca. 1 cm long and of unequal width. The left nostril is about 4 mm, or twice as wide as the right one. The single ear preserved is depicted as a broad crescent shape about 2.3 cm wide, 4 cm long, and 1 cm thick. Except for the stylized ears and nostrils, the modeling of each particular individual feature is naturalistic, but the visage composition is not. The eyes are placed low in relation to the brows, which squeezed the features together bringing the cheekbones to swell oddly at the base of the nose. The ears are featured higher and more forward than anatomically correct.

The eyes are the most prominent features of the visage. The left eye, which is partly damaged, shows that a small almond-shaped lens of plaster was inserted to form the eye lobe. Set well below the eyebrows and far apart, the eyeballs modeled in plaster bulge, slightly tilted down towards the nose. The eyelids are not depicted but the cornea is sharply defined by a low, crisp ridge. The eye corner is well indicated. A small accidental chip, low on the right eye, cannot be interpreted as depicting the pupil. There is also no evidence for any bitumen treatment. The very elongated eyes, ca. 4 cm long and 1.4 wide, give the impression of not being wide open, but rather squint slightly as if falling asleep. F. Zink proposed that the exaggerated distance between brow and eye, the slanted eyes, and the position of the nostrils meant that the skull was to be presented slightly tilted backwards in order to stare at the viewer with a sleepy gaze.

Finally, one word must be added on the truly outstanding artistic quality of Skull 88-1 (Rollefson and Kafafi 2001; Rollefson, Kafafi, and Simmons 1889b: 23). Except for the archaism denoted by the absence of eyelids, the linear nostrils, and the stylized ear, the 9000-year-old plastered skull exhibits a remarkable sophistication in the treatment of the human visage. It exemplifies the work of an individual in full command of his/her craft, who handled the difficult plaster technology with great skill, captured the anatomy of the face, and masterfully executed the modeling. The area of the eyebrows and the dreamy expression of the eyes are particularly impressive. It is interesting to speculate on the impact of such plastered skulls on art. Compared to the small stone figurines characteristic of the previous PPNA period, the life size reproduction of the human visage brought Levantine sculpture to a scale unknown before (Bar-Yosef 1980). Also, the plastered skulls were striving towards naturalism as no previous anthropomorphic art form had ever done. The large statues of PPNB 'Ain Ghazal, Jericho, and Nahal Hemar can possibly be earmarked as resulting from the new genre. An influence of the plastered skulls would explain the choice of plaster for the manufacture of the statues, their unusually large size, and some specific stylistic details such as an upturned nose and linear nostrils (Schmandt-Besserat 1998: 6-Ch. 6).

II. PARALLELS AT 'AIN GHAZAL

Skull 88-1 was part of a complex funerary tradition. The people of PPNB 'Ain Ghazal disposed of their dead in multiple ways as follows: (1) the body was discarded haphazardly as in a trash burial (Rollefson, Simmons, and Kafafi 1992: 461,463; Rollefson, Kafafi, and Simmons 1989a: 116-118); (2) the individual was extended and buried in an open area (Rollefson 1983: 30); (3) the skeleton was decapitated and laid in flexed position under a plastered surface or (4) in an open area; (5) the skull was buried separately. The burial types 3 and 4 involving the decapitation of the corpse shortly after death seem most frequent. Because of the poor condition of the skeletons, the exact number of decapitated bodies is not known. It is therefore not possible to find out whether the fourteen excavated skull burials leave some heads unaccounted for, and if so, how many. What we do know is that the decapitated skeletons were buried with no apparent distinction, whereas the skulls received one of three treatments: plain, painted, or plastered. The following analysis situate Skull 88-1 among the fourteen PPNB skull burials of 'Ain Ghazal.

Fig. 6.2.5. Cache of three plain
skulls. Photograph by C. Blair.

Fig. 6.2.6. Cache of four skulls, Skull D to
the far right. Photograph by B. Byrd.

The Plain Skulls

The simplest head burials consisted of several skulls placed together in a pit. In one case (Square 3083/3283), three male crania of individuals about 60, 20-30, and 11 years old were placed along a wall and under a plastered surface (Fig. 6.2.5) (Rollefson and Simmons 1986: 153,155, Fig. 12). A second cache, from the nearby Square 3074, yielded four adult male skulls (Fig. 6.2.6). Among these, two were undecorated and, as will be discussed below, two were plastered (Simmons and Rollefson 1984: 390). All the plain crania were without mandibles. The five undecorated skulls burials represent too small a sample to dare any far-reaching conclusions. Nonetheless they point out that PPNB plain skulls burials were deemed appropriate for male adults as well as children. They involved separating the crania from the mandible, after which the skulls were buried in groups in a particular area of the site (in the contiguous Squares 3074 and 3083/3283).

The Painted Skulls

Coloring was a second treatment given to human skulls in PPNB 'Ain Ghazal. It required less skill than recreating the facial features with plaster. Still, time and know-how were needed to secure and prepare the (ochre?) pigment and to smear it over the entire cranium.

In 1983, a number of small human skull fragments tinted with a reddish hue and black marks were found scattered on the floor of a house in the Central Field (Square 3078, loci 062, 063, 073) (Simmons and Rollefson 1984: 390; 1985: 47-48). They include eight frontal bones, one temporal, one right and one left parietal, and one occipital, all probably belonging to a same male individual, 20-45 years old. The faint yellowish-red color (Munsell 5YR 5/6) is unevenly distributed, very thinly in some parts and a bit thicker in others. Three of the skull fragments, a frontal, right parietal, and temporal bone, also bear a small black surface, perhaps bitumen. The areas covered were as small as 7 by 4 mm on the temporal bone and 4 by 3 cm on the right parietal, forming no recognizable pattern. The frontal bones exhibit fine traces of scraping in an overlapping pattern. The crisscross lines appear too thin and widespread to be defleshing marks. Instead the overall distribution of the striations suggests that a gritty substance was rubbed on the surface. It is therefore conceivable that the red color consisted of a paste of roughly ground ochre or a type of 'crayon' rubbed over the cranium.

A second red-and-black painted cranium was recovered in 1984 in the Central Field (Square 3083, locus 107) (Rollefson, Schmandt-Besserat, and Rose 1999). The damaged skull is reduced to the left and right temporal, the right and part of the left parietal, and most of the occipital. It was buried below a plaster
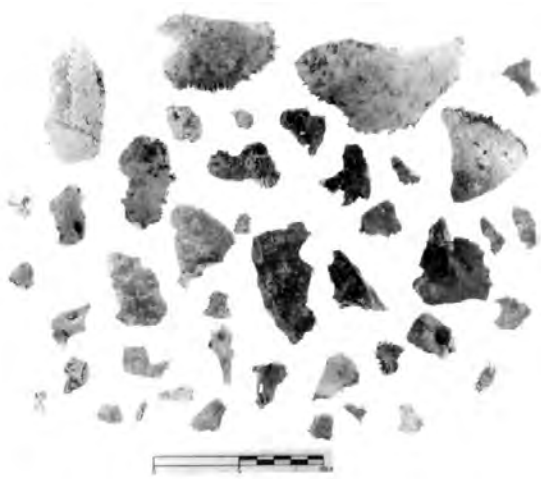
Fig. 6.2.7. Red and black skull from 'Ain Ghazal. Photograph by H. Debajah.

surface under a MPPNB building dated between 7250 +- 110 bc and 7100+- 80 bc, which makes it the earliest decorated skull at 'Ain Ghazal (Fig. 6.2.6). The circumstances are much the same as for the specimen above; the cranium seemed also to be separated from the lower jaw. The reddish color was of a similar shade (Munsell 2.5 YR 6/6), and was light in some areas and darker in others. Again, the bones were finely scratched, strengthening the idea that the pigment was applied with a repeated hand motion. Bitumen was also visible in a small area with no defined pattern. J.C. Rose, physical anthropologist, identified the skull as that of a female, about 15-30 years old, which is the only notable difference from the previous example.

Other badly damaged cranial bones of a 7 or 8 year-old child, bearing black pigment at the back, were part of the 1984 assemblage (Rollefson and Simmons 1985: 17; 1986: 153). This black skull together with the red-and-black cranium and the cache of three plain skulls discussed above came from the same room of a same building in Squares 3083/3283 (Fig. 6.2.2). This structure produced a concentration of burials unmatched elsewhere at 'Ain Ghazal: five burials arranged around a fireplace, another in a room corner, and an infant skeleton beneath a doorway. Particularly puzzling are the remains of four infants not interred but exposed *on* the floor at one-meter intervals (Rollefson, Simmons 1985: 17; 1986: 153, 155), and a peculiar deposit of two small animal figurines stabbed with flints (Schmandt-Besserat 1997: 52-Ch. 2).

As limited as it is, the sample of three painted specimens suggests that skull coloring was almost as frequent as the undecorated treatment. Like the plain skulls, the lower jaw was probably removed but the colored skulls were buried alone rather than in groups. Coloring was applied on a female as well as males, and for children as well as adults. Lastly, the painted skulls with many other burials of all types were scattered in and around the unusual structure of Square 3083/3283 (Rollefson, Schmandt-Besserat, and Rose 1999: 100-101).
Plastered Skulls C and D

Skull plastering to recreate the facial tissues that disintegrate immediately after death was the third and last form of skull burials at 'Ain Ghazal. Including Skull 88-1, a total of six plastered skulls were recovered at the site distributed in three separate loci (Rollefson and Kafafi 2007: 215; Rollefson 2008: 81).

The first cache excavated in 1983 in the Central Field (Square 3074) consisted of four adult male skulls designated as Skulls A-D (Fig. 6.2.6) (Simmons and Rollefson 1984: 390; 1985: 46-47). The crania, without mandibles, were buried in a pit dug in a courtyard. They were placed parallel, facing towards the southwest, and arranged in a loose cross pattern: one in front, two in a central row, and one behind. As described above, Skulls A and B showed no trace of modeling. Skull C held sparse residue of plastering, in particular in a tooth alveolus of the maxilla. Skull D, identified as belonging to a young adult by C. Butler, a physical anthropologist, kept substantial remains of plastering (Butler 1989: 144). The cranium, stored at the Museum of Jordanian Heritage in Irbid, Jordan, provides useful information.

Skull D is unique in having the upper teeth ground to the jawbone—as will become clear in this paper, most plastered skulls had the teeth extracted *post mortem*. On the outside of the skull, the face is covered with a thick slip of very fine pink colored plaster (Munsell 5YR 8/3) while the top and back of the head is untreated. The thin layer is spread evenly, extending over the maxilla hiding the ground upper teeth. The pink slip covers the skull following its natural defleshed contours without modifying its shape. It stopped around the nasal and orbital

cavities, filled with white plaster. There is no trace of chin, lips, or cheek modeling. Seemingly, the only features recreated were the eyes and nose.

Inside the skull, the fillings, no longer in place, are easy to identify and relocate. The right orbit consists of a smooth, round pad of plaster stuck in the orbital cavity that probably protruded enough to be shaped into an eye lobe, presently lost. The left orbital filling (4.5 x 1.4 cm) shows that the plaster was pinched into a broad horizontal ledge to portray a closed eyelid. The surface above the ledge was smoothed, but below it was left rough and was covered with a narrow bitumen strip, ca. 3 mm wide, to emphasize that the eyelid was sealed. Enough plaster remains in the nasal cavity to show that the nose, now broken, was also modeled from the mass of plaster protruding from the nasal aperture. Two shapeless smoothed lumps of plaster, one of them pitted (7 x 5.5 x 3 cm), were found inside the skull.

In short, Skull D can be viewed as combining the two techniques of painting and plastering. The entire process involved eight steps. (1) The lower jaw was pulled out. (2) The upper teeth were ground to the roots. (3) The cranium was colored either by dipping or painting it with a thick pink slip. (4) The plastering started by filling the orbits and nasal aperture with white lime. (5) The eyes and nose were modeled. (6) Hand smoothing completed the facial modeling. (7) Bitumen was added to the eyelids. (8) The maxilla was filled with a pad of white plaster. A long cylindrical mark on the right hand side of the base may signify that a rope was involved. In any case, the skull was provided with a flat base allowing it to stand upright.

Skull D shared important characteristics with Skull 88-1. Both recreated the features of younger men about 30 years old. They were buried in a same area of the site, namely in the adjacent Squares 3074 and 2872. They used the same material and similar techniques. They differed, however, in significant ways. Skull D was associated with three other skulls, but keeping in mind that the pit was partly destroyed, Skull 88-1 seemed to be alone. The teeth of Skull D were ground rather than extracted. The slip did not allow modeling and therefore did not recreate the soft tissues of the face. Consequently, except for the eyes and nose, Skull D kept much of the appearance of a human skull after death, while Skull 88-1 recreated a living face. Skull D was colored pink whereas Skull 88-1 was white. The eyes of Skull D were shown closed but they were open on Skull 88-1. Lastly, Skull D did not show the skill of modeling and the interest in naturalism so extraordinary in Skull 88-1.

The Three Plaster Faces

The third and last cache, excavated in 1984 (Rollefson and Simmons 1986: 161) held three plaster faces (Fig. 6.2.7) (Square 3087, locus 139). The objects restored at the Smithsonian Institution's Conservation Analytical Laboratory, in Washington, D.C., are thoroughly described and analyzed in this volume (see C.A. Grissom and P.S. Griffin). It therefore suffices here to compare and contrast the artifacts to Skull 1-88.

- Although they are closely related to Skull 1-88, the three plaster faces belong to a different type of artifacts. The mask-like objects consist only of plaster while skull 1-88 preserves its bone structure under the plaster overlay.
- Skull 1-88 belonged to a younger man. It is impossible to know the age and sex of the individuals represented by the three faces.
- The three faces are dated to the beginning of the PPNB, ca. 7100 bc, preceding Skull 1-88 by some three centuries.
- Skull 1-88 was mixed with other bones below a painted plaster surface. Instead, the faces were buried in sterile soil.
- Skull 1-88 was alone in a pit, whereas the three faces were nested together, side-by-side, nose down and the forehead oriented towards the south.
- Pigment, probably ochre (iron oxide) mixed with plaster, gave the three faces a pink tone, while Skull 88-1 was left white.
- The impressions of processed plant fibers such as flax or reeds in areas of the three faces suggest that a vegetal material was sometimes inserted between bone and plaster. There is, however, no such evidence

Fig. 6.2.8. The three plastered
Faces from 'Ain Ghazal.
Courtesy Carol A. Grissom.

for Skull 88-1. On the other hand, cordage was placed below the plastered faces, and the same may be true for Skull 88-1.

- In both instances, the plaster covered the same area of the face, from forehead to below the maxilla and above the ears with no indication of treatment at the top or back of the head.
- The reconstruction of the three faces involved shifting the mouth over the nasal cavity. But the nose of Skull 88-1 was rebuilt correctly above the nasal cavity.
- Individual features were modeled in a different style. The nose of Skull 1-88 is broad, globular and up-turned those of the three faces are thin, wedge-shaped and less up-turned. In both instances the nostrils are linear and too narrow in proportion to the nose.
- The ear is crescent-shaped on Skull 88-1 and a vertical ridge on the three faces.
- The eyes show the most striking discrepancy. They are closed, sealed with bitumen on the three faces. Those of Skull 88-1 are open.

In sum, although the three faces and Skull 88-1 are no doubt part of the same funerary tradition of restoring the facial tissues of the dead, they differ in chronology, context, technique, manufacture, color and style.

Of the three ways of dealing with severed heads at 'Ain Ghazal, plastering seems the most common and coloring the most ancient. The fourteen skull burials share major characteristics, namely: (1) The mandible was removed; (2) They were buried in one specific area of the site, west of Wadi Zarka, in the vicinity of a special building in Square 3083/3283. None was excavated in the East, South, and North Fields (Rollefson and Simmons 1986: 159). (3) There is no pattern emerging to explain why a skull was left plain, colored, or plastered. All segments of the population seemed to be eligible for decapitation and skull treatment, from 8 year-old children to adults of 60, males or females. (4) There was considerable leeway in style. Plain skulls were in groups of three or four. Colored skulls could be red, black, or red-and-black. The plastered skulls could be pink or white; fully modeled or partly slipped, have open or closed eyes.

In this perspective, Skull 88-1 is one specimen of the diverse PPNB 'Ain Ghazal assemblage of fourteen plain, colored, and plastered skull burials. Among the six plastered skulls it stands out for its unsurpassed artistic qualities. None have a comparable modeling and gaze. Skull 88-1 is also unique among the plastered
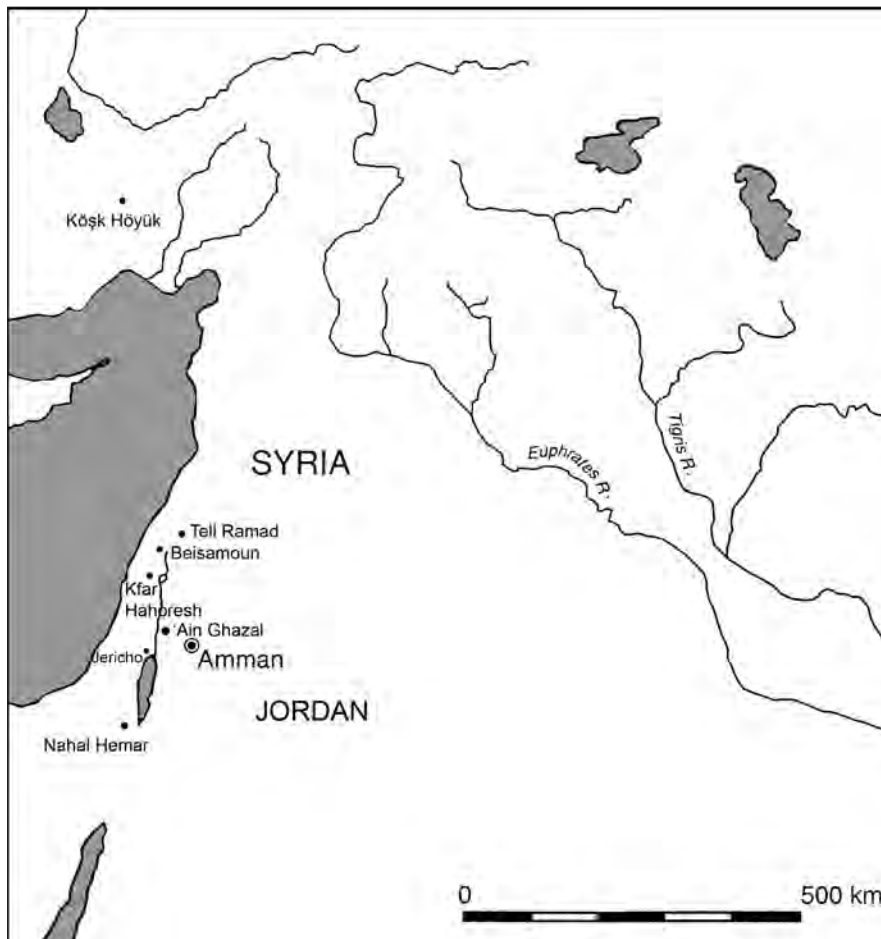
Fig. 6.2.9.   Map of the sites yielding modeled
skulls. Drawing by M. Bataineh.

skulls for being buried alone, uncolored, and shown with open eyes. The remaining plastered skulls generally emphasize the color of the living but the attitude of death or sleep. Instead, Skull 1-88 has the color of death but the expression of life.

The fourteen skulls of 'Ain Ghazal raise many questions. We are at a loss to explain why the mandibles were systematically removed, and the upper dentition ground or extracted. Because only 250 m^2 of MPPNB deposits have been excavated (Rollefson 1998: 55) to document a period of about one millennium (7100 to 6200 bc), it is difficult to assess what percentage of the population the fourteen head burials represent. Finally, archaeology is unable to clarify who received each particular treatment and why, or the role of the structure where so many human remains were clustered. Some of these questions may be answered by comparison with other sites.

III. PARALLELS IN OTHER SITES

The custom of plastering skulls was not unique to 'Ain Ghazal. It was also practiced at Jericho in Palestine; Beisamoun, Kfar HaHoresh, and Yiftahel in Israel; Tell Ramad and Tell Awad in Syria, and Kösk Höyük, Turkey (Fig. 6.2.9). I summarize below the information available on the fifty plastered skulls recovered at these sites. I will also discuss briefly the skulls decorated with collagen at Nahal Hemar, Israel, although they do not use plaster or attempt to model facial features, and therefore are not considered part of the plaster skull assemblage.

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Fig. 6.2.10. Homo I, Kfar HaHoresh. *After A. Nigel Goring-Morris, Y. Goren, L.K. Horwitz et al. Investigations at an Early Neolithic Settlement in the Lower Galilee: Results of the 1991 Season at Kefar HaHoresh, 'Atiqot, Vol. 27, 1995, p. 47, Fig. 9.*

Jericho

The first plastered skulls recovered came from Jericho. Kathleen Kenyon unearthed seven specimens in 1953 (D 110-116), (Kenyon 1957: 61-62) two in 1956 (D 117-118), (Kenyon 1956: 74-75, Pls. 12.2 and 21.1; Kenyon and Holland 1981: Pl. 58b, 59 a-c) and one in 1958 (E 22) (Kenyon and Holland 1981: 310-311). K. Kenyon dated the ten Jericho skulls of the late PPNB, ca. 6250-5850 bc but 7200-6700 bc is the present preferred reading (Kenyon and Holland 1981: 77, 310-311; Kenyon 1974). The seven specimens of the first cache (D 110-116), which are best preserved, provide the most information. The physical anthropologist, E. Strouhal, first identified five among the seven skulls as adult males (Strouhal 1973: 244). However G. Kurth and O. Roehrer-Ertl acknowledge four females and three males in their final report (Kenyon, Holland 1981: 497-99).

With the exception of D 112 (Pl. 6.2.2a-b), the preparation for plastering the Jericho skulls involved removing the mandible, but the upper dentition was sometimes preserved. For example, several teeth are visible on Skull D 111 (Kenyon, Holland 1981: Pl. 57c; Moorey 2005: 31-33) and E 22. The technique of filling the orbits and nasal cavity from inside the skull was the same as that at 'Ain Ghazal, except that the Jericho crania were full of plaster (Kenyon 1957: 62). On the outside, the face was smeared with plaster and covered with a pink slip up to the temples but leaving the rest of the cranium bare. Below, the plaster was covering completely the foramen magnum forming a triangular flat base. Because the mandible was removed, the chin was modeled over the upper teeth, which made the face squat and chubby. A unique stylistic characteristic of Jericho was to represent the eyes with bivalve shells that replicate the form, shade, and glossy surface of the cornea strikingly well. Most of the shells were purposefully broken in half before being inlaid, which created a vertical slit at the center of the eyes suggesting a feline rather than human pupil (Pl. 6.2.2a).

The seven skulls included in the first cache of Jericho cache have a strong resemblance. Visibly, they were done in the same way, for a same purpose. For example, they all have a same flat triangular base modeled in plaster presenting the face strongly tilted backwards (Pl. 6.2.2b). But nevertheless, each skull has unique details. For instance, D 111 has cowry shells instead of bivalves, portraying the eyes closed, rather than open (Kenyon, Holland 1981: Pl. 57c). D 113 has white stones in lieu of shells. The eyes of E 22 had a black pupil traced with bitumen (Kenyon, Holland 1981: Pl. 57a, b). There is also some disparity in the use of pigment. For example, Skull D 113 is uncolored, grayish-white, but most others have a reddish slip. Finally, D 114 has a pink hue, red paint accenting the eyes, two parallel horizontal red lines across the forehead, and a set of broad black stripes spanning the entire cranium (Pl. 6.2.2c-d).

D 112 stands out in the Jericho collection for its awesome beauty (Pl. 6.2.2a). The skull kept the lower jaw but because all upper teeth were extracted the face was shortened shifting the mouth too close to the nose (Strouhal 1973: 238). The modeling of the brows and cheeks was done with special care and skill, which lends D 112 a certain resemblance to Skull 88-1 of 'Ain Ghazal. Both skulls share also some awkward features. For example, the two faces are artificially lowered, the eyes set too low below the brows; the nose is disproportionately broad and large, and the ears are misplaced upwards and anteriorly. Mostly Skulls

88-1 and D 112 have the same dreamy expression. The eyes without iris and not fully opened, cast a similar enigmatic gaze. D 112 is particularly remarkable in the portrayal of the eyelids. The upper lid naturalistically overlaps the lower, a stylistic detail otherwise unknown in antiquity. In fact, eyelids were not represented in sculpture before the Akkadian period, ca. 2300 bc.

With the exception of E 22, recovered at the north end of the mound, the two caches of respectively seven and two plastered skulls were from the same square, D 1. The seven skulls D 110-116 were heaped pell-mell, buried under a plastered surface, seemingly discarded as rubbish (Kenyon, Holland 1981: 77). Square D and the adjacent E 1, produced numerous burials, including thirty decapitated skeletons (Kenyon, Holland 1981: 78) and a plain skull (Kenyon, Holland 1981: 305, Pl.171 A, B).

Kfar Hahoresh

Five modeled skulls plus some detached plaster fragments were excavated at Kfar HaHoresh, in lower Galilee. The first two specimens, Homo I and II belonged to a MPPNB layer dated ca. 7000-6500 bc (Goring-Morris, Boaretto, and Weiner 2001: 213; Goring-Morris 1991: 77; Goring-Morris, Goren, and Kolska Horwitz 1994-5: 84; 1995: 40, 47, Fig. 9). Homo I, whose mandible was removed, was found deformed by the weight of the overlaying sediments into a squat, elongated shape (Fig. 6.2.10). The layer of plaster colored with a brick red ochre wash, that covered the entire cranium covered, was particularly thick over the cheeks, making it impossible to see whether or not the dentition was spared. The visage tilted backwards is childlike, broad, and puffy with a short aquiline nose, a small mouth and a cleft chin. The eyelids were shown closed by tracing a horizontal incision across the round eye lobes, when the plaster was still fresh. The ears were not featured.

Homo I was found sealed beneath a plaster surface in an area packed with inhumations considered to be a funerary installation or regional mortuary center (Goring-Morris, Burns, and Davidzon 1998: 4). The skull was placed in a plastered pit above human long bones and facing towards east. The fact that some missing parts of the plaster base were not recovered in excavation suggests that Homo I was incomplete when it was buried. It is unique among the plastered skulls in being associated with the articulated skeleton of a decapitated gazelle, suggesting a funerary offering (Horwitz and Goring-Morris 2004: 173-174). There is little information on Homo II except for the fact that it came from a different part of the mound (Goring-Morris 2000: 109).

Two caches of respectively three and four skulls were discovered in a later season of excavation (Goring-Morris 2005: 96). Each of the cache produced fragments of plaster and the modeled skull of a young male adult. One of the two showed evidence of having been buried after its plaster cover had deteriorated. The other example, badly preserved, was located in a clay lined container. A goat horn core laid in proximity of the four-skull cache.

A third skull, associated with other cranial remains, was found immediately below the plastered surface of a pit, in a different area of the site. The three skulls received the same treatment which involved several layers or plaster, with the final coat colored in red. The pigments used were ochre and cinnabar.

Yiftahel

The 2007-2008 excavations at Yiftahel, a site close to Kfar Hahoresh in lower Galilee, unearthed three plastered skulls referred to as Homo 1, 2, and 3 (Khalaily, Milevski, and Getzov et al. 2008: 8-9) of which Homo 1 and particularly Homo 3 are severely damaged. The skulls stood on a plaster base, tightly aligned facing west, in a pit of the middle or late PPNB. The mandibles were removed, after which the treatment of Homo 1 and 3 was limited to filling the orbits with plaster, but the chin, cheeks, mouth and nose of Homo 2 were modeled. In the three instances, the eyes were garnished with shells placed horizontally and vertically and, in the case of Homo 1, with additional flint fragments. The gender and age of the individuals is yet undetermined.

Beisamoun

Beisamoun, on the west bank of the Jordan River, produced two PPNB plastered skulls in Level 1, the top level of the site, dated 7000-6000 bc (area C/180) (Ferembach, Lechevallier 1973). The first skull is in poor condition. The second, better preserved, is identified as that of an adult female (Ferembach 1978: 180).
The Beisamoun cranium has most of the characteristics of the modeled skulls while introducing new variations. Here, the teeth were removed *post-mortem* although the mandible was attached (Ferembach 1978: 180). The coat of whitish plaster extended from above the brows to below the chin. It was as thick as 1cm around the face but became thinner above the skull, perhaps leaving the occipital free. The nose, narrow short and up-turned has shallow oval nostrils. A small plaster lens was inserted in the filling of the orbital cavity to form the eye lobe (Lechevallier 1978: 150). The treatment of the mouth was novel. It was slightly opened portraying the teeth with short parallel strokes incised into the plaster.

At Beisamoun the skulls were not buried. They were deposited facing east on a plaster surface near the threshold of an abandoned structure. The two-roomed building which also housed two collective burials for respectively nine adults and four newborn babies may represent a mortuary installation (Lechevallier: 147). As Skull 88-1 and Homo I of Kfar HaHoresh, the Beisamoun skulls were associated with another human bone (a tibia). Unused flint tools of exceptional quality found near the skulls perhaps represent a funerary offering. If this is the case, the nature of the gift differed from that of Kfar HaHoresh.

Tell Ramad

The largest collection of plastered skulls comes from Tell Ramad, Syria. The some twenty-three skulls were found in three caches of respectively eight, three, and at least a dozen (Contenson 2000: 56). The first group from Level I, ca 6200 bc, included the skulls of five females, two males, and one boy 13 or 14 years old. The Level II caches, ca. 6000 bc, (in H 10 and M 4), yielded the plastered skulls of two females and a male, and finally, a dozen of unidentifiable specimens.

The Tell Ramad skulls are unique in many ways. The mandible was attached, but all teeth were pulled *post-mortem* (Ferembach 1970: 250) the neck was plastered; in the Ramad I cache, the foreheads or top of the head bore a large red spot; the eyes lobes were made of grayish plaster with the iris and pupil standing out in pure white (Contenson 1967:20). In the Level II cache, the entire skulls were painted red (Contenson, van Liere 1966: 170).

At Tell Ramad, the plastered skulls were seemingly exposed for display. The eight skulls of the first cache were in a niche ca. 80 x 40 cm outside a building. The same may be true of the three skulls of the second cache that were placed against a stone foundation mixed with human collarbones (Contenson, van Liere 1966: 170). Finally the skulls of cache 3 were kept in an oval enclosure made of mud bricks and a large plaster vessel, where they were arranged in small groups separated by large clay balls. Clay figurines covered with a layer of plaster were included in the first and last cache (Contenson 1967: 20). They probably were a meaningful part of the assemblage or represented yet another kind of funerary offerings.

Tell Aswad

In the vicinity of Tell Ramad, Tell Aswad contributes two deposits of plastered skulls. The first yielded four (Stordeur and Khawam 2006) and the second, more recent, also four with an additional plastered face (with no skull attached) (Stordeur and Khawam 2007). The eight skulls, found standing on their plaster base, were left complete with teeth and mandibles. The plaster used to fill the skull was coarse, while the white and red coating of the face was fine and carefully smoothed. In the later cache, the modeling was characteristically cut in a straight line above the brows. The eyes were always shown shut. The closed eyelids were indicated by carving across the plaster orbit a horizontal line, sometimes underlined by a black line of bitumen or

charcoal. The excavators note that the two caches correspond to a radical change of funerary practices at Tell Aswad. Namely, in the late MPPNB or early LPPNB the dead were no longer buried below habitation floors but in shallow collective funerary installations dug in ruins at the edge of the village. The plastered skulls constituted the initial deposit of these installations. They were deposited in one episode, close together at the bottom of the pit prepared with plastering and furnished with hearths. They skulls may have remained visible for some time and, at least in the earlier cache, where twenty-two subsequent bodies were intentionally laid concentrically around them.

Köşk Höyük

Eleven plastered skulls excavated at Kösk Höyük in Central Turkey between 1985 and 2000 shows that—although seemingly exceptionally—skull plastering extended beyond the Levant, well into Anatolia (Silistreli 1989: 62, Pl. 7; Talalay 2004: 143; Bonogofsky 2006: 52-56). The skulls originated from Levels II and III, the earliest Neolithic strata at the site, dated between 6000-5500 bc, which signifies that the tradition of recreating the features of the dead lingered in Turkey a half a millennium after it was discontinued in the Levant.

The Anatolian skulls were left complete including the dentition. The composition of the assemblage included one child, one 21-24 year old female, two middle-aged female adults, two male adults, and five adults. The plaster combined with ochre, applied exclusively to the face, was similar to the Levantine treatment except for some stylistic discrepancies (Mellink 1991: 128). For instance, the earlobes were represented more naturalistically than in the south, and the eyes were treated differently. The young woman's eyes were inlaid with black stone (Mellink 1991: 128) but another specimen had the sealed with a black line.

Like at Beisamoun and Tell Ramad, some of the crania were exposed rather than buried. The young woman's skull was deposited on a plaster surface, and the five others excavated in 2000 were located on a mud brick base. The association of the skulls with other skeletal remains unclear. It is possible that the young female skull was associated with buildings identified by the excavator as having a ritual function.

Nahal Hemar

The Nahal Hemar skulls are mentioned here for the sake of completeness, although they are treated with bitumen—not with plaster (Bar Yosef 1985: 13, 15). The PPNB cave site ca. 7000-6000 bc, located at the south end of the Dead Sea, yielded twenty-three almost complete crania with no other skeletal remains except for rare pieces of mandibles and two neck vertebrae (Arensburg and Hershkovitz 1988: 53). Homos 1-23 were the skulls of individuals in different age groups from small children to older adults, about 50 years of age (Arensburg and Hershkovitz 1988: 50; 1989: 115).

Six of the Nahal Hemar skulls were smeared with a black substance analyzed by A. Nissembaum as a mixture of bitumen and collagen (Nissenbaum 1997). Homo 8, the skull of a fifty-year-old man, and
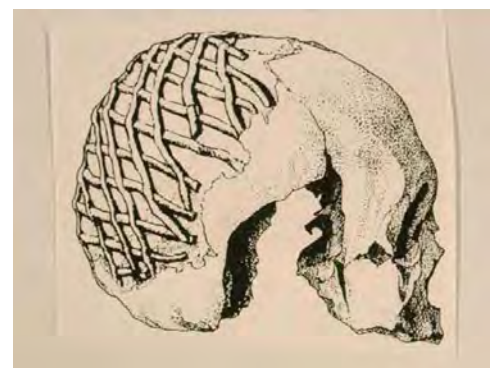

Fig. 6.2.11.   Homo 8, modeled skull from Nahal He-
    mar. *After R. Yakar and I. Hershkovitz, Nahal Hemar:*
    the modeled skulls, 'Atiqot, Vol. 18, 1987, Pl. 24: 1.

the best preserved specimen, was covered with a 1 mm thick layer of tar, starting above the forehead and extending over the back of the head, leaving the face free. Above, evenly spaced horizontal stripes made of the black mix overlapped with diagonal lines to form a net pattern over the back of the cranium (Yakar and Hershkowitz 1988: 59-60) (Fig. 6.2.11). Homo 3, 4, 7, and 9 (a 25-30 year old male), bore traces of a similar design. Homo 2 (a 45-year-old male), displayed a pattern of close parallel lines, perhaps impressed with a comb (Yakar and Hershkowitz 1988: 61). Homo 1 and 4 showed traces of fire (Arensburg and Hershkowitz 1988: 50-51, 53).

The skulls of Nahal Hemar are fundamentally different from the plastered skulls. They show no attempt at recreating facial features, but rather a hairdo or headdress. The treatment used a black concoction of collagen and asphalt rather than white or pink-reddish colored plaster. Therefore the six skulls of Nahal Hemar are not included in the discussions below.

IV. THE PLACE OF 'AIN GHAZAL AMONG THE PLASTERED SKULL ASSEMBLAGES

Plastered skulls are often referred to as "common," but this is an exaggeration. The entire collection of modeled skulls amounts to some seventy, of which about half are badly deteriorated providing only minimal information. The geographic distribution, limited to eight sites, is sparse and widespread (Fig. 6.2.8). Jericho and 'Ain Ghazal, located on either side of the northern shores of the Dead Sea, represent the southernmost extension. Plastered skulls were recovered in Galilee, at Kfar HaHoresh, Yiftahel, and Beisamoun; in Syria at Tell Ramad and Tell Aswad; and as far as north as Kösk Höyük in central Turkey.

The eight modeled skull assemblages were scattered in time as they were in space. The oldest evidence for the custom of plastering skulls comes from Jericho and 'Ain Ghazal, where the three modeled faces may date as early as ca. 7100 bc. The tradition was confined to the five centuries of the MPPNB period (7100-6600 bc) at 'Ain Ghazal but lasted elsewhere over another 1000 years corresponding to the following Levantine periods:

MPPNB (7100-6500 bc)
Jericho	7200-6700 bc
'Ain Ghazal	7100-6600 bc
Yiftahel	7000-6000 bc
Tell Aswad	7000-6000 bc
Kfar HaHoresh	6700-6500 bc

LPPNB (6500-6000 bc)
Tell Ramad	6200-6000 bc
Beisamoun	6100-6000 bc

PN or Yarmoukian (5750-5000 bc)
Kösk Höyük	6000-5000 bc

With their wide distribution and long duration, it is no wonder that the modeled skulls were treated in many disparate ways. They were most often buried, for example at Tell Aswad the skulls were deposited in plastered pits, but at Beisamoun and Kösk Höyük they were exposed inside a building and on the outside at Tell Ramad. Several skulls, including one example at Kfar Hahoresh, were incomplete when they were buried, suggesting that they might have been manipulated before. At Jericho the skulls were thrown pell-mell in a ditch, but those of Beisamoun and Kfar HaHoresh seemed oriented towards east, at Yiftahel towards west, and at Tell Aswad towards North. The high density of inhumations around the plastered skulls at 'Ain Ghazal, Beisamoun, Kfar Hohoresh, Yiftahel, Jericho, Tell Aswad and Tell Ramad suggests the possibility of communal and perhaps regional mortuary centers (Stordeur 2007: 22; Garfinkel 2006: 114; Rollefson 2005: 10; Goring-Morris 2000: 114,119). Consequently, some of the plastered surfaces, associated with the skulls may be considered as 'tombstones'

marking the precise location of an internment. Funerary offerings of animals, flint tools, and figurines were perhaps deposited at Kfar HaHoresh, Beisamoun, and Tell Ramad.

It is a myth that the modeled skulls were arranged in groups of three or multiple sets of three. The numbers of specimens in a cache are as follows: an unspecified "dozen" (Tell Ramad), eight (Tell Ramad), seven (Jericho), five (Tell Aswad), four ('Ain Ghazal, Tell Aswad), three ('Ain Ghazal, Yiftahel, Tell Ramad), two (Jericho, Beisamoun), one ('Ain Ghazal 88-1, Jericho E 22, Kfar HaHoresh and Kösk Höyük).

The caches also varied in composition, showing no visible pattern of age or sex preference for the individuals who received the treatment. The groups brought together old and young adults as well as children. Males and females were also mixed. Fourteen of the identified skulls were those of women. Fifteen were males. According to the various excavation reports, the breakdown of the identified skulls is as follows:

	Females	Males
Beisamoun	1	
Kfar HaHoresh		3
'Ain Ghazal		1 2
Kösk Höyük	3	2
Jericho	3	4
Tell Ramad	2 5	1 2
Total	**14**	**15**

Table 6.2.1. Gender representation

It should be noted here that M. Bonogofsky was able carry out her own identifications and comes to a total of twenty-six adult males and fourteen adult females (Bonogofsky 2006: 57).

The seventy modeled skulls recreated facial features with lime plaster, but they did so in many different ways. As a rule, the mandible and all teeth were removed, but there are exceptions. The skulls of Tell Ramad, Tell Aswad, Kösk Höyük, and Jericho D 112 preserved the lower jaw and several of the Jericho skulls kept at least some dentition. The crania were more or less copiously treated with plaster. In most cases, only the orbital and nasal cavities were involved but at Jericho the entire skull was filled (although some suspect that this may have been done in the museum lab). The surface covered outside the skull varied. At 'Ain Ghazal, Jericho, and Kösk Höyük it was restricted to the visage. At Beisamoun and Tell Aswad it extended on the top and side of the cranium while the whole head was treated at Kfar HaHoresh and even the neck at Tell Ramad. Most skulls had a large flat base that assured a position tilted at the back. The removal of both mandible and dentition squeezed the facial features on the upper 2/3 of the cranium, giving the face a chubby look. But this was not the case for 'Ain Ghazal Skull 88-1 and Jericho D 112. The eyes were mostly open but all were closed at Tell Aswad as well as occasional examples at 'Ain Ghazal, Jericho, Kfar HaHoresh. The cornea or iris was modeled in plaster at 'Ain Ghazal, Beisamoun, and Tell Ramad; inlaid with shells at Jericho and Yiftahel, and with black stone in Kösk Höyük. Bitumen was used to draw the pupil on Jericho E 22 and to seal the eyelids at Tell Aswad, Kösk Höyük and of the three faces and Skull D of 'Ain Ghazal.

It seems important that each cache displays unique characteristics and that these particularities are shared by all the skulls included in the cache. For instance, the seven Jericho skulls portrayed the eyes with shells, but E 22 in a different location at the site did not. The group of Tell Ramad I had a red spot on the forehead, as opposed to that of Ramad II that were red all over. The plastering of the skulls of the second installation at Tell Aswad was cut in a straight line over the brows with a sharp tool, but it was not the case in the first. At 'Ain Ghazal the three faces were separated from the bone structure, but none of the other skulls were. This points out the significant fact that the skulls were done in series rather than individually and possibly each cache was done at the same time by a same person (Stordeur 2007: 10; Kuijt 2000: 155).

In sum, the following traits stand out as most characteristic of the modeled skulls at 'Ain Ghazal and elsewhere.

1) The choice of plaster to model the features of the dead
2) The removal of the mandible
3) The extraction of the dentition
4) The skulls showed marks of wear and tear
5) The skulls were buried with other human remains
6) The homogeneity of style within each cache
7) The skulls presented the face tilted backwards
8) There is no age or sex pattern for plastering
9) The disposal of the skulls in mortuary installations

The analysis of the some seventy plastered skulls gives a new perspective on the 'Ain Ghazal assemblage. Because each cache was made of a series of similar specimens, it is likely that the four skulls A-D were once plastered. The fact that most modeled skulls were mixed with other human remains suggests that skull 88-1 was purposefully associated with human bones. The new interpretation of the plaster surfaces as grave markers to 'seal' the dead—rather than living floors—opens the possibility that Skull 88-1 belonged to a funerary rather than a domestic setting. Finally, because at least some of the modeled skulls seem deposited in mortuary installations, the structure of 'Ain Ghazal Squares 3083/3283 yielding multiple interments and four babies exposed *on* the floor may be considered a house for the dead, rather than for the living.

In the light of the broader assemblage, the three plaster faces, detached from the bone structure, stand as the point of departure of a millennium long Levantine tradition of plastering severed heads. Skull D is unmatched in having the upper teeth ground to the jaw—rather than extracted. It is also singular in mixing the two techniques of coloring and plastering, the white lime plaster being used to model eyes and nose and the pink slip to cover the remainder of the cranium. On the other hand, Skull 88-1 no longer appears unique. Each of the singularities that made it stand out from the 'Ain Ghazal assemblage has parallels elsewhere: Skull 88-1 is one of six specimens buried alone; Jericho D 113 and the Beisamoun skull are also whitish-gray, making no use of red pigment, and twenty-six skulls, from five different sites, have open eyes. Jericho D 112 is the closest parallel to Skull 88-1 in style and time (Kenyon and Holland 1981: pl 51a, 52a, b). The two skulls share harmonious features and a same enigmatic dreamy glance. Jericho D 112 outshines Skull 88-1 in the quality of craftsmanship by introducing such naturalistic details as the modeling of eyelids.

V. ETHNOGRAPHIC PARALLELS

Excavations furnish a host of specific details about the plastered skulls though the big picture remains blurry. No pattern of age or sex allows the identification of those who received the plastering treatment. We have also no clue as to whether the skulls were grouped in caches according to special ties, such as kinship, or simply haphazardly. Archaeologists have tried to solve the enigma of the plastered skulls by comparing the tradition with similar customs in archaic societies. In the following part of the paper, I am briefly reviewing the ancestor's cult and warrior hero theories based on such analogies.

Ancestors Cult

Kathleen Kenyon saw similarities between the Jericho plastered skulls and a collection of ancestor masks from a 19th century culture along the Sipek River Valley of New Guinea (Kenyon 1957: 62). She concluded that probably the plastered skulls were meant to honor the memory of revered ancestors. Kenyon's theory still endures today (Bienert 1991, 1995a: 360-363; Cauvin 1997: 157). Scholars have compiled more references on ancestor cult in 19th century AD New Guinea, Melanesia, South East Asia and as far as South America (1995a: 360-363). However, the archaeological data supporting an ancestor cult in Neolithic Palestine is slim (Bonogofsky 2003). In favor of an ancestor cult, it may be argued that first, great care went into plastering the skulls and some, like Skull 88-1, were beautifully rendered. Second, at 'Ain Ghazal the decapitated skeletons were among the individuals more carefully buried—not those trashed, as was the case in Jericho.
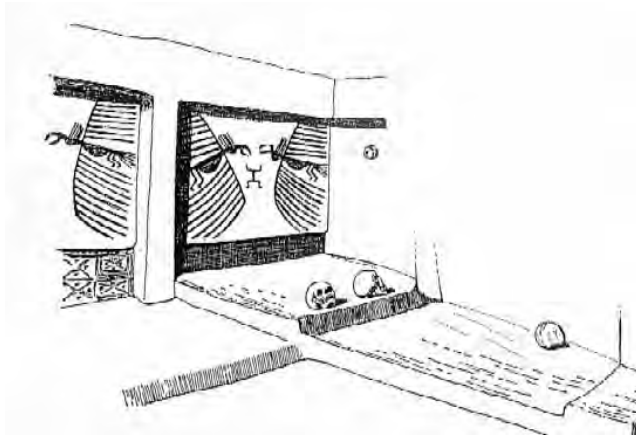
Fig. 6.2.12. Çatal Hüyük, Turkey. After James Mellaart, Catal Huyuk, Mc Graw-Hill Book Co., New York, 1967, Pl. 49. Drawing by Muwafaq Bataineh.

Fig. 6.2.13. Çatal Hüyük, Turkey. After James Mellaart, Catal Huyuk, Mc Graw-Hill Book Co., New York, 1967, p. 83, Fig 15. Drawing by Muwafaq Bataineh.

Third, the orientation of some of the skulls towards east, the direction of the rising sun and the deposit of funerary offerings can denote a belief in an after life. Kenyon's theory, however, does not fare well in the light of the latest excavations and with the results of the present survey. It is difficult to reconcile an ancestor cult with the fact that first, the majority of skulls are those of women. Second, the skull of a child was plastered. Third, the skulls were modeled in series, sometimes as large as a dozen, rather than individually. Finally, the recent view that the modeled skulls were not always buried under homes, but that some were included in mortuary centers, further weakens the ancestor cult theory. Unless DNA analyses reverse the situation in the future, the theory may have run its course. Especially because, in the last decades, archaeologists have become weary of drawing parallels singling out one specific trait—as opposed to meaningful assemblages— from distant cultures unrelated in space and time (Mithen 2004: 19; Whitehouse 2000: 160).

Warrior Hero Cult

The ancestor cult was modified to that of "warrior heroes" theory when it became clear that skulls of young males were plastered (Goring-Morris 2000: 127). It is also problematical to accommodate this theory with a majority of female skulls, the inclusion of a child among the modeled crania, the evidence that the skulls were plastered in series, the removal of mandible and dentition, and finally the context of local or regional burial installations.

Enemy Trophy

Also on the basis of New Guinea parallels, Kathleen Kenyon contemplated the possibility that the plastered skulls could represent war trophies (Kenyon 1957: 63). The safekeeping and special treatment of enemy heads is attested in various societies including the ancient Near East (Testart 2008: 42-46). However, as is discussed below, the circumstances are vastly different.

VI. PARALLELS IN NEAR EASTERN HISTORICAL DATA

Instead of seeking answers far afield, I am presenting data relating to skull symbolism in the ancient Near East. The documents are gleaned among art monuments and cuneiform texts of the early historical period. The Near Eastern societies discussed have the merit of being some 5000 years closer in time than 19th century AD New Guinea. Most importantly, they belong to the same cultural tradition. The fact that the Neolithic cultures of the Levant are the roots of the historical Near East is illustrated by such important features such as the standing

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stones of 'Ain Ghazal (Rollefson 1998: 51; Rollefson and Kafafi 1996: 238; Kafafi 2010) precursor to the 2nd millennium betyls; the plaster statues immodestly presenting their breast announcing the popular depictions of Astarte and Ishtar in the 3rd to the 1st millennium bc (Schmandt-Besserat 1998: 13). Finally, the signs for grain in the 4th millennium Mesopotamian script can be traced without discontinuity to tokens like those used to count at 'Ain Ghazal (Schmandt-Besserat 1996: 81).

Warfare

In the ancient Near East severed skulls are discussed in the context of warfare (Testart 2008: 38; Kuijt 2008a: 117). The royal annals make it clear that military victory was often expressed in terms of rolling heads. Kings boasted of "making pyramids"(Luckenbill 1968: 143, 147, 213), or "fillings the banks of rivers" with enemies' skulls (Assyrian Dictionary 1956: 127). The same is true for art monuments. About 2500 bc, Sumerian victory monuments show the cut heads of enemies devoured by birds of prey. For example, the fragment of a stele illustrating the aftermath of a battle between the cities of Lagash and Umma pictures a flight of vultures carrying away human heads in their beaks and fangs (Pl. 6.2.3a) (Perrot and Chipiez 1884: 179, Fig. 94). Other times, soldiers are shown proudly coming back from war holding a bunch of enemy heads by the hair. Such an image inlaid on a 'standard' of the palace of Ebla, Syria, ca. 2400 bc, depicts a line of warriors carrying bundles of cut heads in their hands and in back sacks (Pl. 6.2.3b) (*Syrie, Memoire et Civilisation* 1993: 92-93). Decapitation was also synonymous with warfare in Egyptian art where, ca. 3000 bc, the victorious Narmer, was pictured inspecting piles of enemies with their heads severed and neatly placed between their feet (Smith 1984: 33, Fig. 14).

The Assyrians exploited most extensively the theme of enemy beheading in the 9th-7th century bc (Richardson 2007: 196-197). The macabre story of enemy decapitation in warfare is told by a series of pictures decorating royal palaces. A first episode, drawn from the paintings at Til Barsip, depicts a massacre of prisoners. Here an Assyrian soldier grabs by the hair the enemy he is about to behead with a curved sword (Parrot 1961: 106-107, Figs.115-116). Elsewhere, piles of heads leave no doubt that all the prisoners are to share the same pathetic end (Parrot 1961: XX, Fig. 1). A relief in Assurnasirpal II's Nimrud throne-room gives details of Assyrian soldiers cutting the heads of the wounded during a siege (Panels 3 and 5, exhibited at the British Museum). In following panels, enemy citadels are shown strewn with headless bodies surrounded by hungry vultures (Moortgat 1969: 139, Pl. 267). Then, at Nineveh, scribes are pictured counting heaps of heads to keep track of the fallen enemies (Pl. 6.2.3c) (Perrot and Chipiez 1884: 103). A next episode, again from the Nimrud throne room, shows Assyrian soldiers having fun playing catch with the severed heads (Panel 6 exhibited at the British Museum). On the other hand, reliefs at Nineveh depict the heads of important enemies being paraded (Layard: 1853: Pl. 26-27). Finally, images in Assurbanipal's palace at Nineveh echo the royal annals (Luckenbill 1968: 393; Weidner 1932-33: 181) in showing how the skull of a famous enemy was treated as a heroic trophy. The relief celebrating the King's return from the Elamite campaign pictures an idyllic scene, which takes place in the harem of the palace of Nineveh. The king lies on an elegant couch under an arbor loaded with grapes. The attentive queen is seated at his side, foods and drinks are served, musicians play lyre and flutes, birds are flying among the trees where hangs the swollen, decaying head of Teumman, the defeated king of Elam (Parrot: 1961: 51-52, Fig. 60).

Iconography may prove that decapitation was featured in similar ways in prehistory as in history. Assyrian battlefields are shown surrounded by vultures voraciously pecking the heads of dead and dying strangers (Moortgat 1969: 156, Pl. 284). The Sumerians pictured the birds as they flew away with a head or an arm after tearing apart the corpses (Pl. 6.2.3a). Consistently, texts and images underscore that decapitation was only the fate of the enemy—friendly troops were always shown in wholesome physical condition. Three thousand years before the Sumerian civilization, birds of prey attacking beheaded people were painted at Çatal Hüyük, Turkey, in a room where human skulls were on display (Fig. 6.2.12). The remarkable Neolithic frieze ca. 5900-5700 bc depicts vultures with gigantic comb-like wings assaulting decapitated figures (Mellaart 1967: 82-83, 108, Figs. 14-15, Pl. 45, 48-49) (Fig. 6.2.13). The birds of prey loom menacing with their big opened beaks, long stretched out necks with ruffled feathers, huge spread out wings, large bodies, and dangling legs. Next to

them the humans are minuscule decapitated stick figures, lying down helplessly. Can the Neolithic scene of birds of prey attacking headless people be seen as the distant antecedent of the early historic motif of vultures pecking beheaded enemies? The scale and role reversal introduced in the Çatal Hüyük paintings featuring gigantic aggressive birds next to tiny headless and helpless humans seem to express that, in the Neolithic Near East also, decapitation was not an honor—it was an abomination.

The cuneiform texts make it clear that the main reason why the Mesopotamians severed heads and relished picturing the atrocious scenes was not comparable to the New Guinea war trophies evoked by Kenyon. It was because decapitation was one of the worst possible outrages they could inflict on their enemies. In the ancient Near East dismemberment was deemed to prevent the dead from achieving a normal status in the afterlife. The 'marginalized' ghost of a decapitated man was condemned to wander aimlessly, drink dirty water, and eat from refuse (Cassin 1982: 356). This was directly related to the belief that an individual remained an active member of the family group after death as long as the bones, the most durable part of a body, were preserved. If the skeleton (*esemtu*) was damaged, the dead ceased to exist physically and the distressed spirit of his ghost (*etemnu*) became aggressive against the living, almost demoniac, creating a permanent source of affliction for his group (Cassin 1982: 356). Curses carved on stone monuments or on treaties warning potential violators that "their bones be dispersed" or "that their bones could never be joined together again" give a sense of how injury to the skeleton was dreaded (Cassin 1982: 356, 360). Sargon II of Assyria used the horror of dismemberment with sadism when he exhumed the skeletons of dead kings in conquered countries and exposed them "to prevent their spirit to never rest in peace …" But, Assurnasirpal II still surpassed his cruelty by ordering a rebel's bones be ground to powder by his own sons. It was to shelter his ancestors from such outrages that Merodoch-Baladon, King of Babylon, took their bones before leaving Babylon after his defeat by Sennacherib (Cassin 1982: 365).

Apotropaic Power

Why would Eblaite soldiers bring skulls home after the battle (Pl. 6.2.2b)? Magic texts make it clear that in the ancient Near East skulls were viewed as loaded with apotropaic power—they protected against evil. And since sickness was considered caused by demons, the skulls cured ailments. The following text shows that, with the proper magic incantation, a skull could prevent the grinding of teeth during sleep: "you take a human skull, you spread a cloth over a chair, place the human skull on it, you recite the incantation seven times into the skull, you have the patient kiss the skull seven and seven times in front of his bed, and he will get well. You return the skull to the place from which you took it …" (*Assyrian Dictionary* 1956: 127). In another case, the skull is to be kissed seven times and licked seven times (Finkel 1983-84: 14). Other texts illustrate that skulls were part of a doctor's kit to dispense medical treatments: "You mix (various drugs) and fumigate the patient with fire in a human skull …" Dust from a human skull mixed with tamarisk seeds or other ingredients was made into balms to be rubbed on patients who continually saw dead persons in dreams (Scurlock 2006: 253, 255, 256, prescriptions 46, 48, 49). Patients suffering from ailments, such as headaches caused by ghosts, could be helped by breathing the fumes of a fragment of skull burned over coal with a *binu*-tamarisk seed, an *ashagu*-thorn, and a stag horn, or, according to another recipe, with ox fat (Scurlock 2006: 590, 577, prescriptions 274 and 261). Of course, the most potent way of using a skull was by ingestion. Ground or fired, skulls were valuable ingredients in preparing medicines. A recipe reads: "you break shards of a human skull into small pieces and crush them …" (*Assyrian Dictionary* 1956: 127).

Supernatural Power

In turn, necromantic texts spell out that skulls possessed the supernatural power to conjure the dead from the underworld (Finkel 1983-84: 14). A skull could exorcize a ghost from a haunted individual. The patient simply recited in front of a skull an incantation starting with the words "You ghost of someone …" (Finkel 1983-84: 14). Most importantly, skulls were part of the paraphernalia of necromancy, a technique of divination from corpses (Tropper 1989: 88). With a skull, a necromancer could summon any ghost and find out important

information otherwise inaccessible to the living concerning the reasons for incomprehensible events or what the future had in store. The texts never specify where the ghost consultation took place, but they make clear that only one necromancer was required, with no attendant. The ritual around the skull started by reciting incantations to appeal to the gods of the underworld and presenting them with offerings. The questions asked also remain unspecified, but the necromantic texts make it sound as if the ghost's knowledge had no limit: "You can call to him and he will answer you;" "Whatever and however much you ask him, he will tell you;" "and then let the ghost make a decision for you …" The dead could also be asked to mediate in front of the gods of the underworld on behalf of a living person (Scurlock 1988: 319, 322-29, 334-336, prescriptions 72, 74-77, 80-81). There is no indication concerning whose skulls were used for the preparation of medicines or served in doctors or necromancers' kits. There is no indication that they were those of known individuals or family members. Presumably, they were anonymous. Perhaps some were collected in battlefields, as those illustrated on the Ebla inlays (Pl. 6.2.2b).

One necromantic incantation describing that a skull had to be smeared with a substance in order to call a ghost is of special interest (Scurlock 1988: 322-323, prescription 74). The text lists all the ingredients necessary to make the magic unguent: a male and a female shelduck, dust from the crossroad, dust of a centipede, a wild sow of the steppe, and an upturned potsherd from a crossroad. After all these were crushed and mixed with oil, the mixture had to stay outside overnight. In the morning it was spread onto the skull and immediately thereafter the necromancer could summon the ghost, talk to him and obtain the requested information. The texts further describe that magic substances were also occasionally applied to figurines representing ghosts (Scurlock 1988: 322-323, 332-333, prescriptions 74 and 79). But most times the special balms were intended for the necromancer to covered his own face with in order to see and converse with the ghost (Scurlock 1988: 325-326, prescription 75). A particular recipe illustrates the complexity of such concoctions necessitating such varied items as "new wood, fresh leaves of the Euphrates poplar soaked in water, beer, wine, crushed snake tallow, lion tallow, crab tallow, white honey, a frog living among the pebbles, dog hair, cat hair, fox hair, chameleon bristle, red lizard bristle, a frog claw, the end of the intestines of a frog, the left wing of a cricket, marrow from the long bone of a goose." The ingredients had to be dried, crushed, sieved and mixed together with oil and 'strong fine beer' and a specific plant (*amharu*-plant). Then the necromancer recited an incantation three times over the mixture before smearing it on his face (Scurlock 1988: 325-326, prescription 75). The texts make us further realize that particular time of the month were particularly propitious for the getting in touch with the great beyond. For example, when used on the 29th of the month of Abu, a certain magic balm could enable the necromancer to communicate directly with the Anunnaki, the gods of the underworld (Scurlock 1988: 340-342, prescription 82).

Of course far more could be said on skulls or the smearing of substances in white and black magic. But an episode of the epic of Gilgamesh will conveniently sum up the ancient Near Eastern beliefs concerning skulls. The story tells how Humbaba, the monstrous guardian of the Cedar Forest, was made prisoner by Gilgamesn and Enkidu and finally decapitated. The two heroes then packed Humbaba's severed head in a leather bag, transported it to Nippur, and offered it to the god Enlil in his Ekur temple (George 1999: 149-166). We will never know what Enlil did with the gift, but the image of the cut head of Humbaba took a life of its own, becoming one of the most popular amulets (Black, Green 1992: 106). Represented with hideous features in the shape of convoluted entrails, Humbaba's decapitated head was used as a magic charm to deter evil, cure diseases, and for divination (Wiggermann 1992: 146). The story of Humbaba's head echoes the art monuments and texts (Finkel 1983-84: 15) in highlighting that in the ancient Near East, foes and monsters were beheaded and their skulls were used to fight against wickedness and to communicate with the dead.

VII. INTERPRETATION

In this paper I have laid out: (1) The archaeological evidence on Neolithic plastered skulls, with special attention to 'Ain Ghazal 88-1. (2) Pictorial and textual evidence on decapitation in the early historic Near East. For the interpretation, I draw as much information as possible from the archaeological data. But when archaeology becomes mute, I fill some of the gaps with information drawn from early historical texts and

images, which are half way back in time to the Neolithic (and half a world and 3000 years closer than the New Guinea masks). I consider the early literary documents to be legitimate sources for prehistory because the ancient Near East was conservative (Moorey 2005: 6-7; Postgate 1994: 176-184). The earliest magic texts of the 3rd millennium bc are, on the one hand, very close to those of the 1st millennium bc, and on the other hand, it is evident that they represent an already ancient tradition that must have had its roots deep in prehistory (Grosman, Munro and Belfer-Cohen 2008). The incantation and necromantic documents are particularly justifiable because magic words or gestures cannot be changed without compromising the expected results. Consequently, magic rituals are—in essence, if not in details—among the most formal, repetitive and stable in a society.

'Ain Ghazal Skull 88-1 and its parallels show that the Neolithic Near East shared the age old and seemingly universal fascination for the human cranium (Talalay 2004: 156; Meslin 1987: 221-225; Wernert 1948: 53-72). The plastered skull had no doubt a symbolic value. But the meaning of symbols is well beyond the reach of archaeology. This is when the cuneiform texts, the oldest repositories of human beliefs, can be used as mirrors of the past. The documents reveal that in the ancient Near East, the human skull was deemed to hold apotropaic virtues and to serve as links to the other world. It is plausible to assume that the skulls were also invested with supernatural powers in prehistory.

Archaeology is limited to describing the color or consistency of the plaster modeled on the skulls, but the necromantic texts disclose that smearing crania with particular substances was deemed to endow them with special powers. Could this be a key to understand the skulls' red or black coloring and especially the plastering? It would not be surprising that the pure white plaster that resulted from the intense firing of ordinary limestone pebbles and that bonded with water with a baffling heat reaction be regarded as wondrous. The texts also raise the possibility that the plaster composition was not as simple as meets the eye but probably included magic ingredients such as "the dust of a centipede and an up turned shard from the crossroad," that chemical analysis would never detect.

That the plastered skulls were manipulated before being disposed of is supported by the following archaeological data (Kuijt 2008b: 183): (1) Some crania were on view inside or outside a building. (2) Several showed signs of previous wear and tear. (3) Lastly, the skulls were visibly prepared for display. Most are still provided with the flat base prepared to lay them securely. The removal of the mandibles and teeth was perhaps no more than a simple way to tilt the crania backwards at a perfect angle to offer a full view of the face (Fig. 6.2.9-6.2.10). When the eyes were closed, the head, leaning back suggested a person asleep or on a deathbed. But when the eyes were open, they were placed low below the brows, to allow "eye contact." Archaeology stops short at explaining why in antiquity—as they do so strikingly today from their museum shelves—the modeled heads caught the glance of viewers and stared back at them with a mysterious gaze. But the magic literature helps us visualize the awesome vision the plastered skulls would produce in a ritual. The texts also give an idea of the types of incantations participants could pronounce and the gestures they could perform in front of the skulls, such as kissing them or licking them that we otherwise could never imagine. Finally, as mentioned in the texts, it is reasonable to assume that the skulls were used especially on particular days of the lunar calendar, for example, when there was no moon.

Archaeology tells nothing about the person who plastered the skulls. But thanks to the written word, we may surmise that the officiating individual was a specialist regarded as having particular powers, perhaps as a healer or seer. It would be interesting to speculate about the status and power such people would derive from handling skulls.

Of course, what the skull rituals were expected to accomplish will always remain a mystery. In the historical period they dealt with trivial personal matters, such as curing people from seeing ghosts in dreams or grinding their teeth during sleep. We will never know whether more was at stake in prehistory. It would be fascinating to correlate the plastered skulls with period of crisis when magic would be put to work to seek answers or protection. But this is far more than can be expected from archaeology.

Finally, can the archaeological and pictorial sources be combined to define who were the people whose skulls were plastered? In the first place, the archaeological and ancient Near Eastern sources at hand are at odds with the ethnographic interpretation of an ancestor cult. We have no way to know whether the skulls were trying to portray someone's appearance or were generic. The sole information available consists of headless skeletons at the sites, which make it likely that the skulls were drawn from burials in the community. We also know that the decapitated skeletons of 'Ain Ghazal were among those more carefully buried—not those thrown in the trash. Archaeology however gives no clue concerning the identity of the beheaded bodies. Furthermore, the plastered skulls show no pattern of age or sex preference. This must simply mean that the selection of skulls for plastering was *not* based on age or sex and consequently on rank, status or social identity. Skull 88-1, buried alone, makes it clear that, in some occasions one specimen was sufficient to reach whatever result was expected. But other times series of as many as a dozen skulls were preferred or necessary. The fact that the skulls were often associated with other human bones denotes that in fact, several parts of the skeleton, in particular cranial or long bones, were required to achieve the desired end. Accordingly, should we infer that skulls—*any* skulls and bones—were collected when there was an urgent need for ritual?

CONCLUSION

In the perspective of the modeled skull assemblage, Skull 88-1, ca. 6800 bc appears a climax of the tradition of skeleton decapitation, which originated in the Natufian and PPNA periods and culminated in the Levantine PPNB (Belfer-Cohen 1995: 9-16; Kuijt 1996: 325). It is one of the most remarkable examples of the modeled genre, which in turn is the most elaborate of all the PPNB cranial treatments. The literary and pictorial sources often complement satisfactorily the archaeological data by lending an everyday life dimension. Archaeology describes the skulls, the plastered features and the breakage they endured but the texts suggest what they may have stood for and how they were handled. Archaeology ignores the people that manipulated the skulls but their shadows appear in the texts. Only the identity of the individuals whose skulls were plastered remains a mystery. Unless DNA analysis brings new information in the future, there is nothing in the archaeological data today to break their anonymity. In the absence of any archaeological evidence to support that the plastered skulls were either venerated ancestors, as suggested by the exotic Polynesian ethnography, or villains, as is to be expected from Near Eastern historical sources, we are left to conclude that the need for rituals involving skulls seemed a more decisive factor than the individuals involved.

Denise Schmandt-Besserat
Professor Emerita
The University of Texas at Austin
300 Bowie Street, Apt. 3902
Austin, Texas 78703, USA

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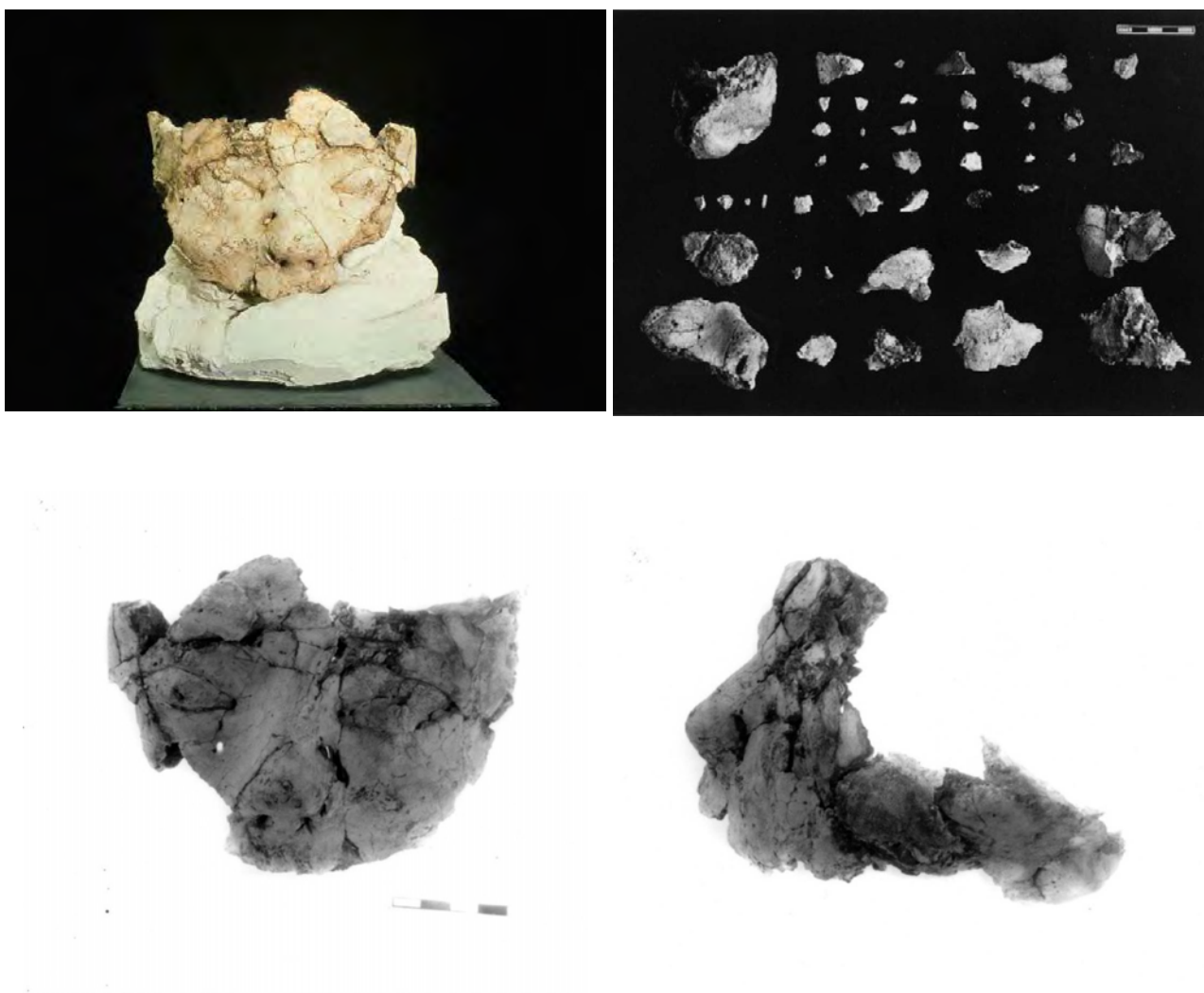1988   Nahal Hemar cave: the modeled skulls. '*Atiqot* 18: 59-63.

Plate. 6.2.1. a) 'Ain Ghazal 88-1, first reconstruction; b) 'Ain Ghazal 88-1, the forty-four bone and plaster fragments; c) 'Ain Ghazal 88-1, second reconstruction; d) 'Ain Ghazal 88-1, second reconstruction, side view; Photographs by Yousef Al-Zoubi.

Plate. 6.2.2. a) Jericho, Skull D 112, frontal view; b) Jericho, Skull D 112, profile view; c) Jericho, Skull D 114, top view; d) Jericho, Skull D 114, bottom view. Photographs by Osama Jabir.
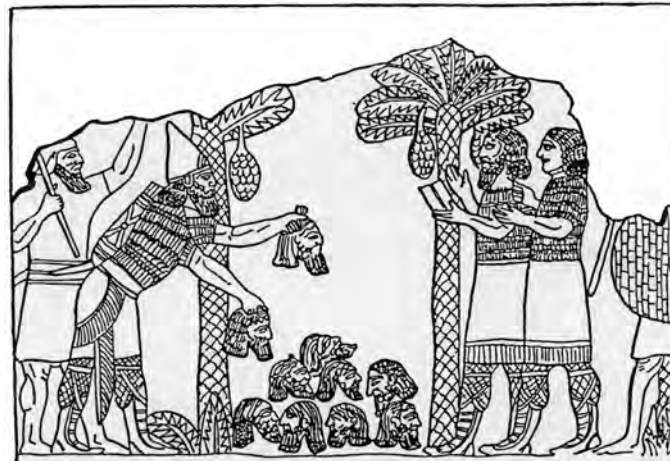
Plate. 6.2.3. a) a. Girsu, Stele of the Vultures, four enemy skulls carried away by birds of prey. *After Georges Perrot and Charles Chipiez, History of Art in Chaldea and Assyria, Vol. II, Chapman and Hall, London, 1884, p. 179, Fig. 94*; b) Ebla, soldiers carrying enemy heads by the hair and in bags. *After En Syrie aux Origines de l'Ecriture, Catalogue de l'Exposition, Ministere de la Culture de Syrie, Brepols, Belgique 1997, p. 238: 209-11. Drawing by Muwafaq Bataineh; c) Nineveh, Assyrian soldiers counting enemy heads. *After André Parrot, Ninive et l'Ancien Testament, Delachaux et Niestlé, Neuchatel, Suisse, 1970, p. 49, Fig. 15.*