THE CULTIC ASSEMBLAGE FROM 'EN HAZEVA: THE RESTORATION PROCESS

MICHAL BEN-GAL

Following is a description of the restoration process of the cult vessels from the favissa uncovered at 'En Ḥazeva (see Ben-Arieh, this volume). It is not a scientific study, nor is it a detailed technological documentation of the potter's craft. Rather, it is a description of the observations I maintained throughout almost a year of close association with the potsherds of these special vessels, while attempting to join them together.

The exceptional shape of these artifacts required a great deal of intuition. To determine the position of the various fragments of each vessel, I related to color, stains, composition, core, section, porosity, erosion and thickness, as well as to the style and processing of the clay. Sometimes, the fragments in the upper part of an object were entirely different from those of its lower part. All the aspects mentioned

above were crucial to the success in joining the potsherds together and indeed, the correct joins between the various parts were ultimately found (Fig. 1).

During the course of my work, I documented in writing each and every detail that I noticed and came across, so as not to lose this essential information. This would aid in understanding the technological, typological and functional aspects of the objects.¹

THE RESTORATION PROCESS

During March 1994, I received for restoration the fragments of a cultic assemblage, discovered in the excavations of Hazeva (the 1993 season; Area C, L771). Once the assemblage was discovered, the excavators made a supreme effort to collect the maximum amount of



Fig. 1. Numerous vessel fragments spread on the restoration tables.

sherds, recognizing the importance of the find; the earth was sifted and every minute bit was gathered. The objects were broken into pieces of varying sizes, mostly very small (1–4 cm; Fig. 2). The breaks were caused in antiquity by smashing (old breaks); during the excavation, large pieces had fallen apart (fresh breaks).

At first, the sherds were spread out and sorted according to different types of vessels. Then, work concentrated on the search for joins between the potsherds, the assembly of the vessel and its completion. Encrustation on part of the sherds resulted in a roughened exterior surface that sometimes occurred on the inside as well. Wherever encrustation covered the sherd, it appeared as a semi-transparent surface or crystals. We were unsuccessful in our attempt to remove the encrustation with immersion in acetic acid (CH₃COOH), as the acid had no effect on it. The sherds were mixed with small chunks of gypsum—apparently natural to the site; hence, it is possible that the



Fig. 2. Close-up view of the minute size of the fragments.

encrustation contained gypsum, which does not respond to acetic acid. As the gypsum encrustation is stable and not particularly affected by environmental conditions, the cleaning was partial and mechanical, only where the encrustation prevented the gluing of pieces together, or for aesthetic reasons. The sherds were glued together with P.V.A. emulsion in water and the missing parts were reconstructed with Plaster of Paris that was mixed with dry pigments to match its color to that of the clay. Due to the relatively good condition of the sherds, which were highly fired to a hard state, there was no need to reinforce them with any special substance.

The restoration process ended in January 1995. More than 70 clay vessels and objects were restored; most had a complete profile, with only 9 vessels missing their base or rim.

It is noteworthy that at the end of the restoration, only a handful of potsherds remained on the tables—a rare occurrence considering the large overall amount at the beginning of the work. Most of these leftovers could be related to specific vessels, but it was deemed not worth trying to place them back as the vessels were complete and their shape was clear.

PRINCIPLES OF POTTERY RESTORATION AND A PROPOSAL FOR FUNCTIONAL RELATIONS BETWEEN THE OBJECTS

It is impossible to scientifically prove that a functional connection existed between complete vessels, even those found in proximity to each other. The evidence is circumstantial and can be understood only when the assemblage is examined as a whole, in an attempt to understand the function of each of its components.

While sorting the material, fragments that usually included more than one vessel, which shared various characteristics, such as texture, view, interior and exterior color, thickness, section, core, inclusions and porosity, as well as the same breakage pattern and formation technique, were piled together. Thus, I assumed that these vessels might have been

made from the same batch of clay and fired under similar conditions, perhaps even made by the same potter. Pairs, triplets and even larger groups of vessels that were apparently produced together emerged from these piles of sherds. When I attempted to form groups based on technological features, it became clear that a connection was evident between certain complete vessels and others that shared the same manufacturing technique, but were typologically different. This connection led me to surmise that a functional affinity was extant between these vessels, and that they most likely had been used together. This, of course, is an observation and not a proven fact, as it is based on complete vessels that have no tangible association with one another.

On closer observation, an interesting phenomenon emerged: nine of the cultic vessels in the assemblage are cylindrical and open on both ends (the tenth vessel is broken). Three of these are anthropomorphic statues (Cat. Nos. 1-3; note, 'Cat. Nos.' refer to Ben-Arieh, this volume) that have a rim above their heads, similar to that of a storage jar. Another pair of vessels (Cat. Nos. 7, 8) is almost identical. Two other vessels (Cat. Nos. 5, 6) are similar, along with another single vessel (Cat. No. 4). In addition, there are eleven denticulated bowls with a narrow pipe-like foot and a row of triangular or squared 'petals', which descend from the carination angle like a skirt. The diameter of the foot in relation to the size of the bowl prevents it from standing on its own, and it is assumed that the narrow foot served as a peg that was inserted into the top of some other vessel. Among these bowls, two (Cat. Nos. 37, 38) are much larger than the other nine, which include two bowls that are identical in shape and size (Cat. Nos. 31, 32) and three bowls that form a group with very similar features of size and shape (Cat. Nos. 28-30). Each one of the four additional bowls is unique in shape, color, size and other identifying traits (Cat. Nos. 33-36). It is reasonable to assume that these bowls had been placed on the cylindrical stands, with their narrow pipe-like foot inserted into their upper opening (see Fig. 3).

Following are my suggestions concerning functional relationships between the vessels:

A. Anthropomorphic Statue No. 1 and denticulated Bowl No. 33; both are of reddish tint and exhibit similar surface treatment and cross-sections. When this bowl is placed on top of the statue, the rim of the latter fits exactly into the inner groove, which is formed behind the row of 'petals' that adorns the lower part of the bowl's exterior.

B. The fragments of anthropomorphic Statue No. 2 were piled together with those of fenestrated Stand No. 27 and those of denticulated Bowl No. 35, due to the similarity between them. When these three vessels emerged from restoration, the technological affinity between them was obvious (Fig. 3). However, additional features bond these vessels together. Fenestrated Stand No. 27 is different in shape and proportions from all other such stands in the assemblage. The bowl on its top



Fig. 3. The suggested arrangement of Stand No. 27, anthropomorphic Statue No. 2 and denticulated Bowl No. 35.

is flat, not rounded, and it has a groove in its center whose diameter is identical to that of the base of anthropomorphic Statue No. 2. This base and the bottom of the bowl bear remains of a clay attachment, as well as stains caused during firing. I propose that anthropomorphic Statue No. 2 was positioned atop or lightly attached to Stand No. 27 when the clay was still wet and that both were dried and fired as one unit; radiating marks, which are the result of a shadow cast by Stand No. 2 on Stand No. 27 during firing, are visible on one side of the bowl's surface. The color of Stand No. 27 is yellowish buff, with a dark gray core; it has large air bubbles due to the careless preparation of clay. The clay color of Statue No. 2 is also yellowish buff with a dark gray core. Where the walls of Statue No. 2 are thin, the clay is pinkish and contains cracks and air bubbles the result of poorly prepared clay. Denticulated Bowl No. 35 has a tapering foot that narrows toward its bottom. This is the only bowl of this type whose diameter would allow insertion into the narrow upper rim of Statue No. 2. The color of Bowl No. 35 is buff to pink and its features are similar to those of anthropomorphic Statue No. 2 and Stand No. 27

C. Anthropomorphic Statue No. 3 is very different from the other two anthropomorphic statues in style, texture and technology (Fig. 4). One arm has been completely preserved and the five-fingered hand holds a carinated bowl. The other hand holds a tablet under its armpit. Only the join of this arm to the shoulder and the palm of the hand have been preserved, as well as part of the arm holding the tablet. This arm was badly eroded and it is impossible to discern fingers or other details. The front of the tablet is missing so its original length is unknown. I greatly deliberated on the reconstruction of the missing arm in plaster, as it seems that this arm was shorter than the other, judging by the marks on the torso. Although the exact size and shape are unknown, I decided to reconstruct it anyway, as a proposal and not as a fact, to easier understand the arm's gesture. The tablet



Fig. 4. Anthropomorphic Statue No. 3 during restoration.

and the hand itself are positioned *in situ*. Based on all the technological features, it seems that anthropomorphic Statue No. 3 is best suited to one of the three bowls (Cat. Nos. 28, 29 or 30), whose color, shape, size and texture are very similar to each other.

D. Stand No. 4 was one of the most difficult to restore. During sorting, it was hard to separate its fragments from those of other technologically similar vessels. Once the restoration of the other vessels was complete, it became clear that the sherds belonged to a different vessel, and possibly even to more than one. The sherds of the stand's lower part are of a different color, thickness and state of erosion than those of its upper part. Although it is reasonable that such a tall vessel would exhibit gradual fluctuations, this was noticed only during the building and gluing of the pieces together, when joins of additional sherds of the stand were found. A great deal of intuition was required for restoring this stand, as its shape and height were unknown and it was impossible to guess what its upper part would look like, based on the base and the lower part. The surface of the vessel was incised and grooved; it had windows and traces of paint. Above the row of windows was a prominent shelf-like ridge (third from bottom). Around the entire panel between this ridge and the one above it were stains and traces of clay that indicated the addition of various plastic elements.

Within this assemblage of potsherds were several figurines, including four animals, two human figures and three birds. These figurines, in a somewhat fragmentary state, had one rather flattened side and seemed to fit a certain profile. On the flattened side were attachment marks, similar to those observed on the surface of the stand. When I tried to match the back of the figurines to the marks on the stand, three of the animals fit; the fourth was shaped differently and apparently belonged to some other object with a flat, rather than a cylindrical, surface. The human figures' back profile corresponded perfectly to the extant marks on the stand. The placing of the figures on the panel is symmetrical: the two human figures are in front and the four animals surround them; the two larger animals face the human figures and the two smaller ones face each other, with their tails turning toward the larger animals. Only one of the two small animals has survived, but the traces of attachment left on the surface of the stand indicate that the missing animal was identical to the surviving one. The prominent ridge above the figurines looks like a roof in relation to the diameter of the stand at this point. On the outer edge of this ridge are equidistant knobs that face upward; some are preserved in situ, while others were recovered and glued into place and some were reconstructed in plaster. Traces of attachment that differ from the round imprint left by the missing knobs are visible along the front of this prominent ridge. Apparently, these were attachments of various shapes that have not been preserved. An additional ridge above the knobbed ridge is similar, yet its diameter is narrower. Above it,

the upper rim of the vessel curves inward. Four small windows are cut into this upper ridge; they bear traces of attachment, indicating that something had been joined to them. I tried to place the three bird figurines in the windows and indeed, each bird was positioned in its precise spot.² The birds were not complete, as each of them had some part missing. The missing parts could be restored, based on the other birds, and so I allowed myself to complete them in plaster. The fourth bird was missing altogether and I reconstructed it entirely from plaster, to achieve a complete look of the stand. It is possible that one of the three footed bowls (Cat. Nos. 28-30) was originally placed on top of this stand. The clay of all three bowls allows for this reconstruction. The rim of Stand No. 4 was distorted during the process of drying, so that placing a bowl on its top would have looked rather unaesthetic; nonetheless, it was probably done.

E. Stand No. 10 has a smooth gray-green surface, with a reddish brown core that contains tiny white inclusions. Denticulated Bowl No. 34 suits this stand, as its color, cross-section, inclusions and processing manner of the clay are similar. In addition, its peg-like foot exactly fits the upper rim of this stand. The 'petals' surrounding the lower body of Bowl No. 34 are perforated. The assemblage also included two groups of pomegranates with suspension holes. One of the groups comprises three tiny pomegranate buds (Cat. Nos. 67-69). Their gray surface is smoothed and worked in a similar manner to that of the stand and the bowl; it is therefore reasonable to assume that they were suspended, like earrings, from the holes in the petals.

F. Stand No. 5 has a light colored, relatively smooth surface, which contains tiny, evenly distributed inclusions. It resembles a tall pillar with several registers of windows and knobbed ridges. This stand is unique in texture. Denticulated Bowl No. 36 suits this stand, as its light colored clay and its cross-section

resemble those of the stand, as does its plastic decoration on top of the rim. The peg-like foot of Bowl No. 36 is divided into two, with the upper part under the join to the bowl more distended than the narrower lower part. When the peg is inserted into the upper opening of the stand, the distended part fits nicely onto the rim and together, they form an imposing tower.

G. The assemblage included fragments of Stand No. 6, whose shape resembles that of Stand No. 5, but it differs in color and inclusions. It is also simpler and has fewer tiers. Following the restoration, I was unable to join the upper and lower parts of the stand, due to erosion that prevented clear joins. The entire height is therefore, unknown. Any one of Bowl Nos. 28–30, whose dimensions, color and texture are similar to those of Stand No. 6, could have been placed on top of it.

H. Stand Nos. 7 and 8 are very similar in shape, as in other features such as clay, color and inclusions; therefore, they have been identified as a pair. They are both of yellowish-buff color on the exterior and have a reddish core with inclusions. Both are also porous, resulting

from the use of a clay recipe that was not well blended. Bowl Nos. 31 and 32, with a narrow foot, form a pair, which is similar in color and in the nature of clay. These bowls are similar to the pair of stands, Nos. 7 and 8. Thus, I permitted myself to match one pair with the other.

I. Bowl Nos. 37 and 38, with a narrow foot, are larger than the rest of the bowls in the same group. Bowl No. 38, whose color is pink, has holes perforated in the upper part of the denticulated 'petals', just above the point where they adjoin each other (Fig. 5). Three almost complete large pomegranates (Cat. Nos. 64–66), as well as fragments of one or two others, were restored. These pomegranates are hollow and have an added clay strip for suspension. They are very similar in their pink color and nature of clay to Bowl No. 38 and presumably, were hung from the holes in this bowl (see Ben-Arieh, this volume: Fig. 40).

RESTORATION OF THE STONE OBJECTS

The stone finds included a group of stone bowls and small stone altars, as well as a stone statue.



Fig. 5. Several restored denticulated bowls.

The broken bowls and altars, of soft limestone, underwent restoration using plastic glue. It should be noted that most of these stones bore faint traces of red color on the exterior. To preserve this pigment, they were all covered with a layer of *paraloid* B72.

Human Statue.— After finding joins and gluing the soft limestone fragments together, two parts of a statue emerged (Cat. No. 76). Its upper front, as well as half of its sides, were nicely smoothed and bore traces of red paint. The back side was roughly worked. The statue was split along its length, probably by a root, and parts of it were missing, particularly from the back, as well as a large gap in the center. Unfortunately, the edges of the stone fragments crumbled and it was impossible to find a clear join between the right and left parts of the statue. As the details of the carving in the front are symmetrical, I

joined the two pieces by reconstructing the carving lines, aiming to achieve a reasonable and aesthetically proportioned width. The distance between the two parts of the statue in its center, near the inner section and not in the front, where a large piece is missing, does not exceed 5 cm.

All the missing parts were filled with plaster to complete the look. A rounded concave break is noted in the center of the statue's upper part. Close examination of the worked area in this part shows a slightly raised margin in the stone that was broken. It is reasonable to assume that the statue had risen at this point to form a neck or a head above the shoulders. To preserve the worked and smoothed parts of this stone, particularly in the front, as well as the traces of paint and the inscription found on its surface, the statue was covered with a protective layer of *paraloid* B72.

NOTES

REFERENCE

Ben-Arieh S. This volume. Temple Furniture from a Favissa at 'En Ḥazeva.

¹ My sincere thanks to Sara Ben-Arieh, Pnina Shorr, Anat Cohen-Weinberger and Elisheva Kamaisky, with whom I consulted during my work.

² I am grateful to my colleague Elisheva Kamaisky for helping me on this matter.