

COPTIC CERAMICS

The pottery produced in Egypt from the late Roman to the early Islamic period. There must be no illusion about the term “Coptic ceramics.” The techniques of production were in the tradition of Hellenistic and Roman techniques. Similarly, there is no marked stylistic discontinuity between the products of the Roman period and those of the Copto-[Byzantine period](#) in that both depended on pottery imported from other regions of the Mediterranean. Nor does the Arab conquest in the seventh century seem to have introduced fundamental changes in local workmanship. It is not unusual to observe the presence of “Coptic” ceramics in so-called Islamic areas until at least the tenth century.

Manufacturing Techniques

A technological study of ceramics allows one to define groups of wares according to the type of clay, the method of shaping, and the method of firing. It shows the characteristics of a workshop or manufacturing group. Such a study should begin with general comments on the materials and techniques of making ceramics in Egypt.

Raw Material.

Clay is fine particles of sedimentary rock, formed from argillaceous minerals (hydrated aluminium silicates) and nonargillaceous minerals (such as quartz and calcite), which appear in varying proportions in clays in the natural state. The lamellar, crystalline structure of these minerals is modified by the addition of water, which gives the clay plasticity, and by firing at a high temperature, which makes it strong and hard. It may be supposed that the clays used by the potters of the Copto-[Byzantine period](#) were not basically different from those used in the more remote past or those still used today.

Clays may be subjected to various treatments—such as kneading,

crushing, washing, and sifting—that vary according to the properties of the clay, the type of vessel to be produced, and, possibly, local customs. In order to increase the strength of the wall of a clay object, to limit plasticity, and to control porosity or shrinkage on drying, nonplastic organic and/or mineral particles called tempers are often added to the natural clay. For a more detailed study of tempers see M. Picon (1973, pp. 11ff.). For the methods of preparation of clay in pharaonic Egypt see D. Arnold (1980, cols. 399 ff.), and J. Bourriau (1981, pp. 14ff), which has a tentative classification of clays.

Pharaonic and Coptic Egypt had three basic types of clay, although in the absence of detailed systematic analyses any attempts at classification may well appear aleatory (Tobia and Sayre, 1974, p. 124; Noll, 1981, pp. 108 and 112). Potters used them separately and probably also in mixtures. *Calcareous, or marl clays* are characterized by a relatively high proportion of calcite. They have slight quantities of silica and iron oxide and a few micas (brilliant flat particles); vegetable particles are seldom present (Arnold, 1980, col. 395ff; Bourriau, 1981, pp. 14-15; Arnold, 1981, pp. 167-91).

During the Copto-[Byzantine period](#) several groups of vessels seem to have been made of calcareous clays. The first group is that of amphorae (large, two-handled jars), especially from such sites in lower Egypt as Abu Mina and Kellia (Egloff, 1977, type 186); they have a beige-to-yellow paste on the surface (Munsell 2, 5YR8/3, 10YR7/4), which includes many black and yellow nodules, large white particles (perhaps calcite), and some grains of quartz.

Breaks are often reddish pink (Munsell 2,5YR5/7; 2,5YR5/8). The second group consists of water jugs, such as those from the fifth century at Kellia (Egloff, 1977, types 198-202); pitchers with excised, vertical fluting, perhaps from Abu Mina (Egloff, 1977, types 227-28); and water jugs and flasks from Isna (Jacquet-Gordon, 1972, p. 13, pl. 4).

Siliceous clays, or silt, are characterized by high levels of silica and iron oxide. They also contain grains of quartz, micas, and organic particles (Arnold, 1980, cols. 394-95; Bourriau, 1981, p. 14). In the Coptic period such clays were no doubt the material of the “fine” (as distinct from “coarse”) ceramic products of what M. Rodziewicz calls Group K (1976, pp. 50ff) and J. W. Hayes calls Egyptian B. These cooking dishes, deep bowls, and storage jars (Rodziewicz, 1976, K 35-36; Egloff, 1977, types 258-98; Jacquet- Gordon, 1972, K 1-2, 4-11, clay III) are of red to brown clays (Munsell 2, 5YR4/6; 5YR5/3). In the clays, visible to the naked eye, are fine particles of mica, grains of quartz, and frequent traces of vegetable tempers. A group of amphorae is characterized by brown, highly micaceous clays (Egloff, 1977, types 172-80; Spencer and Bailey, 1982, pp. 16ff).

Kaolinitic clays contain kaolinite, a hydrous silicate of aluminum. These clays were used for another type of “fine” ceramic ware, Group O (Egyptian A, or Coptic red slip wear, according to Hayes), which includes plates, bowls, and flasks. They are pink on the surface and in the break (Munsell 5YR7/3; 7,5YR7/4) and include, visible to the eye, micas, black nodules, and quartz grains (Rodziewicz, 1976, pp. 54ff).

Shaping. Coptic potting techniques, like those of Greece and Rome, allowed for both specialization and standardization of form. Pottery was thrown on the wheel, which was furnished with a system of propulsion permitting simultaneous production in series, varied forms, and rather elaborate finishing techniques (for the pharaonic period, see Holthoer, 1977, pp. 31-34).

An attempt to reconstruct the method of manufacture is necessary in order to grasp the morphological subtleties of each group of shapes. In the absence of an exhaustive picture, some examples may be indicated here. Open, shallow forms, such as plates, platters, and bowls, made from a ball of clay must be centered on the wheel and hollowed very exactly in order to obtain a regular rim.

The rim may be thickened or flared to strengthen the structure of the vessels. For small shapes, the potter may use a clay cone. Several specimens are successively fashioned from the top of the cone by being sliced off by a string.

Large jars used for the storage of provisions, such as no. E10993 in the Louvre, Paris, may have been made in one piece after the fashion of present day *zirs* (water jugs). Traces of cord visible on and under the maximum diameter of the body indicate that in the drying that preceded the firing, the potter wished to hold the body with a temporary support to prevent undue strain on the walls.

Some lids with a beveled rim (Egloff, 1977, types 347ff.) seem to have come from the same preliminary shape as the cooking pots to which they are perfectly adapted (Egloff, 1977, types 110 and 115-16). The pot was turned as a closed shape and is thought to have been “beheaded” obliquely with a cutting tool in the upper part, thus forming the lid. The lower part, the remaining three-quarters, formed the pot (Rhodes, 1978, fig. 93, 6).

During and after the fashioning of the preliminary shape, the potters smoothed the surfaces with a blade (Rhodes, 1978, pp. 45ff.). Then they resorted to finishing. With a cutting instrument they trimmed off the walls, rim, and base (Picon, 1973, pp. 30-31). So far as bowls and plates of Group O are concerned (Rodziewicz, 1976, 0 23; Egloff, 1977, types 33-37), the helicoidal marks of tooling, quite visible on the exterior surface, constitute a veritable trademark.

On amphorae and pots, potters liked to make a network of horizontal rilling lines giving a ribbed appearance to the vessel’s surface. This treatment, intended among other things to facilitate gripping the vessel, was obtained by pressure from the fingers during throwing or with the help of a cutting tool. Handles, spouts, and filters were luted (coated) with *barbotine* (liquid clay) before the final drying.

Throwing was the principal fashioning technique used in Copto-Byzantine Egypt. Molding seems to have been very rarely employed and modeling was nonexistent, except for handles and grips. A special technique, building up with a beater, seems to have been used for the construction of bread ovens, big troughs of coarse clay with thick walls (Egloff, 1977, pp. 167-69).

Firing. In spite of the rare reference to kilns in the Copto- Byzantine period, it cannot be doubted that Egypt possessed a considerable number. (On methods of firing, see Picon, 1973, pp. 55ff.) The archaeological literature refers to kilns at Maryut (Empereur and Garlan, 1984, and Picon, 1984); at Abu Mina, where the specialty was figurines and *eulogia* (praise or blessing) AMPULLAE, as well as common ware; and at al-Ashmunayn (Hermopolis Magna), where the archaeological remains are complemented by the evidence of a papyrus, dated 517, that mentions a potter's workshop in the Hermopolite nome (Spencer and Bailey, 1982, p. 17 and n. 17). In Upper Egypt, kilns have been discovered at Medamud and Tod (bibliographical references concerning these areas are collected in Egloff, 1977, p. 191, n. 2).

The structure and functioning of the kilns have never been studied in detail. The kilns at Medamud are described thus: "This kiln consists of a tower of crude bricks, with an opening at the bottom, on a level with the furnace chamber. In the tower, and restricting the stoke-hole, is a platform, perforated to make a sort of earthenware grill on which the pots to be fired were placed. The opening is below this grill. This opening served as the mouth of the furnace chamber" (Bisson de la Roque, 1931, p. 22).

Nubian kilns of Group X, or the Ballana culture, after the Meroitic period (c. 100-350), and of the Christian period (until 1350) are better known. A certain number that were situated to the north and south of Wadi Halfa (West Faras, East Serra, East Debeira, Argi, Gezira, Daboro, Mugufil) generally had the form of a furnace chamber, often dug in the ground and

with the help of a dome supporting a firing chamber open at the top. Access to the furnace was by a small lateral stokehole above the outside ground level. There were also in Nubia more rudimentary methods of firing (Adams, 1962, pp. 62-75).

Few analyses have dealt with the determination of the temperature of firing. In the New [Kingdom](#) it seems that siliceous clays were fired at a low temperature (500 to 800°C) and calcareous clays at a higher temperature (850 to 1000°C; Bourriau, 1981, p. 17). In the Roman period, the temperature of firing common wares ranged from 800 to 1000°C and that of terra sigillata (ware with stamped designs) between 900 and 1100°C (Picon, 1973, p. 58), the same range of temperatures at which Gaulish *sigillata* were fired.

In the present state of research, more attention should be directed to the Romanization of manufacturing techniques in Egypt and their points of contact with Copto-Byzantine ceramics, and Copto- Byzantine innovations should be identified. Further archaeological investigations, aiming at the discovery of production sites, and application of laboratory methods will undoubtedly produce a better evaluation of these problems.

BIBLIOGRAPHY

- Adams, W. Y. "Pottery Kiln Excavations." *Kush: Journal of the Sudan Antiquities Service* 10 (1962):62-75.
- Arnold, D. "Keramik." *Lexikon der Ägyptologie*, Vol. 3, col. 392-409. Wiesbaden, 1980.
- . "Ägyptische Mergeltone ("Wustentone") und die Herkunft einer Mergeltonware des Mittleren Reiches aus der Gegend von Memphis." In *Studien zur altägyptischen Keramik*, ed. D. Arnold. Mainz am Rhein, 1981.
- Ballet, P., and M. Picon. *Recherches préliminaires sur les origines de la céramique des Kellia (Egypte). Importations et productions égyptiennes*. Cahiers de la Céramique Egyptienne 1. Cairo, 1987.

- Bisson de la Roque, F. Médamoud (1930). *Fouilles de l'Institut français d'archéologie orientale*, Vol. 8, pt. 1. Cairo, 1931.
- Bourriau, J. *Umm el-Ga'ab. Pottery from the Nile Valley before the Arab Conquest*. Exhibition at the Fitzwilliam Museum. Cambridge, 1981.
- Brissaud, P. *Les ateliers de potiers de la région de Louqsor*. Bibliothèque d'Etude, Vol. E 78. Cairo, 1982.
- Egloff, M. Kellia. *La Poterie copte. Quatre siècles d'artisanat et d'échanges en Basse Egypte*. Recherches suisses d'archéologie copte, Vol. 3. Geneva, 1977.
- Empereur, J. Y., and Garlan, eds. "Recherches sur les amphores Grecques." *Actes du colloque international d'Athènes, 10-12 septembre 1984*. Supplement to *Bulletin de correspondance hellénique* 13 (1984).
- Holthoer, R. *New Kingdom Pharaonic Sites: The Pottery*. Copenhagen and Stockholm, 1977.
- Jacquet-Gordon, H. *Les Ermitages chrétiens du désert d'Esna*, Vol. 3: *Céramique et objets*. *Fouilles de l'Institut français d'archéologie orientale*, Vol. 29, pt. 3. Cairo, 1972.
- Matson, F. R. "Technological Studies of Egyptian Pottery. Modern and Ancient." In *Recent Advances in Science and Technology of Materials*, Vol. 3, ed. B. Adli. New York, 1974.
- *Munsell Soil Color Charts* (Munsell Color Company). Baltimore, 1954.
- Noll, W. "Bemalte Keramiken Altägyptens: Material Rohstoffe und Herstellungstechnik." In *Studien zur altägyptischen Keramik*, ed. 1981. Mainz am Rhein, 1981.
- Picon, M. *Introduction à l'étude technique des céramiques sigillées de Lezoux*. *Centre de Recherches sur les techniques gréco-romaines*, no. 2. Dijon, 1973.
- Rhodes, Daniel. *La Poterie: les formes*. Paris, 1978.
- Rodziewicz, Mieczyslaw. *La Céramique romaine tardive d'Alexandrie, Alexandrie I*, trans. Z. Kiss. Warsaw, 1976.
- Spencer, A. J., and D. M. Bailey. *British Museum Expedition to*

Middle Egypt: Ashmunein (1981). British Museum, Occasional Paper no. 41. London, 1982.

- Tobia, S. K., and E. V. Sayre. "An Analytical Comparison of Various Egyptian Soils, Clays, Shales and Some Ancient Pottery by Neutron Activation." In *Recent Advances in Science and Technology of Materials*, Vol. 3. Proceedings of 2nd Cairo Solid State Conference: 1973, Ed. A. Bishay. New York, 1974.

Decorative Techniques and Motifs

Decoration had a considerable place in Coptic ceramics. It appeared in simplified form even on articles intended for everyday use. Decorative techniques bear witness to specialization in workshops and adaptation of ornament to the type and technology of the vessel. Impressed decoration was generally associated with wares made of relatively fine clays; painting was found on wares of coarser clay. It is sometimes difficult to distinguish between the process of fabrication itself and the decorative effect that may have resulted from it, such as traces of cords on amphora and cooking pots.

Coptic decoration excelled more in its iconographic and stylistic expression than in the techniques of application. Impressed decoration was dependent on late Roman ceramics. It is in the motifs of painted decoration that Coptic ceramics seem to be distinguished from any external inspiration and present real originality. In this respect it is significant that, from the eighth century, some form of glazed (vitreous) coating was applied to painted and other Coptic wares.

Impressed Decoration and Related Techniques. A number of Coptic decorative methods show Roman influence: impressing and stamping, incising, deforming and cutting, and relief.

Decoration formed by *impressing or stamping* a carved motif on soft clay was directly inspired by late Roman "fine" ceramics, especially the

sigillata of Late Roman B (“fine” ware from North Africa) and D, to use O. F. Waagé’s terminology, taken over by M. Rodziewicz and M. Egloff. This technique was imported into and imitated in Egypt.

Fine local ceramics, particularly orange wares of Group O, were inspired by Late Roman B, as the stylistic adaptation of a dove on a vessel from Alexandria bears witness (Rodziewicz, 1976, p. 54). On wares at Kellia, there are impressions of the monogram of Christ, stars with seven branches, Maltese crosses, and a six-petaled flower (Egloff, 1977, p. 81, pls. 11, 14, 15, 1-7); and at Isna, wares bear the monogram, rosettes, crosses, fishes, and doves (Jacquet-Gordon, 1972, p. 19). Other wares with stamped motifs were found at Armant (Mond and Myers, 1940, pls. 82-83, without specification of groups) and at Elephantine (Grimm, 1975, pp. 76-77, fig. 13). Carmine red wares of Group K, with the exception of some specimens from Kellia (Kasser, 1983, nos. 16-17 and 38), were seldom stamped, according to Rodziewicz (1976, p. 50).

Terra-cotta stamps intended for imprinting decorative motifs have been found at Elephantine (Thilo, 1971, p. 235-42). Rouletted decoration, consisting of overlapping row on row of vertical or oblique incised strokes, was cut with a hard instrument. This operation took place when the vessel, after a first drying, again trued up on the moving potter’s wheel. Rouletted decoration is characteristic of Group O wares (Jacquet-Gordon, 1972, p. 12, among forms D and E; Rodziewicz, types O3-O4, O22a, O24; Egloff, type 37; Grimm, p. 76, fig. 13a, c, d). Simple concentric grooves decorated the bottom of certain pieces of Group K wares (Egloff, 1977, type 63; Kasser, 1983, no. 28, 36), on the pattern of Late Roman B and D.

Another frequently found form of impressed decoration is the impression of ropes on and below the outer rim. This design might also be evidence of the manufacturing technique (Rodziewicz, types K21b, K23b, K24c).

Incised decoration is cut into the wall of the vessel with a gouge or knife

to produce a line or groove. The shoulder and belly of light-colored clay pitchers at Kellia (Egloff, 1977, types 227-28), which perhaps originated in Abu Mina, were incised to create vertical fluting.

Decoration by *deformation and cutting* is reserved exclusively for the rim, which is altered by pinching and pressing to make an undulation at the mouth of bowls and deep dishes (Egloff, 1977, pls. 76-79, 81; Jacquet-Gordon, 1972, forms S4; Murray, 1935, p. 7, pl. V, 4-5; Louvre, no. AF6939). The wide rim of certain plates in Group K is sometimes cut out as a slightly concave polygon (Rodziewicz, 1976, type K31; Hayes, 1976, no. 128).

Decoration in *relief* by means of appliqué or carving was uncommon. However, very large vessels such as bread ovens and basins were ornamented with pellets framed or linked by impressed rippled bands and associated with a design of impressed plants (Kasser, 1983, no. 155). The excavations of the Institut français d'archéologie orientale found some sherds from Hermitage 167 at Kellia showing such decoration. Schematic modeled faces were sometimes applied to the outer surface of vessels (Clédat, 1904, p. 102, fig. 57; Murray, 1935, pp. 2-3, pl. II, 2, III; Louvre, Archivio di filosofia 13886).

Painted Decoration. Painting clearly distinguishes Coptic pottery from the decorative techniques derived from late Roman ceramics, although the two methods of decoration were contemporaneous. Some pieces, however, juxtapose impressed motifs and painted ornamentation (Hayes, 1976, nos. 109-110).

A wide range of forms and wares could have painted decoration. Elaborate and sometimes presenting real compositions, it is present on cups, plates, wide bowls, and deep dishes. It also ornaments the shoulders of water jugs and pitchers; the permeability of their walls, preserving the coolness of the water, revived the colors. Painting was the preferred decoration for censers and pot lamps, probably for liturgical

use. Reduced to simple points and quickly sketched bands and arcs, it adorns cooking pots. It is also found on storage vessels.

Decoration was not used on so-called deluxe ceramics. It appears on vessels whose material and manufacturing techniques may be mediocre, such as coarse-textured clays or sketchy finishing of rims and bases. In certain cases, the application of the decoration seems intended to conceal the technical poverty of the vessel.

The themes and techniques of painting on vases evolved until the fifth century, with Hellenistic and Roman motifs, such as garlands of flowers and designs in friezes, as the predominating influence. From the fifth to the seventh centuries, the workshops used both stylization and spontaneity in the treatment of motifs. They adopted the dark circle and employed a relatively limited palette of colors. They introduced a religious iconography, a wide variety of animals, and floral and geometrical combinations adapted to the demands of the form. From the eighth century the traditional character of painted ceramics persisted as much in Christian areas as in zones of Arab penetration.

Paint consisted of slip (liquid clay) colored by the addition of metallic oxides. One early technique on unglazed pottery was to coat a fired vessel with a thick layer of white slip and then paint motifs on it, as in examples of the third century from Antinoe (Antinoopolis) (Kueny and Yoyotte, 1979, nos, 198-201).

The colors used were brown and black (manganese or manganiferous hematite), red-orange (iron oxide), and white (very pure kaolin) (Neyret, 1966, pp. 40-41; Noll, p. 123). The decoration was monochrome (black/brown), bichrome (black/brown and white or black/brown and red/orange), or polychrome (black/brown, red/orange, and white). According to some experts, this technique preceded painting on a raw unfired base, but analyses of some potsherds of the Coptic period have confirmed that the painting had been fired (Noll, 1981, p. 123).

Paint was usually applied with a brush. A sketch of the figure was made in light ochre or white. Then the contours were quickly emphasized with black lines and hatching. This procedure of shading with swift, parallel strokes was probably influenced by the art of Alexandria (Badawy, 1954, p. 60). Finally the colors of the highlights were added (Neyret, 1966, p. 41; Desroches-Noblecourt and Vercoutter, 1981). Sometimes, however, the finger was used to print simple dots.

In the late Roman period, the composition of painted ceramic decoration was generally superposed friezes at the top of a vessel, as for example in the wares from Antinoopolis just cited and a vessel in the Louvre (AO.E11271), or a floral garland (*Meisterwerke altägyptischer Keramik*, 1978, no. 437). Coptic painters, however, preferred circular, centered compositions and the arrangement of motifs in metopes (square spaces in a Doric frieze). There was a close link between the form of the vessels and the composition of the ornamentation. The bodies of jars were suitable for motifs in metopes, while the insides of cups were adorned with centered designs. Lines and horizontal bands gave rhythm to the necks of water jugs, while their shoulders bore arcs encircled by pellets or lotus buds; sometimes foliage associated with fish was displayed. Geometric motifs were arranged on the wide rims of vessels and censers.

Coptic painted ceramics presented a wide range of iconography (Egloff, 1977, pp. 56-58; Mond and Myers, pls. 72-81). Painters of pottery probably drew their inspiration from the iconography of mural painting, book illumination, and textiles. Certain compositions with human figures, such as saints, appear to be veritable transpositions of scenes appropriate to wall paintings. A certain parallelism is noticeable in the treatment of forms, such as an outline delineating a motif or the hieratic aspect of a human form.

Coptic painted decoration relied to a moderate degree on the human figure. Often it was in the form of a bust, apparently derived from Egypto-Roman funerary portraits. Sometimes only the head was represented

(Quibell, 1908, pl. 62, 4; Louvre, no. E10993; Bulté, 1980, no. 138, fig. p. 23). Saints in niches or saints on horseback fighting a dragon formed real little pictures (Neyret, 1966; *Hommages Serge Sauneron*, 1979, pp. 187-89; Murray, 1935, pp. 1-2, pl. I, 1, 4-5, pl. 9). The Louvre possesses a rare representation of two men raising their right hands on the fragment of a cup (Louvre, Archivio di filosofia, no. 6939).

The rich variety of beasts showed a strong preference for gazelles, lions, asses, and hares (Mond and Myers, 1940, pl. 72; Quibell, 1912, pl. 51). The volatile faun was sometimes associated with other animals (Coptic Museum, Cairo, no. 6720; Henne, 1925, pl. 21; Louvre, no. E1246/AF 4471). One painter had a liking for aquatic life (Hayes, 1976, nos. 107-108), including tortoises (Egloff, 1977, p. 53, pl. 36,2). Among the plants, the lotus and the vine were frequently depicted (Egloff, 1977, p. 49, pls. 64-65, 94; Desroches-Noblecourt and Vercoutter, 1981, no. 364).

Geometric motifs developed from the circular band into braid, plait, and scroll patterns among others (Egloff, 1977, pls. 96-98; Jacquet-Gordon, 1972, pp. 17-18). The metopes on jars were often enclosed in a lattice-work design (Coptic Museum, no. 39065/86401).

In some cases the existence of schools or workshops can be distinguished, like that of the “master of Kellia” (Egloff, 1977, p. 49), as well as that of the artist who probably created two vases with similar decoration (Quibell, Vol. 4, 1912, pl. 51; Piankoff, 1942, pp. 25-29) and perhaps a third specimen (Bulte, 1981, no. 77).

Glazing. At the end of the seventh century glazing appeared, a development that has been highlighted by the work of Rodziewicz at Kom al-Dikka, Alexandria (Rodziewicz, 1978, pp. 338-45; Rodziewicz, 1983, pp. 73-75). Glaze in the form of finely powdered glass was applied to earthenware and then fired to produce a vitreous coating that would be impervious to liquid. Glaze was used with both impressed and painted decoration. Glaze was applied to vessels of Groups O and W of local fine

wares (Rodziewicz, 1976, pp. 54, 61). In the eighth century, glazed specimens from Groups O and W coexisted with unglazed specimens, which disappeared in the course of the ninth century. During this second phase, local glazed ceramics continued, while glazed ceramics began to be imported from Syria, Mesopotamia (Iraq), and Persia (Iran).

On these local examples the red/orange slip coating of wares (in Group O) was covered with a clear glaze. The white slip coating of wares (in Group W) was more frequently covered with one or several layers of glaze—brown, green, or transparent. The glaze enriched the effect of the traditional red, brown, and black colors of painted decoration beneath the glaze. A green or brown glaze was also laid down over the transparent, vitreous coating. The characteristic Coptic motifs such as birds and garlands were contemporary with floral elements marked by a naturalist tendency and probably influenced by the lusterware from Samarra, Mesopotamia.

BIBLIOGRAPHY

- Badawy, A. “L’Art copte. Les Influences hellénistiques et romaines.” *Bulletin de l’Institut d’Egypte* 35 (1954):5-68.
- Bulté, J. “La Céramique copte.” *Archéologia* 138 (1980):20-25.
- Clédat, J. *Le monastère et la nécropole de Baout*. Mémoires publiés par les membres de l’Institut français d’archéologie orientale Vol. 12, no. 34. Cairo, 1904.
- Desroches-Noblecourt, C. and J. Vercoutter, eds. *Un Siècle de fouilles françaises en Egypte, 1880-1980*. Cairo and Paris, 1981.
- Egloff, M. *Kellia: la poterie copte. Quatre siècles d’artisanat et d’échanges en Basse Egypte*. Recherches suisses d’Archéologie copte, Vol. 3. Geneva, 1977.
- Grimm, G. *Stadt und Tempel von Elephantine. Fünfter Grabungsbericht*. [Mitteilungen](#) des Deutschen Archäologischen Instituts—Abteilung Kairo, Vol. 31. Mainz am Rhein, 1975.
- Hayes, J. W. *Roman Pottery in the Royal Ontario Museum*. A

Catalogue. Toronto, 1976.

- Henne, Henri. *Rapport sur les fouilles de Tell Edfou 1923-4*. Fouilles de l'Institut français d'archéologie orientale, Vol. 2, pt. 3. Cairo, 1925.
- *Hommages à la mémoire de Serge Sauneron 1927-1976*, Vol. 2. Bibliothèque d'étude, Vol. 82. Cairo, 1979.
- Jacquet-Gordon, H. *Les Ermitages chrétiens du désert d'Esna. Céramique et objets*, vol. 3. Fouilles de l'Institut français d'archéologie orientale, Vol. 29, pt. 3. Cairo, 1972.
- Kasser, R. *Survey archéologique des Kellia (Basse-Egypte). Rapport de la campagne 1981*. [Missions](#) Suisses d'Archéologie Copte de l'Université de Genève. Louvain, 1983.
- *Meisterwerke altägyptischer Keramik. 5000 Jahre Kunst und Kunsthandwerk aus Ton und Fayence*. Hahr-Grenzhausen, 1978.
- Mond, R., and O. H. Myers. *Temples of Armant. A Preliminary Survey*. Egypt Exploration Fund, Vol. 48. London, 1940.
- Murray, M. A. "Coptic Painted Pottery." *Ancient Egypt and the East* 20, June (1935):1-15.
- Neyret, C. *Les Céramiques coptes du Musée du Louvre*, Mémoire, Ecole du Louvre (manuscript). Paris, 1966. We have drawn extensively on this study in regard to the painted decoration.
- Noll, W. *Bemalte Keramiken. Studien zur altägyptischen Keramik, 1981*. D. Arnold. Mainz am Rhein, 1981.
- Quibell, J. E. *Excavations at Saqqara, II, 1906-1907*. Cairo, 1908.
- . *Excavations at Saqqara, IV, 1908-9, 1909-10: The Monastery of Apa Jeremias*. Cairo, 1912.
- Rodziewicz, M. *La céramique romaine tardive d'Alexandrie, Alexandrie I*. Warsaw, 1976.
- . *La Céramique émaillée copte de Kôm el-Dikka*. Etudes et Travaux, Vol. 10. Travaux du Centre d'archéologie méditerranéenne de l'Académie Polonaise des Sciences, Vol. 20. Warsaw, 1978.
- . "Egyptian Glazed Pottery of the Eighth to Ninth Centuries." *Bulletin de la Société d'archéologie copte* 25 (1983):73-75.

- Ulbert, T. “Keramikstempel aus Elephantine.” *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 27 (1971):235-42.
- Waagé, O. F. *Hellenistic and Roman Tableware of North Syria, Antioch on the Orontes IV*. Princeton, N.J., 1948.

Types of Ceramic Ware

The ceramics of Copto-Byzantine Egypt are all of terra-cotta, that is, fired earthenware. They offer a varied range of shapes and manufacturing groups adapted to very specific functions. The following discussion is based largely on the few monographs on archaeological sites that deal with pottery. The classification given here must be considered tentative and intended to be revised and completed in the future. It deals with documentation generally dated from the end of the fourth to the eighth centuries A.D. inclusive.

The sites—such as hermitages at Isna and Kellia and urban foundations at Alexandria and Elephantine—have yielded a rich collection of material completing the picture provided by museum collections. This material gives evidence of daily use of “fine” tableware, cooking pots, amphorae, and water jugs. In the hermitages, ceramic material was frequently used as a component part in building.

“Fine” Tableware. Plates and dishes were generally intended for the presentation and consumption of food. Some pieces decorated with Christian motifs may have had a liturgical role, replacing vessels in precious metal or glass.

The terminology adopted here must not be understood in the strict sense: the borderline between plates and dishes is difficult to establish; these types of vessel are also called cups and bowls. Morphological definitions seem, however, to agree on the following criteria: the diameter of the mouth is generally more than 6 to 8 inches (15-20 cm) and the objects are

shallow, with a depth seldom more than one-third of the diameter.

Plates and dishes are well represented in the three groups of “fine” ceramic ware distinguished by Rodziewicz according to the clay of which they are made: Group K, Group O, and Group W (Rodziewicz, 1976, pp. 50, 54, 61), as previously noted. They were influenced by late Roman ceramics imported into Egypt, designated Late Roman A, Late Roman B: Light Sigillate D, Late Roman C, and Late Roman D: Cypriot Red Slip Ware, according to Waagé’s old terminology. They are attested from the fifth to the eighth centuries and later, a period during which they evolved morphologically.

Group K (carmine red) ware is of red to brown micaceous clay; the slip is red. From the present state of our knowledge, it seems that it was especially widespread in the Delta and in Middle Egypt (Rodziewicz, 1976, pp. 50-53; Egloff, 1977, pp. 79ff., “Group 2,” types 38, 40, 44-47, 50, 52-55, 57, 62, 73-77, 79).

Group O (orange) ware is of orange-pink clay. The slip, of orange-red, is brown on the rim of some specimens (Rodziewicz, p. 55). This group appears in Lower Egypt and very frequently in Upper Egypt (Rodziewicz, pp. 54-60, pl. 23-31; Egloff, pp. 79ff., “Group 1,” types 32-37, 39, 41-43, 48-49, 56-59, 61, 63-66; Winlock and Crum, 1926, pp. 86-87, figs. 37, 41; Jacquet-Gordon, 1972, forms C, D, E of clays II and IIa, pp. 11-12; Gempeler, 1976, p. 109). It is widespread in Nubia and was probably made in the region of Aswan, according to W. V. Adams (Adams, 1986, pp. 538ff.).

A variant of this type, Group W (white), has light slip, that is whitish to yellow (Rodziewicz, 1976, pp. 61-62, pls. 32-33; Kasser, 1983, nos. 7 and 13).

A collection of “fine” ceramic of the fourth to fifth centuries, localized in the oases of Khargah and Dakhlah in the Western Desert, consists

basically of bowls. The minerals included in the clay (small “shales”) confirm the local manufacture of these products (Hope, 1981, p. 235; Rodziewicz, 1983, pp. 140-42, fig. 3a).

The typological approach to classification of pottery remains uncertain, at least for the purpose of tracing the broad outlines. Nevertheless, there are a number of plate forms with a wide flat rim whose diameter often exceeds one foot (30 cm). Other plates, of more modest size, show a thickened rim or one formed by a lip flared outward. The sides are slightly convex, sometimes with a rectilinear flaring. The base is generally formed by an annular foot.

The inner and outer surfaces of these types of vessels are coated with a matte or slightly shiny slip, in red (Group K), orange (Group O), or white-beige (Group W). Their open form makes them suitable for decoration; the inner surface sometimes carries stamped motifs, guilloches, painted decorations, and, on some late specimens, a coat of glaze. The outer surface is often decorated with guilloches, sometimes also found on the rim. Among the stamped motifs, the monogram of Christ and crosses are the most frequent (Hayes, 1976, nos. 109-110). The painted decoration is applied as a circular or centered composition. The themes are often taken from the animal and vegetable kingdoms, for example, hares running, separated by a plant motif (*Meisterwerke* 1978, no. 438, pl. 15); a central motif ornaments the bottom of dishes, sometimes a fish (Hayes, No. 107-108), a bird (Louvre, E12226; Desroches-Noblecourt and Vercoutter, 1981, no. 357), sometimes a mythical animal (Coptic Museum, no. 3374a/10271). The raised rim of plates frequently has a painted decoration of interlacing, braid, and scroll patterns (Kasser, 1983, no. 13, p. 429). The glaze that appears on certain examples of Groups O and W from Alexandria is applied over painted decorations in the Coptic tradition, such as the bird and floral themes (Rodziewicz, 1978, pls. 3-4).

The application of decoration was not a general rule: plates and dishes from Group K were generally without it, except for a few stamped

impressions, imprints of cords on the outer edge, and circular grooves. It is also quite probable that the lack of painted decoration is due to the sometimes mediocre qualities of the painted layer and its poor state of preservation.

Among some typological and functional variants of “fine” tableware, some dishes for cooking, often carinated, with a broad, rounded base, should be noted. They are technologically related to wares of Group K (Egloff, 1977, types 81-97; Kasser, 1983, nos. 41ff.; Rodziewicz, 1976, types K 34-36). There are also platters with small cup-shaped depressions arranged around the rim, surrounding a central cup, which might, from their compartmentalized structure, have held several ingredients or foodstuffs. The inspiration for them could have come from silver vessels (Desroches-Noblecourt, 1982, pp. 11 and 18 and n. 11, pls. 3, 5-6; Coptic Museum, nos. 3388, 6721, 9036; for the most up-to-date discussion of these cupped platters, see Rutschowskaya, 1985).

BIBLIOGRAPHY

- Desroches-Noblecourt, C. “Les Nouvelles fouilles de Tod: Résultats des quatre premières saisons de recherche. Printemps 1980-automne 1981.” *Bulletin de la Société Française d’Égyptologie* 93 (1982):12.
- Desroches-Noblecourt, C., and J. Vercoutter, eds. *Un Siècle de fouilles françaises en Égypte, 1880-1980*. Cairo and Paris, 1981.
- Egloff, M. *Kellia: la poterie copte. Quatre siècles d’artisanat et d’échanges en Basse-Égypte*. Recherches suisses d’Archéologie copte, Vol. 3. Geneva, 1977.
- Hayes, J. W. *Roman Pottery in the Royal Ontario Museum. A Catalogue*. Toronto, 1976.
- Kasser, R. *Survey archéologique des Kellia (Basse-Égypte). Rapport de la campagne 1981*. [Missions](#) Suisses d’Archéologie Copte de l’Université de Genève. Louvain, 1983.
- *Meisterwerke altägyptischer Keramik, 5000 Jahre Kunst und*

Kunsth Handwerk aus Ton und Fayence. Hohn-Grenhausen, 1978.

- Rodziewicz, M. *La Céramique romaine tardive d'Alexandrie, Alexandrie I*. Warsaw, 1976.
- . *La Céramique émaillée copte de Kom el-Dikka*. Etudes et Travaux, Vol. 10; Travaux du Centre d'archéologie méditerranéenne de l'Académie polonaise des sciences, Vol. 20. Warsaw, 1978.
- Rutschowskaya, M.-H. "Plats à cupules d'époque copte," *Revue du Louvre* 5/6 (1985):412-15.

Deep Dishes and Bowls. Deep dishes and bowls made of brown to red clay, often black in the break, are similar to wares of Group K; however, the texture is coarser (Egloff, 1977, types 258-98; Jacquet-Gordon, 1972, E11-15, S1-4). Deep dishes are usually fairly large, generally exceeding 10 inches (25 cm) in diameter. They are characterized by a wide, often flat base, walls that widen out, and an everted lip with a broad rim decorated with pinched undulations and/or horizontal grooves on the inner surface. Bowls differ from the dishes, in general, in being deeper and having a less elaborate rim. These vessels are often decorated with painted motifs.

Cooking Vessels. Cooking vessels are found in several types of clay. They have rounded bases. Shallow dishes with flaring walls present features in common with wares of Group K, so far as clays and manufacturing techniques are concerned (Rodziewicz, 1976, K 35-36; Egloff, 1977, types 80-97; Winlock and Crum, 1926, fig. 42, A-E; Jacquet-Gordon, 1972, C 5-8). Cooking pots are often carinated (ridged) up to the lower third of their height. Some are made of Group K clays; others are of micaceous clays with quartz grains. These pots are sometimes decorated with painted dots on curved bands (Egloff, 1977, types 98-108; Winlock and Crum, 1926, fig. 42, G-K).

Other cooking pots, with a convex belly, have vertical or horizontal handles. They are made of easily recognizable micaceous clay, which in some cases includes a high proportion of quartz grains. The fine walls

may reach a thickness of 4-5 mm. The outer surface carries a ribbing sometimes alternating with smooth surface.

These cooking pots form a group, very widespread in Egypt, with many morphological variations (Rodziewicz and Rodziewicz, 1983, p. 275, fig. 13; Egloff, 1977, types 112-13, dating from the end of the fourth to the fifth centuries; types 114-54, later, matching the general description of pots [above]; Spencer and Bailey, 1982, pp. 20ff., figs. 6-19, first half of the fifth to the first half of the seventh centuries; Winlock and Crum, 1926, fig. 47; Jacquet-Gordon, 1972, M 13-16, pl. CCXXV; Gempeler, 1976, p. 109, fig. 9a-b). They are generally associated with lids of similar technology (Egloff, 1977, types 347-52).

Storage Jars. Large jars were intended for storing provisions and liquids. Their dimensions (a height of about 27 to 39 inches [70 to 100 cm]) necessitated a specific method of manufacture (see the section Manufacturing Techniques above).

These receptacles have a flat base, a body with convex walls widening halfway up, a slightly marked neck, and a flanged rim. The outer surface is often ornamented with a painted design (Quibell 1908, pl. 62; Quibell, 1912, pl. 51; Winlock and Crum, 1926, fig. 46; Jacquet-Gordon, 1972, form K; Bruyère et al., 1937, pl. 39; Gempeler, 1976, p. 110, fig. 9c; Hope, 1981, p. 237, pl. 28, 9; Hayes, 1976, no. 233; Coptic Museum, Old Cairo, nos. 2994, 39065/9025, 86301). Technologically and morphologically the jars from Kellia are fairly similar to the cooking pots (Egloff, 1977, types 158-63).

Amphorae. The large jars called amphorae, which have a rounded or pointed base and two handles, were intended essentially for the transportation of provisions and liquids. There are five types.

Brown wine amphorae are of richly micaceous clay that is brown both on the surface and in the break. They have a slender form and pointed base

and more or less pronounced ridges on the shoulder. The oldest examples appeared in the Ptolemaic and Roman periods (Hayes, 1976, no. 364). This group was widely distributed in Copto-Byzantine Egypt and during the first centuries of the Arab occupation.

There are three subtypes of brown wine amphorae. (1) Amphorae with a pointed base and an annular protuberance were known at Kellia from the end of the fourth to the end of the fifth centuries (Egloff, 1977, type 172). (2) Amphorae in the shape of a spinning top (Hayes, 1976, no. 365), date from the fifth to the sixth centuries, with earlier bibliographical references (Jacquet-Gordon, 1972, p. 7; Egloff, 1977, type 180; Kasser, 1983, no. 91, dating from the second quarter of the seventh century). (3) Small amphorae with a sharply defined shoulder evolved, at Kellia, from the end of the fourth century to the eighth century (Egloff, 1977, type 177, the oldest; types 173-74, common from the second half of the seventh century). They are comparable to the "Late Roman Hermopolite Amphorae B," for which D. M. Bailey's study has developed the morphological sequence according to the stratigraphy of the excavations conducted at al-Ashmunayn (Spencer and Bailey, 1981, pp. 16ff.; see also Hayes, 1976, nos. 367-69).

Obus amphorae are of light brown micaceous clay (Egloff, 1977, types 182-83; Kasser, 1983, no. 90; Kaufman, 1910, pls. 15, 84; Bernard et al., 1937, pl. 38). They have a body shaped like a cannon shell and a barely indicated short neck. Short round handles are attached under the rim, and the surface is smooth except for some very fine grooves, traced with a comb, halfway up the body. It remains to be determined whether this group of amphorae was local or imported.

Light spheroidal amphorae of light clay are characterized by a round base and a spheroidal or baggy body with a short, narrow, cylindrical neck. Small round handles are luted on to the shoulder. The surface carries fine ribbings. These amphorae, generally dating from the seventh century onward, are principally found in the sites of the Nile Delta. Some of them

might have been manufactured at Abu Mina (Egloff, 1977, type 186; Kasser, 1983, nos. 78-85; Jacquet-Gordon, 1972, p. 11).

Red ovoid amphorae are made of red clay with, as characteristic inclusions, vegetal particles in the form of fine, black, oblong nodules. Morphologically these amphorae are similar to the previous group. Nevertheless, their dimensions are more modest, and the shape of the body is generally ovoid. They were common at Kellia from the middle of the seventh century, as well as in the contemporary or later urban sites (such as Alexandria and al-Fustat [Cairo]) (Egloff, 1977, type 187; Ballet, 1986); Bonnet, 1984).

Byzantine Aswan amphorae as the name implies come from Aswan (see Adams, 1986, pp. 545ff., ware U2.).

Water Jugs, Pitchers, and Bottles. A variety of forms were intended to hold liquid. Water jugs are generally made from porous clay, to preserve the coolness of the stored water by permitting constant evaporation. One group is of calcareous clay, without external coating (Egloff, 1977, types 198-200, end of fourth to fifth centuries; Winlock and Crum, 1926, p. 91; Jacquet-Gordon, 1972, clay 4, N26ff.). Another group is of reddish, micaceous clay, with the external surface coated with a slip and decorated with painted motifs (Egloff, 1976, type 204ff., from the fifth to the eighth centuries; Winlock and Crum, 1926, p. 91). Water jugs have rounded or pear-shaped bodies with varied neck forms, on the base of which a filter is luted. The foot is annular or in pedestal form; sometimes water jugs are provided with one or two handles and a spout.

Pitchers are often round-bellied. The mouth, for pouring, may be trefoil, pinched, or drawn out. Among the most easily recognizable series are small pitchers, often with a trilobate opening and decorated with vertical gouged lines, that were no doubt produced at Abu Mina and distributed in different places (Kaufmann, 1910, pls. 83-86; Egloff, 1977, types 227-28; Hayes, 1976, no. 275, which indicates an example found at

Karanis). Originating also from Abu Mina is a collection of jugs bearing on the shoulder the inscription *eulogia* ("praise or blessing"), intended to hold the miraculous water of the sanctuary (Kaufman, pls. 85-87; for other types of pitchers and jugs, see Jacquet-Gordon, 1972, N1-7).

Bottles (or flasks) must no doubt be recognized as the successors of the Roman *unguentaria* (ointment flasks). A certain number are related to wares of Group O in the matter of clays and slip. Among the shapes with an ovoid or pear-shaped body with a hole by way of filter, some examples seem to have contained an oily product (Jacquet-Gordon, 1972, N 1-5; of comparable shape but without trace of any kind of residue is a flask found in the Kom 167 at Kellia). Other bottles are more squat with the maximum diameter of the body greater than the height (Hayes, 1976, nos. 124-27, with parallels from Ihnasiyah and Ballana).

Other Types of Water Vessels.

Water kegs, oval-bellied (with a horizontal axis) and short-necked, were probably used for drawing and holding water (Egloff, 1977, type 338; Hope, 1981, pp. 235-36). Widespread in the Roman period, they persisted in Copto-Byzantine Egypt.

Saqiyah pots (*qawadis*) have a wide mouth, a well-defined rim, and a base with a knob, around which a cord was tied to attach them to the *saqiyah* (waterwheel). They were rare in Kellia (Egloff, 1977, type 256), but some were found at Thebes (Winlock and Crum, 1926, pp. 64-65, fig. 23). At Isnâ, where no *saqiyah* was found near the hermitages, they are thought to have been used as storage jars (Jacquet-Gordon, 1972, p. 7, R1-2).

Water pipes were placed either end-to-end or interlocking (Winlock and Crum, 1926, p. 92, fig. 48C-D; Ballet, 1983, pp. 2-4, fig. p).

Table of Concordances of Nomenclature of Egyptian Ceramics

RODZIEWICZ AND RODZIEWICZ, HAYES, 1983	1972	EGLOFF, 1977	ADAMS, 1970	ADAMS, 1986
Group K	Egyptian Group 2 B (pp. 397-99)	(“sigillée égyptienne”)		
Group O	Egyptian A (Coptic red slip ware) (pp. 387ff.)	Group 1 (“sigillée égyptienne”)	Aswan Group A II	Byzantine Aswan wares, Group A II, R4 (pp. 543ff.)

BIBLIOGRAPHY

- Adams, W. Y., *Ceramic Industries of Medieval Nubia*, Vols. 1-2. Lexington, Kentucky, 1986.
- Ballet, P. “Kellia, Koms 88 et 166.” *Bulletin de liaison du Groupe internationale d’étude de la céramique égyptienne* 8 (1983):2-4.
- . “Céramique tardive des Kellia et présence islamique en Egypte.” In *Le Site monastique copte des Kellia. Sources historiques et explorations archéologiques, Actes du Colloque de Genève, 13-15 August 1984*, ed. P. Bridel. Geneva, 1986.
- Ballet, P. and M. Picon. *Recherches préliminaires sur les origines de la céramique des Kellia (Egypte). Importations et productions égyptiennes*. Cahiers de la Céramique Egyptienne, Vol. 1. Cairo, 1987.

- Bonnet, F. "Possibilités de datation des amphores ovoïdes, à pâte rouge, d'époque islamique, en ce qui concerne la période d'abandon des Kellia." In *Actes du Colloque de Genève*, 13-15 August 1984.
- Bruyère, B., et al. *Tell Edfou 1937*. Fouilles franco-polonaises, rapports, Vol. 1. Cairo, 1937.
- Egloff, M. *Kellia. La poterie copte: Quatre siècles d'artisanat et d'échanges en Basse-Égypte*. Recherches suisses d'archéologie copte, Vol. 3. Geneva, 1977.
- Gempeler, R. *Stadt und Tempel von Elephantine. Sechster Grabungsbericht. Mitteilungen* des Deutschen Archäologischen Instituts—Abteilung Kairo, Vol. 32. Mainz am Rhein, 1976.
- Hayes, J. W. *Roman Pottery in the Royal Ontario Museum. A Catalogue*. Toronto, 1976.
- Hope, C. A. "Dakhleh Oasis Project. Report on the Study of the Pottery and Kilns. Third Season, 1980." *Journal of the Society for the Study of the Egyptian Antiquities*, 11, 4 (1981):233-41.
- Jacquet-Gordon, H. *Les Ermitages chrétiens du désert d'Esna. Céramique et objets*, Vol. 3. Fouilles de l'Institut français d'archéologie orientale, Vol. 29, pt. 3. Cairo, 1972.
- Kasser, R. *Survey archéologique des Kellia (Basse-Egypte). Rapport de la campagne 1981. Missions* Suisses d'Archéologie Copte de l'Université de Genève. Louvain, 1983.
- Kaufmann, C. M. *Die Menasstadt und das Nationalheiligtum der altchristlichen Ägypter in der Westalexandrischen Wüste*, Vol. 1. Leipzig, 1910.
- Mysliwiec, K. *Keramik and Kleinfunde aus der Grabung im Tempel Sethos' I. in Gurna*. Archäologische Veröffentlichungen, Vol. 57. Mainz am Rhein, 1987.
- Quibell, J. E. *Excavations at Saqqara, II, 1906-1907*. Cairo, 1908.
- . *Excavations at Saqqara, IV, 1908-9, 1909-10: The Monastery of Apa Jeremias*. Cairo, 1912.
- Rodziewicz, M. *La Céramique romaine tardive d'Alexandrie, Alexandrie I*. Warsaw, 1976.

- . Douch. *Rapport préliminaire de la campagne de fouilles de 1981*. Annales du Service des [Antiquités](#) de l'Égypte, Vol. 69. Cairo, 1983.
- . *Les Habitations romaines tardives d'Alexandrie à la lumière des fouilles polonaises à Kôm el-Dikka, Alexandrie III*. Warsaw, 1984.
- Rodziewicz, E., and M. Rodziewicz. "Alexandrie 1977." *Études et Travaux* 12 (1983):275.
- Spencer, A. J., and D. M. Bailey. *British Museum. Expedition to Middle Egypt. Ashmunein (1981)*, British Museum, Occasional Paper 41, London, 1982. *Ashmunein (1982)*, Occasional Paper 46, London, 1983. *Ashmunein (1983)*, Occasional Paper 53, London, 1984. *Ashmunein (1984)*, Occasional Paper 61, London, 1986. *Ashmunein (1985)*, Occasional Paper 67, London, 1986.
- Waagé, O. F. *Hellenistic and Roman Tableware of North Syria, Antioch on the Orontes IV*. Princeton, N.J., 1948.
- Winlock, H. E., and W. E. Crum. *The Monastery of Epiphanius at Thebes*, Vol. 1. Metropolitan Museum of Art, Egyptian Expedition. New York, 1926.

Lamps. Most of the lamps in Copto-Byzantine Egypt were made of terracotta. They come from the areas of habitation such as Ihnasiyah, Antinoopolis, Armant, Medamud, and Madinat Habu, and from religious centers that attracted [pilgrims](#) such as Abu Mina. The hermitages at Kellia and Isna have furnished relatively few. The various oils used to feed lamps in Egypt, such as castor oil, palm oil, and olive oil, are mentioned by the classical authors and in the Greek papyri (Lucas, 1962, p. 329; Shier, 1978, p. 7). Vegetable fibers or strands of wool formed the wicks (Schier, 1978, p. 7).

Copto-Byzantine lamps were influenced by the technical traditions of Hellenistic and Roman lamp making. From the third century B. C. onward, saucer lamps, handmade or turned on a wheel, were progressively replaced by bivalve molded lamps. The two valves form a reservoir with a convex profile; in lamps of the Roman period the reservoir has the shape of a casserole with a cover. The upper part,

slightly bulged, includes a disk or medallion, often concave, pierced by the aperture for pouring in oil, and the disk may be adorned with a decoration in relief. The lower part rests on a generally flat base, on which a maker's mark is sometimes shown. The nozzle, from which the end of the wick emerges, forms an appendage, more or less free of the reservoir. On the opposite side, a modeled handle is luted with a liquid clay. Sometimes it is molded in one piece with the upper valve. The majority of the lamps from Copto-Byzantine Egypt derived from this type of manufacture (examples of molds in Kaufmann, 1910, pl. 82, bottom of plate; Badawy, 1978, p. 345, fig. 5.50, 1 and n. 61, with earlier bibliography).

Just as with ceramic vessels, the description of lamps as "Coptic" must be viewed with caution. Certainly the iconographic scheme and the inscriptions may be used in identifying an object as Christian. However, it seems prejudicial to the study of these lamps to consider this documentation within unduly strict morphological, decorative, and chronological limits. Systematic differentiation between late Roman and Christian material, or Christian and Islamic, is the result of a procedure that neglects the reality of the technological traditions and the history of the workshops. For example, we may note the presence of dolphin and *echinus* (sea urchin) lamps, considered as late Roman, in contexts dated, respectively, in the fourth and fifth centuries and fifth and sixth centuries (Hölscher, 1954, vol. 5, p. 68, Group 3, g; Group 2, c). In the same way, the oldest lamps from al-Fustat present the same technical and decorative characteristics as contemporary "Christian" lamps (Kubiak, 1970, pp. 3-5).

In addition, the study of lamps suffers from an almost total absence of reliable elements for dating. Either because of method or because the context did not lend itself to doing so, archaeological work has rarely furnished data capable of allowing an approach at once typological and chronological (on this question, see Hayes, 1976, pp. 93, 118). Nevertheless, we shall present here documentation generally supporting

a dating between the fourth and eighth centuries, with due regard to the reservations expressed above.

The classification proposed by J. W. Hayes (Hayes, 1976, pp. 118ff.), excluding the frog-lamps, is based on such matters as the method of manufacture and the type of clay or slip. It attempts to discover the geographical distribution of various groups. In regard to a museum collection, the dates, established on the basis of comparison, are presented as hypotheses. This study, as well as the older one of U. Hölscher, the main lines of which we shall follow here, appears to be the most important in the present state of research.

There are four types of *mold-made lamps*. The upper part of the oval reservoir of *frog lamps* is adorned by a frog. Often there is no added handle. The frog is treated in realistic or stylized fashion. A third variant presents only the hind feet of the batrachian, the rest of the body being rendered by a square shape (Petrie, 1905, group E, "frog and corn," p. 10, pl. 64.) For the classification of the frog lamps, see studies by M. Kunze and J. Mynarczyk.

According to the majority of authors, frog lamps were particularly abundant in Egypt from the second to the fourth centuries, and they were a specially original product of the country. At Madinat Habu they come from levels dated probably in the third and fourth centuries (Hölscher, 1954, Vol. 5, group 4, pp. 68-69). However, their manufacture and use continued later than the fourth century. Their morphological evolution is not very well known (Shier, 1978, p. 24). Some bear Christian inscriptions or motifs (Shier, 1978, p. 24); their symbolism conjures up the themes of resurrection, immortality, and fecundity (Mlynarczyk, 1973, pp. 100ff.; Leclant, 1978, pp. 565f.).

A second type of molded lamp, akin to frog lamps in form and decoration, are lamps in other motifs called, according to F. Petrie's classification, "corn and palm," "arm," and "boss" (Petrie, 1905, Group P, pp. 10-11, pl.

65; Group A, p. 11-12, pl. 66; Group B, p. 12, pl. 67). Often the conventional term “frog lamp” is retained, whatever the theme represented. At Madinat Habu, some examples are dated to the fourth and fifth centuries (Hölscher, Vol. 5, p. 69, Group 5).

A third group of molded lamps is characterized by an oval body, an often carinated profile, a ribbed vertical handle, and a thick, glossy red slip. One series of these lamps are not quite oval, with a relatively large disk, often decorated with a rosette. Another series includes more elongated forms with a nozzle-channel and a small disk. Recent excavations at al-Ashmunayn (Hermopolis Magna) have yielded an important number of these lamps. The archaeological context dates them from the fifth century to the Arab conquest. They are comparable to lamps found at Antinoopolis, which were probably manufactured in this region of Middle Egypt (Guerrini, 1974, pp. 96-98, pl. 38, 4-12 and pp. 103ff., pls. 42-43; Hayes, 1976, pp. 120-23, no. 476-91, “Middle Egyptian [questionable]. These lamps are also called red-burnished ware”; Spencer and Bailey, 1982, pp. 34-35.

A fourth group of molded lamps, generally round but sometimes oval, with larger funnels, is made of light-colored pink or orange, relatively fine clay with very small mineral elements, including micas. The clay seems identical to that of Group O (orange) ware. The slip is described as red, with rose or orange variations.

The medallion, of average diameter, is often decorated with a cross or a rose. A Greek or Coptic inscription appears on the circumference (mention of a saint or the Holy Trinity, on a lamp from Medamud in the Louvre, no. E12950 [Bisson de la Roque, 1928, no. 2024, pp. 80-81, fig. 48]). Sometimes the decoration is a floral one; rosettes, palmettes, or vine branches surround the disk. The relief of the inscriptions and motifs is very strongly marked, the molds being deeply incised.

These lamps come chiefly from Upper Egypt and Nubia and they are

dated from the fifth century on (Bisson de la Roque, 1928, nos. 1850, 1913, 2024, 2025, pp. 80-81, fig. 48; Hölscher, 1954, p. 69, Group VII e and f). Hayes calls this series Early Christian Aswan Ware class, including a series deriving from Armant (Hayes, 1976, nos. 495-518, pp. 124-29). Some molds found at Elephantine indicate that this group was partly produced in this area (Ballet and Mahmoud, 1987, pp. 56-57, 64-67).

A fifth group of mold-made lamps has an oval body with a hook-like handle and is covered with light yellow slip. The decoration around the disk frequently consists of concentric semicircles in a pattern of multiple arcs, either stamped or incised.

These lamps appear to have been widespread in Upper Egypt and are called “Upper Egypt yellow-slipped ware” by Hayes (1976, pp. 131-33, no. 530-39; see also Hölscher, 1954, Vol. 5, p. 69, Group 6a).

A sixth group comprises a set of oval lamps characterized by the lengthening of the reservoir, which is accentuated by a groove underlining the disk and marking off the feed-channel as far as the end of the nozzle. The decoration is varied and includes floral and geometrical designs. Inscriptions sometimes appear around the central disk. Such lamps are generally considered to be a late product from the sixth and seventh centuries and are known throughout Egypt (Petrie, 1905, p. 9, pls. 61-62, “groove lamps”). Hölscher mentions “beak-shaped lamps with grooves or without grooves” (Hölscher, 1954, pp. 69-70, Groups VIII-IX), some of which are dated by the archaeological context from the sixth to eighth centuries; some pieces of this series belong to what Hayes calls the “late buff-ware class” (Hayes, 1976, nos. 526-29, pp. 130- 31).

There are two types of *wheel-made lamps*. Lamps in the shape of a teapot or juglet have pot-bellied bodies often topped by a neck. The nozzle and handle, flat or ribbed, were added after the reservoir was formed. These lamps bear no decoration (Petrie, 1905, p. 13, pl. 69, group neck; Shier, 1978, p. 49, nos. 496-99 and no. 500). They come chiefly from the upper

levels of occupation of a site (Hölscher, 1954, pp. 70-71, Group 10, one example of which is dated to the fourth century, another to the fifth).

The second type is small cups or bowls. Their use for lighting is shown by the traces of the burning of the wick on the rim. These were found mainly in monasteries and hermitages (Winlock and Crum, 1926, p. 88, fig. 38; Jacquet-Gordon, 1972, pp. 7-8, pl. 228; Egloff, 1977, types 308-15, pp. 162-63, pl. 85).

Finally there are *miscellaneous* lamps such as those with multiple nozzles (*polykandilon*), which had the holes for the wicks arranged on a rectangular or circular stand. This variety, well known in the Roman period, was more rare in Christian Egypt (Badawy, 1954, p. 345, fig. 5.51). Lamps with seven nozzles may have had a liturgical function, like the modern *qandil* (votive lamp), the seven wicks of which are lighted in succession during the ceremony of extreme unction (Badawy, 1978, p. 345 and n. 65; Viaud, 1978, pp. 44-45).

A not very common lighting device, attested at Kellia, takes the form of a large receptacle with handles. Under the inner rim, rings are fixed in the form of a funnel and serve as holders for glass chalices containing oil. The arrangement thus includes a circuit for feeding the lamp with oil and recovering any surplus. These “eternal lamps”, an example of which was found at Ihnasiyah, would have allowed more than 500 hours of lighting (Egloff, 1977, pp. 165-66, pls. 86-87, types 322-24).

This attempt at classification remains sketchy, to the extent that information about the lamps from Christian sites in the Delta, apart from Kellia, is not completely published. Those from Abu Mina, for example, have not been dealt with in this article. In C. M. Kaufmann’s study, their photographic reproduction is matched by rare iconographical and technical commentary; however, they appear to be rather different from the lamps previously described. It is also probable that there are importations among them (perhaps from North Africa) (Kaufmann, 1910,

Vol. 1, pls. 79-81).

BIBLIOGRAPHY

- Badawy, A. *Coptic Art and Archaeology. The Art of the Christian Egyptian from the Late Antique to the Middle Ages*. Cambridge, Mass., 1978.
- Ballet, P., and F. Mahmoud. "Moules en terre cuite d'Éléphantine (Musée Copte). Nouvelles données sur les ateliers de la région d'Assouan, à l'époque byzantine et aux premiers temps de l'occupation arabe," *Bulletin de l'Institut français d'archéologie orientale* 87 (1987):53-72.
- Bisson de la Roque, F., and J. Clère. *Rapport sur les fouilles de Medamoud (1927)*. Fouilles de l'Institut français d'archéologie orientale, Vol. 5, pt. 1, Cairo, 1928.
- Guerrini, L. *Materiali ceramici: Antinoë (1965-1968)*. Missione Archeologica in Egitto dell'Università di Roma. Rome, 1974.
- Hayes, J. W. *Ancient Lamps in the Royal Ontario Museum. I : Greek and Roman Clay Lamps. A Catalogue*. Toronto, 1980.
- Hölscher, U. *The Excavations of Medinet Habu. V. Post-Ramessid Remains*. Chicago, 1954.
- Jacquet-Gordon, H. *Les Ermitages chrétiens du désert d'Esna*, Vol. 3: *Céramique et objets*. Fouilles de l'Institut français d'archéologie orientale, Vol. 29, pt. 3. Cairo, 1972.
- Kaufmann, C. M. *Die Menasstadt und das Nationalheiligtum der altchristlichen Ägypter in der Westalexandrischen Wüste*. Leipzig, 1910.
- Kubiak, W. B. *Medieval Ceramic Oil Lamps from Fustat*. *Ars Orientalis: The Arts of Islam and the East*, Vol. 8. Ann Arbor, 1970.
- Kunze, M. "Die Tonlampen im Ägyptischen Museum." *Forschungen und Berichte* 14 (1972):97-100.
- Leclant, J. *La Grenouille d'éternité des pays du Nil au monde méditerranéen*. Hommages à Maarten J. Vermaseren, Vol. 2. Leiden, 1978.

- Lucas, A. *Ancient Egyptian Materials and Industries*. London, 1962.
- Mlynarczyk, J. *Egyptian Types of Terra-cotta Lamps from Tell Atrib*. Etudes et Travaux Vol. 7. Warsaw, 1973.
- Petrie, F. W. M. *Roman Ehnasya (Herakleopolis Magna) 1904*. London, 1905.
- Shier, L. A. *Terracotta Lamps from Karanis, Egypt. Excavations of the University of Michigan*. Ann Arbor, Michigan, 1978.
- Spencer, A. J., and D. M. Bailey. *British Museum Expedition to Middle Egypt: Ashmunein (1981)*. British Museum, Occasional Paper no. 41. London, 1982.
- Viaud, Gérard. *La Liturgie des Coptes d'Égypte*. Paris, 1978.
- Winlock, H. E., and W. E. Crum. *The Monastery of Epiphanius at Thebes, Vol. 1*. New York, 1926.

Potstands. Potstands, widespread during the pharaonic period, appear relatively seldom among Coptic ceramics. Although many vessels with a rounded or pointed base, particularly amphorae, needed to rest on a stand to be balanced, they were either stuck into the ground, leaned against a wall, or laid on the earth. Monastery kitchens and storehouses at Isna sometimes had benches or platforms that held jars (Sauneron and Jacquet, 1972, p. 19, fig. 3).

Also at Isna, a pot set in the ground might have served as a support for a larger receptacle, perhaps a water jug (Sauneron and Jacquet, 1972, p. 19). In this case, the lack of a stand is explained. Stands known in published material are rare, although [Alliot](#) states that they were numerous in the Tell Idfu houses (Alliot, 1933, p. 20).

Stands are divided into two groups. The first consists of simple forms, open at each end, with concave sides widening out toward the mouth. The relationship of the dimensions varies according to the type of receptacle placed there: There are low, wide shapes (Kasser, 1983, p. 456, nos. 147-48), those whose height is equal to the diameter (Alliot, 1933, fig. 55; Winlock and Crum, 1926, fig. 488), and tall forms (Winlock and Crum,

1926, fig. 48A). Sometimes they are decorated, like two specimens from Tud ornamented with a wide, open-work design (Desroches-Noblecourt, 1982, p. 12). The second and more elaborate group is made of triple supports put together in a rectangular stand, with a flat, closed base 14 to 20 inches (36 to 50 cm) high and 24 to 39 inches (60 to 100 cm) long. Three orifices are arranged in the upper part, the middle one being lower than those on either side. Water jars were probably placed there, as is suggested by a cavity situated near the base, allowing the drainage of water exuded by porous vessels. These triple stands are decorated with zigzags, crossbars, pellets, and other motifs (Strzygowski, 1904, pp. 240-41, figs. 287-89; Bisson de la Roque and Clère, 1928, no. 2354ter, p. 59, fig. 41). They certainly constitute a simplified version of stone stands, in the shape of a table (Strzygowski, 1904, pp. 88-94; Quibell, 1912, pl. 43, fig. 1-2).

BIBLIOGRAPHY

- Alliot, M. *Rapport sur les fouilles de Tell Edfou (1932)*. Fouilles de l'Institut français d'archéologie orientale, Vol. 9, pt. 2, Cairo, 1933.
- Bisson de la Roque, F., and J. Clère. *Rapport sur les fouilles de Médamoud (1927)*. Fouilles de l'Institut français d'archéologie orientale, Vol. 5, pt. 1, Cairo, 1928.
- Desroches-Noblecourt, C. "Les Nouvelles fouilles de Tod: Résultats des quatre premières saisons de recherche. Printemps 1980-automne 1981." *Bulletin de la Société Française d'Égyptologie* 93 (1982):12.
- Gempeler, R. *Stadt und Tempel von Elephantine. Sechster Grabungsbericht. Mitteilungen* des Deutschen Archäologischen Instituts—Abteilung Kairo, Vol. 32. Mainz am Rhein, 1976.
- Kasser, R. *Survey archéologique des Kellia (Basse-Egypte). Rapport de la campagne 1981. Missions* Suisses d'Archéologie Copte de l'Université de Genève. Louvain, 1983.
- Leclercq, H. "Jeux et jouets." *Dictionnaire d'archéologie chrétienne et de liturgie*, Vol. 7, pt. 2. Paris, 1926.

- Palanque, C. "Notes sur quelques jouets coptes en terre cuite," *Bulletin de l'Institut français d'archéologie orientale* 3 (1903):97-103.
- Petrie, F. W. M. *Roman Ehnasya (Herakleopolis Magna)* 1904. London, 1905.
- Quibell, J. E. *Excavations at Saqqara, IV, 1908-9, 1909-10: The Monastery of Apa Jeremias*. Cairo, 1912.
- Sauneron, S., and J. Jacquet. *Les Ermitages chrétiens du désert d'Esna, Vol. 1: Archéologie et inscriptions*. Fouilles de l'Institut français d'archéologie orientale, Vol. 29, pt. 1. Cairo, 1972.
- Scanlon, G. T. "Ancillary Dating Materials from Fust< ât." *Ars Orientalis. The Arts of Islam and the East*, Vol. 7. Ann Arbor, Michigan, 1968.
- Strzygowski, J. *Koptische Kunst, Catalogue Général du Caire*. Vienna, 1904.
- *Survey archéologique des Kellia (Basse Egypte). Rapport de la campagne 1981*. Mission Suisse d'archéologie copte de l'Université de Genève. Louvain, 1983.
- Winlock, H. E., and W. E. Crum. *The Monastery of Epiphanius at Thebes*, Vol. 1. New York, 1926.

Stamps. Stamps, or seals, in terra-cotta were chiefly intended to impress marks on loaves of bread used in the liturgy, the stoppers of amphorae, and ceramic vessels (for a general survey, see Badawy, 1978, pp. 345-46, figs. 5.52, 5.55, and 5.57).

The Eastern churches had the custom of impressing on liturgical loaves motifs or inscriptions relating to the rite being celebrated. It is often difficult to distinguish stamps for bread used in the Eucharist from those for *eulogia* ("blessed") bread, which was distributed to the faithful at the end of the service, on a saint's festival, on a pilgrimage, or at a funeral. The impressions were made by wood or terra-cotta stamps. The latter, preserved in greater quantity than examples in wood, are flat, often with a handle fixed on the back, or else conical. The plane surface carries the engraved motif and/or inscription. An important collection comes from

Akhmim, generally dated to the sixth and seventh centuries.

Among the motifs on the stamps for eucharistic bread are the fish and a cross inscribed *ic ,c yu uc* (“Jesus Christ, Son of God”) between the arms (Galavaris, 1970, p. 73). One type of stamp, peculiar to the [Coptic church](#) and in use down to the present day, reproduces on the eucharistic loaf a large cross formed of twelve squares within each of which a small cross is placed diagonally. Each square represents an apostle. Sometimes five holes also appear, symbolizing the wounds of Christ upon the cross (Galavaris, 1970, pp. 93f.).

The stamps intended for *eulogia* bread often carry the motif of a cross, with the ends of the arms enlarged and surrounded by an inscription such as *eulogia kuriou ev /mac, eulogia kyriou eph çmas* (“the blessing of the Lord is upon us”). This theme, relatively widespread and uniform in Egypt, was no doubt the result of some control desired by the church (Galavaris, pp. 118f.).

Stamps were impressed upon the outer surface of the stoppers closing the mouths of jars and amphorae (discussed below). These stamps reproduced inscriptions (such as a name), animal motifs, crosses, and rosaces (circular panels enclosing rosettes). The impression was sometimes of the same type as those of the stamps for bread; it is probable that some of the stamps could have served for several purposes.

Stamps were also used to impress decoration on the inside bottom of an open shape such as a cup or plate before the piece was fired. “Fine” local wares of the Copto-[Byzantine period](#) bear stamped motifs such as the Christogram, cross, or dove after the manner of the fine imported wares, as previously discussed. Terra-cotta stamps have been found at Elephantine (Ulbert, 1971, pp. 235- 42). They are either mushroom-shaped or conical. The thin end allows the stamp to be grasped. The other end, presenting a plane surface, bears a decoration incised with a pointed tool: crosses, two Christograms juxtaposed, a rose, a hare. Their presence

probably attests the existence of a local workshop specializing in the production of fine ceramics.

BIBLIOGRAPHY

- Badawy, A. *Coptic Art and Archaeology: The Art of the Christian Egyptians from the Late Antique to the Middle Ages*. Cambridge, Mass., 1978.
- Galavaris, George. *Bread and the Liturgy: the Symbolism of Early Christian and Byzantine Bread Stamps*. Madison, Wis., 1970.
- Ulbert, T. *Keramikstempel aus Elephantine*. [Mitteilungen](#) des Deutschen Archäologischen Instituts—Abteilung Kairo, Vol. 27. Wiesbaden, 1971.

Stoppers. Amphorae were closed with stoppers made generally of plaster or clay. Before the actual stopper was inserted, a preliminary stopper was pushed inside the neck; it was either a recut potsherd or, more generally, a pad of straw (Egloff, 1977, p. 180). Then the actual stopper was set in place, closing the opening of the neck. A plaster stopper, relatively flat, slightly convex in its upper part, is round and extends below the outer rim. Its inner face presents the imprint of the rim, forming a circular depression, as well as traces of straw from the first stopper. On its outer face there is the imprint of a seal in relief, most often round, which could cover almost the entire surface of the stopper.

Stoppers of unfired clay mixed with straw are conical and largely encase the upper part of the neck, sometimes even as far as the shoulder. They bear the imprint of stamps (two or more), generally round, more rarely rectangular, which seem smaller than the imprints on plaster stoppers. They are sometimes red or white, indicating that the stamps had initially been filled with colored materials before application to the stopper (Hölscher, 1954, pp. 61- 62).

The imprints on plaster and clay stoppers are varied: Greek or Coptic

inscriptions, often abridged, mentioning some liturgical formula or a name, monograms, crosses, roses, animals, sometimes even saints, such as Saint Menas (Clédat, 1904, figs. 6-7, 21-23, and 40-41; Strzygowski, 1904, pp. 233-40, nos. 8797-9003 and 9004- 9033; Quibell, 1912, pls. 66-67; Hölscher, 1954, fig. 68; Egloff, 1977, pp. 181-83, pl. 20). These imprints probably indicate the place where the amphorae were filled and then stoppered or the name of the sender.

BIBLIOGRAPHY

- Clédat, J. *Le Monastère et la nécropole de Baouît*. Mémoires publiés par les membres de l'Institut français d'archéologie orientale, Vol. 12. Cairo, 1904.
- Egloff, M. Kellia. *La Poterie copte. Quatre siècles d'artisanat et d'échanges en Basse-Egypte*. Recherches suisses d'archéologie copte, Vol. 3, Geneva, 1977.
- Hölscher, U. *The Excavations of Medinet Habou*, Vol. 5: Post Ramesside Remains. Chicago, 1954.
- Quibell, J. E. *Excavations at Saqqara*, Vol. 4: 1908-9, 1909-10. Cairo, 1912.
- Strzygowski, J. *Koptische Kunst, Catalogue Général du Caire*. Vienna, 1904.

Figurines

Small terra-cotta figures for popular use have not been much appreciated by scholars. Very few studies and archaeological publications have been devoted to them. They are at a great disadvantage because they followed Hellenistic and Roman figurines, which are infinitely richer iconographically and more elaborate technically.

Coptic figurines have been found in pilgrimage centers such as at Abu Mina and from sites of habitation, as may be seen from the list at the end of the article. Excavations of hermitages in Kellia and Isna have yielded

no figurines. Some female figurines were found there in a workshop and near an oven (Kaufmann, 1908, pp. 58-60 and figs. 39 and 42); Kaufmann states that the statuette of a monkey was probably produced in the local workshops (Kaufmann, 1910, p. 71, figs. 27-29). The workshops of Abu Mina might have supplied Alexandria with stocks of shoddy quality (Martens, 1975, p. 43; 1975, p. 75).

Manufacture. Technically, these statuettes are characterized by rough manufacturing methods. The principal techniques used were molding and modeling.

Molded figurines are fashioned from two molds, one for the front, the other for the back. The two parts thus obtained are joined with clay, leaving a hollow interior. Since the back is flat or slightly convex, only the front is detailed with the general form of the body and a simplified modeling of the face. Elements of attire and coiffure are evident on representations of women. A comparable schematization is adopted for equestrian and animal figures. Sometimes a few details were incised into the interior of the mold. The Coptic Museum has two front molds of orants, or praying figures (nos. 10125 and 10080), and one of an equestrian group (no. 10130).

Modeled figurines are made from coils of clay, crudely worked and then put together. Sometimes a piece is carved on a plaque of clay with no attempt at modeling, as in an orant in the Coptic Museum (no. 41846/10147), and a female head (no. 39232/10281).

Both procedures, molding and modeling, may have been used in the manufacture of a single figure. Some statuettes in Alexandria have a molded head and body with modeled arms and legs that have been joined to the body (Martens, 1975, p. 53; cf. also figurines at Abu Mina, Kaufmann, 1910, pls. 73, 1-6 and 9-20; 74, 18-26; 75, 6 and 9-11). The forequarters of some figurines of horses were shaped on the lathe (Martens, 1975, p. 53).

The statuettes are covered with white slip. Painted detail applied over the slip mitigates the inadequacies of the primitive workmanship. Strokes of black or brown paint give the face an expression defined by the encircled eyes and attire the body in a long tunic if it is human, in a harness and saddle if it is a horse.

Iconographic Types. Among the iconographic types, representations of females are the most numerous. They are generally standing, their legs joined, with variations in the position of the arms and in the coiffure. There are also some *kourotrophoi* (figures carrying children) (for Abu Mina, Kaufmann, 1910, pl. 73: 11 and 18; for Bawit, Palanque, 1903, p. 99, pls. 1, 4-5; for Antinoë, *Antinoë*, 1974, pl. 44:2). These female statuettes are often clothed in a long tunic, woven in a single piece and ornamented with vertical bands over the chest and back. They are adorned with necklaces and bracelets. Their protuberant, mouselike noses are modeled; their eyes, eyebrows, and mouths are indicated by strokes of paint.

Two main groups of female figures can be recognized. The first consists of figures made by mixed methods, the bodies and the heads molded, the arms and some accessories modeled. The most characteristic feature is hair arranged in melon rolls, derived from Hellenistic and Roman patterns, and encircled by a nimbus. Often, only the heads are preserved, but some complete representations of standing figures are known, with both hands positioned on or below the breast or on the hips, holding an object such as a discus, a crown, or a child. They are relatively common at Abu Mina (Kaufmann, 1910, pl. 73).

The second group consists of orants, with arms raised or stretched out. They are generally molded in two parts. The face, with large eyes indicated by molding or sketched in with a stroke of paint, is crowned with a triangular coiffure and pierced at the top with a hole so that the figure could be hung up. Sometimes the hair is decorated with small circles and a cross, and the triangular coiffure may be made from tufts of

hair decorated with beads and bands. Two other holes at the level of the ears no doubt were created so that the figurine could be adorned with earrings (for Elephantine, see Gempeler, 1976, p. 109). A necklace, from which a cross hung on some figurines, adorns the neck.

Some sources (for example, Polaczek-Zdanowicz, 1975, pp. 136 and 149) consider the orants to be in the line of female representations of fecundity in pharaonic Egypt and closely connected with the Hellenistic and Roman Isis-Aphrodite and her followers. The necklace of the orants recalls that of the goddess, called *periammata*. Certainly these figurines were not created *ex nihilo*; they present a definite iconographic link with some late Roman orants, probably those related to the worship of Isis (Castiglione, 1969, pp. 80-82, pl. 11). However, these statuettes also belong to the group of Coptic orants represented on funerary stelae and in other places; the presence of a cross on the coiffure or hanging from a necklace is not the least of the signs of a declared Christianity.

These two groups of female likenesses do not coexist in the same archaeological contexts. The question arises whether they are two separate productions from different periods for different functions or two separate productions from different geographical areas. Indeed, the orants are not mentioned in the publications on Abu Mina or Alexandria, where the first group of terra-cotta objects is predominant, but they abound in Middle and Upper Egypt. This differentiation arises perhaps from specialization in the figurine workshops and their area of diffusion. A recent discovery of molds from Elephantine partly resolves the question of the origin of the southern group of figurines (Ballet and Mahmoud, 1987, pp. 60-61, nos. 13-16).

A rare type of female figurine is represented by a flat orant from al-Bahnasa (Wessel, 1964, pp. 92-93, ill. 4, p. 95). It is characterized by earrings in glass and cornelian, as well as a tunic whose ornamentation dates from the ninth century (Du Bourguet, 1964, no. 142).

Less common than female figurines are male figurines. A group originated in Alexandria (Martens, 1975, p. 67) and Abû Mînâ (Kaufmann, 1910, pls. 74-75). In spite of an often defective state of preservation, they appear to have been attired in long robes. The hands are placed on the hips, crossed on the chest, or holding an object (Kaufmann, 1910, pls. 76: 14-16, pl. 75: 3 and 10). These figurines have the same technical characteristics as their female counterparts from Alexandria and Abu Mina.

It is not impossible that some fragmentary pieces of figurines may have belonged to equestrian groups, which form a fairly widespread iconographic class. Here again, both manufacturing techniques, molding and modeling, are represented (for Armant, Mond and Myers, 1940, pl. 70: 19; Coptic Museum, Cairo, no. 44720/9507; Kaufmann, 1910, 77; 1, 3; Coptic Museum, nos. 8083, 8107). In molded figurines, the anatomy and the garments of the horseman are scarcely indicated. In modeled figurines, the sense of detail is more highly developed, as seen, for example, in the pointed hat folded down in front and shield on the arm.

Among animal figurines, horses and [camels](#) are the most common. Molded pieces are more often found than modeled; the profile, mane, harness, and saddle are indicated by molding and are underlined by strokes of paint. There is evidence of the production of horses on most of the sites that have yielded terra-cotta objects. Statuettes of camels, which are less common, are often of very good technical quality. Some come from Medamoud (Bisson de la Roque, 1930, no. 4407, p. 56, fig. 52; Louvre, nos. E12781 and E14158).

Sometimes they are modeled (Kaufmann, 1910, pl. 77: 4 and 7).

Abu Mina also offers a sampling of animals and winged creatures, among them lions, dogs, gazelles, monkeys, and cockerels (Kaufmann, 1908, pls. 77-78). These are often modeled vases, which are different from figurines because they have a narrow neck and a handle generally attached at the

back. Elsewhere, examples of such varied fauna are seldom found, and it cannot be said whether this fact is due to the lack of publications or to an archaeological reality. A monkey from Medamoud is, however, to be noted (Bisson de la Roque, 1931, no. 4957, p. 84, fig. 68; Louvre, no. E14159).

Technical and Iconographic Evolution. From the published material it is scarcely possible to trace the technical and iconographic evolution of terra-cotta figurines. However, their origin and their eventual conclusion can be determined: on the one hand, late Roman figurines, those from Ihnasiyah for example (Petrie, 1905, pls. 47-51), reflect the modifications of traditional manufacture such as the mechanical execution of folds in garments and waves in the hair and the tendency to treat figurines as reliefs. These features illustrate the transition to the sketchy type of manufacture characteristic of Coptic figurines. On the other hand, the existence of some terra-cotta specimens, modeled and looking unpolished, comparable to some examples of present-day terra-cotta, is attested at the oldest levels of al-Fustat from the middle of the eighth to the beginning of the ninth centuries, but there is no further evidence in later archaeological remains at the site (Scanlon, 1968, pp. 2-5, pl. 1: 1a-c). Among other rare chronological benchmarks, the level of Elephantine from which orants, horses, and camels come seems to date them from the sixth century (Gempeler, 1976, pp. 111-12, and n. 191).

As for the iconographic reminiscences suggested by these representations, the idea must no doubt be abandoned that the mediocre *kourotrophoi* were influenced by the theme of *Isis lactans*. Likewise, Horus the horseman is probably not the ancestor of the equestrian figures. In general, one notes the abandonment of a syncretist iconography, such as that shown by the third- and fourth- century figurines at Ihnasiyah. Kaufmann sees the survival of pagan beliefs, however, in the *cynocephali* (dog-headed figures) produced by the Abu Mina workshops (Kaufmann, 1910, p. 76).

The iconography of the figurines scarcely reveals the religious context of the period, except for some crosses incorporated in the attire of orants. What may be the deformed monogram of Christ is found on a horse from Medamoud (Bisson de la Roque, 1931, p. 82, fig. 65), as well as on the statuette of a boar (Keimer, 1943, pp. 93- 101). Dating from the fourth century, it might be a blasphemous image of Christ. Collectively, these figurines were not, however, without religious intention.

Purpose. The purpose of these figurines is unclear, and several interpretations have been proposed. The figurines, including those from Abu Mina, and in particular the horsemen and animals, might be toys brought back to their children by pilgrims (Leclercq, 1926, "Jeux," cols. 375-76). The horsemen from Kom al-Dikka would belong to this category (Martens, 1975, p. 77). Following C. Palanque (Palanque, 1903, p. 98), H. Leclercq saw in these toys "imperfect trifles which the piety of the survivors placed near the small child taken too soon from their loving care," an argument that rests on no serious archaeological evidence (Leclercq, "Poupées," 1926, col. 2517). When the figurines are associated with a place of worship, they are no doubt votive offerings given by the faithful with a view to obtaining some benefits. The little camels of Abu Mina would recall one of the miracles of Saint Menas, the curing of a sterile she-camel, and would serve to obtain for the donor a benefit of the same kind (Kaufmann, 1910, p. 114 and n. 2). The female figurines might be votive offerings for cures and for fertility (Martens, 1975, p. 75). It appears, however, that most of the figurines come from residential districts, which limits their possible role in funerary furnishings and their connection with a specific religious center, unless they were brought back from a pilgrimage.

Sites. Abu Mina

- Kaufmann, C. M. *La Découverte des sanctuaires de Ménas dans le désert de Maréotis*. Alexandria, 1908.
- . *Die Menasstadt und das Nationalheiligtum der altchristlichen*

Ägypter in der westalexandrinischen Wüste, vol. 1. Leipzig, 1910.

- Labib, P. "Fouilles du Musée copte à Saint Menas (première campagne)." *Bulletin de l'Institut d'Égypte* 34 (1951-1952):133- 38.
- Wulff, O. *Altchristliche und mittelalterliche byzantinische und italienische Bildwerke, Beschreibung der Bildwerke der christlichen Epochen*, vol. 3. Berlin, 1909.

Alexandria

- Martens, M. "Figurines en terre cuite coptes découvertes à Kôm el Dikka (Alexandrie)." *Bulletin de la Société archéologique d'Alexandrie* 43 (1975):53-77.

Armant

- Mond, R., and O. H. Myers. *Temples of Armant. A Preliminary Survey*. The Egyptian Exploration Society, Vol. 43. London, 1940.

Bawit

- Palanque, C. "Notes sur quelques jouets coptes en terre cuite." *Bulletin de l'Institut français d'archéologie orientale* 3 (1903):97-103.

Elephantine

- Gempeler, R. "Stadt und Tempel von Elephantine. Sechster Grabungsbericht." *Mitteilungen des deutschen archäologischen Instituts, Abteilung Kairo* 32 (1976):106.

Ihnasiyah

- Petrie, F. W. M. *Roman Ehnasya*. London, 1905.

Kom Ishqaw

- Strzygowski, J. *Koptische Kunst. Catalogue général des [antiquités égyptiennes](#)*, Vol. 12. Vienna, 1904.

Medamoud

- Bisson de la Roque, F. and J. Clère. *Rapport sur les fouilles de Médamoud (1927). Fouilles de l'Institut français d'archéologie orientale*, Vol. 5, pt. 1. Cairo, 1928.
- . *Rapport sur les fouilles de Médamoud (1929). Fouilles de l'Institut français d'archéologie orientale*, Vol. 7, pt. 1. Cairo, 1930.
- . *Rapport sur les fouilles de Médamoud (1930). Fouilles de l'Institut français d'archéologie orientale* Vol. 8, pt. 1. Cairo, 1931.
- . *Rapport sur les fouilles de Médamoud (1931-1932). Fouilles de l'Institut français d'archéologie orientale*, Vol. 9, pt. 3. Cairo, 1933.

Tell Idfu

- Alliot, M. *Rapport sur les fouilles de Tell Edfou (1932). Fouilles de l'Institut français d'archéologie orientale* Vol. 9, pt. 2. Cairo, 1933.
- Bruyère, B. et al. *Tell Edfou 1937. Fouilles Franco-polonaises, Rapports*, Vol. 1, Cairo, 1937.
- Henne, H. *Rapport sur les fouilles de Tell Edfou (1921-1922). Fouilles de l'Institut français d'archéologie orientale*, Vol. 1, pt. 2. Cairo, 1924.
- . *Rapport sur les fouilles de Tell Edfou (1923-24). Fouilles de l'Institut français d'archéologie orientale*, Vol. 2, pt. 3. Cairo, 1925.
- Michalowski, K., et al. *Tell Edfou 1938. Fouilles Franco-polonaises, Rapports*, Vol. 2. Cairo, 1938.
- . *Tell Edfou (1939). Fouilles Franco-polonaises, Rapports*, Vol. 3. Cairo, 1950.

BIBLIOGRAPHY

- *Antinoë (1965-1968)*. Missione Archeologica in Egitto dell'Università di Roma, ser. 21, Rome, 1974.
- Ballet, P., and F. Mahmoud. "Moules en terre cuite d'Eléphantine (Musée Copte). Nouvelles données sur les ateliers d'Assouan, à l'époque byzantine et aux premiers temps de l'occupation arabe." *Bulletin de l'Institut français d'archéologie orientale* 87 (1987):53-72.
- Bisson de la Roque, F. *Rapport sur les fouilles de Médamoud (1930)*. Fouilles de l'Institut français d'archéologie orientale, Vol. 8, pt. 1. Cairo, 1931.
- Castiglione, L. "Stele eines Kupferschmieds. Zur Deutung der römerzeitlichen ägyptischen Grabsteine." *Mitteilungen des deutschen archäologischen Instituts, Abteilung Kairo* 24 (1969):80-82.
- Du Bourguet, P. *L'Art copte*. Catalogue of the Exhibition in the Petit Palais. Paris, 1964.
- Gempeler, R. *Stadt und Tempel von Elephantine. Sechster Grabungsbericht*. *Mitteilungen* des deutschen archäologischen Instituts—Abteilung Kairo, Vol. 32. Mainz am Rhein, 1976.
- Kaufmann, C. M. *La Découverte des sanctuaires de Ménas dans le désert de Maréotis*. Alexandria, 1908.
- . *Die Menasstadt und das Nationalheiligtum der altchristlichen Ägypter in der westalexandrinischen Wüste*, Vol.1. Leipzig, 1910.
- Keimer, L. "Le Chrisme sur une statuette de porc," *Bulletin de la Société d'archéologie copte*, 9 (1943):93-103.
- Leclercq, H. "Jeux et jouets." *Dictionnaire d'archéologie chrétienne et de liturgie*, Vol. 7, pt. 2, cols. 375-76. Paris, 1926.
- . "Poupées." *Dictionnaire d'archéologie chrétienne et de liturgie*, Vol. 7, pt. 2, col. 2517. Paris, 1926.
- Martens, M. "Figurines en terre cuite coptes découvertes à Kôm el-Dikka (Alexandrie)." *Bulletin de la Société archéologique d'Alexandrie*, 43 (1975):53-77.

- Mond, R., and O. H. Myers. *Temples of Armant: a Preliminary Survey* 63. London, 1940.
- Palanque, C. "Notes sur quelques jouets coptes en terre cuite." *Bulletin de l'Institut français d'archéologie orientale* 3 (1903):97-103.
- Petrie, R. F. *Roman Ehnasya (Herakleopolis Magna), 1904*. London, 1905.
- Polaczek-Zdanowicz, K. *The Genesis and Evolution of the Orant Statuettes Against a Background of Developing Coptic Art*. Etudes et Travaux, Vol. 8: Travaux du Centre d'archéologie méditerranéenne de l'Académie Polonaise des Sciences, Vol. 16. Warsaw, 1975.
- Rodziewicz, M. *Les Habitations romaines tardives d'Alexandrie à la lumière des fouilles polonaises a Kôm el-Dikka, Alexandrie, Vol. 3*. Warsaw, 1984.
- Scanlon, G. T. "Ancillary Dating Material from Fustat." *Ars Orientalis. The Arts of Islam and the East* 7 (1968):2-5. Wessel, K. *L'Art copte*. Brussels, 1964.
- Wulff, O. *Altchristliche und Mittelälterliche byzantinische und italienische Bildwerke. Beschreibung der Bildwerke der christlichen Epochen, Vol. 3*. Berlin, 1909.

PASCALE BALLETT

Tags: [Heritage](#), [History](#)