



STUDIES
ON OLD KINGDOM
POTTERY

edited by
T. I. RZEUSKA
A. WODZIŃSKA

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Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Sciences
avec la collaboration de l'Institut d'Archéologie de l'Université de Varsovie

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T.I. RZEUSKA
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PAN

Wydawnictwo Neriton
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ABBREVIATIONS

<i>AA</i>	<i>American Anthropologist</i> , Arlington, Virginia
AAMT	Advances in Archaeological Method and Theory, University of Arizona, Tuscon
<i>AANT</i>	<i>American Antiquity</i> , Washington, DC
ACE Reports	The Australian Centre for Egyptology Reports, Sydney
ADAIK	Abhandlungen des Deutschen Archäologischen Instituts Kairo (Ägyptologische Reihe), Glückstadt, Hamburg, New York, Mainz am Rhein
<i>Ä&L</i>	<i>Ägypten und Levante</i> , Wien
<i>Archaeometry</i>	<i>Archaeometry</i> , Oxford
<i>Archeologia</i>	<i>Archeologia</i> , Warsaw
<i>Archeologia Geographica</i>	<i>Archeologia Geographica</i> , Hamburg
ARCUS	<i>Berichte aus Archäologie, Baugeschichte und Nachbargebieten</i> , Potsdam
<i>ArOr</i>	<i>Archiv Orientální, Quarterly Journal of African and Asian Studies</i> , Praha
ASAE	<i>Annales du Service des Antiquités de l'Égypte</i> , Le Caire
AV	<i>Archäologische Veröffentlichungen des Deutschen Archäologischen Instituts Abteilung Kairo</i> , Berlin, Mainz am Rhein
ÄA	Ägyptologische Abhandlungen, Wiesbaden
ÄAT	<i>Studien zu Geschichte, Kultur und Religion Ägyptens und des Alten Testaments</i> , Wiesbaden
BAR	<i>British Archaeological Reports, International Series</i> , Oxford
BASOR	<i>Bulletin of the American Schools of Oriental Research</i> , Ann Arbor
BÄ	Beiträge zur Ägyptologie, Wien
BÄBA	Beiträge zur ägyptischen Bauforschung und Altertumskunde, Kairo
BCE	<i>Bulletin de liaison du groupe international d'étude de la céramique égyptienne</i> , Le Caire
<i>BdÉ</i>	<i>Bibliothèque d'Étude, Institut français d'archéologie orientale</i> , Le Caire
BES	<i>Bulletin of the Egyptological Seminar</i> , New York
BIFAO	<i>Bulletin de l'Institut français d'archéologie orientale</i> , Le Caire
BMFA	<i>Bulletin of the Museum of Fine Arts</i> , Boston
BP	<i>Biology and Philosophy</i> , Dordrecht
BSAK	Studien zur altägyptischen Kultur, Beihefte, Hamburg
BSFE	<i>Bulletin de la Société française d'égyptologie</i> , Paris
CA	<i>Current Anthropology</i> , University of Chicago, Chicago
CCE	<i>Cahiers de la céramique égyptienne</i> , Le Caire
CdE	<i>Chronique d'Égypte, Bulletin périodique de la Fondation Égyptologique Reine Elisabeth</i> , Bruxelles
CRAIBL	<i>Comptes rendus de l'Académie des inscriptions et belles-lettres</i> , Paris
EA	<i>Egyptian Archaeology. Bulletin of the Egypt Exploration Society</i> , London

EEF	Egypt Exploration Fund, London
EES	Egypt Exploration Society, London
ÉtTrav	<i>Études et Travaux du Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Sciences</i> , Varsovie
FIFAO	Fouilles de l'Institut français d'archéologie orientale, Le Caire
Genève	<i>Bulletin du musée de Genève. Musée d'art et d'histoire</i> , Genève
GM	<i>Göttinger Miszellen</i> , Göttingen
HdO	Handbuch der Orientalistik, Leiden
Hesperia	<i>Journal of the American School of Classical Studies at Athens</i> , Athens
IBAES	<i>Internet-Beiträge zur Ägyptologie und Sudanarchäologie</i>
JAMT	<i>Journal of Archaeological Method and Theory</i> , Dordrecht
JAR	<i>Journal of Archaeological Research</i> , New York
JARCE	<i>Journal of American Research Center in Egypt</i> , Boston
JAS	<i>Journal of Archaeological Science</i> , New York
JEA	<i>Journal of Egyptian Archaeology</i> , London
JFA	<i>Journal of Field Archaeology</i> , Boston University, Boston
JSSEA	<i>Journal of the Society for the Study of Egyptian Antiquities</i> , Toronto
LA	<i>Louisiana Archaeology</i> , Springhill
LÄ	Lexikon der Ägyptologie, vols. I-VII, Wiesbaden
MDAIK	<i>Mitteilungen des Deutschen Archäologischen Instituts Kairo</i> , Berlin, Wiesbaden, Mainz am Rhein
MIFAO	Mémoires publiés par les membres de l'Institut français d'archéologie orientale, Le Caire
OLA	Orientalia Lovaniensia Analecta, Leuven
OMRO	<i>Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden</i> , Leiden
OrAnt	<i>Oriens Antiquus. Rivista del Centro per le antichità e la storia dell'arte del Vicino Oriente</i> , Roma
OrMonsp	Orientalia Monspeliensia, Montpellier
PAM	<i>Polish Archaeology in the Mediterranean</i> , Warsaw
Památky archeologické	<i>Památky archeologické</i> , Praha
PP	<i>Perception and Psychophysics</i> , Austin
PR	<i>Psychological Review</i> , Washington, DC
Radiocarbon	<i>Radiocarbon</i> , Tucson
SAAC	Studies in Ancient Art and Civilization, Cracow
SAGA	Studien zur Archäologie und Geschichte Altägyptens, Heidelberg
SAK	<i>Studien zur Altägyptischen Kultur</i> , Hamburg
SAOC	Studies in Ancient Oriental Civilization, Chicago
Science	<i>Science</i> , Washington, DC
SDAIK	Sonderschriften des Deutschen Archäologischen Instituts Abteilung Kairo, Mainz am Rhein, Berlin
TMO	Travaux de la Maison de l'Orient et de la Méditerranée, Lyon
WES	Warsaw Egyptological Studies, Warsaw
WB	A. Erman, H. Grapow, Wörterbuch der ägyptischen Sprache, vols. I-VI, Berlin und Leipzig
ZÄS	<i>Zeitschrift für ägyptische Sprache und Altertumskunde</i> , Berlin, Leipzig

FOREWORD

Egypt has been the object of uninterrupted exploration for the past two centuries. Successive expeditions, regardless of whether they were working in archaic cemeteries or in a medieval Coptic monastery, focused on the study and publication of the most spectacular finds: architecture, decoration and texts. The artefacts were rarely the subject of in-depth research and pottery was no exception. Despite being the most numerous group in the archaeological finds assemblage, ceramic material has long waited, and actually continues to wait, for more suitable interest on the part of archaeologists. The modest literature on the subject is sufficient proof of the slight interest in this category. In most publications concerning particular funerary complexes, especially of Old Kingdom date, the information on the pottery is scarce, if included at all. One may be forgiven for thinking that material is selected for publication based on criteria of intactness and “prettiness”.

This state of affairs is due not so much to limited interest in pottery as to the huge quantities of sherds unearthed during even a single season – from a few to several thousands of diagnostic fragments. Not without significance is the fact that most of the tombs and temples were plundered already in Antiquity, often repeatedly, and many were reused in later periods, leaving the ceramic material in a disturbed and fragmentary condition. The complex situation requires from potential ceramologists not just patience, but also knowledge of pottery ranging from the Archaic period through the Middle Ages, including imports from the Mediterranean area. Many archaeologists are overwhelmed by the mass of material and prefer to leave it for “future” research, which is usually belated. Furthermore, analyses of Old Kingdom pottery are often based on accidental and frequently erroneous observations. One lingering conviction is that pots made of “poor” clay represent offering or cult pottery, while vessels of “good quality” clay (particularly of Nile A, and B1) are referred to as “red ware” or “Meidum ware”, come from burial chambers. However, it is not the quality of the pottery that answers questions about its provenance or original function. Where a pot came from, and what specific event it is witness to, can be determined only from the archaeological context.

The subject of the present study is a technological, chronological and cultural analysis of pottery of the Old Kingdom. Some chapters refer to technological issues of pottery manufacture in the late Old Kingdom; the authors discuss the results of analyses of the

materials used in pottery production, shaping techniques and surface treatment, while the others present a cultural analysis of the pottery. The authors did not wish to leave this important material exclusively as a typology accompanied with the dating of particular groups of pots and the function of individual vessels. The pottery proved to be one of the most important testimonies concerning burial customs, funerary cult, plunder, and daily life of the Ancient Egyptians.

For the past several years one may observe a slow but constant increase in interest in Old Kingdom ceramics. In order to deepen our knowledge it is important not only to publish and to read older publications, but also exchanging ideas during meetings in groups of specialists. Such meetings allow vivid discussion, exchange of thoughts and new ideas, as well as international cooperation.

The present publication was inspired by the workshop on ceramics from the Old Kingdom organized by Teodozja I. Rzeuska and Anna Wodzińska in 2007 in the Institute of Archaeology (University of Warsaw). The meeting was very successful, however, the organizers realized that the subject is much more complex and requires further studies. In order to receive different views on the material, more ceramicists were invited to participate in the publication devoted solely to ceramics dating from the Old Kingdom.

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DOMESTIC AND FUNERARY/SACRAL POTTERY FROM FOURTH DYNASTY GIZA

ANNA WODZIŃSKA (University of Warsaw)

The Heit el-Gurob site provides a large collection of domestic ceramics dated to a very short period of time, namely to the end of the Fourth Dynasty. The pottery types derived from this site appear to be very uniform, produced to fulfill a specific need.¹

The Heit el-Gurob assemblage (Figs 1-2) has been compared with the roughly contemporaneous funerary/sacral material from the Giza Plateau. Some types occur in both contexts, while many appear only in tombs or temples; still other are typical only to the settlement corpus.

In the absence of the original pots, it is very difficult to compare the settlement material to the funerary one. Publications of pottery material remain very often unsatisfactory in this respect and they usually adopt different methods of describing similar material.

The similarities and differences between ceramics originating from domestic and funerary contexts have been analyzed on the basis of the following criteria: presence only in the domestic context, presence only in the funerary/sacral context, presence in both domestic and funerary/sacral contexts, type of clay, manufacturing method and surface treatment, function, and dating.

SETTLEMENT TYPES

It is difficult to distinguish between pots that occur only at settlements. However, several types are absent in the cemeteries, or were not published as being funerary, among which may be listed, the white carinated bowl (CD7), big conical bread molds with flat internal base (F2C), large basins with multiple spouts (CD22B), and some miniature bowls (CDM).

The CD7 is a white carinated bowl with hemispherical body and rounded bottom (Fig. 3). The vessels appear to have been thrown on a simple wheel, and the bottom was always additionally trimmed with some kind of knife or tool. The CD7 occurs almost entirely at Giza, except Wadi Garawi,² and at Sheikh Sa'id in Middle Egypt.³ It is likely

¹ The article is based on my PhD dissertation – WODZIŃSKA 2003.

² DREYER and JARITZ 1983, pp. 11-12, Figs. 7a, 16.

³ Personal communication – Belgian Mission to Deir al-Bersha, especially Stefanie Vereecken, Marleen De Meyer, and Zoe De Kooning.

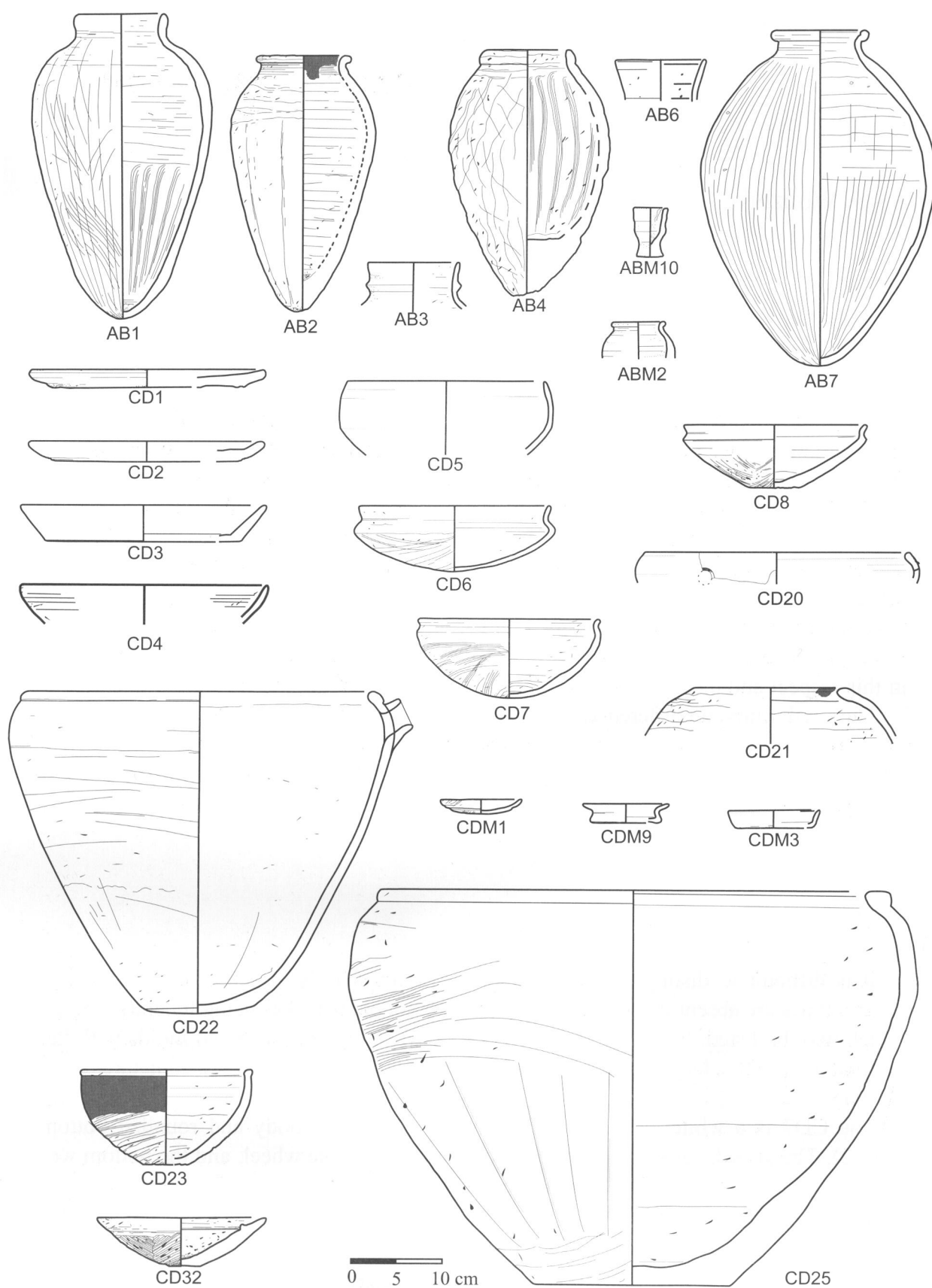


Fig. 1. Selection of the Heit el-Gurob ceramic types. Drawings by Jadwiga Iwaszczuk, William Schenck, and Anna Wodzińska.

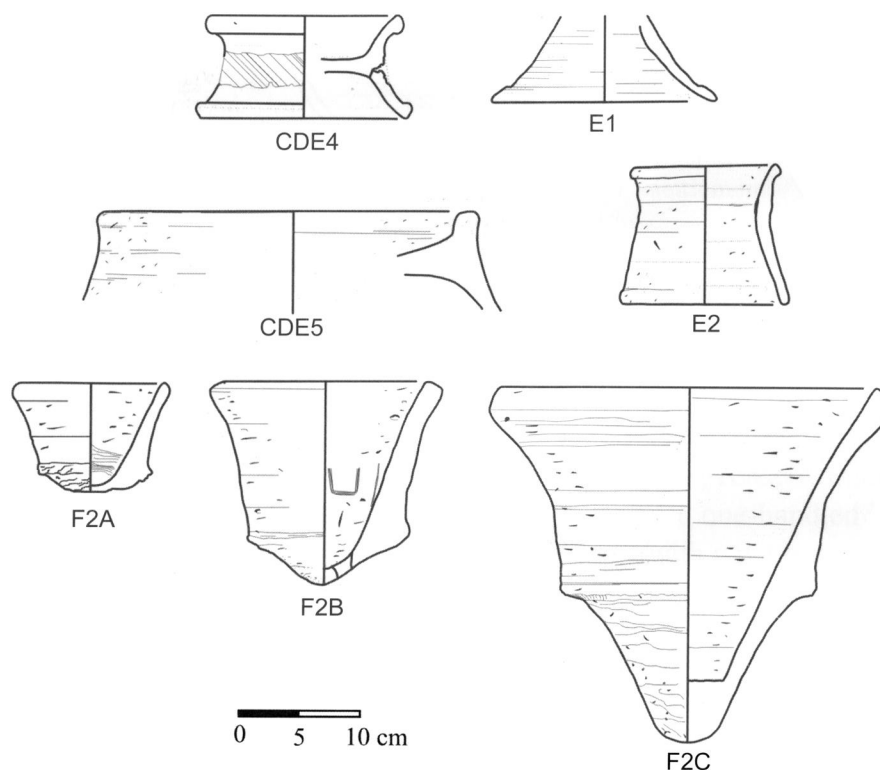


Fig. 2. Selection of the Heit el-Gurob ceramic types. Drawings by Dietrich Raue, William Schenck and Anna Wodzińska.

that they were also found at the cemetery excavated by Hassan,⁴ but this information cannot be confirmed.

The Heit el-Gurob conical bread molds, *bd3* in ancient Egyptian,⁵ can be subdivided into three groups based on their shape and size, namely F2A, F2B, and F2C. The F2A is the smallest of the conical molds, with a usual rim diameter of between 11 and 14cm, compared to 18 to 22cm for the F2B. The largest of the conical molds, the F2C (Fig. 4), is characterized not just by its size, but by a flat interior base, 6 to 7cm, in diameter, which appears to be a standard. The rim diameter of 28 to 35cm can sometimes reach more than 40cm, with its height ranging from 27 to 36cm. Bread molds are commonly held to be formed on a core.⁶ Big conical bread molds with a flat internal base, the F2C, are known from the Heit el-Gurob site and from Sheikh Sa'id.⁷ There are no other settlements, where similar pots have been found. They seem to be unique to Giza where they were used during daily bread production, probably for the builders of the Giza monuments.

The big basin with multiple spouts (CD22B) (Fig. 5) also occurs only at the Heit el-Gurob site. Its function is not known, but we may assume that the spouts were used for pouring liquids, perhaps water during a ritual ablution. Or maybe it was a vessel for grain

⁴ HASSAN 1953, Pl. XLVIII.B (lower row, the second and third bowl from the left side), C (lower row, the second pot from top).

⁵ BALCZ 1932, p. 210; BARTA 1995a.

⁶ ARNOLD *et al.* 1993, p. 20.

⁷ Personal communication – Belgian Mission to Deir al-Bersha, especially Stefanie Vereecken, Marleen De Meyer, and Zëe De Kooning.

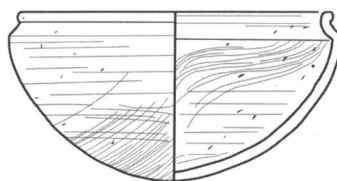


Fig. 3. CD7, white carinated bowl from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

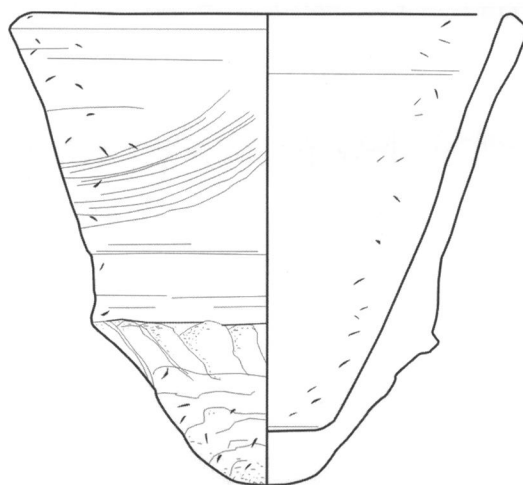


Fig. 4. Large conical bread mold from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

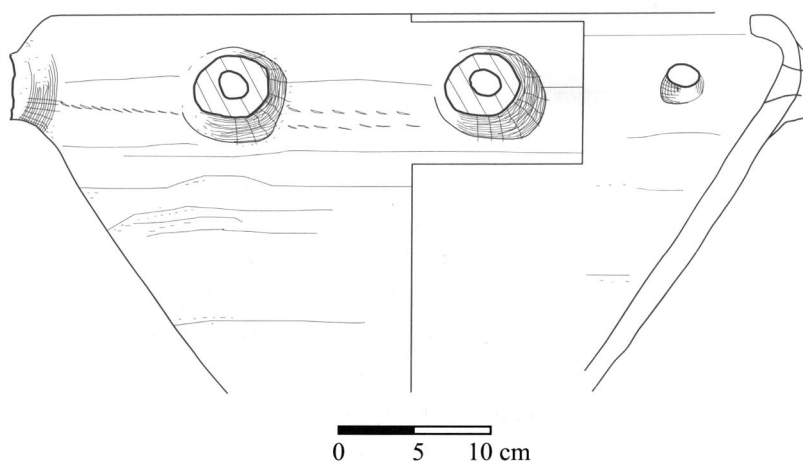


Fig. 5. Large basin with many spouts from the Heit el Gurob settlement. Drawing by Jadwiga Iwaszczuk and Anna Wodzińska.

rations? Some miniature plates, namely CDM1 (Fig. 6), CDM2 (Fig. 7), and CDM9 (Fig. 8), which represent smaller versions of bigger vessels, are also known only from a settlement. They occur in great numbers at the Heit el-Gurob site. They were wheel-made with clear traces of base trimming with the use of some kind of knife.⁸

⁸ WODZIŃSKA 2007, p. 305.

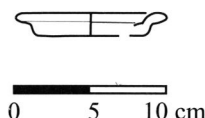


Fig. 6. Miniature CD1 plate from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

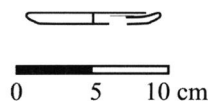


Fig. 7. Miniature CD2 plate from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

FUNERARY TYPES

Ceramic types known only from a funerary/sacral context were found in the immediate vicinity of, or inside tombs, but also in temples, though this last group remains partially studied at Giza. These ceramic types include the *nmst*, *hst*, *dšrt*, censers, miniature votive jars (ABM10) and miniature votive bowls (CDM10), imported one-handled jugs, combed ware jars, as well as deep bowls with flaring walls and jars with a flat base and long spout attached to the body (AB35). These two last vessels are parts of so-called *Waschgeschirr* – purification set.

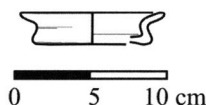


Fig. 8. Miniature CD9 plate from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

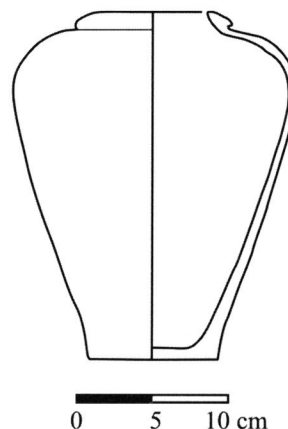


Fig. 9. *nmst* jar from the Hetepheres tomb – REISNER 1955, 65, Fig. 62.14.

The *nmst* (Fig. 9) is a hole-mouth jar with flat base and round rim and incurving walls in the upper part of the body. Vessels of this type were found in great quantities in the tomb of Hetepheres,⁹ where, according to the texts, they served as ritual vases.¹⁰

The *hst*¹¹ (Fig. 10) is ceremonial tall vessel with a narrow neck, outturned, usually with a flat rim, and flat base.¹² The vessels could also be made in other materials, such as stone,¹³ wood,¹⁴ and silver.¹⁵ They were frequently represented, often spouted,¹⁶ as ritual

⁹ REISNER 1955, p. 65, Figs. 62-63.

¹⁰ ARNOLD 1977, pp. 484, 487, Fig. 27.

¹¹ BALCZ 1934, p. 71.

¹² FALTINGS 1989, Fig. 5a.

¹³ ASTON 1994, p. 138, vessel 134 – from First Dynasty to the Second Intermediate Period.

¹⁴ BORCHARDT 1907, color insert.

¹⁵ ISKANDER 1965, p. 178 – Middle Kingdom-Thirteenth Dynasty, times of Amenemhat III.

¹⁶ BALCZ 1934, pp. 72-73, Figs. 99-100.

vases in scenes from Old Kingdom tombs, together with *nmst* jars.¹⁷ These jars were most common from the Sixth Dynasty¹⁸ to the Middle Kingdom.¹⁹ *hst* and *nmst* jars usually contained water, and as such were used during the purification ritual.²⁰

The *dšrt*, a pot with a narrow ledge rim, bent walls and round base (Fig. 11)²¹ is another typical ritual vessel. *dšrt* pots are very rare in the archaeological context. At Giza they are actually known only from the tomb of queen-mother Hetepheres, leading to the supposition that they were perhaps associated only with the élite. *dšrt* literally red one, is very often connected with the breaking of the red pot ritual, though that may not have been its sole function.

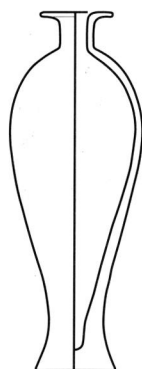


Fig. 10. *hst* vessel – BRUNTON 1937, Pl. LIII.95c₂.

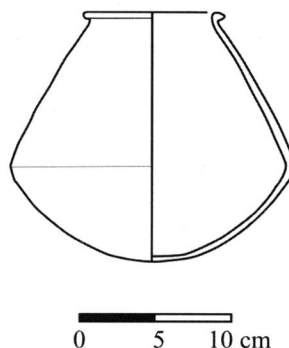


Fig. 11. *dšrt* vessel from the tomb of Hetepheres – REISNER 1955, p. 64, Fig. 60.1188/13.

A censer consists of two parts: a lid, very often with many holes made before firing (Fig. 12), and a bowl for the incense with a long handle. Actual censers were found in temples,²² or in tomb chapels,²³ and they were also depicted in many tomb decorations.²⁴ Censers were used presumably during official sacral ceremonies, such as a funeral.

Votive miniature jars and miniature bowls (Fig. 13) occur in great numbers in different parts of tombs and temples.²⁵ Some of them were also found at the Heit el-Gurob site, but their presence in a settlement context seems to be accidental and unintended.²⁶ Miniatures were thrown on a wheel and their bottoms were string-cut, leaving characteristic semicircular marks. They were mass-produced and in a rather careless manner, to judge from the surface treatment. The aim seems to have been to produce a large number of these vessels,

¹⁷ ARNOLD 1977, p. 484, 487, Figs. 25-26.

¹⁸ SIMPSON 1961, 112.

¹⁹ ISKANDER 1965, p. 182, Fig. 4.6 – small votive vase from the Twelfth Dynasty; STEINMANN 1998, p. 126, vessel no. 362, Pl. 103.1-2.

²⁰ POSENER-KRIÉGER 1976, p. 187.

²¹ REISNER 1955, Figs. 59-60.

²² FALTINGS 1989, Fig. 5d; SIMPSON 1961, p. 134, Fig. 22.

²³ ALEXANIAN 1999, Fig. 45, no. S31, Pl. 20; BRUNTON 1928, Pl. LXXXVIII.98; HASSAN 1953, Pl. L.A-B; JUNKER 1951, p. 144, Fig. 52; PETRIE 1900, Pl. XVI.6; REISNER 1955, Fig. 78, two pots in upper left corner.

²⁴ BADAWY 1976, Fig. 14, collected Old Kingdom depictions of censers.

²⁵ For instance BÁRTA 1995b; MARCHAND BAUD 1996.

²⁶ BÁRTA 1995b, p. 15.

and not the quality of execution. Miniature jars and plates had symbolic significance. They were brought to tombs and temples as votive gifts and used during ceremonies of the royal mortuary cult (in the temples) or more commonly, the cult of the dead.²⁷ Examples in stone are also known.²⁸

Small oval trays dated to the late Sixth Dynasty-First Intermediate Period were found at the Balat cemetery.²⁹ Such a type does not occur at the contemporaneous potter's workshop at Ain Asil. Faltings³⁰ suggested that even if their form is similar to the bread trays they differ in function and may have been used in funerary service. But such trays are not known at Giza.

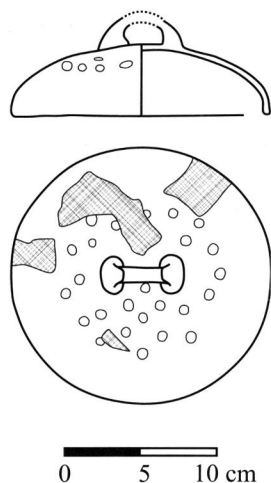


Fig. 12. A lid from a censer – REISNER 1955, p. 78, Fig. 78.43. Drawing by Edyta Klimaszewska Drabot on the basis of the original image.

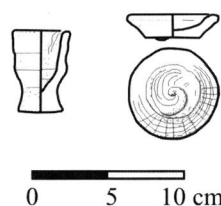


Fig. 13. Two votive vessels from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

Bowls called *šꜥwt*³¹ with a flat base, flaring wall and recurved rim (Fig. 14) were usually located on high stands in front of the false doors³² in the tomb chapels where the cult of the dead was performed.³³ Like the stands, they were given thick coatings of white wash, directly on top of a red-slipped surface.³⁴ On one of the offering tables in Giza four such vessels were discovered and each had its specific content indicated. The bowl with flaring walls had the sign *mw* – water.³⁵ Bowls of this type are also known to have been made of copper,³⁶ which, in conjunction with basins and spouted jars with a flat base make up the

²⁷ ARNOLD 1977, pp. 484, 487; BARTA 1995b, p. 17.

²⁸ REISNER 1931, p. 176, Fig. 44, 4th-5th Dynasties.

²⁹ BALLET 1992, pp. 175-180.

³⁰ FALTINGS 1998, p. 87.

³¹ HANNIG 1997, p. 807.

³² RZEUSKA 2003, p. 128.

³³ BOURRIAU 1981, p. 52.

³⁴ RZEUSKA 2003, Pls. 28-30.

³⁵ JUNKER 1941, p. 103, Fig. 28.

³⁶ BRUYERE *et al.* 1937, Pl. XVIII.1 – upper right corner; HENDRICKX 1992, Pl. VIII.2, together with spouted jar from washing set; LIMME 1999/2000, p. 25, Fig. 6.

so-called *Waschgeschirr*,³⁷ and as such were used in the cult of the dead.³⁸ They were also found in temples.³⁹

The *hsmni* jar⁴⁰ features a broad flat base, squat body, a narrow flaring neck and a long spout on the body (Fig. 15). It is often found together with the *šwti* bowl described above. They are usually discovered in funerary chapels where the cult of the dead was performed.⁴¹ Jars of this type also appear in tomb relief decoration.⁴² *hsmni* jars are known to have been made not only of clay but of copper,⁴³ and stone.⁴⁴

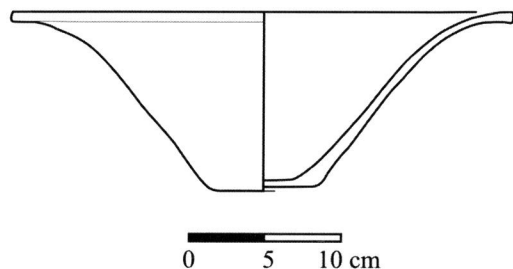


Fig. 14 Large basin from the tomb of Hetepheres – REISNER 1955, p. 66, Fig. 75.80.

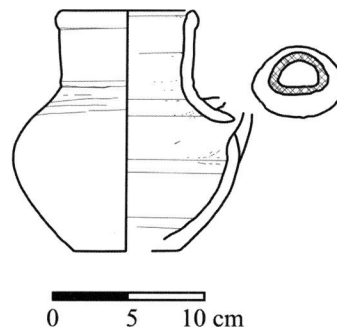


Fig. 15 AB25 jar. Drawing by Anna Wodzińska.

Two imported vessels are known from Old Kingdom cemeteries. They are combed ware two-handled jars (Fig. 16)⁴⁵ and red coated juglet with one handle (Fig. 17).⁴⁶ Some body sherds of combed ware jars come from the Heit el-Gurob⁴⁷ site and from Elephantine.⁴⁸ Their occurrence in the settlement context is very rare and maybe even accidental.⁴⁹ None of the one handled juglet was found at settlements.

The jars with combed decoration are flat-bottomed vessels with narrow necks and outturned rim, equipped with two vertical handles are presumed to have a Canaanite origin.⁵⁰

The juglet is a pot with a flat bottom, egg-shaped or globular body, a narrow neck and a vertical handle joining the rim to the upper part of the body (Fig. 17). Ruth AMIRAN⁵¹ believes that these one handled juglets, like the combed ware jars, were used for the transport of oil. On the basis of some residue studies it is believed that they originated from the area of modern Lebanon.⁵²

³⁷ ARNOLD 1977, p. 483, Fig. 1.8-9.

³⁸ BOURRIAU 1981, p. 52.

³⁹ FALTINGS 1989, Fig. 3d; KAISER 1969, p. 71, XVI.208-212; SIMPSON 1961, pp. 123-124, Fig. 14.1-8.

⁴⁰ HANNIG 1997, p. 562.

⁴¹ BOURRIAU 1981, p. 52.

⁴² BALCZ 1932, p. 97, Fig. 13.

⁴³ REISNER 1927, p. 31.

⁴⁴ ASTON 1994, p. 128, vessel 103.

⁴⁵ for example REISNER 1955, pp. 75-76, Figs. 80, 96-98.

⁴⁶ HASSAN 1936, p. 146, Fig. 173.3, Pl. XLVII.3; REISNER 1955, Fig. 95.

⁴⁷ WODZIŃSKA 2007, p. 66.

⁴⁸ Dietrich Raue, personal communication 2004.

⁴⁹ WODZIŃSKA 2007, pp. 312-313.

⁵⁰ WODZIŃSKA 2007, pp. 311-312.

⁵¹ AMIRAN 1970, p. 66.

⁵² SERPICO and WHITE 1996, pp. 136-138.

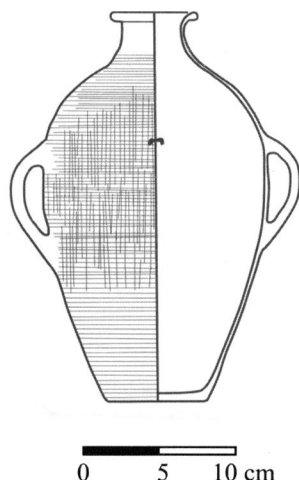


Fig. 16. An imported combed ware jar found in the tomb of Hetepheres – REISNER 1955, p. 69, Fig. 80.17j.

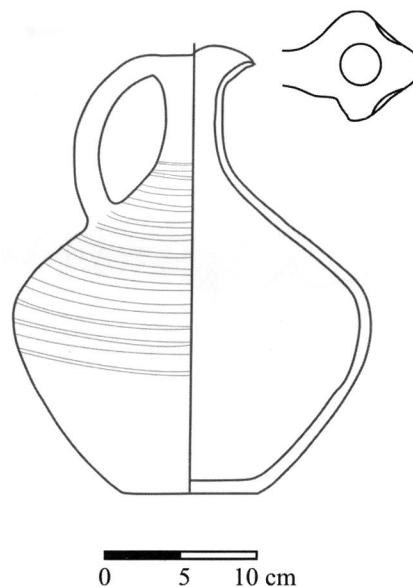


Fig. 17. An imported juglet from the tomb of Hetepheres – REISNER 1955, 64, Fig. 95, G1233/1.

SETTLEMENT/FUNERARY TYPES

Pottery types from settlements and cemeteries are numerous. They are jars: like white ovoid storage jar with straight rim – AB1 (Fig. 1), ovoid storage jar with recurved rim and red polished surface – AB2 (Fig. 1), jars with collar around neck – AB3 (Fig. 1), beer jars – AB4 (Fig. 1), jar with flaring neck and straight rim – AB6 (Fig. 1), storage jar made of marl clay with recurved rim and internal groove – AB7 (Fig. 1), large globular storage jar with straight or recurved rim (AB21); bowls: flat trays wit red slip – CD1 and CD2 (Fig. 1), bowls with flaring walls and flat base – CD3 (Fig. 1), bowls with slightly recurved inside walls – CD4 (Fig. 1), bowls with bent walls – CD5 (Fig. 1), red polished carinated bowls – CD6 and CD8 (Fig. 1); CD25 – large bread dough mixing vats (Fig. 1); CD32 – bowls with internal ledge (Fig. 1); bowl miniature with flat base and slightly flaring wall – CDM3 (Fig. 1), bowls on high foot – CDE4 and CDE5 (Fig. 2), flat bread trays, small and medium conical bread molds – F2A, F2B (Fig. 2); stands: low – E2 and tall – E1 (Fig. 2).

It is clear that many pots known from a settlement material could have been used also at cemeteries such as the storage jars, mostly AB1, AB2, AB7, and also beer jars (the AB4 in the funerary context are known as offering jars).⁵³

The most common type of bowl found in both contexts remains the red carinated bowl – CD6. At Giza the red carinated bowls are more typical to the funerary context rather than to the settlement. The most characteristic bowl of the Heit el-Gurob settlement site is CD7, the so-called white carinated bowl.⁵⁴

⁵³ REISNER 1931, p. 212, Fig. 64.

⁵⁴ WODZIŃSKA 2007, pp. 299-300, 309; WODZIŃSKA 2006.



Fig. 18 F1C – oval flat bread tray from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

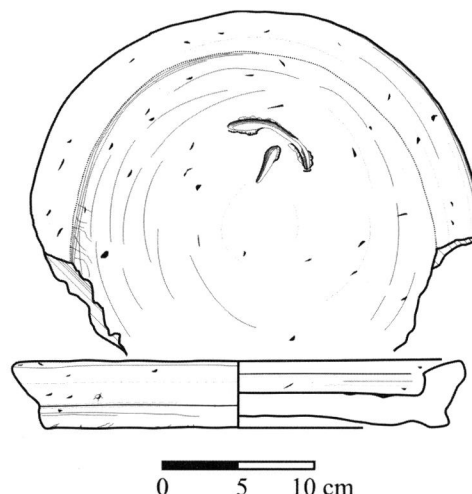


Fig. 19. F1A – rounded flat bread tray from the Heit el Gurob settlement. Drawing by Anna Wodzińska.

Hole-mouthed bowls – CD20 and CD21 (Fig. 1) are difficult to recognize in the funerary context, given that there is insufficient description of their surface treatment or their compositional material in the publications of funerary pottery.

Domestic miniature jars (ABM) and bowls (CDM) are known from both contexts. But apart from votive miniature vessels they seem to be associated more with settlements and their function is practical rather than symbolic.⁵⁵

According to Faltings⁵⁶ flat bread trays are very rare at the cemeteries because they are rather connected to the daily life and not used as offering vessels. The Saqqara examples shown by Rzeuska appear, however, to have a connection to goods found in graves.⁵⁷ We can distinguish two kinds of Giza flat breads trays. The first one is an oval with a high rim, while the second is round with a low rim. Oval trays (F1C – Fig. 18) are usually large, like the one complete example from Elephantine, which measures 78cm long, 46cm wide and 8.5cm high.⁵⁸ Round trays are generally smaller, with two different variants known from the Heit el-Gurob site, namely the F1A (Fig. 19), which has a diameter of 30cm and the F1B with 18-20cm.

CLAY

Pascale BALLET discovered that pots from the cemetery at Balat in the Dakhla Oasis, were made of a different clay than those from the settlement, especially in the local pottery

⁵⁵ BARTA 1995b, p. 15.

⁵⁶ FALTINGS 1998, p. 83.

⁵⁷ RZEUSKA 2006, pp. 174-183, Pls. 66-70.

⁵⁸ FALTINGS 1998, p. 86.

workshop,⁵⁹ and she suggested that this was due to the varying purpose of the pottery, with funerary pots being made separately in different workshops using different materials.

Differences in clay between the settlement and funerary pots from the Memphite region have not been observed, though they probably exist.

MANUFACTURE METHODS/SURFACE TREATMENT

Differences between settlement and funerary ceramics can also rest on the different manufacturing methods and surface treatment.

The settlement miniatures (ABM and CDM) usually represent smaller versions of bigger pots. They are wheel-made and their bases are cut with a knife. Votive miniatures (ABM10 and CDM10) are also wheel made but their bases are always cut with a string when the clay was still wet.

The surface of pots from settlements was usually carefully smoothed or polished (except in the case of bread molds and beer jars), because a slip or coat seals the pores in the clay and turns the vessel wall less permeable. Many pots from the funerary context are coated only in visible areas,⁶⁰ given that the function of such pots was more symbolic than practical.

The white wash is a very common surface treatment at the Heit el-Gurob site, more so than red slip.⁶¹ The reason for choosing the white wash may be simple practicality, given the fact that sources of white *tafla* – which was probably used in the preparation of the wash – are located in close vicinity of the site.⁶² A red slip usually contains red ochre, natural sources for which can be found near the Dakhla oasis in the western desert, or near Asuan in Upper Egypt.⁶³ It seems that the white wash was more accessible, though it was used in limited cases in cemeteries where red slipped pots predominate. Perhaps the red color was associated with the ritual of breaking the red pots, thus its occurrence on funerary pots would be more symbolical than practical. Some funerary pots placed in tomb chapels,⁶⁴ such as bowls with flaring walls with red slip, were additionally covered with a white substance.

The settlement pottery usually bear numerous traces of use like abrasions or burnt areas.

Funerary vessels very often do not bear any traces of use, as they were made only for one a single purpose, namely to be placed in a tomb and serve as offerings.⁶⁵

The principal differences between settlement and funerary pots can be summarize as follows.

⁵⁹ BALLET 1992, p. 188.

⁶⁰ Conclusion based on the personal observation of the Reisner's Giza ceramic material from the Museum of Fine Arts in Boston.

⁶¹ WODZIŃSKA 2007, p. 292.

⁶² LEHNER 1985, p. 114.

⁶³ HANNIG and FUCHS 1982, p. 551.

⁶⁴ RZEUSKA 2003, p. 128.

⁶⁵ For example conical bread molds from El-Tarif cf. KAMMERER-GROTHAUS *et al.* 1998, p. 88.

Table 1: Principal differences between settlement and funerary pottery.

Settlement pottery	Funerary pottery
Miniature jars and bowls – base cut with a knife	Votive miniature jars and bowls – base cut with a string
Jars – entire external surface coated	Jars – partially coated external surface
Bowls – entire external and internal surface coated	Bowls – surface coated only in visible places
White wash used to cover surface of many pottery types	White wash used to cover surface of a few pottery types already having a red coat
Visible traces of use	Very often without any traces of use

FUNCTION

Major differences between settlement and funerary vessels rest upon their varying function within the two contexts, as is summarized in the following Table 2.⁶⁶

Table 2: General functions of settlement and funerary pots.

Functions of settlement pots	Functions of funerary pots
Cooking, baking	Daily life pots used as offering vessels
Food preparation without use of fire	Ritual vessels
Food serving, eating, drinking	Daily life pots used as burial vessels
Storage of liquids	Daily life pots used as containers for building material
Dry food storage	Illumination
Transport of liquids	Daily life pots used for food serving and consumption at tombs
Dry food transport	–
Illumination	–
Storage of building material	–
Pigment containers	–

It is possible to suggest that settlement pots were used for cooking, and baking, and especially in particular activities like brewing and bread baking which never took place in cemeteries. Further, settlement pots can be used at cemeteries for food preparation, serving, eating and drinking, but also for illumination, transport, storage of liquids and dry food, and for the preparing and storing building material. Big vats (CD25) very often were utilized as burial vessels. Otherwise, ritual/votive vessels were produced only for the funeral/sacral context and they were never used at the settlements.

DATING CRITERIA

Pots can be dated according to different criteria, the most common of which are the type of clay, shape, manufacturing method, and surface treatment. Even if the criteria stay

⁶⁶ Based on ILAN 2001, p. 337.

the same, pots from different contexts, especially the funerary one, can be dated in different ways.

Even if the date of a tomb is established, not every object found in it can or should be dated to the same period. We also should remember that the shape of pots produced only for the funerary service do not significantly change over time since they do not break very often. Such vessels include, for example, votive miniatures, *hst*, *dšrt* and *nmst* vessels.

CONCLUSIONS

Differences between settlement and funerary ceramics can be discussed on many levels, including clay, types, manufacturing method and surface treatment, function, or dating criteria.

Differences in clay between settlement and funerary pots from the Memphite region are not discernible. Perhaps these exist, but we cannot recognize them without special clay analyses as was done for the Dakhla ceramics (Ain Asil, Balat).

There is a large group of types which belong to both settlement and funerary assemblages. This group contains most of the storage/transport jars, and bowls used for preparing and serving of food, and bread molds. These daily life pots were also used as offering vessels at cemeteries.

It is difficult to distinguish between pots that occur only at settlements. Several types are absent in cemeteries or at least were not published as such. They are the white carinated bowls, the big conical bread molds with flat internal base, big basins with many spouts, and some miniature bowls.

Types from a funerary context were found near or inside tombs, but also at temples. They are ritual jars like the *nmst*, *hst* or *dšrt*, and also deep bowls with flaring walls, censers and miniature votive pots. They clearly belong to the funerary equipment used in performing rituals in tombs and at temples. Imported one handled jugs and combed ware jars were usually placed in burial chambers of prominent individuals as luxury item offerings.

Some differences in method of manufacture and surface treatment can also be observed. Bases of votive miniatures were cut with a string while bases of small settlement pots were cut with a knife.

Pots from a funerary context are often coated only in visible places. Numerous pots known from settlements but found in cemeteries do not bear any traces of use. The white wash is the most common method of coating the pot surface at the Heit el-Gurob site. Some red coated pots in cemeteries were also found with white wash-paint applied to them.

We also should keep in mind that the shape of pots produced only for the funerary service and never attested at a settlement, do not significantly change over time since they do not break very often.

It seems that the pottery production at Giza was very complex. We may attempt to suggest that apart from the workshops producing daily life pottery, there must have also been a separate industry producing funerary/sacral vessels, which were perhaps manufactured by different potters in distinct places, which as of yet remain undiscovered.

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