Univerzita Karlova Filozofická fakulta Český egyptologický ústav Egyptologie

# Disertační práce

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Miniature and model stone vessels of the Old Kingdom – From typology to social and political background

(Miniatury a modely kamenných nádob doby Staré říše – Od typologie k sociálnímu a politickému pozadí)

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#### Abstract

The present dissertation thesis proposes a new systematic research in stone model and miniature vessels, which were used in the burial context in the Old Kingdom. The scope of work encompasses the limits of typology towards the social and political history. A detailed study of the preserved assemblages of stone model and miniature vessels and their characteristics in the context of the production and distribution of stone vessels in the Old Kingdom shows their specific social meaning. The changes, which can be detected on the assemblages, either from the point of view of their morphology or material, clearly point to particular key periods of social and political changes, which influenced the production and distribution of stone vessels, either in the miniature and model forms, or in the form of large size functional pieces.

#### Abstrakt

Předkládaná disertační práce přináší souborné zpracování kamenných miniaturních nádobek a modelů, které byly využívány v pohřebním kontextu v době Staré říše. Práce ovšem významně přesahuje hranice typologie směrem k sociálním a politickým dějinám. Podrobné zkoumání dochovaných souborů kamenných modelů a miniatur a jejich charakteristik v kontextu výroby a distribuce kamenných nádob v době Staré říše ukazuje na jejich specifický sociální význam. Změny, které jsou na soborech detekovatelné, ať už z hlediska jejich morfologie nebo materiálu, jasně ukazují na určitá klíčová období, kdy docházelo k politickým a sociálním změnám, jež ovlivnily právě i výrobu a distribuci kamenných nádob, ať už ve formě miniatur a modelů, nebo velkých funkčních kusů.

# Key words

Old Kingdom – stone vessels – miniature – model – production – chronology – opening of mouth – set – travertine – limestone – provinces

# Klíčová slova

Stará říše – kamenné nádoby – miniatura – model – výroba – chronologie – otevírání úst – sada – travertin – vápenec – provincie

# Table of contents

1.	Introduction1	
	1.1 Terminology and methodology	
	1.2 History of research	
	1.3 New approach to the material	
2.	Stone vessels before the introduction of model sets in the Fourth Dynasty 10	
	2.1. Predynastic Period 10	
	2.2. Early Dynastic Period 12	
	2.3. Third Dynasty 16	
	2.4. Fourth Dynasty before Khufu	
	2.5. Model and miniature stone vessels up to the reign of Khufu	
3.	Stone vessels in Memphite private tombs of the Fourth to Sixth Dynasties	
	3.1. Memphite private tombs with large size stone vessels	
	3.2. Nature of the stone vessels and their interpretation	
4.	Materials and techniques of production	
	4.1. Material	
	4.1.1. Travertine	
	4.1.2. Gypsum	
	4.1.3. Limestone	
	4.1.4. Rock crystal	
	4.1.5. Basalt	
	4.1.6. Obsidian	•
	4.2. Production process	ŀ
	4.2.1. Location of workshops74	1
	4.2.2. Techniques of production and tool marks	7
5.	Typology and chronology	;
	5.1. Typology of model stone vessels	5
	5.1.1. Open forms	7
	5.1.1.1. Bowls/beakers	;
	5.1.2. Closed forms	÷
	5.1.2.1. One-handled jugs 92	
	5.1.2.2. Cylindrical jars	ł
	5.1.2.3. Beer jars	)

	5.1.2.4. Wine jars			
	5.1.2.5. Shouldered jars 102			
	5.1.3. Special forms			
	5.1.3.1. Tables			
	5.1.3.2. Basins (with ewers) – washing sets 106			
	5.1.3.3. Ewers			
	5.1.3.4. Incense burners			
	5.1.3.5. Squat jars			
	5.2. Composition of the assemblages			
	5.3. Old Kingdom offering lists			
	5.4. Chronological aspects			
6.	Stone versus pottery and copper model and miniature vessels (typology, context) 129			
	6.1. Pottery			
	6.2. Copper			
	6.3. Comparison			
7.	Model and miniature vessels in the provinces			
	7.1. Stone vessels in the provincial cemeteries			
	7.2. Nature of stone vessels in the provinces in the latter part of the Old Kingdom. 175			
	7.3. Centre versus periphery			
8.	Opening of the mouth ritual sets			
	8.1. Typology and material 187			
	8.2. Chronology and meaning			
9.	Conclusions			
	9.1. Interpretation of model and miniature stone vessels in the Old Kingdom burial			
	context			
	9.1.1. Meaning of assemblages of model stone vessels in the burial and mortuary			
	customs in the Old Kingdom 199			
	9.1.2. Political and social implications			
	9.1.3. Practical consequences (dating and social criteria)			
	9.2. Stone vessels in the Old Kingdom – general overview			
	9.3. Summary			
10. Appendix 1 – Catalogue of assemblages				
	10.1. Stone model and miniature vessels of the Fourth Dynasty			
	10.1.1. Giza			

	10.2.	Stone model and miniature vessels of the Fifth Dynasty	231			
	10.	2.1. Abu Rawash	231			
	10.	2.2. Giza	233			
	10.	2.3. Abusir	250			
	10.	2.4. Saqqara	255			
	10.3.	Stone model and miniature vessels of the Sixth Dynasty	257			
	10.	3.1. Giza	257			
	10.	3.2. Abusir	264			
	10.	3.3. Saqqara	265			
11. Appendix 2 – Catalogue of the Opening of the Mouth ritual sets						
	11.1.	Giza	269			
	11.2.	Abusir	274			
	11.3.	Saqqara	277			
	11.4.	Zawiyet el-Meytin	281			
	11.5.	Dara	282			
	11.6.	Deir el-Gebrawi	283			
	11.7.	Abydos	284			
	11.8.	Deir el-Nawahid	286			
	11.9.	Hamra Dom	287			
	11.10.	Dendera	288			
	11.11.	Unknown origin	289			
12.	Bibliog	graphy	291			

#### 1. Introduction

Ancient Egyptian belief in the afterlife with all its aspects led the people living on the banks of the river Nile to maintain their well-being in the otherworld in the same – or even better – way as their social position and personal wealth allowed them to live their Earthly lives. They dug either humble burials in the desert or they had large mudbrick or stone tombs built and appropriately furnished with all the objects they might have needed for their life in the netherworld. Since the afterlife reflected the life on Earth, also the burial equipment was supposed to provide the deceased with similar things that they needed in their Earthly lives. The only difference sometimes dwelled in the use of slightly different materials, mostly more precious for the purpose of the eternal afterlife. In this regard, the burial chambers of the Old Kingdom mastabas were furnished with pottery, stone vessels, copper objects and jewellery. The number and manner of objects included in the burial equipment was changing in the long-lasting history of ancient Egyptian civilisation, and mostly reflected major social shifts, as will be further presented in this thesis.

Miniature and model stone vessels were no novelty that would appear for the first time it the Old Kingdom. Small size vessels are to be found in Pre- and Early dynastic tombs, as well. However, their meaning and purpose had changed in the meantime, and a milestone came soon after the beginning of the Fourth Dynasty, when specific sets of these small size, "dummy" vessels were introduced as a new piece of burial equipment. The Third and early Fourth Dynasty tombs still preferred large size stone vessels that highlighted the social status of the owner of the mastaba. Their variety was not as wide as in earlier periods, and a high level of standardisation is clearly traceable. However, they still attract attention concerning their size, number, and craftsmanship. The social and political changes that became apparent at the beginning of the Fourth Dynasty led to the adoption of a new concept of burial apartment and its equipment (e.g. Lehner 1985; Flentye 2002; 2007; Bárta 2005b; Jánosi 2005; Gundacker 2006). The new cemeteries of Giza introduced a well-planned city of the dead, and throughout their architecture and furnishing reflected emphasis, which was put on economical behaviour. Although the most important members of the royal family, such as Queen Hetepheres, enjoyed spectacular wealth in the afterlife (Reisner - Smith 1955), the common officials and other members of the royal family must have satisfied themselves with limited burial equipment. The miniature and model stone vessels were probably introduced as a kind of economisation of the funeral and mortuary practice. This trend was already recorded

in the pottery production of the early Fourth Dynasty (Bárta 1995). Comparison of the burial equipment from the point of view of stone vessels leads to the same conclusion.

## 1.1. Terminology and methodology

The small size vessels of the Old Kingdom are usually denoted as "miniature" or "model", and these terms are often interchanged, regardless their different meaning. Susan Allen was the first one to try to shed more light into the terminology and clarify the shift in meaning (Allen 2006). From her point of view, miniature vessels are the small size vessels that were supposed to be used as real containers, thus being a cheaper substitution of the large size vessels. Contrary, model vessels were produced intentionally as "dummy" vessels with a shallow depression in the rim part. They were not meant to contain real offerings, since their function was symbolic. From outside, they were exact copies of the large size originals, and from the perspective of an ancient Egyptian, they could supply the deceased with their imagery contents in the same way as the large functional pieces. In this respect, Allen designated the small size vessels in stone as "models", and those in pottery as "miniatures". It is quite easy to distinguish between these two kinds in case of tall jars, but bowls are usually the same, and their interpretation relies on the context they were found in.

When dealing with pottery assemblages, Katarína Arias Kytnarová introduced another term for a kind of small size vessels – "miniaturised" (Arias Kytnarová 2014: 227–250). She reinterpreted Allen's classification, and stated that "miniature" vessels are those that have their origins in large size pottery vessels, but their morphology has changed, and they remained as their stylised versions. On the other hand, "miniaturised" vessels are those that copy the shape of original pottery vessels with all details. Their size is quite often larger than the size of "miniatures". Such a classification, well working on pottery, can be also applied on stone vessels, but it may rather cause confusion. Most of the small size stone vessels belong to the group of "models" ("dummy", symbolic vessels), others should be called "miniatures" (potentially functional) regardless their morphology, which usually copies the functional vessels of larger sizes.

From the methodological point of view, it is also important to define a "small size" vessel. Most of them are to be found in assemblages ritually deposited in burial chambers. However, in some cases the looting was so severe that there are only few pieces left in the burial chamber, and one has to decide which of the vessels are still the "small size" models or miniatures and which of them should be considered the "large size". Generally, the size of

most of the "model" and "miniature" vessels does not exceed these dimensions: bowls up to 9.0 cm in diameter, tall jars up to 11.0 cm in height, tables up to 20.0 cm in diameter.

The author of the thesis also had to deal with different contexts, in which the model and miniature stone vessels were discovered. Respecting their function and subsequent interpretation, she decided to include only the vessels with clear original (mostly primary) context, such as burial chambers, shafts and offering places. Although most of the tombs were disturbed in various times in history, the vessels were often left in their original position by the robbers, especially in case of the tombs that were looted in antiquity. The pieces collected in dumps or other secondary contexts will be included only on purpose, when it is clear that they really belonged to the assemblage of a tomb.

#### 1.2. History of research

Ancient Egyptian stone vessels and their development in general was a target of research of several authors. They discussed their typology and chronology and tried to provide a systematic analysis of the prestigious material. One of the first authors dealing with stone vessels was William M. F. Petrie, who tried to sum up the basic types from the Early Dynastic Period until the Graeco-Roman times (Petrie 1937). He described the classes and types deposited in the storerooms of the University College, London, which he supposed to be adequate for the relevant examination. Petrie only left aside the Predynastic corpus, as it had already been dealt with in his previous publication devoted entirely to that period (Petrie 1920). Petrie's work was the first attempt to study the chronological development of particular forms of stone vessels based on the method of comparison and archaeological context.

Georg A. Reisner enriched the study of stone vessels by his advanced typological and chronological interpretation, which was motivated by his work in the pyramid complex of king Menkaure, where hundreds of stone vessels came to light (Reisner 1931). The subsequent research in the tomb of Queen Hetepheres enabled him to revise his systematic analysis and adjust new types (Reisner – Smith 1955). The corpus of stone vessels known until that time mostly from the Predynastic or Early Dynastic contexts or from individual private tombs was enlarged especially by the enormously rich assemblages coming from the royal structures of the Fourth Dynasty. Reisner's summary and interpretations remain one of the most important pieces of work on the early ancient Egyptian stone vessels until today.

The most valuable work concerning the range of types of stone vessels was published by Ali A. H. R. El-Khouli (1978). It deals with the Predynastic Period until the Third Dynasty. Although it is often considered rather confusing concerning the typology and description with a wide variety of slightly different types classified separately disregarding the possible historical development, the catalogue itself is of a great importance. El-Khouli attempted to present all the known types of stone vessels and was quite successful, as he had access even to the unpublished material discovered during various Egyptian excavations. He differentiated the already classified types into more groups in respect of miscellaneous, sometimes even insignificant details on one hand, and on the other hand neglected the variations indicating the historical development. Regrettably, it is a great disadvantage of his work that prevents application of such a complicated system on new evidence and general use.

The most recent work on the typology of stone vessels was produced by Barbara G. Aston (1994). Although she focused particularly on material, *i.e.* the types of stones and their possible origins in the so far known Egyptian quarries, she also tackled their usage during Egyptian history of stone vessel making. The forms were discussed rather briefly, as they did not represent the primary aim of the author, but she collected a list of many examples for each of them. Aston was led to the historical implications of her geological study as a result of the use of individual stones in limited time spans, and therefore for production of specific vessel types. Her typological system is quite simple, listing only basic types of vessels in every period. For this clear presentation and list of attestations of individual types, her work remains the most cited one by excavators working in field and publishing the uncovered material.

Unfortunately, with the exception of Reisner, none of the authors paid attention to model stone vessels as a specific product requiring a special treatment. The early attempts at their interpretation were connected with the large-scale archaeological research. Since this type of excavations brought to light too many examples, it avoided the excavators to override their evaluation. The first sets of model stone vessels were discovered in the Giza cemeteries, and therefore their earliest explanation is to be found in the publications of Hermann Junker, Selim Hassan, and G. A. Reisner, who all spent many years excavating local tombs and the contents of their shafts and burial apartments.

After a careful analysis of his finds, H. Junker came to the conclusion that these sets represented a 3D offering list situated in the burial chamber, prior to its appearance in the written form on the walls of the burial apartment later in the Fifth Dynasty (Junker 1929: 108–112). Junker was well aware of the shapes of the model stone vessels and was right to

connect them with the offering lists, since they were supposed to contain many of the items listed there. However, he never made an exact comparison between the vessels and items of the offering list to prove that they really contained the same objects. If he did, he would find out that there were many differences. Junker was at the beginning concerned mainly with the sets dated to the Fourth Dynasty and made of travertine. Later, he excavated even the limestone assemblages, but he did not pay much attention to the material variations, and chronological aspects. Although he observed decline in craftsmanship in the latter part of the Old Kingdom, he did not devote himself to explain the history of this specific kind of burial equipment.

S. Hassan also found many sets of model stone vessels in the burial chambers of the Giza tombs which he excavated. As he was aware of the importance of interpretation of his finds, he devoted several parts of the Giza publication series to particular aspects of the Old Kingdom afterlife. One chapter attempted to explain the phenomenon of the model vessels made of stone (Hassan 1948: 27–31). Contrary to Junker, who rather thought of the reason for their existence, Hassan was more concerned with their typology. He tried to separate various types and looked for their parallels in the iconographical evidence to find out their function. Although he touched the problem of chronology, he did not think about the sets as assemblages produced on purpose with a specific significance. Therefore, his research let him to a wide and unclear typology with no exact conclusions, since even similar pieces were separated as different types with different use.

Another archaeologist, who came across these sets of model stone vessels, was G. A. Reisner; again during his excavations in the large Giza cemeteries. Reisner also followed the line of typological criterion (Reisner 1931, 130–201; Reisner – Smith 1955: 90–102). And unfortunately, treated the model vessels as large size vessels and described them in the same way. It was not necessarily a wrong approach, but it let him to override the meaning of them as assemblages, where every piece has its position. Reisner also did not pay enough attention to the material used for their production. Although he observed occurrence of limestone in some tombs, he just considered them to be poorer tombs and did not search for any chronological consequences (Reisner – Smith 1955: 92). Reisner had wide knowledge of the Old Kingdom material culture, including stone vessels, but his method could not let him get deeper in the chronological development of the assemblages of model stone vessels.

All other authors dealing with model stone vessels generally followed the interpretation of Junker and did not dare to re-open either the question of typology or chronology. No one was concerned with the variety of materials, or shape and composition

development that might have reflected the social changes throughout the Old Kingdom. Model stone vessels were discussed in context of primary finds for instance by Vivienne G. Callender (in Verner – Callender 2002: 34–38 and in Krejčí – Callender – Verner 2008: 276– 281), or by Petra Vlčková (in Verner 2006, 343–346, 356–359) and Minaul-Gout (2019). Other texts on model stone vessels represent various catalogues (Lacovara 1992; Arnold 1999: 492–493; Benešovská – Vlčková 2006: 256–257, 284–285).

#### **1.3.** New approach to the material

The Old Kingdom period is represented by at least four dynasties that lasted almost 500 years. Such a long time must have brought changes that would have been reflected even in burial customs. And indeed, they are. There are many aspects of the Old Kingdom culture that have become a subject of detailed study, and brought interesting results, including administration, funerary architecture, religious believes, art and iconography, pottery and other parts of material culture (*e.g.* Arnold 1999). Stone vessels were always treated differently than the other kinds of material culture. Their typology is not easy to establish, for their high value predestined them to be frequently recycled objects. However, the Old Kingdom is different than previous periods. During this time many stone vessels became a product intended not for practical usage (except for the large size vessels from royal contexts), but only to be buried in tombs. Therefore, the assemblages collected in burial chambers of officials and their family members do really reflect the production of the time, when the tomb was built, and its owner died. Moreover, although the stone model and miniature vessels were perceived as a static piece of burial equipment in the past, when studied in detail, they become more variable and in the end point to some major changes in the society of the Old Kingdom.

The above presented works on stone vessels usually treated the model stone vessels from the point of view of their typology. They searched for differences and similarities with large size vessels, often omitting their chronological development. The main target of this thesis is thus a complex study of this kind of material culture. The assemblages of model stone vessels must be treated as a group with a specific function. In this respect, they followed a particular pattern concerning the typology of individual vessels. The approach of the author of this thesis thus dwell in detailed study of the typology of the vessels and their material with regard to their purpose. If one keeps in mind that they were always considered as a set of vessels, which were substituting the large size vessels and were supposed to provide the deceased with all basic necessities for their well-being in the afterlife, the typology becomes much simpler than the one considered by previous researchers. At that point, one comes to the number of 10 basic classes represented by a handful of types that may vary substantially. But what is important, they still represent a particular vessel class.

Attention should be also paid to the material, which was used for the production of model stone vessels, since it leads to the conclusion that it played an important social role. Reisner saw the introduction of limestone as a symbol of "increasing poverty of the community" (Reisner – Smith 1955: 92). But a deep study of the burial equipment of the Old Kingdom tombs gives a different image. The material played a social role, but different than Reisner thought, and correlated more with chronology. When comparing the typology and material variations, one comes to an interesting historical development that in the end reflects political and social changes in the Old Kingdom Egypt. The new approach is thus a more systematic study following synchronic and diachronic patterns of production and distribution of the assemblages of model stone vessels.

The present dissertation thesis tries to shed more light on the model and miniature stone vessel in context of the production of stone vessels in general, as well as in context of social and political development in the Old Kingdom. The research is thus introduced by Chapter 2, which deals with the stone vessels excavated in the tombs from the time prior to the early Fourth Dynasty, more precisely the reign of Khufu. During the reign of this king, the first assemblages of model stone vessels appeared. In this respect, Chapter 2 discusses Preand Early Dynastic evidence, as well as the Third and early Fourth Dynasty stone vessels, with the emphasis on possible sources of inspiration, *i.e.* the small size and "dummy" vessel. The scope of research is not limited to the Memphite area, as the tradition was rather homogeneous throughout the whole country at that time.

The main corpus of the thesis deals with the assemblages of model stone vessels with their various aspects. Since these sets are specific feature of the Memphite cemeteries, the provinces are omitted in Chapters 4 to 6. The author worked with material coming from all the Old Kingdom royal cemeteries from Abu Rawash in the north to Dahshur in the south. All of the discussed assemblages were presented with basic structured data in the catalogues, which are added at the end of the thesis as appendixes. Most of the data were taken from publications presenting archaeological excavations of the Old Kingdom tombs. Much of the so far unpublished material is be found on some web sites. For instance, evidence on the Giza finds can be acquired through Digital Giza, a web site, which was prepared by Harvard University (http://giza.fas.harvard.edu/). Similar database is provided by Giza Project with finds stored mostly in German and Austrian museums, such as Roemer- und Pelizaeus

7

Museum Hildesheim, Museum of Universität Leipzig and Kunsthistorisches Museum in Vienna (http://www.giza-projekt.org/). These are both valuable tools, which provided the author of the thesis with many details including sizes of vessels, their drawings and photographs. They likewise enabled her to study the finds in contexts, which was often important for dating, especially in cases, when there were only a few pieces of model stone vessels found.

If possible, other unpublished material was searched for on the official web sites of individual museums housing ancient Egyptian collections, or it was studied by the author of the thesis there (*e.g.* Kunsthistorisches Museum in Vienna and Museum of Universität Leipzig, or National Museum in Prague). Since the author participates in the excavations of the Czech Institute of Egyptology at Abusir on regular basis and is responsible for documentation and publication of stone vessels, she also included all of the finds from Abusir cemeteries, which she could study herself in hand. Starting with the data from Abusir, she created a database of model stone vessels in the Old Kingdom. This database became an essential source of evidence for the research presented in this dissertation thesis. As there are many correlations between the model and large size functional vessels from the point of view of their typology as well as chronology, the author has also started filling a database of the Old Kingdom large size vessels. This one is however, still in process.

The present thesis attempts to study the model and miniature stone vessels not only from the point of view of typology, but a great part of the work is devoted to the sociological point of view. The assemblages of model stone vessels are studied in detail from various points of view. Chapter 4 is devoted to the material and technologies used during their production. Chapter 5 focuses on the typology and chronology of the vessels. The similarities and differences concerning the model vessels made of stone, pottery and copper are discussed in Chapter 6. Besides these, there are chapters on general historical development of stone vessels either in Memphis (Chapter 2 and 3) or in the provinces (Chapter 7). The stone vessels disappeared from the remote areas soon in the Fourth Dynasty and they are detected again there from the end of the Fifth Dynasty. Due to this re-occurrence in the time, when Memphite burial customs were still bound by strong tradition of assemblages of model stone vessels, it is tempting to search for parallels and ways of transfer of ideas and forms at that time. The provincial stone vessels and their burial contexts are listed and then interpreted in correlation with the central administration and its development. The research led to tracing particular modes of production and distribution of stone vessels in the Sixth Dynasty, the time of decline of assemblages of model stone vessels and new rise of full-size functional types in Memphis.

Aside the assemblages of model stone vessels, there are particular sets of a different kind of model stone vessels, which belonged to the Opening of the Mouth ritual. For they are specific in material, as well as in morphology, they are treated separately. Moreover, these vessels had another meaning and function than those from the large assemblages, which are the main target of the thesis. The material used for the production of the vessels belonging to the Opening of the Mouth ritual sets is included in Chapter 4, but they have their own catalogue (Appendix 2). Their nature and purpose are discussed in Chapter 8.

The primary research is in the end followed by conclusions involving several interpretative chapters. Chapter 9.1 concentrates only on the model vessels, their general meaning, usage, political implications, as well as their possible employment as social and dating criterium. Chapters 9.2 attempts to give a general overview of the development of stone vessel production and distribution in the Old Kingdom. It divides the period into several phases, which are separated by particular turning points that mostly correlate with the political and social changes. The conclusions are then shortly summed up in Chapter 9.3.

#### 2. Stone vessels before the introduction of model sets in the Fourth Dynasty

#### 2.1. Predynastic Period

The Predynastic Period is a long time of chiefdoms represented by local independent centres. At its beginning they formed particular cultural centres with specific traditions, later the transfer of people involved also the transfer of goods and thoughts and led to what is now generally defined as Upper and Lower Egyptian culture. The nature of environment obviously involved the behaviour and customs of people. Their natural resources were reflected in their economic power and wealth. The settlement sites in the Nile Delta could have profited from the long-distance trade heading to the north-east, whereas the Upper Egyptian settlement sites found their wealth in the desert resources, represented by minerals and metals. The differences between the two cultures disappeared by the time of Nagada II, and the Upper Egyptian culture found its way to the sites of the Delta (Teeter 2011b). The three main protostates of the Upper Egypt – Abydos, Naqada and Hierakonpolis – took control over the neighbouring areas. The wealthy cemeteries of local elite point to complex societies with well-defined burial habits and particular social standards. The remains of the settlement sites show well-organised society with industrial areas involving large-scale production (Hoffman 1979; Adams - Ciałowicz 1997; Midant-Reynes 2003; Wengrow 2006; Wenke 2009; Friedman 2011; recent archaeological excavations are presented at www.hierakonpolisonline.org and abydos.org).

If there is any luxurious product typical for the Predynastic Period, it is a stone vessel. The craftsmanship was on a high level in this period, and the relative independence of craftsmen and local production gave way to specific forms. Not only the shapes, but also the material variety was quite wide, again connected with the dispersal of workshops and lack of central control. The most popular was basalt (Mallory 2000), but the production of stone vessels also involved travertine, limestone, breccia, porphyry and syenite (Reisner 1931: 130). With the introduction of new drilling techniques enabling a large-scale production, the popularity and craftsmanship reached its peak in the Naqada II period (Stevenson 2011). Although a range of popular types existed, there are also many original motives that never appear later on after the unification. These are above all represented by animal figures "impressed" into the hard rock, perfectly modelled and smoothed. Since the beginning of the stone vessel production ancient Egyptians knew well how to work even the hardest stones, and therefore they were not afraid to work all available material including granite (*e.g.* Petrie 1920; Lucas 1930; Reisner 1931; el-Khouli 1978; Aston 1994; Berman 1999).

All the vessels of this period were functional vessels, drilled completely inside to be used as containers of oil and ointment. Stone was the best material to keep the cosmetic substances in good conditions, necessary for their storage in warm Egyptian weather. The value of cosmetics on one hand and stone vessels on the other met in a luxurious combination available as a symbol of high social status to the nobles of the society of that time. Although the stone vessels represented prestigious products, they were distributed quite widely in the Predynastic Period (Reisner 1931: 130-137; Mallory-Greenough 2002; Kopp 2007), as can be seen for instance in the cemeteries of Naga ed-Deir (Lythgoe 1965) and Naqada (Petrie -Quibell 1896) or Tell el-Farkha in the Delta (Pryc 2012). However, the masses of stone vessels in a single tomb were not common, yet. Their shapes in the Predynastic Period mostly copied pottery pieces. For instance, cylindrical jars, so typical class of stone vessels of the First Dynasty onwards, were originally made of ceramics, and only slowly disappeared from the scale of shapes of pottery vessels. Interestingly, the value of stone vessels was commonly reflected back in pottery jars that tried to imitate the surface of stone vessels through a particular colourful pattern. A good example of such a "fake" is to be seen in the Ashmolean Museum, where there are two squat jars with tubular handles of the same size on display next to each other. One of them is made of red breccia, the other is made of pottery with surface painting imitating the same material. Both date to Naqada II, the stone one comes from Naqada (museum no. 1895.153), the other from Matmar (museum no. 1932.912). The size of stone vessels in this period was rather "practical", *i.e.* similar to the size of pottery originals.

Small size vessels were already produced in the Predynastic Period, some as models ("dummy"), but most of them as miniatures (*i.e.* completely drilled inside). Their shape and function were the same as in case of regular size vessels, and the only difference dwelled in their dimensions (*e.g.* Reisner 1931; el-Khouli 1978; Bąk-Pryc 2014). The function of Predynastic model vessels and other grave goods were discussed by Sally Swain (1995). Although she paid attention to many kinds of model objects, she did not include stone vessels. She found different meanings of various model products. From her point of view, model stone vessels of the Predynastic Period probably played a similar role as pottery pieces, which were discussed by Swain, *i.e.* a small scale version of the large original with the advantage of economic costs.

#### 2.2. Early Dynastic Period

The Predynastic Period was heading towards unification in its late phase. It was represented by growing territorial domination of Abydos and its chiefs. The tomb U-j is the main representative of the new – almost royal – elite that grew in this proto-state (Dreyer 1998). The first kings remained in Abydos, but the new administrative centre of the unified state was founded on the frontier of the Nile Delta and the Upper Egyptian valley. It was quite far from the original centre and home of the new kings, but it was the best place from the point of view of political, economic and security reasons. The kings probably move there too, and fulfilled their duties from the border area, occasionally visiting the remote areas of their newly founded state. The administrative centralisation involved even the cultural and craft centralisation, as it can be perceived on the homogenous nature of material culture of that time (Wilkinson 1999).

Reflecting the political situation, the very end of the Predynastic and the beginning of the Early Dynastic Period brought new trends. Since the onset of the centralised state, the stone vessel production started to be more organised and dependent. Such a process is reflected in the growing unification of forms and materials. The royal tombs were still furnished with precious stone vessels well-crafted and made of a large scale of materials (Amélineau 1899; 1902; 1904; 1905; Petrie 1901). However, stronger social stratification slowly led towards new redistribution of luxurious objects in the non-royal sphere. The burials of the middle-class officials usually did not contain more than bowls and cylindrical jars made of siltstone, limestone, or travertine (*cf.* Petrie 1902; Bonnet 1928; Köhler 2014). The elite mastabas situated on the escarpment in North Saqqara were slightly wealthier in the range of material and forms, but the main contrast with the middle-class dwelled in the number of vessels (Emery 1938; 1939; 1949; 1954; 1958).

The vessels tend to be larger, which was probably caused by the shift of their role. In Predynastic Period they really served as cosmetic containers, in the Early Dynastic Period and the beginning of the Old Kingdom, they mostly became symbols of the social position of the owner of the tomb. Most of the vessels were just deposited in the tomb, in case of members of the royal family in heaps of hundreds of vessels that were probably produced as functional containers, but in fact used as models only, since they had no contents, and represented mere social markers (*e.g.* the tomb of Hemaka at Saqqara in Emery 1938). Stan Hendrickx pointed to the fact that since Naqada III stone vessels started to replace pottery vessels in some tombs. The royal burials contained tens of thousands of vessels (with mostly no trace of use) that must have involved direct governmental control of production (Hendrickx 2011). Moreover, it required large amounts of raw stone to be gained in the quarries.

That was probably the reason why the first "dummy" vessels appeared. They were crafted from outside, but not bored inside. Only a shallow depression was drilled in the area of the orifice. They should be called model vessels since they were not functional. These are already often to be found not as single pieces, but in collections of several jars in one tomb, such as at Saqqara (there are many examples in Quibell 1923), Helwan (Köhler 2014: 155, 223, 240; mostly dated to Naqada IIID), Abusir (Bonnet 1928: Tafel 10). Interestingly, they are all cylindrical jars, often made of limestone and found together with stone bowls of regular size and shape. Their size is often quite small when compared with the cylindrical jars of regular size.



Fig. 1 Some of the "dummy" cylindrical jars from the Bonnet cemetery, which are now kept in the Ägyptisches Museum der Universität Leipzig (L. Jirásková, archive of the Czech Institute of Egyptology)

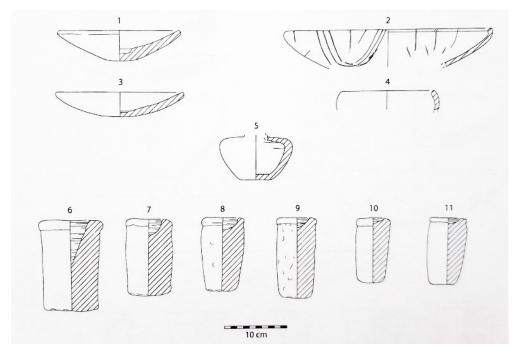


Fig. 2 Assemblage of stone vessels including model "dummy" limestone cylindrical jars from tomb Op.4/15 at Helwan (taken from Köhler 214: 223)

In fact, this is another step in the process of economisation of the burial customs. Only in some cases, there are more other types of stone jars present, such as in the Saqqara tomb 2115, which contained about 40 limestone "dummy" jars, 5 travertine cylindrical jars, 2 travertine tables, 10 travertine bowls, 1 diorite bowl, 1 serpentinite bowl, 1 siltstone, and fragments of others (Quibell 1923: 21). Most of these "dummy" jars are of short height, and therefore they might be interpreted as predecessors of the assemblages of model jars of the Old Kingdom. One would not search for these model vessels in royal tombs, but the tomb of Khasekhemwy at Abydos also contained several pieces of these "dummy" cylindrical jars, most of them dummies" from the great number of four to five hundred of stone vessels, which were collected in his tomb, Reisner 1931: 153–154). Likewise, the tomb of Peribsen was furnished with small size and rather roughly shaped cylindrical jars (Hendrickx – Eyckerman 2009: 321–323, 456). In this context, it may be perceived as a trend leading towards symbolism in the sphere of burial activity.

Another example of a model vessel in a royal tomb is represented by a small squat jar found in the First Dynasty "royal" tomb at Naqada (de Morgan 1897: 187, Fig. 682; now on display in the Egyptian Museum in Cairo, museum no. 11937). It is a complete jar made of

porphyry (according to de Morgan) with drilled tubular handles, but it is not bored inside, having only a shallow depression in the area of orifice.

An interesting group of model stone vessels from the Early Dynastic period comes from the tomb Q 20, one of the subsidiary graves around the burial of Qaa at Abydos. It is represented by seven quite small limestone model vessels without drilling inside. The striking feature is that their surface was carefully painted in different colours and patterns to imitate harder kinds of stone (Spencer 1980: Plate 21; now on display in the British Museum in London, museum nos. EA 32677–32683). The significant difference between the king and his servant is evident.

Quite a different kind of model stone vessels is represented by clusters of vessels cut as a single piece, such as the one coming from the latter part of the First Dynasty from Bonnet cemetery at Abusir. It is a group of two vessels set into a basket (Benešovská – Vlčková 2006: 210–211). There are more variations to be found, such as a bowl with four other vessels inside (on display in the Egyptian Museum in Cairo, museum no. 65409), or another set of three vessels in a basket (again on display in the Egyptian Museum in Cairo). These recall the unique "joined vessels" of the Old Kingdom that were found, for instance, at Abusir, in the pyramid complex of Queen Khentkaus II (Jirásková in preparation).

These all examples show that the development in the production of stone vessels in the Early Dynastic period and the Old Kingdom, must have been closely connected with the changes in social stratigraphy of the society, and the religious thoughts of that time. The assemblages of model stone vessels did not appear suddenly, but their rise was influenced by a slow turn in believes, and also by practical reasons. The combination of both these factors gave way to a new expression of burial customs.

Apart from the new kinds of model vessels that came into existence with the rise of Egyptian state, the miniature pieces are still to be found in the Early Dynastic tombs (*e.g.* Reisner 1931; Spencer 1980). They are of the same manner as in the Predynastic Period – small size versions of the large stone vessels. Their popularity did not vanish with the beginning of the Old Kingdom, and they remained a – rather rare – part of the burial equipment.

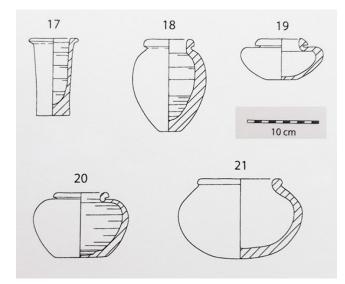


Fig. 3 Miniaturised vessels from tomb Op.4/8 at Helwan (taken from Köhler 2014: 182)

### 2.3. Third Dynasty

According to the ancient Egyptians and their king lists, the beginning of the Third Dynasty was a turning point in their history. In modern terminology, it starts the period called the Old Kingdom, and there are many reasons why it shall be perceived as a point of major transformation in ancient Egyptian history (Wilkinson 1999). Contrary to many historical, economical, administrative, and other changes, much of the burial habits including the contents of burial chambers remained the same. The only difference in this case is the declining number of stone jars and bowls. Hundreds of pieces from the First Dynasty elite mastabas turn into tens in the Third Dynasty (*e.g.* Quibell 1913: 37). Stone vessel production determined for the non-royal tombs of the Second and Third Dynasties, is often difficult to differentiate, and in case of dating one should rely mainly on the architectural features of the tomb, which is rather distinctive in both periods.

Dorothea Arnold and Elena Pischikova classified the stone vessels of the Old Kingdom into three main groups: (1) cosmetic oil and ointment vases, (2) imitations in stone of everyday pottery and metal vessels, and (3) model vessels (Arnold – Pischikova 1999: 124). This is true mainly for the time of the Fourth Dynasty onwards, but with some tolerance, it can be also applied on the Third Dynasty production. Although the Third Dynasty belongs to the Old Kingdom, the typology scale of stone vessels and their distribution follows the pattern of the Early Dynastic period. The changes that appeared at the beginning of the Old Kingdom were a consequence of the previous development, and although they affected many aspects of culture and society, a lot of habits remained very similar or the same. In this respect, Toby H. A. Wilkinson included the Third Dynasty into his publication on the Early Dynastic Egypt (Wilkinson 1999). Another, probably more dramatic turn happened slightly later, at the beginning of the Fourth Dynasty. The more complex society reached a point, where reforms became necessary for the state to maintain its function, and for the king to keep his authority and power. At that point, with the reign of Snofru and from the point of view of the target of this theses particularly with the reign of Khufu, the transformation affected also the burial customs, including production and distribution of stone vessels.

What remained the same after the beginning of the Old Kingdom, was the emphasis on presentation and reinforcement of the social status through the tomb structure and burial equipment. Therefore, large tombs full of luxurious commodities were still required by the highest levels of Egyptian society, and what is more important, the king was at the same time willing and able to provide them with all these necessities (*e.g.* Petrie – Mackay – Wainwright 1910). Later on, the growing state administration probably forced the king to revise this mode and led Khufu to define new rules in the funerary and mortuary practice. All these turns seem to be sudden changes, but in fact, there was always a long-time process of slow "preparation" that resulted in break with earlier habits and introduction of new order in the appropriate area of life. This process called punctuated equilibrium was successfully applied on the example of the Old Kingdom society by Miroslav Bárta (2015).

The Third Dynasty elite tombs situated close to the royal residence in Memphis were large mastabas similar to those of the preceding period, and of the very beginning of the Fourth Dynasty. Their examples – although smaller in some cases – are to be found not only in the capital (including Zawiyet el-Aryan with a royal pyramid), but also in the provincial centres mostly located near Abydos. At other sites, the tombs were either destroyed by later activity, or the tombs were of poor nature without any traces of connection to the royal court.

It is an interesting fact that the only large mastabas of the Third and early Fourth Dynasty with clear evidence of royal control are to be found in Upper Egypt, close to the place of origin of the kings of the Early Dynastic period. At Abydos itself, almost no larger tombs of higher importance are to be found at local cemeteries. Contrary, slightly to the north the elite cemetery of Bet Khallaf attracts attention (Garstang 1902, 1904). Further north, the cemeteries of Reqaqna are situated, where some larger mastabas with presence of royal names were also uncovered (Garstang 1904). On the opposite site of the riverbank lies Naga ed-Deir with huge cemeteries containing burials from the Predynastic Period until the end of the Old Kingdom (Reisner 1908; Mace 1909; Reisner 1932; Lythgoe 1965). The Third Dynasty mastabas are of larger sizes, and the remains of burial equipment strongly resemble to that of the administrative centre. The royal involvement is evidenced by serekhs incised in the walls of some stone vessels, or by seal impressions mentioning names of some kings.

When considering the location of the most important and largest tombs with a kind of "royal presence" of the Third and early Fourth Dynasty, it comes clear that their position is not a coincidence, but a purpose. Both the sites – Memphis and Abydos were tightly connected to the king either through his origin, or through his administrative role. All these tombs must have been made on the order of the king for the elite of that time. The presence of either imprints of royal sealings or stone vessels with royal names points to the royal gifts. Also, the large amounts of stone vessels must have been made at royal workshops and provided to the particular people on king's order.

The cemetery at Bet Khallaf is specific, since there are only the large mastabas to be found. They are also prominent when compared to the tombs of Reqaqna and Naga ed-Deir. Therefore, it is plausible that it was the final resting place of relatives of the king himself. The other large mastabas might have belonged to local officials connected to the royal court through administration, or they might have belonged to some remote relatives of the king, who deserved higher status due to their blood.

A break came after the reign of Snofru, who is the last king "present" through his name in the provinces. Since Khufu until the late Fifth Dynasty, there are no important tombs of people connected to the royal court to be found outside Memphis. The large mastabas disappear, and royal names are not present there anymore. The hiatus was probably a consequence of the reforms performed at the residence involving the modes of administrative control of the country (*e.g.* Moreno Garcia 1997; Brovarski 2013; Martinet 2019).

The first two dynasties are characterised by the real presence of kings in the provinces, at least by their monumental architectonic structures or their burials. On the other hand, many members of the royal family were buried at the newly founded administrative centre at Memphis. In this respect, it meant that they were connected more to the new capital of the state than to the place of their origin. From the Third Dynasty, however, only few royal structures are to be found in the provinces, and the royal activity, and burials are directed to the royal residence, at that time already tightly connected to the administrative centre of Egypt.

In the Third Dynasty, the royal family was probably still the only ruling elite of the country, and there was no emphasis paid on the place of burial. Some of the members of the royal family chose to be buried at Saqqara. The life and death of these people should have been bound with the central administration and its offices. Others, who stayed at Abydos at

the time when the king definitely left for Memphis, remained there, and might have chosen their final resting place close to it, at Bet Khallaf.

Ancient Egyptian administration steadily grew from its beginning and required more and more people (Moreno García 2013). Soon the closest members of the royal family were not enough, and the king must have involved even people of non-royal origin. It might have been the reason why all the officials gradually tended to remain close to the king, either in their lives, or after death. At the beginning of the unified state, the affiliation to the king was the most important aspect of social stratification, no matter where the person lived. From the Fourth Dynasty onwards, it started to be important to stay in the service close to the king, rather than just belonging to his family. Growing state needed not just statutory officials, but real administrators of power.

There are still only a few tombs dated to the Third Dynasty that would have been fully excavated and well documented in Memphis, and hopefully there will be more soon to gain new data. They all seem to have belonged to the officials of the state, but not to the closest members of the royal family. Due to the stone vessels deposited under the Step pyramid at Saqqara, many names are known, but the tombs of these people remain covered by sand or maybe destroyed by later activity in the area (Lauer – Lacau 1959; 1961; 1965).

Most of the officials' tombs situated at North Saqqara were excavated by Auguste Mariette, Walter B. Emery and James E. Quibell close to the First and Second Dynasty tombs built on the highest points of the escarpment, but unfortunately many of them were not properly published with regard to their burial equipment. One of the well documented and published tombs once belonged to Hesire. Quibell devoted to this tomb a separate volume of the Saqqara tombs publications, due to its size and unusually well-preserved wall paintings (Quibell 1913). The mastaba was not the largest of all, but still it measured more than 45 m in length and at some parts reached the height of 5 m at the time of excavations. The beautiful wooden panels depicting Hesire in different positions with his name and titles had been already removed by Mariette during his work in the area, but luckily many noteworthy features remained in situ to be recorded by the next mission to come. From the point of view of the tomb equipment, not only the real offerings were of importance, but also the colourful decoration detected on the eastern wall of the corridor with niches. It listed various objects considered necessary for the afterlife of the deceased, including stone vessels. The "list" is amazing and has no parallel in this period. The subterranean chambers contained tens of stone vessels broken into pieces (Quibell 1913: 37-38, Pls. XXVI-XXVII), mostly made of

travertine, but also diorite, and metagabbro in case of some bowls and squat jars with handles. All of them were large size functional vessels.

Hesire's tomb was one of the larger and richer ones. There were no roughly shaped or "dummy" vessels belonging to his burial equipment. Next to the large mastabas, also smaller tombs appeared. Alike the lesser tombs of the Early Dynastic period, even these contained not only large size vessels, but mostly "dummy" jars made of limestone. These were sometimes present in small numbers next to the large size vessels; in other cases, they were the only stone vessels found. Many of the tombs were excavated and published by Quibell (1923). Unfortunately, he limited himself to publish just a brief catalogue of tombs with contents of their burial chambers. The number of plans is limited, and only the major tombs were drawn in ground plan. In this respect, it is nowadays difficult to date the minor tombs. Many of them seem to be of the Second–Third Dynasty, however, precise dating is not possible based only on the evidence provided by Quibell in his publication.

Also Emery excavated some of the minor Third Dynasty tombs, and found examples of assemblages of "dummy" vessels either being the only stone vessels present, or representing a part of the equipment. The first recorded example should have come from the tomb no. 3518. According to the old records of Emery, published by Sue Davies, there were 19 pieces of "dummy" cylindrical jars listed as coming possibly from the southern shaft of this tomb. Since the mastaba lies above the Late period catacombs, its burial chamber, as well as those of other tombs in the area, became part of the underground structures of the baboon galleries. The tallest vessel was 20.60 cm, the shortest one 9.40 cm high (Davies 2006: 95, Pl. XLIIIe). The other example was found in the tomb no. 3517. The burial chamber contained several bowls and two tables made of travertine. Apart from these traditional vessels, a different kind of bowl was collected in the northern shaft. It was made of limestone, and only symbolically bored by the mouth (Martin 1981: Plate 10, no. 1602). It is one of the rare examples of a model vessel other than a cylindrical jar, which was made prior to the Fourth Dynasty.

Other tombs of the early Old Kingdom are to be found at Abusir South. The large mastabas of Ity and Hetepi did not contain any stone vessels, whereas the subterranean chambers of the tomb AS 33 gave a large collection most probably dating to the Third Dynasty (Maříková Vlčková in Bárta – Coppens – Vymazalová *et al.* 2010). Also in this context a "dummy" cylindrical jar made of travertine was found (no. AS33-05-49).

The reign of Huni terminated the Third Dynasty. There are at least two tombs dated to his time, due to the inscriptions mentioning his name. One of them is the tomb of Metjen

situated at North Saqqara, the other lies at a prominent spot at Abusir South and belongs to an unknown owner. Metjen's tomb was published by Margaret A. Murray, but no stone vessels were recorded (Murray 1905). The tomb AS 54 at Abusir South was published in preliminary report including the stone vessels found in the northern burial chamber (Bárta 2010; Jirásková 2011). The assemblage was quite uniform concerning material, as well as forms. Travertine bowls predominated other classes. Of more interest was an unusually rich group of stone offering tables (Jirásková 2013). However, no "dummy" vessels were collected, and the only cylindrical jars found were perfectly crafted, almost half-a-metre-high pieces. It is not surprising, since also other large mastabas situated at Memphite cemeteries rarely contained model vessels. These were mostly found in smaller tombs of lower- and middle-class officials and reflected their social status.

Another large Third Dynasty tomb situated close to the administrative centre was unearthed at Zawiyet el-Aryan. There are mostly Early Dynastic graves to be found at this site. The construction of the Third Dynasty tombs was evidently motivated by the so-called "Layer pyramid". Its ownership was ascribed to one of the less known kings of the Third Dynasty – Khaba, due to the presence of bowls inscribed with his name in the large mastaba Z 500 lying adjacent to the pyramid. The mastaba was only briefly published with emphasis on the stone vessels found in its underground chambers. There were many bowls and jars of shapes typical for the period, made of travertine with several pieces in diorite and limestone. Although they were not included in drawings, the records mention that the excavators also found at least ten "dummy" jars made of travertine (Dunham 1978: Pl. XXIII).

About 104 tombs from the first three dynasties were excavated near Lahun, at the site called Bashkatib by Petrie (Petrie – Brunton – Murray 1923). Particularly interesting is one of the stairway tombs, namely the tomb no. 771. It differed from the others due to the system of closing of the burial chamber, using a stone slab instead of mud-brick wall. Apart from the other tombs, there were three "dummy" cylindrical jars made of travertine found inside (*idem*: 23, Pl. LIV). The tomb was dated to the middle of the First Dynasty by the excavators, but later dating is more plausible. Based on the stone vessels, it should come from the Third Dynasty. Unfortunately, the evidence given in the publication is rather scarce, and there might be more tombs dating to the Old Kingdom that remain unrecognised.

The tombs built at the beginning of the Third Dynasty at Bet Khallaf were of the same nature as those situated at Memphis. They were mostly stairway tombs with one burial. Also a similar variety of stone vessels was collected in their subterranean chambers, including travertine "dummy" cylindrical jars. Some of them were collected in mastaba K2, others in K4 (Garstang 1902: Pls. XXII, XXVII). Interestingly, there were none in K1, the largest mastaba of all.

Most of the tombs of the Third Dynasty at Reqaqna were of more modest style; however, several large mastabas equipped with masses of functional large size stone vessels of the finest quality were excavated. Even there, John Garstang found "dummy" cylindrical jars made of travertine that he already knew from the great mastabas at Bet Khallaf. These came from the tomb R 40, one of the larger mastabas situated at the edge of cultivation, described as "of royal or semi-royal origin" (Garstang 1904: 25, Pl. 7). The other large tomb, R 1, contained only the large size stone vessels common at that time (*idem*: Pl. VIII–XI).

The site of Naga ed-Deir lies on the opposite site of the riverbank. The local cemeteries had a long tradition, since Predynastic Period, until the end of the Old Kingdom. In this respect, it represents a valuable opportunity for comparison with other sites, and the centre, respectively. Moreover, it enables a detailed analysis of the local development of burial customs and social changes. The Old Kingdom cemetery 500–900 was published by G. A. Reisner (1932), who presented not only a well organised and detailed overview of the excavated tombs and burials, but also several studies on architecture, and burial equipment.

The large Third Dynasty mastabas located in this cemetery were only a few; however, they respected the trends of the time. Their architecture was similar to those in the centre, and other provincial cemeteries. Only the size of the tombs was smaller, and the number of stone vessels was also limited. In fact, the dimensions of the tombs correlated with their equipment, when compared with the centre. The largest number of stone vessels was discovered in the mastaba N 573+587. Its main shaft, the southern one, contained over 40 stone vessels deposited in a subterranean niche. Although they were nice pieces, there was also a "dummy" travertine cylindrical jar between them (*idem*: Fig. 134, no. N 587/39). The other examples of model stone vessels come from the tombs dated rather to the beginning of the Fourth Dynasty.

There must have once been some Third Dynasty mastabas in the area of El-Kab, however, not much was left at the spot. The only better excavated structure dated to this period was situated at the top of the hill above the ancient town. The superstructure of  $20.0 \times$ 10.0 m was hiding a single burial chamber accessed by a long stairway. Unfortunately, the burial was completely plundered in antiquity, and most of the underground parts were reused in the New Kingdom. Although there were many pieces of stone vessels collected inside and outside the mastaba, they have not been properly published, yet (Huyge 2003).

22

#### 2.4. Fourth Dynasty before Khufu

The very beginning of the Fourth Dynasty is represented by the reign of Snofru, the probable Huni's son and the father of Khufu. Since he chose Meydum, as the place of his first pyramid, most of the members of the royal family started to prepare their own eternal dwellings at that site (Petrie – Mackay – Wainwright 1910). The next generation is buried at Dahshur, by the other two pyramids of the same king (Alexanian 1999). Although the family members rested close to the king, the other high officials kept on building their mastabas at the elite cemetery of the North Saqqara plateau. Many of the tombs are tentatively dated to the transitional time of the end of the Third and the beginning of the Fourth Dynasty, such as tombs of Khabausokar or Akhethotep (Mariette 1885; Bárta 2005b). The architecture and material culture were very similar at that time, and in many cases the precise dating is not possible. Moreover, none of these tombs were published in detail with regard to finds. Attention was paid to the architecture of the tombs, their decoration and inscriptions.

The tombs from the time of Snofru's reign at Meydum followed the pattern of distribution of stone vessels of the Third Dynasty. They contained either large size vessels, or the "dummy" jars. Unfortunately, the largest mastabas were looted, or their substructures were not excavated completely. Therefore, all of them were found empty of any stone production. With regard to the then habits, one would expect them to contain tens of stone vessels mostly made of travertine or mettagabro, above all bowls, tables and cylindrical jars, but none of these have survived ancient (and probably also modern) looting. For instance, in the mastaba no. 17, only some pottery, and copper objects, as well as animal bones were collected. The tomb of Snofru's son Nefermaat contained many fragments of wood, and some remains of linen. The large stone-cased mastabas situated to the west of the pyramid were all reused in later times, and therefore there was nothing left from the original burial equipment. The only remains of offerings from that time are to be found in the smaller tombs surrounding the causeway, and to the west of the pyramid (Petrie – Mackay – Wainwright 1910).

Most of the tombs in "the far west" were also reused in the First millennium BC. Luckily, several of them still contained original burials, one being an intact tomb no. 50. There were a few stone vessels found lying on the bottom of the shaft, close to the limestone portcullis. They were represented by a squat shouldered jar made of granite, fifteen limestone, and one travertine model cylindrical jars. The contents of the burial chamber including remains of the body of the deceased and two pottery jars and a bowl were destroyed by the ceiling that collapsed in history (*idem*: 26). In the tomb no. 55, there were several stone vessels found broken and spread in the burial chamber. These were three bowls, three cylindrical jars and fragments of their covers, and a small beaker, all made of travertine, and a piece of a diorite beaker. The other contents included pottery vessels with a one-handled jug, 19 flint blades and three copper needles (*idem*: 27).

The provinces were probably still closely connected to the royal court and reflected its burial habits. Snofru's name was discovered at Reqaqna in the tomb R 64 belonging to a scribe of the king, Shepses (Garstang 1904: 49). Its small burial chamber contained a travertine table with stand and a travertine bowl bearing the inscription "*nzwt-bjty Snfrw*". It was engraved into the wall of the bowl at the same place and in a similar manner as the *nzwt-bjty* name of Huni in AS 54 (*idem*: Pl. XXXII; Jirásková 2019b).

Another occurrence of the name of Snofru was detected at the large cemeteries of Naga ed-Deir. There are some smaller Fourth Dynasty tombs in cemetery 500-900, but also a few larger mastabas are to be found there. One of the better-preserved mastabas from the beginning of the Fourth Dynasty is N 739. The core of the mastaba was hiding a single shaft with plundered burial chamber. However, a few stone vessels were preserved, one of them being a diorite bowl inscribed with the Horus name Nebmaat (Reisner 1932: 248–249, Fig. 203). The model vessels were found only in small tombs dated by Reisner to the transitional time of Third-Fourth Dynasty (compare the list of stone vessels in *idem*: 36-75). Concerning the typology of stone vessels, the tombs seem to date rather to the early Fourth Dynasty. One of them was tomb N 502, which contained two model shouldered jars (idem: 194, Fig. 62). The small-size shouldered jars about 10 cm high were quite popular at this site during the Third to Fourth Dynasty, however, all of them (except for these two examples) were completely drilled inside. The other instance of a model vessel comes from the tomb N 536. Besides other common stone vessels (including the small, shouldered pieces mentioned above) it contained two limestone model cylindrical jars, coloured in red paint, slightly more than 10.0 cm high (idem: 205, Fig. 99). Another "dummy" cylindrical jar was found within a large amount of stone vessels and their fragments, which were collected in the two chambers of tomb no. 587. In this case, it was made of travertine (idem: 218-220, Fig. 134). The model cylindrical jars were common already in the Third Dynasty; however, the model shouldered jars appear for the first time. This may date the tombs to the time after Snofru, which would mean that these shouldered jars would be the only examples of "real" model stone vessels in the provinces. The opposite is true when the other stone vessels found in the same tombs are considered. They clearly fall into the very early Fourth Dynasty.

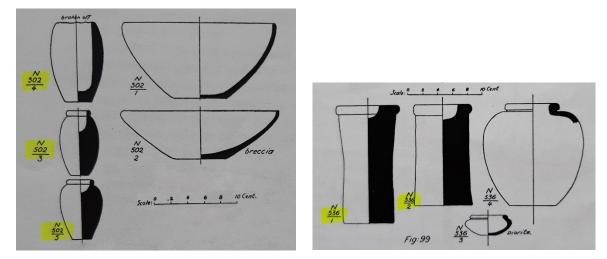
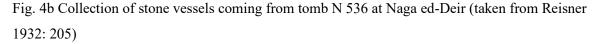


Fig. 4a Collection of stone vessels coming from tomb N 502 at Naga ed-Deir (taken from Reisner 1932: 194)



At El-Kab, three bowls with the name of Snofru were discovered in three different tombs (Quibell 1898: 3). The most important Fourth Dynasty tomb belonged to Kaimen, who was the king's acquaintance and priest. The tomb was closed by a sandstone slab preventing the looters entering the undisturbed burial chamber. Apart from pottery, it contained three tall jars and a table made of travertine, two bowls made of diorite, and another of porphyry, one of them being inscribed with the royal name Hor Nebmaat. Beautiful, large size copper vessels and instruments were found lying in front of the body (*idem*: 4, Pl. X). Other tombs situated close to that of Kaimen were equipped with similar variety and number of vessels, mostly described as made of travertine and diorite by the author. The name of Nefershemem and his titles *jry-ht nzwt* - "custodian of the king's property" (Jones 2000: 327–328, no. 1206), *shd nzwt* - "inspector of the king" (not included by Jones) and *hm* – "servant" (*idem*: 499, no. 1871) were found on an Old Kingdom statue belonging to mastaba D, which was reused later in antiquity, and the original burial was damaged. The other piece of bowl with the *nzwt-bjty* name of Snofru (again written in a simple form without cartouche) was found in the damaged mastaba 288 situated within the town walls (Quibell 1898: 5).

There are other sites with larger or well-equipped tombs containing stone vessels, but without royal names. One of them is Abydos. Only one larger mastaba was excavated and published there. It was described as containing two shafts, D 135 and D 136, similar to the early tombs at Giza and Abusir. Unfortunately, there is no information on the burial chamber equipment. Although not mentioned, it seems that the chambers were found rather empty with

scattered remains of burials (Peet – Loat 1913: 9). Other excavated tombs from the Third and Fourth Dynasties were poor burials without any stone vessels.

There are several large tombs, which were built approximately at the beginning of the Fourth Dynasty at Dendera (Petrie 1900: 4–5). The dating is based mainly on the architecture, since there were only a few objects found. Unfortunately, there were no stone vessels collected at all dating to this period, but the largeness and architecture of the tomb of Niibunisut, who was *jry-ht nzwt* – "custodian of the property of the king" (Jones 2000: 325, no. 1200) and *hmt-ntr Hwt-Hr* – "priest of Hathor" (Jones 2000: 540, no. 2012) and his followers point to their high economic power and connection to the administrative centre.

At el-Tarif, a tomb from the beginning of the Fourth Dynasty was excavated. It was a  $19.0 \times 9.0$  m large mud brick mastaba with one shaft. The burial chamber was disturbed, but still contained several pieces of stone vessels typical for the early history of Egypt. There were only large vessels including a carinated bowl made of diorite and travertine table probably with some remains of offerings on it (Arnold 1976: TAFEL 5c, 5d). The other stone vessels probably originally contained ointment. Traces of red substance were left in a small jar. There were also two more small – miniaturised – vessels found bellow a large cylindrical jar, and a squat jar with flat rim and tubular handles. Unfortunately, the information on all the stone vessels provided in the publication was rather limited, and there is no stone determination, or details on the vessel shapes.

The cemeteries of Gebelein probably contained some Fourth Dynasty tombs, but they have not been properly published yet, and more available are the objects coming from the Fifth Dynasty tombs (Donadoni Roveri – D'Amicone – Leospo 1994; D'Amicone – Pozzi Battaglia 2009: 65–68).

The state of affairs in the Delta is also rather shrouded in mist, since only a few sites have been uncovered dating to the Old Kingdom. One of the noteworthy cemeteries is Tell el-Basta. A few Old Kingdom tombs were uncovered there by Ahmad el-Sawi. Only one of them contained some stone vessels. It was marked as burial no. 137 and described as an oblong, mudbrick, north-south oriented structure. It held a single shaft with two chambers. The norther chamber was equipped with two diorite bowls of 20.0 cm in diameter, and a small porphyry squat shouldered jar of the height of 4.7 cm. The southern chamber contained a diorite bowl of 19.5 cm in diameter (el-Sawi 1979: 63, Figs. 105–107). The stone vessels are of shapes that can be found from the Second to the Fourth Dynasty, but the morphology of the pottery beer jars point to the Third or early Fourth Dynasty dating of the tomb.

#### 2.5. Model and miniature stone vessels up to the reign of Khufu

The evidence from the periods prior to the beginning of the Fourth Dynasty shows that the small size vessels were common products of the stone vessel workshops since the Predynastic Period. The existence of miniature jars and bowls – functional pieces completely drilled inside – predates the production of model vessels, the so called "dummy" jars, *i.e.* non-functional large size vessels, usually only roughly dressed from outside. The difference between the two kinds in the early Egyptian history dwells in the craftsmanship. The miniaturised vessels represent mostly perfectly crafted pieces with thin walls pointing to the skilfulness of ancient Egyptian stoneworkers, the other ones seem to be cheap imitations instead, carelessly made to fulfil their function in very symbolical way. One would see both as a kind of economisation process, but when the details are considered, it comes out that they differ in meaning, too. The well-made miniaturised jars and bowls were not easy to work. The tiny pieces with thin walls could break easily, and their handling in the process of production must have demanded a skilled craftsman. Therefore, it is not entirely sure that they represented true "economical" substitution of the large vessels, although they did not involve as much material as the larger "dummy" jars.

On the other hand, the "dummy" vessels were real representatives of the economical way of thinking. Although they were larger than the later model vessels, they were usually roughly shaped from outside. Again, it was easier to produce a larger vessel of this kind than its smaller, perfectly crafted version. The material used and social context of both kinds likewise supports such an interpretation. The miniaturised vessels were produced from many kinds of stone, including the hard types. Contrary, the above presented evidence from centre and provinces has shown that "dummy" jars were normally made of limestone or travertine, the common economical materials of the Early Dynastic period.

The analysis of both kinds of small size vessels serves as a starting point towards the interpretation of the development of model stone vessels of the Old Kingdom. The miniature vessels appeared since the beginning of the stone vessel production, and they remained popular even later, although at some point rather in the royal contexts. Their material at that time did not change much. A big turn in this habit appeared in the first half of the Sixth Dynasty, when the miniature vessels gained popularity and started to be produced in masses from cheaper travertine.

The first "dummy" jars were recorded from the end of the First Dynasty (see the subsidiary tomb of Qaa above). These are, however, rather imitations of more precious hard-

stone vessels, and the typical travertine or limestone "dummy" cylindrical jars became common especially during the Third Dynasty, when they started to occur in sets of several pieces. They represent a new product and in fact shall be perceived as a consequence of the growth of state administration at the beginning of the Old Kingdom. The stone vessels were prestigious objects reflecting the social status of the person who acquired them – probably through his service to the king. The growing number of officials initiated the production of new kinds of stone vessels, easy to be made in masses, worked from accessible and therefore affordable stones. The traditional large size functional vessels remained an important part of burial equipment of all the officials' tombs, but contrary to the elite, *i.e.* royal family, the new cheaper variation – "dummy" jars – was provided to the middle and lower classes of officials. This could have been practiced until the reign of Khufu, who came to the point, when this habit was not sustainable anymore. The experience with "dummy" vessels gave way to the new idea of sets of small model vessels, securing the well-being of the official after his death. The social stratification was then ensured by the material of the model jars and bowls (see the discussion in the following chapters).

The whole process might be understood as a result of political development that forced the funerary customs to savings. The growth of number of officials, penetration of people of non-royal origin into the central administration and great expanses on royal building activities had a great impact not only on the lives of inhabitants of the Nile valley, but also on the organisation of burial practices (Strudwick 1985). The masses of stone vessels, pottery and copper objects were mostly replaced by their model size representatives. The stone vessels were constantly produced, but in limited numbers and sizes. Only several classes of vessels remained in use, and the available evidence points to the very restricted scale of products meant for the private persons. On the other hand, royal mortuary temples revealed many examples of large size stone vessels made of hard stones was since that time restricted to the king himself. His family members and officials were seldom provided with a single piece of the large size stone vessels, such as a bowl or cylindrical jar. This all evidence highlights the power of the king, who was at that time the real ruler of the country with privileged access to all its resources, either material or human.

#### 3. Stone vessels in Memphite private tombs of the Fourth to Sixth Dynasties

The previous chapter focussed on the Periods preceding the time of Khufu. It listed evidence on stone vessels coming either from Memphite or provincial cemeteries and defined basic trends. The research has shown that the tradition of production and distribution of stone vessels was similar in the centre as well as in the provinces. Moreover, it followed the trend of economisation, which was strongly manifested by the beginning of the Fourth Dynasty. This chapter will continue in describing general trends of burial equipment of the Old Kingdom officials from the time of Khufu to the end of the Sixth Dynasty. It will trace the surviving existence of large size stone vessels in non-royal contexts, which started to be dominated by assemblages of model stone vessels, which are the main focus of this thesis and will be discussed in detail in the following chapters. This chapter is limited to the area of Memphis, since the assemblages of model stone vessels appeared only in the Memphite cemeteries in the Old Kingdom. The relations between the centre and provinces from the point of view of the stone vessels will be dealt with in detail in Chapter 7.

#### 3.1. Memphite private tombs with large size stone vessels

The reorganization of state administration at the beginning of the Fourth Dynasty, which was discussed in the previous chapter led to reorganization of burial customs. The new planning and systematic building activity in the royal necropolis at Giza, as well as economization in costs of burial equipment pointed to strong central involvement. The tombs dating to the reign of Khufu are to be found either in the Western, Eastern and Southern cemeteries at Giza (Jánosi 2005). Most of the members of the royal family were buried to the east of the pyramid of this king. In that part, the mastabas are of larger dimensions than in the other parts of the necropolis.

One of the oldest and best-preserved burials in the Khufu cemeteries is that of his mother, Queen Hetepheres (G 7000 X). It was furnished with furniture, pottery, copper, gold and also stone vessels, all made of travertine (Reisner – Smith 1955). The most prominent of these are the miniature jars – six cylindrical jars with lids and two one-handled jugs – serving as containers of seven sacred oils, being found in a wooden box. The names of the six of the oils are inscribed on lids of the cylindrical jars (*idem*: Fig. 41). Although there are two jugs, the set clearly refers to the following tradition of assemblages of model stone vessels, where there are usually six cylindrical jars and one one-handled jug for the seven sacred oils.

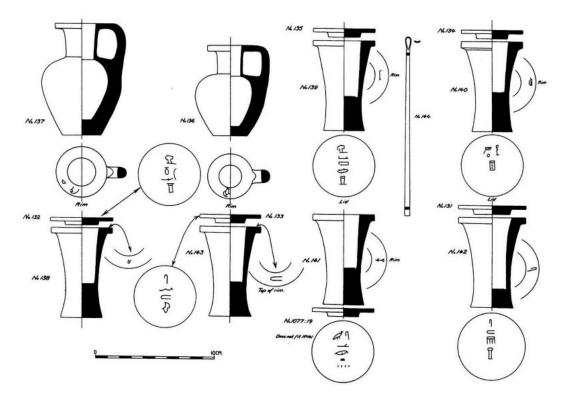


Fig. 5 Seven sacred oil jars from the tomb of Hetepheres (taken from Reisner - Smith 1955: Fig. 41)

Except for these, there were some more miniature cylindrical jars either with uninscribed lids or without them. The large size vessels were represented by a rather short, shouldered jar with higher neck, squared rim and flat base (ca 30.9 cm high)<sup>1</sup>. It also had a convex-shaped lid. The other jar was similar, but approximately half size (ca. 18.3 cm). The last one is an imitation of pottery vessel (that of G 4520, *idem*: Fig. 104) situated on a stand. It is a tall, shouldered jar with higher neck and a long tubular spout coming upwards from the shoulder of the jar. The original jar had a pointed base and therefore its lower part is modelled in the shape of a short conical stand (21.3 cm high, all of them in *idem*: Fig. 142). Another unusual jar, which was inspired by pottery and reminds the later model jars, is a beer jar on stand (ca 23.0 cm high, *idem*: Fig. 144). A number of bowls of various sizes with rounded or flat bases and simple unmodelled rims also constituted the burial equipment of the queen (*idem*: Figs. 145–146).

<sup>&</sup>lt;sup>1</sup> The sizes of vessels from the tomb G 7000 X were measured from the publication drawings.

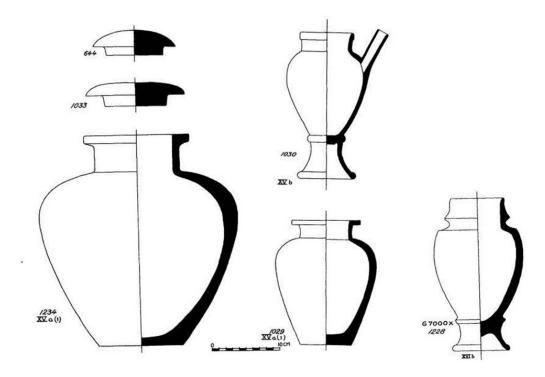


Fig. 6 The large size jars from the tomb of Hetepheres (taken from Reisner – Smith 1955: Figs. 142, 144)

There are a few exceptionally huge mastabas, all dating to the reign of Khufu and belonging to the highest officials. The largest mastaba G 2000 is, however, nameless. Its main shaft was labelled as B. It started with a deep shaft, followed by a sloping corridor leading to the burial chamber. By the west wall was lying a body in remains of a wooden coffin and to the east of it were several ox bones and two pottery jars with pointed bases. The burial is very humble and evidently of later origin, as the jars are of the late Fifth Dynasty shapes.

The next largest mastaba is that of king' vizier Ankhaf (G 7510). There was an only shaft in the core of the mastaba (B) belonging to the owner of the tomb. The burial chamber was like in case of G 2000 B accessed by a deep shaft and a short sloping passage. It was originally cased with limestone blocks, which were already partly removed. By the west wall was probably situated a sarcophagus, which was gone, and only a depression in the ground gave evidence for its existence. Such as in G 2000 B, nothing from the original burial was found in the chamber. The only interesting finds from the point of view of model stone vessels, was an assemblage of plaster model vessels, which was deposited in the exterior chapel. However, it is difficult to date them to the Fourth Dynasty, since they have no parallel at that time. They are similar to those, which were collected in the mortuary temple of Queen Chentkaus II. at Abusir and may come from the same time, probably late Fifth Dynasty.

One of the largest mastabas in the Western cemetery belonged to Hemiunu (G 4000), who is supposed to be the son of Nefermaat, the oldest son of Snofru. He held important administrative and priestly titles including that of vizier and must have been one of the most powerful men of the early Fourth Dynasty. His mastaba contained two 20.0 m deep shafts; the northern one having a finished stone cased burial chamber with fragments of limestone sarcophagus, the southern one being unfinished. Junker claimed that Hemiunu probably died before his supposed burial chamber at the bottom of the southern shaft could have been finished, and he was finally buried in the northern one. The southern, unfinished shaft was then used as a storage for burial goods (Junker 1929: 143–145). Both still contained some burial equipment including pottery and stone vessels. The stone vessels were of the large and small sizes. In the northern chamber were "two travertine vessels under the blocking stone and fragments of others" (idem: 161). The chamber situated at the bottom of the southern shaft provided seven pieces of travertine large size vessels and several model vessels (http://www.giza-projekt.org/Funde/PM G4000/Alabaster ZSchacht.html). These were three bowls, a beaker and a convex-shaped lid of a canopic jar. The model vessels were represented by a beer jar with its stand, a flat lid probably belonging to a cylindrical jar and six bowls.

Most of the members of Khufu's family were buried in the Eastern cemetery. Stone vessels were discovered here either in the form of large size bowls or as small model vessels. The large size functional vessels were discovered in the following tombs:

tomb	owner	type of vessel	material	excav. no. <sup>2</sup>
G 7130, shaft A	Khufukhaf I	bowl	diorite	24-12-284
G 7330, shaft A	unknown	bowl	travertine	34-6-14
G 7350, shaft A	unknown	bowl, 13 fragments	travertine	28-8-21
G 7550, shaft B	Duaenhor	table	travertine	28-5-186
G 7650, shaft C	Akhethotep	plate, 2 fragments	travertine	29-3-255

Khufukhaf I was a son of Khufu, the owner of G 7330 is unknown, as well as his titles, but the position and size of his tomb clearly evidence his high social status. Likewise, the owner of G 7350 is unknown, but the preserved parts of decoration mention members of the royal family, such as Prince Kawab or Queen Hetepheres II. Duaenhor, the owner of G 7550 is

<sup>&</sup>lt;sup>2</sup> All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

believed to be the son of Kawab and Hetepheres II. Akhethotep, the owner of G 7650, was hm-ntr hwfw – "priest of Khufu" (Jones 2000: 565, no. 2087), smr w<sup>c</sup>ty – "sole companion" (*idem*: 892, no. 3268), hm (b3w) Nhn – "servant of the Souls of Nekhen" (*idem*: 501, no. 1877), hrp <sup>c</sup>h – "director of the palace" (*idem*: 707, no. 2579), <sup>c</sup>d-mr wh<sup>c</sup>w (3pdw) – "administrator of fishers/fowlers" (*idem*: 356, no. 1323). However, he was also connected to the royal family, since his wife was a probable daughter of King Khufu, Princes Meretites, who was also buried in G 7650.

Model stone vessels come from the tombs of Kawab and Hetephers II (G 7110 B), Minankh (G 7133 or G 7130 X), Hordjedef (G 7210 B), Baufre (G 7320 X), anonymous tomb G 7350 A, Meresankh II (G 7410), Duaenhor (G 7550 B), anonymous tomb G 7560 B and Akhethotep (G 7650 C). Both sizes were thus present in shaft A of the anonymous tomb G 7350, shaft B in G 7550, which is the tomb of Duaenhor and in shaft C of G 7650 belonging to Akhethotep.

Some stone vessels were collected in the mastabas situated to the south of the pyramid of Khufu, but these were only assemblages of model stone vessels. They come from Mastaba I and Mastaba III.

Much more numerous were the stone vessels collected in the tombs of the Western cemetery. The list of contexts containing large size stone vessels in cemetery G 1200 includes:

tomb	owner	type of vessel	material	excav. no. <sup>3</sup>
G 1024	unknown	bowl with decorated rim	diorite	HM_6-19784
G 1203, shaft A	Kanefer	cylindrical jar, base fragment	travertine	unnumbered <sup>4</sup>
G 1203, shaft A	Kanefer	bowl, rim and body fragments	travertine	unnumbered <sup>5</sup>
G 1223, shaft A	Kaemah	bowl	travertine	unnumbered
G 1223, shaft A	Kaemah	cylindrical jar with lid	travertine	unnumbered
G 1223, shaft A	Kaemah	cylindrical jar, base fragment	travertine	HM_6-19790
G 1223, shaft A	Kaemah	jar, rim fragment	travertine	HM_6-19789

<sup>3</sup> All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

<sup>&</sup>lt;sup>4</sup> Reisner 1942: 391.

G 1407, shaft A	unknown	cylindrical jar	travertine	34-9-4
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The owner of G 1024 is unknown, as well as his titulary. Kanefer, the owner of G 1203 was *jmy-r3 wpwt* – "overseer of commissions" (Jones 2000: 89, no. 376) and *hrp tm3tjw* – "director of bowcase bearers" (*idem*: 753, no. 2746). Prince (*z3 nzwt*) Kaemah, the owner of G 1223 is also known as *jmy-r3 z3w* Šm<sup>c</sup> – "overseer of the phyles of Upper Egypt" (Jones 2000: 202, no. 759) and *wr mdw* Šm<sup>c</sup> – "great one of the ten of Upper Egypt" (*idem*: 388, no. 1437). The owner of G 1407 and his titles are unknown.

Assemblages of model stone vessels were collected in the tomb of Kanefer (G 1203), Kaemah (G 1223) and Nefretiabet (G 1225). Both sizes were thus evidently present in the burial chambers of Kanefer (G 1203) and Kaemah (G 1223).

The cemetery G 2000 contained only two tombs, both with large size and model stone vessels. These were the burial chambers of Sedit in shaft A of G 2100 and that of Seshatsekhentiu in shaft A in G 2120. Sedit was the mother of Merib, who was buried in G 2000-I. In his tombs, she is called *z3t nzwt n ht.f* – "king's daughter of his body" (Jones 2000: 819, no. 2993), *hm-ntr Nt mhtt jnb.s* – "priestess of Neith, who is north of her wall" (*idem*: 531, no. 1981).

Especially the latter tomb is of high interest. It did not contain just stone model vessels, but also pottery miniatures and large size pottery jars. Unfortunately, there is not much information on its owner. The only surviving titles are hry-hbt – "lector priest" (Jones 2000: 781, no. 2848) and hry-tp... – "overlord..." (*idem*: 647–658). The pottery miniatures would be called "miniaturised" vessels by K. Arias Kytnarová (2014: 227–250), since they are small size versions of the functional large size vessels. They include shouldered jars, *d&rt*-jars and bowls. The travertine jar with excavation no. 33-1-7 is of an unusual shape. It is an one-handled jug with three pierced "projections" placed in regular distances below the rim. Moreover, it is crafted as one piece with a short stand. It was closed by a convex-shaped lid with a short stopper. If without context, one would date it to the time of New Kingdom (*cf.* Lilyquist 1995: 121, Fig. 157). However, taken into consideration other items, which were preserved in the burial chamber of shaft A, there is no doubt that it was disturbed in history, but not contaminated with younger material. Therefore, it should really date to the time of the burial, which is about the time of Khufu – Radjedef.

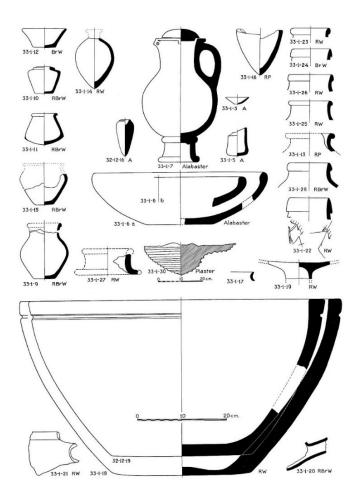


Fig. 7 Stone and pottery vessels collected in shaft A and its burial chamber in G 2120 at Giza (taken from Reisner 1942: 426, Fig. 245)

tomb	owner	type of vessel	material	excav. no. <sup>6</sup>
G 2100, shaft D	Sedit	shouldered jar with neck	travertine	MFA 06.1892
G 2120, shaft A	Seshatsekhentiu	bowl, fragments	travertine	33-1-6a
G 2120, shaft A	Seshatsekhentiu	bowl, fragments	travertine	33-1-6b
G 2120, shaft A	Seshatsekhentiu	jar on stand with lug handle and lid	travertine	33-1-7

The largest number of stone vessels comes from the cemetery G 4000. The list of functional vessels is presented below. Except for two tables, they are all bowls. All were made of travertine. They come from burial chambers, just the table of Meryhetepef (G 4360) was

<sup>&</sup>lt;sup>6</sup> All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

tomb	owner	type of vessel	material	excav. no. <sup>7</sup>
G 4150	Iunu	table	travertine	KHM ÄS 9228 <sup>8</sup>
G 4150	Iunu	lid	travertine	unnumbered <sup>9</sup>
G 4150	Iunu	lid	travertine	unnumbered <sup>10</sup>
G 4150	Iunu	lid	travertine	unnumbered <sup>11</sup>
G 4150	Iunu	spouted bowl	travertine	unnumbered <sup>12</sup>
G 4150	Iunu	jar	travertine	unnumbered <sup>13</sup>
G 4150	Iunu	jar	travertine	unnumbered <sup>14</sup>
G 4160, shaft A	unknown	bowl	travertine	unnumbered <sup>15</sup>
G 4160, shaft A	unknown	bowl	travertine	unnumbered <sup>16</sup>
G 4160, shaft A	unknown	bowl	travertine	unnumbered <sup>17</sup>
G 4160, shaft A	unknown	bowl	travertine	unnumbered <sup>18</sup>
G 4240, shaft A	Snefruseneb	bowl	travertine	13-11-59
G 4260	unknown	bowl	travertine	unnumbered <sup>19</sup>
G 4340, shaft A	unknown	bowl, fragments	travertine	13-10-10
G 4340, shaft A	unknown	bowl, in fragments	travertine	13-10-14
G 4360	Meryhetepef	table	travertine	unnumbered <sup>20</sup>
G 4440, shaft A	unknown	bowl	travertine	13-11-97
G 4440, shaft A	unknown	bowl, fragments	travertine	13-11-98
G 4440, shaft A	unknown	table	travertine	13-11-99

discovered in the chapel. It is inscribed with his title  $^{c}\underline{d}$ -mr (n)  $z_{3}b$  – "administrator of the king" (Jones 2000: 806, no. 2947), the only surviving evidence of his titulary.

- <sup>14</sup> *Idem*: 110, Fig. 10/2, 180.
- <sup>15</sup> *Idem*: 110, 168.
- <sup>16</sup> *Idem*: 110, 168.
- <sup>17</sup> *Idem*: 168.
- <sup>18</sup> *Idem*: 110, 168. <sup>19</sup> *Idem*: 110, 191.
- <sup>20</sup> L1 201
- <sup>20</sup> *Idem*: 201.

<sup>&</sup>lt;sup>7</sup> All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

<sup>&</sup>lt;sup>8</sup> Junker 1929: 110, Fig. 10/20, 180 and http://giza.fas.harvard.edu/objects/45611/full/.

<sup>&</sup>lt;sup>9</sup> Junker 1929: 110, Fig. 10/9, 180.

<sup>&</sup>lt;sup>10</sup> *Idem*: 110, Fig. 10/7, 180.

<sup>&</sup>lt;sup>11</sup> *Idem*: 180.

<sup>&</sup>lt;sup>12</sup> Idem: 110, Fig. 10/19, 180.

<sup>&</sup>lt;sup>13</sup> *Idem*: 110, Fig. 10/1, 180.

G 4640, shaft A	unknown	bowl	travertine	13-12-6
G 4640, shaft A	unknown	bowl	travertine	13-12-8
G 4660	unknown	bowl	travertine	unnumbered <sup>21</sup>

The tomb of Iunu is situated immediately to the east of that of Hemiunu and contains an only shaft belonging to the tomb owner, whose identification was based on a slab stela, which was found in situ on the eastern façade of G 4150. He is presented there sitting in front of the offering table, being labelled with the same titles as Kaemah (G 1223): *jmy-r3 z3w šm<sup>c</sup>* – "overseer of the phyles of Upper Egypt" (Jones 2000: 202, no. 759), *wr mdw Šm<sup>c</sup>* – "great one of the ten of Upper Egypt" (*idem*: 388, no. 1437) and *z3 nzwt* – "king's son" (*idem*: 799, no. 2911).

The owners of the tombs G 4160, G 4260, 4340, 4440, 4640 and 4660 are unknown, as are their titles. Snefruseneb, the owner of G 4240, was sm - "sm-priest" (Jones 2000: 885, no. 3241), <u>hrp šndt</u> – "director of the kilt" (*idem*: 750, no. 2736), '<u>d</u>-mr dp – "administrator of Dep" (*idem*: 365, no. 1348), r3 P nb – "mouth of every Butite" (*idem*: 490, no. 1831), smr – "companion" (*idem*: 891, no. 3263), z3 nzwt n <u>ht.f</u>, – "king's son of his body" (*idem*: 799, no. 2912).

Assemblages of model stone vessels were collected in the tomb of Meretites (G 4140 A), Iunu (G 4150 X), Snefruseneb (G 4240 A) and the anonymous tombs G 4160 A, G 4250 A, G 4260 A, G 4340 A and G 4640 A. Both sizes come from the tomb of Iunu (G 4150 X), Snefruseneb (G 4240 A), G 4160 A, G 4340 A and G 4640 A. The most interesting contexts are those from G 4160 A, G 4340 A and G 4640 A. All these burial chambers did not contain only model stone vessels, but also pottery miniatures. In case of G 4160 A, only pottery bowls were collected. Contrary, G 4340 A had more sophisticated system, when the jars were made of ceramics and bowls (in form of high beakers) were crafted in travertine. G 4640 A was still keeping a travertine cylindrical jar, which might have been all what survived from a larger assemblage, and it also contained both pottery jars and bowls.

The tables listing the large size stone vessels in the Fourth Dynasty contexts show that most of them were bowls crafted from travertine. Only one piece produced from diorite was found. Besides these, some cylindrical jars and rounded tables were collected.

The Fifth Dynasty Memphite contexts are less abundant in large size vessels. One would expect them to be spread in more cemeteries, such as Abusir and Saqqara. However,

<sup>&</sup>lt;sup>21</sup> *Idem*: 215.

the only few pieces evidenced outside Giza are a water pot,<sup>22</sup> which was buried with the body of Neferinpu in his tomb AS 37 at South Abusir and several possible vessels collected in the tomb of Ptahshepses (AC 9) at Central Abusir. All others come from Giza; none was found in the Fifth Dynasty mastabas at Abu Rawash:

tomb	owner	type of vessel	material	excav. no. <sup>23</sup>
G 2089, shaft A	Neferked	cylindrical jar	travertine	38-4-32
G 2353, shaft B	Herunefer	shouldered jar on stand	limestone	12-11-49
G 2370, shaft A	Senedjemib Inty	bowl	anorthosite gneiss	2-11-32
G 5080, shaft B	Seshemnefer II	table	travertine, in fragments	33-2-99
G 5080, shaft B	Seshemnefer II	table	travertine, in fragments	33-2-100
G 5227, shaft B	unknown	water pot	travertine	40-1-2a
G 7710, shaft B	Iby	flat lid	travertine	25-2-1100
AC 9	Ptahshepses	cylindrical jar, rim fragment	travertine	E 2743 <sup>24</sup>
AC 9	Ptahshepses	flat lid	travertine	E 2712 <sup>25</sup>
AC 9	Ptahshepses	bowl, body fragment	diorite	E 2614 <sup>26</sup>
AS 37, shaft 1	Neferinpu	water pot	travertine	45/AS 37/2007 <sup>27</sup>

Some other stone vessel from the Fifth Dynasty tombs do not come from burial chambers, but from various parts of their superstructures, such as the water pot of Menib from his serdab at Giza (Junker 1950: 22, 218, Taf. Vic) or the short neckless shouldered jar from the tomb of Ankhires (AS 98) at Abusir (Dulíková – Bárta – Odler *et al.* 2018: 12).

Neferked, who was buried in shaft A of G 2089 had an only title preserved. It was inscribed on the cylindrical jar and named him as *shd hntjw-š pr-*? – "inspector of tenants of the Great House" (Jones 2000: 949–950, no. 3503). Nothing else was lying with the body either in or outside his wooden coffin.

<sup>&</sup>lt;sup>22</sup> For the interpretation of the Old Kingdom water pots see Jirásková 2016.

<sup>&</sup>lt;sup>23</sup> All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

<sup>&</sup>lt;sup>24</sup> Dulíková – Jirásková – Odler in press.

<sup>&</sup>lt;sup>25</sup> Idem.

<sup>&</sup>lt;sup>26</sup> Idem.

<sup>&</sup>lt;sup>27</sup> Bárta et al. 2014: 102–103.

Herunefer from G 2353 is evidenced as *hm-ntr Hwfw* – "priest of Khufu" (Jones 2000: 565–566, no. 2087), (*jry-ht*) *nzwt* – "custodian of the king's property" (*idem*: 327–328, no. 1206). His burial chamber in shaft B also contained model stone vessels, copper model tools, canopic jars and maybe two statues, which are referred to be found in "pit G 2353 B" (Simpson 1980: 35–37: http://giza.fas.harvard.edu/sites/810/full/).

The bowl, which was found in the tomb of Senedjeib Inty (G 2370), comes from shaft A, which was probably his wife's, whose name was Tjefi, identified as *jry-ht nzwt* – "custodian of the king's property" (Jones 2000: 327–328, no. 1206). Besides the bowl, her burial chamber also contained fragments of copper model tools.

Senedjemib Inty was a high positioned official bearing a long list of titles, including that of vizier (Brovarski 2000: 83): hrp zšw nbw – "controller of all scribes" (Jones 2000: 739, no. 2694), hry-tp nzwt - "royal chamberlain" (idem: 788, no. 2874), jmy-r3 šnwty - "overseer of the two granaries" (*idem*: 254–255, no. 923), *jmy-r3 pr-h3w 10* – "overseer of the house of weapons" (*idem*: 116–117, no. 470), *qd nzwt m prwy* – "royal architect in the two houses" (*idem*: 997, no. 3693), *jmy-r3 prwy-hd* – "overseer of the two treasuries" (*idem*: 133–134, no. 524), *jmy-r3 jswy n hkrw nzwt* – "overseer of the two chambers of royal regalia" (*idem*: 67–68, no. 310), jmy-r3 st nbt nt hnw - "overseer of every department of the Residence" (idem: 240, no. 880), jmy-r3 prw msw nzwt - "overseer of the houses of the royal children" (idem: 129-130, no. 513), jmy-r3 hkr nzwt - "overseer of royal regalia" (idem: ), jmy-r3 hwt-wrt 6 -"overseer of the six great law-courts" (idem: 165, no. 630), jmy-r3 sdmt nbt - "overseer of all that is judged" (*idem*: 243, no. 887), *jry-p<sup>c</sup>t* - "hereditary prince" (*idem*: 315, no. 1157), *h3tj-*<sup>c</sup> - "count" (*idem*: 496–497, no. 1858),  $t_{3yty}(n) z_{3b} t_{3ty}$  - "chief justice and vizier" (*idem*: 1000–1001, no. 3706), jmy-r3 k3t nbt nt nzwt – "overseer of all royal works" (idem: 262–263, no. 950), *jmy-r3 zš(w)* (w) (*nw*) *nzwt* – "overseer of royal document scribes" (*idem*: 209–210, no. 780), hry-sšt3 wdt-mdw nbt nt nzwt - "secretary of every royal decree" (idem: 617, no. 2264), hry-hbt - "lector-priest" (idem: 781, no. 2848), smr w'ty - "sole companion" (idem: 892, no. 3268).

Senedjemib Inty's own burial chamber in sloping shaft B was found only with some minor remains of its original contents, such as a two-handled combed ware jar probably of Levantine origin (excav. no. 35-7-41) and travertine model vessels (see the catalogue). However, on the surface by its opening were collected other objects, which might have originally belonged to the burial equipment of the tomb owner. One of them was a flat travertine lid with a high stopper, 8.8 cm wide and 1.9 cm thick (excav. no. 12-12-89, http://giza.fas.harvard.edu/objects/16421/full/). The other was a limestone convex-shaped lid

belonging to a (lost) canopic jar (excav. no. 12-12-100;

http://giza.fas.harvard.edu/objects/16442/full/). It was 17.0 cm wide and 5.0 cm high.

Seshemnefer II, the owner of G 5080 held a similar position as his contemporary, Senedjemib Inty, although he was involved mainly in the scribal activity and management of royal documents. His titulary was preserved on some architectural elements in his tomb and mentions: *jmy-r3 zš(w)* (w) (*nw*) *nzwt* – "overseer of royal document scribes" (Jones 2000: 209–210, no. 780), *hry-sšt3 wdt-mdw nbt nt nzwt* – "secretary of every royal decree" (*idem*: 617, no. 2264), *jmy-r3 k3t nbt nt nzwt* – "overseer of all royal works" (*idem*: 262–263, no. 950), *zš hrt-*<sup>c</sup> *nzwt* – "scribe of the royal document-case" (*idem*: 867, no. 3174), *zš* <sup>c</sup>(*w*) *nzwt* (*n*) *sb3yt nzwt* – "royal document scribe of the royal instructors" (*idem*: 842–843, no. 3072), *hry-sšt3 n hrt-*<sup>c</sup> *nzwt* – "secretary of the royal document-case" (not included by Jones), *jmy-r3* (*pr*) <sup>c</sup>*h3w m prwj* – "overseer of (the house of) weapons in the two houses" (*idem*: 116–117, no. 470). Moreover, Altenmüller identified him in a scene, where he is titled as a vizier (*t3yty* (*n*) *z3b ţ3ty*, Altenmüller 2008).

He was buried in the southern shaft, labelled B, of his mastaba, where most of the original burial equipment was discovered, including the two travertine tables, an assemblage of travertine model vessels, remains of the Opening of the Mouth ritual set, model copper tools, jewellery from gold, faience and lapis lazuli and red granite scribal statue. The social position he held is not presented only in his titulary, but it is also expressed by the exceptional equipment of his tomb. He was one of the few Old Kingdom officials, who were awarded by the king for his service with a granite sarcophagus. Moreover, his burial chamber still preserved lids of canopic jars, which were made of travertine, instead of common limestone. Except for the kings themselves and royal mothers, there are only a few officials, who were praised by the king in this way (Dulíková – Jirásková – Odler in press).

The owner of G 5227 is not known. At the same spot in the "shaft in front of the entrance to chamber" of shaft B was not discovered only the water pot, but also a disk of red pigment (belonging to it) and plaster face mask (excav. no. 40-1-1, http://giza.fas.harvard.edu/objects/24420/full/). Shaft B, however, was finished by an irregular burial chamber, which did not contain a sarcophagus. The tomb was "squeezed" between two older and larger mastabas, and was quite simple, belonging probably to a middle-class official.

The rock-cut tomb G 7710, belonging to Iby, was not large, but it contained two main shafts – A and B, both equipped by limestone sarcophagi. Many objects from the original burial equipment survived until modern excavations, such as a travertine headrest, an

assemblage of limestone model vessels and limestone canopic jars in shaft B (probably Iby's wife's, whose name was Meretnebty), or assemblage of travertine model vessels and limestone canopic jars in shaft A (that of Iby). The lid was uncovered in shaft B and probably belonged to a small cylindrical jar, since its diameter was 7.0 cm and thickness 0.35 cm (http://giza.fas.harvard.edu/sites/2204/full/).

Iby is known to hold the following titles: *jry-ht nzwt* – "custodian of the property of the king" (Jones 2000: 327–328, no. 1206), *zš* (*n*) *z3b* – "juridical scribe" (*idem*: 811, no. 2964), *hry-sšt3* – "privy to the secret" (*idem*: 609, no. 2233), *shd w*<sup>6</sup>*bw* – "inspector of *w*<sup>6</sup>*b*-priests" (*idem*: 919, no. 3377).

The last two officials were buried at Abusir. Ptahshepses, the owner of AC 9 was a high official, who held the title of vizier and was married to a royal princess (Khamerernebty, daughter of Niuserre). His preserved titulary is long (Verner 1977: 124-129; Dulíková -Jirásková – Odler in press), and among the most important titles should be named: t3yty(n)z3b t3ty - "chief justice and vizier" (Jones 2000: 1000-1001, no. 3706), jmy-r3 k3t nbt nt nzwt - "overseer of all royal works" (*idem*: 262–263, no. 950), *jmy-r3 jswy n hkrw nzwt* - "overseer of the two chambers of royal regalia" (*idem*: 67–68, no. 310), hry-sšt3 n pr-dw3t – "privy to the secret of the House of Morning" (idem: 620-621, no. 2275), hry-sšt3 n mdw-ntr - "privy to the secret of the god's words" (idem: 622, no. 2281), hry-sšt3 n nzwt m swt.f nbt - "privy to the secret of the king in all his places" (idem: 630–631, no. 2311), wd wd<sup>c</sup>-mdw m<sup>3<sup>c</sup></sup> n hry-wdb -, true giver of judgements (?) to those in charge of reversions (of offerings)" (*idem*: 409, no. 1503), jry nfr h3t - "keeper of the headdress" (idem: 231-232, no. 1183), hm-ntr Nhbt nbt h*ntr*  $\check{S}m^{c}$  - "*hm-ntr* -priest of Nekhbet, the lady of the god's palace of Upper Egypt" (*idem*: 527, no. 1970), hrp 'h - "director of the palace" (idem: 707, no. 2579), hry-hbt - "lectorpriest" (idem: 781, no. 2848), h3tj-c-"count" (idem: 496-497, no. 1858), smr w<sup>c</sup>ty-"sole companion" (idem: 892, no. 3268).

Neferinpu was a middle-class official involved mainly in priestly services, who was buried in a family tomb at Abusir South in AS 37. His burial chamber was found intact, and therefore, all the burial equipment was still lying in the positions, where it was left at the time of the funeral. Besides pottery, the burial chamber contained limestone canopic jars and an assemblage of limestone model vessels. Inside the limestone sarcophagus, a wooden sceptre, faience beads, a necklace made of gold wire and semi-precious stones and the water pot were found. Neferinpu's titles were (Bárta *et al.* 2014: 8–9): *jmy-r3 k3t nbt wd\_.t n.f* – "overseer of all work, which is commanded to be done" (similar title in Jones 2000: 262, no. 948), *jry-ht nzwt* – "custodian of the property of the king" (*idem*: 327–328, no. 1206), *w*<sup>c</sup>b Mn-swt-Njwsr-R<sup>c</sup> – "w<sup>c</sup>b -priest of the (the pyramid complex) Durable-are-the-places-of-Niuserre"
(*idem*: 372, no. 1376), w<sup>c</sup>b nzwt – "wab-priest of the king" (*idem*: 373, no. 1382), nht-hrw (n)
z3b – "strong of voice of the king" (*idem*: 807, no. 2951), r Nhn (n) z3b – "speaker of Nekhen
of the king" (*idem*: 808, no. 2953), hm-ntr M<sup>cct</sup> – "hm-ntr -priest of Maat" (*idem*: 516–517,
no. 1930), hm-ntr Mn-swt Nj-wsr-R<sup>c</sup> – "hm-ntr -priest of (the pyramid complex) Durable-arethe-places-of-Niuserre" (*idem*: 519, no. 1939), hm-ntr N(j)-wsr-R<sup>c</sup> – "hm-ntr-priest of
Niuserre" (*idem*: 524, no. 1954), hm-ntr Nfr-jr-k3-R<sup>c</sup> – "hm-ntr-priest of Neferirkare" (*idem*:
526, no. 1963), hm-ntr R<sup>c</sup> m Šzp-jb-R<sup>c</sup> – "hm-ntr -priest of Re in (the Sun temple of Niuserre)
The-delight-of-Re" (*idem*: 538, no. 2006), hm-ntr Hr hry-jb <sup>c</sup>h – "hm-ntr-priest of Horus who
is in the <sup>c</sup>h -palace" (*idem*: 558, no. 2064), hm-ntr Hr St-jb t3wj – "hm-ntr-priest of Horus
Setibtawy" (*idem*: 559, no. 2071), hry-sšt3 – "privy to the secret" (*idem*: 609, no. 2233),
smsw h3yt (n) z3b – "elder of the (judicial) court of the king" (*idem*: 813, no. 2974).

Although there are many more tombs with assemblages of model stone vessels dating to the Fifth Dynasty, the large size functional vessels almost disappeared from the burial chambers of officials. One more difference between the Fourth and Fifth Dynasties is the prevalence of anorthosite gneiss (also called diorite). Types remained the same – bowls, cylindrical jars and tables. A new type is the water pot, a short jar with concave sides, which served as a symbol of scribal position (Jirásková 2016). A specific type is the jar from the burial chamber of Herunefer (G 2353 B), which is a model jar made in large size (its height is 25.5 cm).



Fig. 8 Water pot from the burial chamber of Neferinpu (AS 37) (K. Voděra, archive of the Czech Institute of Egyptology)



Fig. 9 Shouldered jar on stand from the tomb of Herunefer (G 2353 B) (taken from https://collections.mfa.org/)

Unlike the Fourth Dynasty, there are so many tombs with model stone vessels that their list will not be presented here since all of them are to be found in the appropriate part of the catalogue.

tomb	owner	type of vessel	material	excav. no. <sup>28</sup>
G 1031	unknown	shouldered jar	porphyry	HM_6-19764
G 1234, shaft B	Ankhhaf	bowl, rim fragment	travertine	34-8-6
G 2001, shaft B	Tjetu [I] Kanisut	bowl	anorthosite gneiss	36-3-21
G 2001, shaft D	Tjetu [I] Kanisut	bowl	anorthosite gneiss	36-3-23
G 2024, shaft A	unknown	bowl	diorite	40-4-45
G 2038d, shaft C	unknown	short, shouldered jar	diorite	37-11-19
G 2477, shaft F	unknown	bowl	anorthosite gneiss	40-4-45
G 4733, shaft E	unknown	bowl	anorthosite gneiss	14-2-74
G 4813, shaft A		bowl, fragment	anorthosite gneiss	15-11-62
G 5563, shaft A	unknown	bowl	travertine	35-11-3

There are a few tombs from the turn of the Fifth and Sixth Dynasties, which are difficult to be dated precisely:

 $<sup>^{28}</sup>$  All the vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/

G 5563, shaft B	unknown	bowl	anorthosite gneiss	35-11-37
G 7147, shaft B	unknown	water pot	porphyry or granite	37-8-6
G 7169, shaft B	unknown	stand	travertine	27-1-307
G 7215, shaft D		cylindrical jar, rim fragment	travertine	25-1-856
G 7931, shaft B	unknown	cylindrical jar	travertine	30-12-29
shaft east of D 20, serdab	unknown	water pot	anorthosite gneiss	unnumbered <sup>29</sup>
D 39, shaft 3	Djasha	bowl	anorthosite gneiss	ÄMUL 2487 <sup>30</sup>

The tomb owner of the family tomb G 1031 is unknown, but his burial chamber in shaft A contained two interesting pieces of burial equipment. One of them was the stone jar, referred to be found inside a thick wooden coffin. It was made of porphyry (probably metagabbro instead), it was of tall, shouldered shape with a narrow flat base, narrow opening and flat collar rim. The other was a combed ware jar with two handles (http://giza.fas.harvard.edu/unpubdocs/47291/full/). Since they were both found inside the burial chamber, they may have really belonged there.

Ankhhaf, the owner of G 1234 held titles of  $\underline{G}$ -mr (n) z3b pr- $\underline{G}$  – "judge and administrator of the Great House" (Jones 2000: 806–807, no. 2948), jmy-r3 hntjw-š pr- $\underline{G}$  – "overseer of land-tenants of the Great House" (*idem*: 189, no. 710), *šps nzwt* – "noble of the king" (*idem*: 988, no. 3648). The fragment of travertine bowl was found in shaft B, which was the minor one. The only other finds from the same burial chamber are a copper mirror and several beads.

The tomb G 2001 contained 4 shafts (A–D; Simpson 1980: 7–15). Three of them were connected to the decorated false door to the east of them. The southern shaft A belonged to the false door of <u>hry-tp nzwt (n) pr- $^{\circ}$ </u> – "royal chamberlain of the Great House" (Jones 2000: 789, no. 2878) Mesni, the son of Tjetu [I] Kanisut, the central one to <u>jry-ht nzwt</u> – "custodian of the property of the king" (*idem*: 327–328, no. 1206), <u>hmt-ntr Hwt-hr</u> – "<u>hmt-ntr</u>-priestess of Hathor" (*idem*: 540–541, no. 2012) and <u>hmt-ntr Nt</u> – "<u>hmt-ntr</u>-priestess of Neit" (*idem*: 529, no. 1973) Wadjet-hetep, the wife of Tjetu [I] Kanisut, and the northernmost shaft C belonged to Tjetu [I] Kanisut, the owner of G 2001, himself. He held the titles of *jmy-r3 njwt 3ht-Hwfw* – "overseer of the pyramid town Akhet-Khufu" (*idem*: 147–148, no. 575), *jmy-r3 hntjw-š* –

<sup>&</sup>lt;sup>29</sup> Junker 1927: 104, Taf. IXa.

<sup>&</sup>lt;sup>30</sup> www.giza-projekt.org/Funde/UL\_2487/UL\_2487.html

"overseer of land-tenants" (*idem*: 189, no. 709), *shd w<sup>c</sup>bw 3ht-Hwfw* – "inspector of *w<sup>c</sup>b*priests of the pyramid town Akhet-Khufu" (*idem*: 919, no. 3377), *hry-tp nzwt* (*n*) *pr-*? – "royal chamberlain of the Great House" (*idem*: 789, no. 2878), *smr w<sup>c</sup>ty* – "sole companion" (*idem*: 892, no. 3268), *hry-hbt* – "lector priest" (*idem*: 781, no. 2848).

The stone bowls were uncovered in the burial chambers of two women – the wife of Tjetu in shaft B and a lady called Nebet, who was buried in shaft D. She is supposed to be either wife of mother of Tjetu and held the titles of *jry-ht nzwt* – "custodian of the property of the king" (*idem*: 327–328, no. 1206) and *hmt-ntr Hwt-hr nbt nht* – "*hmt-ntr*-priestess of Hathor, Mistress of the sycamore" (*idem*: 545, no. 2024). Simpson considers the first find from shaft B intrusive. The burial chamber in shaft B was disturbed and there were no other finds. Contrary, shaft D still contained a copper mirror, which was found together with the stone bowl by the feet of the deceased. Both bowls were quite small, measuring between 12.0 and 12.8 cm in diameter (Simpson 1980: 14).

The find of a tiny diorite bowl with incurved rim and a thick collar in shaft A of the anonymous tomb G 2024 is peculiar. The tomb contained an only shaft in the centre of its core. At its bottom was a sealed burial chamber with a sarcophagus pit dug in the ground, covered by a limestone slab. Its only contents was a body in slightly contracted position with its head lying on two unworked stones. There was no burial equipment at all. The bowl is described to be found in the sand fill of the shaft in its upper part, and the whole context of the burial points to its different place of origin

(http://giza.fas.harvard.edu/unpubdocs/33296/full/). Also its measurements are strange. It is referred to be  $3.7 \times 3.2$  cm large, which is very unusual

(https://collections.mfa.org/objects/134896/carinated-bowl?ctx=a3d0f40c-7abc-4dd8-801d-58a03880f808&idx=0).



Fig. 10 The tiny bowl from tomb G 2024 (taken from https://collections.mfa.org/)

The owner of the rubble tomb G 2038d is unknown. The short, shouldered jar with ledge handles was found in shaft C, which is the largest one, situated in the northern part of the mastaba. The only registered find is this jar, which was 11.7 cm high, referred to be found in de debris of plundered burial chamber in Reisner unpublished manuscript of the History of the Giza Necropolis III (http://giza.fas.harvard.edu/unpubdocs/47147/full/). The jar is quite small and when found in this type of tomb, it can be dated rather to the Sixth Dynasty.

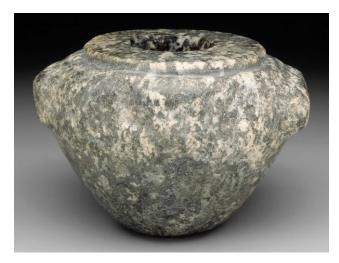


Fig. 11 Short shouldered jar from G 2038d (taken from https://collections.mfa.org/)

The family tomb G 2477 has an anonymous owner. There were 8 shafts altogether in this tomb and the only find comes from shaft F. It is a small bowl from anorthosite gneiss, which measures 7.9 cm in diameter and is reported to come from the debris in the shaft. Therefore, it may be an intrusive find (http://giza.fas.harvard.edu/sites/927/full/).

Shaft E in G 4733 is a very interesting context. Although there were 7 shafts dug into this mastaba, shaft E was probably the one of the tomb's unknown owner, being situated to the west of the main offering place, which was represented by an uninscribed false door. The burial chamber at its bottom was irregularly cut and contained a limestone sarcophagus. It was well-equipped and preserved until modern excavations which were performed by the team of G. A. Reisner. There was a large assemblage of travertine model vessels counting 115 pieces, model food offerings made of travertine, which are a very rare find,<sup>31</sup> a large and interesting set of copper miniature vessels and model tools, limestone canopic jars, travertine Seven sacred oil tablet and a travertine headrest. The pottery collected in this burial chamber

<sup>&</sup>lt;sup>31</sup> Similar models come from the tomb AC 29 at Abusir (Krejčí – Callender – Verner 2008: 55–60).

included tall marl-clay jars with rounded bases, various kinds of bowls and about 50 short, shouldered jars with flat bases and short necks.



Fig 12 Bowl from shaft E in G 4733 at Giza (taken from https://collections.mfa.org)

The anonymous tomb G 4813 contained in shaft A a fragment of a diorite bowl, which measured about 25.0 cm in diameter (http://giza.fas.harvard.edu/objects/16179/full/). However, there is no information on the owner of this tomb and his social position.

The anonymous tomb G 5563 has no superstructure and there are only two shafts preserved. Burial chamber in shaft A contained a large fragment of a travertine bowl, which might have originally had 34.0 cm in diameter and two copper mirrors. In the other one, shaft B, was found a bowl made of anorthosite gneiss, measuring 21.6 cm in diameter. Unfortunately, there is no information on the owner of the tomb. Since the debris in the burial apartment of shaft A contained several pieces of servant statues, one is tempted to date the burials to the Sixth Dynasty.

The anonymous tomb G 7147 is situated to the south of the cemetery of Khufu's family in the Eastern cemetery. The only object collected in the substructure of the tomb, was the granite/porphyry water pot (10.0 cm in diameter and 4.4 cm in height). It contained two shafts, none of them having a burial chamber. Shaft B was even finished without a burial niche at its bottom.

The same can be said about the anonymous tomb G 7169 and its shaft B, where the only surviving find was the travertine stand (6.3 cm in diameter and 3.2 cm in height).

The anonymous rock-cut tomb G 7215 contained a number of shafts. The rim fragment of a travertine cylindrical jar was found in shaft D, the one with the largest burial chamber, probably belonging to the owner of the tomb. However, his name and titles remain

unknown. The jar was quite small, having 9.6 cm in diameter (http://giza.fas.harvard.edu/objects/8144/full/).

Shafts B of the tomb G 7931 was likewise a simple one without any burial chamber, and therefore the travertine cylindrical jar (24.0 cm high), which was discovered in the debris filling this shaft, should be rather perceived as an intrusive find.



Fig. 13 The cylindrical jar, which was found in the debris filling shaft B of G 7931 (taken from https://collections.mfa.org/)

In a serdab, belonging to a shaft situated east of D 20 found H. Junker another water pot, made of anorthosite gneiss (Junker 1927: 104, Taf. IXa). However, no information on its owner is available.

Another tomb, which is difficult to be dated is D 39+40. These are two tombs connected together, having one cult place. D 39 is an extension of D 40 with 5 new shafts. The small bowl (2.44 cm high and 8.79 cm wide) made of anorthosite gneiss is referred to come from shaft 3. It was found by the head of the deceased, as the only find from this burial apartment. No finds were uncovered in the remaining shafts, and therefore the dating of the tomb is quite difficult. If one should rely on the finds from the serdab, where many servant statues were discovered, they would date it to the Sixth Dynasty. Based on the drum from false door and several statues from the serdab, the tomb D 39+40 was ascribed to Djasha (http://www.giza-projekt.org/Mastaba/Mastaba\_D39\_40.html), whose titles were: w<sup>c</sup>b nzwt – "royal w<sup>c</sup>b-priest" (Jones 2000: 373, no. 1382), *hm-ntr mwt nzwt* – "*hm-ntr*-priest of the king's

mother" (*idem*: 517, no. 1934), *hm-k*3 – "*k*3-servant" (*idem*: 591, no. 2167), *smsw-pr* – "elder of the domain" (*idem*: 901, no. 3305), *jmy-r*3 *sšr* – "overseer of cloth" (*idem*: 234–235, no. 864), *jmy-r*3 *pr-jn*<sup>c</sup>t/*htswt* – "overseer of the houses of weavers" (*idem*: 129, no. 511).

The Sixth Dynasty tombs should be divided into two groups, one is from the time prior to the reign of King Pepy I, when the Memphite corpus of stone vessels still contained traditional shapes, the other from the time from Pepy I onwards, when new classes of vessels appeared (for detailed discussion see Chapter 9.2). The first part is represented by:

tomb	owner	type of vessel	material	excav. no. <sup>32</sup>
G 2385, shaft A	unknown	carinated bowl, inscribed	diorite	12-12-109
G 5330, shaft A	Ihy	bowl, 3 fragments	schist	14-11-146
G 5552, shaft A	unknown	water pot	travertine	33-3-43
G 8640	Ankhhaf (Qar)	water pot	limestone	unnumbered <sup>33</sup>
unnumbered	Mereruka	jug	travertine	unnumbered <sup>34</sup>
unnumbered	Mereruka	bowl, inscribed	travertine	unnumbered <sup>35</sup>
unnumbered	Mereruka	cylindrical jar	travertine	unnumbered <sup>36</sup>
unnumbered	Mereruka	stand	travertine	unnumbered <sup>37</sup>
unnumbered	Mereruka	shouldered jar	travertine	unnumbered <sup>38</sup>
unnumbered	Mereruka	shouldered jar	red granite	unnumbered <sup>39</sup>

The owner of G 2385 is unknown, as are his titles. G. Reisner thought that this tomb, which is situated within the complex of the Senedjemib family may belong to Khnumenti (http://giza.fas.harvard.edu/sites/836/full/). In the main burial chamber in shaft A was found this small carinated bowl of rather archaic form inscribed with the name of King Teti on its wall. It is 4.2 cm high and 9.3 cm wide. It is very similar to a piece, which was discovered in Menkaure's valley temple at Giza (https://collections.mfa.org/objects/139057/bowl-with-recurved-rim?ctx=8d31c90f-8dcb-40e3-8f2b-7a1c18561d90&idx=0). Besides the bowl the

<sup>&</sup>lt;sup>32</sup> All vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

<sup>&</sup>lt;sup>33</sup> Hassan 1941: 139, Fig. 117, Pl. XLIII.

<sup>&</sup>lt;sup>34</sup> Firth – Gunn 1926: 24, Fig. 20/7, Pl. 13.

<sup>&</sup>lt;sup>35</sup> *Idem*: 24, Fig. 20/9, Pl. 13.

<sup>&</sup>lt;sup>36</sup> *Idem*: 24, Fig. 20/4, Pl. 13.

<sup>&</sup>lt;sup>37</sup> *Idem*: 24, Fig. 20/8, Pl. 13.

<sup>&</sup>lt;sup>38</sup> *Idem*: 24, Fig. 20/10, Pl. 13.

<sup>&</sup>lt;sup>39</sup> *Idem*: 24, Fig. 20/1, Pl. 13.

burial chamber was also equipped with an assemblage of model stone vessels, which were of very schematic shapes typical for the middle or latter part of the Sixth Dynasty. There were also some copper model tools, limestone containers for food offerings, a combed ware jar and other pottery jars and bowls. Although, the bowl mentions the name of Teti, it is a mere *post-quem* date for the burial. Taking into consideration the whole context, it may be rather dated to the latter part of the Sixth Dynasty. But the shape of the vessel does not belong to the new Sixth Dynasty corpus.



Fig. 14 A small bowl coming from shaft A in G 2385, which was inscribed with the name of King Teti (taken from https://collections.mfa.org)

Ihy, the owner of G 5330 (http://giza.fas.harvard.edu/sites/570/full/), can be identified as *hry-tp nzwt* – "royal chamberlain" (Jones 2000: 788, no. 2874) and *jmy-r3 wpwt* – "overseer of commissions" (*idem*: 89, no. 376). The fragmentary small bowl (rim diameter 15+x cm, height 4+x cm) comes from his burial chamber, which was situated at the bottom of shaft A. It was equipped by a limestone sarcophagus and contained remains of the burial equipment of the Old Kingdom period, as well as from younger periods (represented by secondary burials). From the original contents of the apartment come some travertine model vessels and a limestone canopic jar lid. The large size schist bowl was a simple shape with incurved rim, the bottom part was missing and with it a part of an inscription, which was incised in its outer face. It is, again a type of the old tradition, and therefore, the tomb should be dated to the earlier phase of the Sixth Dynasty.

The tomb G 5552 (also G 2359) was just a small addition to the larger complex G 5520 (L 28) and it contained a single burial shaft A. Nothing is known of its owner, no other finds were recorded, except for the water pot. In this respect, it is difficult to date the tomb.

The only criterion is thus the stone vessels, which is of the old tradition, and therefore, the tomb may be dated to the time before Pepy I.

One of the early ones is the tomb of Ankhhaf, whose good name was Qar (G 8640; Hassan 1941: 130). He was '*d*-mr (n) z3b – "administrator of the king" (Jones 2000: 806, no. 2947), wr Bst – "great one of the Beset" (*idem*: 387–385, no. 1423), *jmy-r3* w<sup>c</sup>bty – "overseer of the two workshops" (*idem*: 87–88, no. 374), *htm*(w) *df3w bjty* – "sealer of the provisions of the King of Lower Egypt" (*idem*: 775–776, no. 2821), *jmy-r3* prwy-hd – "overseer of the two treasuries" (*idem*: 133–134, no. 524), *jmy-r3 jswy n hkrw nzwt* – "overseer of the two chambers of royal regalia" (*idem*: 67–68, no. 310), *jmy-r3* prwy-nbw – "overseer of the two houses of gold" (*idem*: 132–133, no. 522), *smsw iz*(*t*) – "elder of the *iz*(*t*)-chamber" (*idem*: 898, no. 3296), *hry-tp nzwt* – "royal chamberlain" (*idem*: 788, no. 2874), *jmy-r3* pr-hd – "overseer of the treasury" (*idem*: 123, no. 489).

Ankhhaf's burial chamber was found intact. On the sealed limestone sarcophagus was lying a limestone headrest and the water pot. East of the sarcophagus were found pottery jars and bowls, 68 pieces of copper model tools, and a travertine Seven sacred oil tablet. In the south-eastern corner were limestone canopic jars and pottery. There were two more shafts in the core of the mastaba. One of them, S 626, was also undisturbed and besides other things contained an assemblage of limestone model vessels and copper miniature vessels (Hassan 1941: 139–146).

The last of the officials, who was buried with large size stone vessels, was one of the viziers of King Teti, Mereruka. One of them was made of red granite, an unusual and very rare material for the production of stone vessels. All others were made of travertine, including four canopic jars, a tall jar with wide shoulders, short neck and flat base, a tall slender cylindrical jar of exceptional height for the early Sixth Dynasty (about 35.0 cm), a one-handled jug of about 22.0 cm high, a concave-shaped short stand and a bowl with unmodelled rim and inscription on its inner wall mentioning the name of Mereruka (about 22.0 cm wide). The titulary of Mereruka is too long to be presented here.<sup>40</sup> The official is generally known to be holding of the highest posts in the state administration, and his main duties involved the offices of: *jmy-r3 hwt-wrt* 6 – "overseer of the six great law-courts" (Jones 2000: 165, no. 630), *jmy-r3 prwy-hd* – "overseer of the two treasuries" (*idem*: 133–134, no. 524), *jmy-r3 z8(w)* **c**(*w*) (*nw*) *nzwt* – "overseer of royal document scribes" (*idem*: 209–210, no. 780), *jmy-r3 k3t nbt nt nzwt* – "overseer of all royal works" (*idem*: 262–263, no. 950), *jmy-r3 snwty* –

<sup>&</sup>lt;sup>40</sup> The titulary can be found here in Kanawati – Woods – Shafik – Alexakis 2010.

"overseer of the two granaries" (*idem*: 254–255, no. 923). The repertory of stone vessels, which were deposited in his tomb prove his extraordinary social position.

tomb	owner	type of vessel	material	excav. no. <sup>41</sup>
G 2381, shaft A	Ptahshepses Impy	tall, shouldered jar with neck	travertine	12-12-579
G 2381, shaft A	Ptahshepses Impy	tall, shouldered jar with neck	travertine	12-12-580
AS 22, shaft A	Inty Pepyankh	cylindrical jar with flat lid	travertine	133a/AS22/2002 <sup>42</sup>
AS 22, shaft A	Inty Pepyankh	cylindrical jar with flat lid	travertine	133b/AS22/2002
AS 22, shaft A	Inty Pepyankh	jug with convex lid	travertine	133c/AS22/2002
AS 22, shaft A	Inty Pepyankh	cylindrical jar with flat lid	travertine	133d/AS22/2002
AS 22, shaft A	Inty Pepyankh	tall, shouldered jar with neck and convex lid	travertine	133e/AS22/2002
AS 22, shaft A	Inty Pepyankh	cylindrical jar with flat lid	travertine	133f/AS22/2002
AS 22, shaft A	Inty Pepyankh	cylindrical jar	travertine	133g/AS22/2002
AS 22, shaft A	Inty Pepyankh	tall, shouldered jar with neck, fragmentary	travertine	133h/AS22/2002
AS 79	Setib	cylindrical jar with flat lid	travertine	116a/AS79/2015 <sup>43</sup>
AS 79	Setib	cylindrical jar with flat lid	travertine	116b/AS79/2015
unnumbered	Isheti	barrel-shaped jar with handles	porphyry	unnumbered, Fig. 1 <sup>44</sup>
unnumbered	Isheti	cylindrical jar	diorite	unnumbered, Fig. 2
unnumbered	Isheti	globular jar with neck	travertine	unnumbered, Fig. 3
unnumbered	Isheti	globular jar with neck	travertine	unnumbered, Fig. 4
unnumbered	Isheti	globular jar with neck	travertine	unnumbered, Fig. 5
unnumbered	Isheti	globular jar with neck	travertine	unnumbered, Fig. 6

<sup>&</sup>lt;sup>41</sup> All vessels from Reisner's excavations are to be found according to their register numbers at http://giza.fas.harvard.edu/.

<sup>&</sup>lt;sup>42</sup> Jirásková in Bárta – Vachala *et al.* in preparation.

<sup>&</sup>lt;sup>43</sup> These two jars from AS 79 are yet unpublished.

<sup>&</sup>lt;sup>44</sup> All the vessels coming from the tomb of Isheti at Saqqara were presented in Drioton – Lauer 1958: 220–221, Figs. 1–14.

unnumbered	Isheti	ovoid jar with neck	travertine	unnumbered, Fig. 7
unnumbered	Isheti	ovoid jar with neck	travertine	unnumbered, Fig. 8
unnumbered	Isheti	ovoid jar with neck	travertine	unnumbered, Fig. 9
unnumbered	Isheti	slender jar with pointed base	travertine	unnumbered, Fig. 10
unnumbered	Isheti	shouldered jar with neck	travertine	unnumbered, Fig. 11
unnumbered	Isheti	slender jar with flat base	travertine	unnumbered, Fig. 12
unnumbered	Isheti	slender jar with flat base	travertine	unnumbered, Fig. 13
unnumbered	Isheti	bag-shaped jar with neck	travertine	unnumbered, Fig. 14
unnumbered	unknown	bowl	diorite	unnumbered <sup>45</sup>
unnumbered	Sebekemkhenet	lid	travertine	unnumbered <sup>46</sup>
M XII	Wadjet	bowl with a groove under the rim	porphyry	unnumbered <sup>47</sup>
M XII	Wadjet	bowl with a groove under the rim	diorite	unnumbered
M XII	Wadjet	bowl with a groove under the rim	diorite	unnumbered
M XII	Wadjet	bowl with a spout	diorite	unnumbered
M XII	Wadjet	ovoid jar with wavy collar	serpentinite	unnumbered
M XII	Wadjet	cylindrical jar	diorite	unnumbered
M XII	Wadjet	cylindrical jar	diorite	unnumbered
M XII	Wadjet	cylindrical jar	diorite	unnumbered
M XII	Wadjet	cylindrical jar	travertine	unnumbered
M XII	Wadjet	cylindrical jar	travertine	unnumbered
M XII	Wadjet	cylindrical jar	travertine	unnumbered
M XII	Wadjet	drop-shaped jar with wavy collar	travertine	unnumbered
M XII	Wadjet	short, shouldered jar with pointed base	travertine	unnumbered
M XII	Wadjet	short, shouldered jar with pointed base	travertine	unnumbered
M XII	Wadjet	short, shouldered jar with pointed base	travertine	unnumbered

<sup>&</sup>lt;sup>45</sup> The name of the owner was inscribed on the wooden sarcophagus, but the documentation was lost (Drioton – Lauer 1958: 227–228, Fig. 15.
<sup>46</sup> Drioton – Lauer 1958: 246.
<sup>47</sup> All the vessels coming from the tomb of Wadjet at Saqqara were presented in Jéquier 1929: 83, Figs. 94–95.

M XII	Wadjet	slender jar with pointed base	travertine	unnumbered
M XII	Wadjet	slender jar with pointed base	travertine	unnumbered
M XII	Wadjet	slender jar with wavy collar and flat base	travertine	unnumbered
M XII	Wadjet	shouldered jar with flat base, neck and wide rim	travertine	unnumbered
M XII	Wadjet	shouldered jar with flat base, neck and wide rim	travertine	unnumbered
M XII	Wadjet	shouldered jar with flat base, neck and wide rim	travertine	unnumbered
M XII	Wadjet	shouldered jar with flat base, neck and wide rim	travertine	unnumbered
N II	Henut	bowl decorated with incision	travertine	unnumbered <sup>48</sup>
N II	Henut	lid, inscribed	travertine	unnumbered

The list of vessels presented in the table above includes only those coming from non-royal context. Therefore, the pyramids of Queens were not included. Assemblages of large size stone vessels come from the pyramid complexes of the Queens, who were buried by the pyramids of Pepy I and Pepy II (Minaul-Gout 2019; Jéquier 1933). They are all of similar shapes as the vessels from other late Sixth Dynasty tombs, which were listed above.

The two vessels from the intact tomb of Merptahankh-Meryre, whose good name was Ptahshepses Impy were found lying by the head of the deceased inside his wooden coffin together with a travertine headrest and a copper mirror. Ptahshepses Impy was a member of a powerful family, and his social position is visible not only through his titulary (http://giza.fas.harvard.edu/ancientpeople/1218/full/), but also burial equipment, which was well-preserved, containing above all a large number of copper vessels, model tools and altars (see Chapter 6 for details), pottery jars (including imports) and some model stone vessels (http://giza.fas.harvard.edu/sites/831/full/). His titulary included: *h3tj-*<sup>c</sup> – "count" (Jones 2000 496–497, no. 1858), *sm* – "*sm*-priest" (*idem* :885, no. 3241), *hrp šndt nbt* – "director of every kilt" (*idem*: 751, no. 2737), *hry-hbt hry-tp* – "chief lector priest" (*idem*: 784, no. 2860), *jm3-*<sup>c</sup> – "gracious of arm" (*idem*: 10, no. 39), *htm(ty)-bjty* – "sealer of the king of Lower Egypt"

<sup>&</sup>lt;sup>48</sup> Both pieces from N II are drawn in Jéquier 1929: 91, Fig. 103.

(*idem*: 763–764, no. 2775), *jmy-r3 k3t nbt nt nzwt* – "overseer of all royal works" (*idem*: 262–263, no. 950), *smr w<sup>c</sup>ty* – "sole companion" (*idem*: 892, no. 3268), *mdh nzwt kd(w) m prwy* – "king's architect in the two houses" (*idem*: 464–465, no. 1733), *jmy-r3 w<sup>c</sup>bty* – "overseer of the two workshops" (*idem*: 87–88, no. 374).

The other dignitaries, whose tombs contained large size stone vessels were buried outside Giza, at South Abusir and North and South Saqqara. One of them, Inty Pepyankh, did not built his own tomb, but he had only a shaft been dug in the core of the mastaba of Inty (AS 22), his probable relative. The series of 8 cosmetic jars were deposited in a wooden box to the north of the limestone sarcophagus. The well-preserved burial equipment contained travertine model vessels, copper large size vessels and miniatures, copper *htp*-altars and model tools, limestone containers for food offerings, Seven sacred oil tablet, Opening of the Mouth ritual set or two scribal palettes (Bárta – Vachala *et al.* in preparation). There is not much information on his position. He is known to be  $zš \ (w) \ (nw) \ nzwt \ hft-hr - \ (w) \ (nw) \ nzwt - \ (inspector of scribes of the royal documents'' ($ *idem*: 956, no. 3527).

The lady called Setib, who was buried in shaft 14 of AS 79 at Abusir, is known to be a priestess of the king (*hmt-nzwt*). The title was preserved on a headrest, which was found in her wooden coffin together with the two cylindrical jars and remains of jewellery (Dulíková 2019).

Isheti's burial chamber was found disturbed by looter, but quite much from the original burial equipment have survived. There was a sarcophagus pit in the ground of the chamber which was covered by a limestone slab. In the south-east corner of the chamber were found the stone vessels together with 5 travertine containers for meat offerings in the shape of geese/ducks. Moreover, there were several miniature copper vessels and tools, which were probably once gilded, since several leaves of gold were collected in their proximity (Drioton – Lauer 1958: 219, 222). Isheti's social and administrative position is evidenced by his titulary (*idem*), which survived on the architectural elements of his tomb: hq3-hwt – "estate manager" (Jones 2000: 670–671, no. 2453), hq3-hwt Mn-nfr-Mry- $R^c$  – "chief of the funerary estate of (the pyramid) The-perfection-of-Merire-Abides" (*idem*: 679–680, no. 2488), hp3-hwt Mn-cnh-Nfr-k3- $R^c$  – "chief of the funerary estate of (the pyramid) The-life-of-Neferkare-Abides" (*idem*: 679, no. 2486), *smr* w<sup>c</sup>ty – "sole companion" (*idem*: 892, no. 3268), *hry*-*hbt* – "lector-priest" (*idem*: 781, no. 2848), *jmy*-r3 wp(w)t *htp*(w)t-ntr – "overseer of the divisions of divine offerings" (*idem*: 97, no. 402), *jmy*-r3 wp(w)t *htp*(w)t-ntr m prwy – "overseer of the divisions of divine offerings in the two houses" (*idem*: 97–98, no. 403), *jmy*-r3 sp3wt T3-mhw –

"overseer of the nomes of Lower Egypt" (*idem*: 227–228, no. 843), *htm*(*ty*)-*bjty* – "sealer of the king of Lower Egypt" (*idem*: 763–764, no. 2775).

The diorite bowl, which was collected in the burial chamber of another shaft dug south of that of Isheti was found together only with a few pieces of pottery.

The last of the tombs situated to the west of the Step pyramid at Saqqara, where stone vessels were collected was that of Sebekemkhenet, whose burial chamber still contained a travertine lid, which probably once belonged to a cylindrical jar (8.3 cm in diameter, 0.2 cm in height, Drioton – Lauer 1958: 246). His titles present him as: *h3tj-*<sup>c</sup> – "count" (*idem*: 496–497, no. 1858), *htm*(*ty*)-*bjty* – "sealer of the king of Lower Egypt" (*idem*: 763–764, no. 2775), *smr w*<sup>c</sup>*ty* – "sole companion" (*idem*: 892, no. 3268), *jmy-r3 gs-pr* – "overseer of a workplace" (*idem*: 269–270, no. 969), *hq3-hwt Mn-nfr-Ppi* – "chief of the funerary estate of (the pyramid) The-perfection-of-Pepy-Abides" (*idem*: 679, no. 2487), *shd hm-ntr Mn-<sup>c</sup>nh-Nfr-k3-R*<sup>c</sup> – "inspector of *hm-ntr* -priests of (the pyramid) The-life-of-Neferkare-Abides" (*idem*: 934–935, no. 3447).

Two contexts, which contained large size stone vessels were discovered at South Saqqara, by the pyramid causeway of King Pepy II. Both of them belonged to women, one of them being Wadjet (M XII; Porter – Moss 1979: 683), the *hmt-ntr Hwt-hr – "hmt-ntr-* priestess of Hathor" (Jones 2000: 540–541, no. 2012), *hkrt nzwt* – "the ornament of the king" (*idem*: 794–795, no. 2899), the other Henut (N II; Porter – Moss 1979: 677), the *hkrt nzwt w<sup>c</sup>tt* – "sole ornamented of the king" (*idem*: 795–796, no. 2900). The pieces collected in the tomb of Henut are particularly interesting. One of them is a bowl, which was decorated by a kind of net pattern inside. The other is a lid decorated by a linear inscription mentioning the names of king Pepy I.

## **3.2.** Nature of the stone vessels and their interpretation

The evidence presented above cannot be taken as a complete sample of owners of the large size stone vessels in the Old Kingdom. There is a great obstacle, which is caused by looting and disappearance of many pieces before modern excavations. The corpus of the Fourth Dynasty is quite expressive, as well as the Fifth Dynasty, but especially the Sixth Dynasty part is quite limited in number of tombs in comparison to the provinces, where the stone vessels appear quite regularly even in smaller tombs. One shall understand this inequality in the relatively low number of excavated tombs in the Memphite area. The non-royal

cemeteries in South Saqqara have been merely touched so far and one shall expect much more evidence to be documented with future excavations in the site.

Despite this discrepancy, general trends are quite well traceable. The corpus of the Fourth Dynasty is represented by vessels made of travertine. Only in a few cases diorite appeared. The classes that prevail are bowls or cylindrical jars. Some of the owners of the vessels are not known, and their social position can be estimated only considering the position and size of their tomb or other contents of the burial equipment, if survived. If the owners are known, they are mostly members of the royal family. It was still common that some contexts contained not just one, but several stone vessels of large size. Besides them, these tombs were also often equipped by an assemblage of model stone vessels.

The number of large size functional vessels in non-royal contexts decreased in the Fifth Dynasty and the tombs were in most cases equipped with one vessel only. There are a few exceptions connected with the officials of the top level of the Old Kingdom administration. These are Ptahshepses from Abusir (AC 9; Dulíková 2017; Verner 2017) and Seshemnefer II from Giza (G 5080; Altenmüller 2008), both belonging to powerful families of the time. Ptahshepses became the son-in-law of King Niuserre and Seshemnefer II, who served to the same king, gained a royal daughter for his son Seshemnefer III. Similar social position was holding Senedjemib Inty, a vizier of King Djedkare (G 2370; Brovarski 2000).<sup>49</sup>

Contrary to these highly positioned men, Neferked is of much lower social and administrative position. In fact, one doubts if he would afford such a jar, which was also inappropriately deposited by the feet and not by the head, as an only part of the burial equipment. Ann Macy Roth also noticed this discrepancy and pointed to the tomb G 1151, which belonged to a man with the same name and title. She offered an explanation that Neferked might have built G 2089 as his first burial place, but with promotion moved elsewhere. The jar, which was left in the unused tomb, was then taken by its new "inhabitant" (Roth 1995: 93–95). It really seems plausible that the person buried in shaft A of G 2089 was not Neferked and he just reused the jar.

The jar from the burial chamber of Herunefer (G 2353 A) is made of cheaper material than travertine – limestone – and resembles to a model jar. It is just in larger size, but still not drilled inside. The decoration of Herunefer's tomb was partly disturbed and the surviving

<sup>&</sup>lt;sup>49</sup> Their social position with respect to their tombs and burial equipment is discussed in Dulíková – Jirásková – Odler in press.

titles do not give clear image. The size of the tomb, its position and equipment point to him as a middle-class official (Simpson 1980: 35–37).

Iby was likewise rather a middle-class official, but the burial equipment of his and his wife's burial chambers was of good quality and more precious materials. In this respect, it is not improbable that his wife would have a small travertine cylindrical jar buried with her.

The water pots, which were discovered in the tombs of Neferinpu and the anonymous tomb G 5227, were mere markers of scribal position within the Old Kingdom administration. Neferinpu was a priest above all and belonged to the middle-class, which is also reflected in his rather less wealthy burial, which was found intact (Bárta *et al.* 2014).

The Fifth Dynasty tombs in general are rather heterogeneously equipped, especially in the latter part of the period. Most of the tombs contained assemblages of model stone vessels, earlier made only from travertine, from the time of Niuserre from both travertine and limestone. Other important contents of the burial chamber were pottery vessels, copper model tools and canopic jars. Headrests found their way to the burial chambers once again and became its regular contents, as well as Seven sacred oil tablets and Opening of the Mouth ritual sets. Large size stone bowls and tables probably served as luxurious rather than functional element in the burial chamber. Real functional object symbolising the social status of the deceased were the water pots. Stone vessels as traditional containers of oils were present in the burial chambers of the Fifth Dynasty officials just in the model version or in the form of the Seven sacred oil tablet.

The tombs from the turn of the Fifth and Sixth Dynasties follow the trend of the Fifth Dynasty contexts. Like before, the vessels are made either from travertine or anorthosite gneiss (also called diorite by some authors). An only exception is the water pot from G 7147, which comes from a peculiar context and might be an intrusive find. If the owners of the rest of the vessels are known, they held the middle-class administrative positions.

The Sixth Dynasty must be divided in two parts when dealing with stone vessels in the Memphite cemeteries. The early part, which is represented by the time of Teti – Pepy I is represented by the following tradition of common shapes, such as cylindrical jars, bowls and water pots. There are only a few tombs known, which contained some large size stone vessels in their burial chambers. One of them was that of Ihy, whose titulary was not preserved complete, but assessing his tomb in its complexity, it seems that he was of middle to higher social position. The same can be said about Ankhhaf (G 8640), who held some important administrative positions, such as "overseer of the two treasuries" and whose well-equipped burial chamber was found intact.

The owner of G 2385 is not known, but he must have belonged to the powerful family of the Senedjemibs. The fine carinated bowl incised with the inscription mentioning the name of King Teti is thus no surprise and points to the importance of the family.

Mereruka acquired many stone vessels from the king. He was one of the few Old Kingdom officials, who was awarded with travertine canopic jars. Although all of the large size stone vessels, which were found in his burial chamber, were made of travertine, one was crafted from red granite. It is a very hard stone, which was not suitable for the production of stone vessels, and therefore, it was used for such a purpose seldomly (Aston 1994: 15–18). In this respect, it is a strong symbol of his social position.

The first part of the Sixth Dynasty followed the trend of the Fifth Dynasty in case of large size stone vessels, but there were some changes. The model stone vessels started to be substituted by copper miniature vessels and the typology of the surviving assemblages of stone model vessels ceased to be as homogenous as before.

The later part of the Sixth Dynasty, which was above all represented by the reign of King Pepy II, but probably started earlier in the reign of King Pepy I has its own specifics. The burial customs abandoned the tradition of model vessels and the officials once again started to fill the burial apartments chambers with large size vessels either made of stone or copper (the presence of large size pottery vessels in the burial chamber was never omitted). There were large size stone vessels completely drilled inside to serve the purpose of oil containers, copper vessels that should have been used for fumigation and cleansing rituals, pottery jars as containers of wine and beer. Meat usually just laid upon ground in the burial chamber was often closed in the cases in the appropriate shape. These were likewise used to keep bread – the circular ones (for the shapes *cf.* Minault-Gout 2019: 147–152).

When studying the list of stone vessels from the tombs of this period, one cannot avoid the feeling of two slightly different traditions, one at Giza and Abusir, the other at Saqqara. The vessels collected in the burial chambers of Ptahshepses Impy (G 2381), Inty Pepyankh (AS 22) and Setib (AS 79) have more in common with the older traditional. Their shapes are inspired by model stone vessels, but their number is not so high, and their position respects the trend of particular position for individual parts of burial equipment. They were all as oil jars deposited by the head of the deceased. Contrary, the vessels in complete or almost complete assemblages from the tomb at Saqqara, such as those from the tomb of Isheti and Wadjet are more numerous and more reflect the new shapes that came to the centre from the provinces (find the detailed discussion in Chapter 7). Ptahshepses Impy was a member of a wealthy and powerful family. His intact burial chamber was full of precious commodities, but

he had only two small ointment jars placed in his apartment. Inty Pepyankh do not seem to belong to the highest members of society, and yet they had a similar repertory of stone vessels in their burial chambers Setib. Isheti held higher administrative position that involved control of some funerary domains and provisions. The social position of Wadjet, who had more than a dozen of stone vessels of new types in her burial chamber, is quite difficult to assess. She was a wife of an official, whose name was Sebaku. His administrative responsibility is not known, but the position of their tomb close to the pyramid of King Pepy II, points to a kind of service at his court.

## 4. Materials and techniques of production

## 4.1. Material

The wealth of the ancient Egyptian land is usually perceived in the regular floods of the Nile that brought fertile mud to the fields. Indeed, the fertility of the land was the main source of life in this area, which was also benefited by the surrounding vast deserts abundant in various kinds of stone. The scale of stones used for the production of stone vessels was wide, especially in the Predynastic Period.<sup>50</sup> It was probably caused by the lack of central organisation, and wider access to the resources. The local sources were important supplies, and the craftsmanship was on a high level, mostly due to the low level of standardisation connected again with decentralisation. Already at that time luxurious products circulated within the land, and the elite liked to stress their social position through stone vessels made of precious, often not local, stones. Such a demonstration of power of local chiefs led to rise of trade with luxurious materials and products. Therefore, the variety of stones collected at a site with elite burials does not usually reflect local resources, but often includes products of long-distance trade, either within or outside Egypt (*e.g.* the elite cemetery at Hierakonpolis site HK 6; Friedman 2011; https://www.hierakonpolis-online.org/index.php/explore-the-predynastic-cemeteries/hk6-elite-cemetery).

The unification of ancient Egypt was one of the milestones in the stone vessel production. The scale of materials and variety of shapes diminished rapidly in favour of standardisation, both in material and form. It seems that the newly established king of Upper and Lower Egypt slowly took control over the resources and their exploitation, as well as over the production of particular kinds of material culture. The first two dynasties were still in the process of standardisation, but the Third Dynasty tombs usually contain mostly vessels made of travertine, limestone, metagabbro and diorite<sup>51</sup> of several shapes represented mostly by bowls, cylindrical jars, tables and a few handled jars (*e.g.* Jirásková 2011). One of the reasons for the choice of these materials was probably their softness and good accessibility. Limestone is the most common stone in Egypt, travertine is also to be found quite often since it is closely connected with limestone (see below). Metagabbro was a harder kind of material

<sup>&</sup>lt;sup>50</sup> For the discussion on the materials used for the production of ancient Egyptian stone vessels in general, see the work by Barbara G. Aston (1994), who also presented the basic typology of individual periods.

<sup>&</sup>lt;sup>51</sup> This material, known at least from the Early dynastic period, became very popular from the Fourth Dynasty onwards also for the royal statuary (Aston 1994: 62–64; http://www.quarryscapes.no/egypt\_chep.php).

with sources in Wadi Semna in the Eastern Desert.<sup>52</sup> It is quite far from the Nile valley, and its exploitation must have involved much more effort. Apart from the practical reasons for their usage, one would also say that these materials fulfilled the religious request of purity (white) and earthly component (black) in context of the burial equipment. The reason for the choice of metagabbro is not clear. The other black stone quarried since Predynastic period, basalt, remained a very popular material used mainly in the architecture to symbolise the black silt of the Nile. But for some reason, it was excluded from stone vessel production, until it found its use in the sets for the Opening of the mouth ritual (side by side with obsidian). Another kind of black stone, which may be found in the Old Kingdom contexts is siltstone (*e.g.* S 4215).

As was discussed in Chapter 2, the Fourth Dynasty brought a rather sudden change. The range of materials employed in the production of large size stone vessels remained similar to the Early Dynastic period and the Third Dynasty. However, such a scale of material was reserved for the king himself, and his subjects must have relied on cheaper kinds, such as limestone (canopic jars), travertine (model vessels) and diorite (bowls). These stones have already found their way to the private tombs in the Early Dynastic period in a kind of economisation mode, as was demonstrated on the so called "dummy" vessels in preceding chapter.

The first sets of model stone vessels were discovered in the cemeteries founded by Khufu at Giza. All of these were made of travertine. Even the pieces later belonging to the sets for the ritual of the Opening of the mouth were all made of the same material, including the *psš-kf* knife (G 7550 B and G 7560 B). Only later by the middle of the Fifth Dynasty, limestone became very frequent in case of many members of the administration. The first pieces of the Opening of the Mouth ritual sets made of black stones – basalt and obsidian – appeared approximately at the same time as limestone. Besides these black stones, also rock crystal became popular and substituted the widely used travertine in these particular sets. All of these stones will be discussed separately in the following part of the chapter.

<sup>&</sup>lt;sup>52</sup> As in case of most other quarries, there is no evidence of activity prior to Greco-Roman period (Klemm – Klemm 2008: 291–294).

## 4.1.1. Travertine<sup>53</sup>

In ancient Egyptian, this kind of stone was often called *šs* or *bit* (Shaw 2010: 13–14). In modern times, it is called either travertine, or Egyptian alabaster or calcite. It is to be found in the whole area of Egypt, but its larger quarries lie in the Eastern desert only (*idem*: 19–25). It is closely connected with limestone, since "calcite alabaster is nothing more than a wellcrystallised form of the rearranged limestone found in the immediate environment" (Klemm -Klemm 2008: 147). There are several rich veins that could have been exploited already in the Old Kingdom, but the evidence that has survived points only to the quarries at Hatnub. The inscriptions found there are to be dated mainly from the Old to Middle Kingdom periods (Shaw 2010: 137–162). A survey project conducted between the years 1985 and 1994 in the area of Hatnub quarries have brought interesting data. Careful study of the remains of local settlement elements enabled dating of activity based on archaeological evidence. Most of the huts situated in the areas of quarry P were dated already to the early Old Kingdom based on pottery analysis. Also, the wayside huts occurring by the main desert road to the quarry still contain sherds of the Old Kingdom pottery (*idem*: 33–73, 111). New research in quarry P, which is performed by Franco-British mission led by Yannis Gourdon brought to light a carry ramp dating probably already to the time of Khufu (https://www.ees.ac.uk/hatnub).

The expeditions to the area of Hatnub, called Wenet by ancient Egyptians, sent there by various kings for particular purposes, are attested not only in the rock inscriptions, but also biographical texts. For instance, Weni, the elder from Abydos mentions that the king (Pepy II) sent him to Hatnub for "a great offering table of Hatnub alabaster". He also counted that it took him and his men 17 days to extract the stone, which later travelled north in a boat of acacia wood "60 cubits long and 30 cubits wide" (Strudwick 2005: 356).

The growing popularity of travertine in the Old Kingdom might have been connected with more intensive exploitation of quarries or opening of new ones. However, these two parts of the process are interchangeable. And it might have been the other way round: the growing need could have initiated search for new resources. It is important to notice that the

<sup>&</sup>lt;sup>53</sup> There has been a long discussion on the terms, which shall be used when describing this material. In the past, it was called alabaster, but the geological analyses have proven that it is of a different nature than the European material traditionally described as "alabaster". Therefore, it was reinterpreted as "travertine" by James A. Harrell (1990). Rosemarie and Dietrich D. Klemms disagree with the terminology and prefer to call the material "alabaster calcite" (Klemm – Klemm 2008: 147). B. Aston distinguishes between "calcite", "travertine" and "alabaster" (Aston 1994).

The author of this thesis discussed the problem with the geologist Václav Cílek, and decided to use the term "travertine", which is nowadays generally accepted, and widely used. Recently, the material was discussed by Tina Köster (2012).

production of stone vessels was just a minor target of its extraction in the Old Kingdom from the Fourth Dynasty onwards. Masses of travertine were used mainly in the royal pyramid complexes, where it mostly served for smaller architectural elements (such as the abovementioned offering tables) or statuary. Some of the Fifth Dynasty kings, such as Djedkare or Unas had their mortuary temples paved by this material. Since it was difficult to obtain large blocks of travertine running in layers usually about one metre thick, large monolithic products, such as sarcophagi were of a great value, and therefore also limited in number. They are to be found for instance in the pyramids of Sekhemkhet and Netjerikhet (Shaw 2010: 16; for the sarcophagi see Štěpánová 2011).

There are different kinds of travertine that were used for the production of model vessels throughout the Old Kingdom. The variety is caused by distinct conditions in the process of its formation. Individual resource areas give stone of particular pattern. Some pieces are almost white, some completely yellow, others have brownish/greyish shades or white and red veins. The pattern of stone was evidently taken into consideration when cutting the vessels. In this respect, all of the vessels with red stripes have them in horizontal position, which was probably a stylistic rather than functional aspect. Especially these vessels are of interest, since in case of many pieces from various contexts the pattern seems to be the same. The author of this thesis could study only some of them in person while others were available only in photographs; but even if their photographs are put side by side in one scale, the regularity and similarity of veins comes out. Therefore, it is possible to think of the same place of production of these vessels, *i.e.* one workshop. The group of these similar pieces includes several jars (2 cylindrical, 3 shouldered jars, 1 wine jar, 1 jug) and the basin from the tomb of Kapuptah (G 4461; studied by the author in the museum of Universität Leipzig); 4 cylindrical, 2 shouldered jars, 1 beer jar from G 4733 E (studied in photographs); several bowls, 1 cylindrical, 1 beer jar of Irankhptah (G 4811 B; studied in photographs); 1 beaker, 2 shouldered jars from G 4610 A at Giza (studied in photographs), and 1 shouldered jar from Khekeretnebty (AC 15; studied by author in the Naprstek Museum in Prague), 2 cylindrical jars from Khentkaus III (AC 30; studied by author at Abusir) at Abusir. All of them bear the same pattern of veins, which is probably no coincidence. The table below presents some examples:



Fig. 15 Similar pattern of veins is visible on different vessels coming from different contexts (G 4461 and AC 30 by L. Jirásková, AC 15 by M. Zemina, both archive of the Czech Institute of Egyptology, G 4733 E taken from https://collections.mfa.org/, G 4811 B and G 4610 A taken from https://giza.fas.harvard.edu/).

Could they have been cut from a single piece of stone in the same workshop? They might have been, although their shapes sometimes vary, which would have been caused by different craftsmen working in the workshop. All of the people, who had these vessels in their burial chambers lived at approximately the same time, the latter part of the Fifth Dynasty, time of Niuserre – Djedkare. Their social position was, however, quite distinct. Whereas Khentkaus III and Khekeretnebty belonged to the royal family, Kapuptah and Irankhptah were of nonroyal origin. The titles of Irankhptah inscribed on his false door are: jry-ht – "custodian of property" (Jones 2000: 325, no. 1200), *jmy-r3 w<sup>c</sup>bty* – "overseer of the two workshops" (*idem*: 87–88, no. 374), *jmy-r3 hmwt*(*yw*) *pr-<sup>c</sup>3* – "overseer of the craftsmen of the Great House" (*idem*: 181, no. 684), *jmy-r3 k3t nt nzwt* – "overseer of royal works" (*idem*: 262, no. 949).

They point to his higher social position. Kapuptah's titles are unknown, except for a single one, which was found on his chapel drum lintel and reads *jry-ht nzwt pr-*? – "custodian of the king's property in the Great House" (*idem*: 329, no. 1211). From the point of view of this evidence, it seems that there was no difference between the members of royal family and other officials. There were probably central workshops with more craftsmen. They either crafted the model vessels from a larger stone block, or they worked with waste material remaining after production of larger elements. Concerning the difference in social statues, one would expect to find a hierarchy in such a workshop, with a master and his top-artists working on the "royal" products and other craftsmen creating equipment for officials.

The layers of travertine at their source place are usually up to 1 m thick, and they can be several metres long (personal communication with Václav Cílek, geologist of the Czech Institute of Geology of the Czech Academy of Sciences). Unfortunately, not much is known about the initial process of production of model stone vessels involving orders and shipment of stone blocks from the quarries to the workshop and its final consumer. The large architectural elements intended to be used in royal buildings were probably crafted at the site and delivered completely prepared straight to the construction site. It is illustrated by depictions and descriptions in private tombs and royal monuments (*e.g.* carrying of columns from the walls of the causeway of Unas). However, the material intended for subsequent specialised treatment might have been officially sent to the treasury, and then redistributed to the workshops (Eichler 1993: 277–288). On the other hand, the finds including many pieces of crescent-shaped flint and chert borers near Deir el-Bersha (Willems – Vereecken – Kuijper *et al.* 2009) or Umm es-Sawan (Caton-Thompson – Gardner 1934) point to possible workshops by the quarries even for such a kind of products.

The archaeological evidence from the quarries at Hatnub is not the only source of information on the activity in this area. There are also several inscriptions mentioning a few expeditions that worked there during the Old Kingdom. Two of them name the King Khufu, all the others are from the reigns of the Sixth Dynasty kings (Eichler 1993: 38–45). Obviously, there must have been many more expeditions sent by other kings of the Old Kingdom, who verifiably used travertine, at least in their mortuary complexes. For the purpose of small-scale objects, one delivery of several blocks should have satisfied the need for several years. And one such vein of up to 10 metres length would be probably enough for a generation.

Generally, judging by eye, none of the assemblages is made up of vessels cut from the same kind of travertine. Some pieces are from the "striped" stone, some are of yellowish,

others from more crystalline version, such as in case of the assemblage 27/AS104/2018 from Abusir in the table below. It would be necessary to perform detailed analyses to find out the provenance of the stone used for their production. Until such analyses are available, one shall assume that the workshops probably worked with several different kinds of stone coming from the same or different quarries.



Fig. 16 Several jars from the assemblage 27/AS104/2018 from Abusir, where different kinds of travertine were used (L. Jirásková, archive of the Czech Institute of Egyptology).

Another explanation is the reuse of older material for the production of model stone vessel. An example of such an activity was described by Reisner, who found within the valley temple of Mycerinus a workshop producing travertine model vessels from "chips made by the breaking up of the statues and statuettes." He also claimed that the unfinished pieces found at the spot were "of the forms so common in the mastabas of Dynasties V and VI" (Reisner 1931: 45).

## 4.1.2. Gypsum

Gypsum is created by similar process as travertine, and it can look completely the same way. Its variations include clear, almost transparent, pieces, as well as milky, or the red, white and brown striped ones. In this respect, it is difficult to distinguish between these two materials using only one's eyes. The most important difference between them is their hardness. On Mohs scale, travertine stands on position 3, whereas gypsum is slightly softer – position 2. According to B. Aston, it is possible to scratch a gypsum vessel by nail, while it is impossible in case of travertine (Aston 1994: 48).

The problem of identifying various stones used for the production of stone vessels is a generally known issue. Especially in case of old excavations, one can only rely on the determination of report authors. Almost all of the model stone vessels made of the crystalline

material are denoted as "alabaster pieces" – using the old term for the material. There has been no modern analysis that would revise this information. The only research was led by B. Aston, who studied some vessels accessible in the museum collections. She realised that gypsum vessels were produced from the Predynastic Period to the early Old Kingdom (Aston 1994: 50–51). Therefore, the model vessels of the Old Kingdom should rather be made of travertine. Such a conclusion was also reached by the author of this study, based on the material studied in hands. All the vessels studied by the author of this thesis in hands were made of hard material that could be scratched by stone, but not by nail. These are all the model vessels coming from the tomb at Abusir (either the ones from old excavations, which are now stored in The Naprstek Museum in Prague or the ones from new excavations, which are deposited at Saqqara), the set from the tomb of Kapuptah at Giza (now held in Leipzig) and some vessels from Junker's excavations at Giza (now held in Vienna).

The survey in the most famous gypsum quarries situated to the north of Faiyum at Umm el-Sawan (Caton-Thompson – Gardner 1934; Heldal – Bloxam – Degryse *et al.* 2009) have pointed to their use especially during the Third and early Fourth Dynasty, which would correspond with Aston's interpretation of the examined vessels.

#### 4.1.3. Limestone

By the middle of the Fifth Dynasty limestone was introduced in the production of assemblages of model stone vessels. This material (Klemm – Klemm 2008: 23–145) is to be found almost everywhere in Egypt, but the main quarries lie between Qurna and Cairo. For the exploitation of the fine-grained limestone, which was used for the production of model stone vessels in the Old Kingdom, were above all visited the quarries of Tura. Local deposits were famous for extra quality white limestone, which was also used for finer architectural features or casing of the pyramid walls, statues and other small products. Its position close to the main building sites by Memphis was also one of the reasons for its preference. Apart from the fine-grained white Tura stone, most of the common limestone used for building activity was acquired in quarries situated close to the construction area in the desert (Klemm – Klemm 2010). Stone vessels were, again, a kind of "by-product" of the exploitation activity, which focused mainly on the large blocks used for architectural construction elements. All the vessels studied by author in hand (those from Abusir excavations) were made of white, fine-grained limestone that is typical also for the production of statuary, sarcophagi or false door.

In case of limestone, it is not easy to distinguish between different kinds of stone by a simple macroscopic analysis. However, the X-ray fluorescence analysis performed on six vessels from the set of Neferinpu (AS 37) from Abusir led to a conclusion that four of them have a different geochemical provenance than two others (Bárta *et al.* 2014: 189–190). It seems that as with travertine assemblages, the workshops were probably supplied with various blocks of rock from different resource areas. Generally, the production of small vessels might have been performed on the basis of waste material left after cutting of larger objects, both in case of limestone and travertine. However, the small cubes might have also been cut straight from the large blocks delivered to the stone vessel workshops by an expedition or by a redistribution office.

The first appearance of limestone stone vessels in the studied period, *i.e.* the reign of Khufu onwards, is connected with canopic jars. They became part of burial equipment in the Fourth Dynasty and were, except for a limited number of pieces, always made of limestone. Model vessels made of limestone started to appear in the burial chambers in the middle of the Fifth Dynasty, by the time of Niuserre's reign (see the discussion on chronology in Chapter 5.4). At that time, they were mostly limited for the middle-class officials. For instance, at Abusir south, most of the private tombs are equipped with limestone pieces only – Neferinpu AS 37, anonymous tombs AS 47 and AS 67, Nefer (AS 68d). There are also many Saqqara tombs containing merely limestone vessels, dating to the Fifth and Sixth Dynasties – Perneb, Neferseshemre, Mastaba A. At Giza, they were collected in the tombs of Iby (G 7710 B), G 7132, G 7753 A, G 8402, S 1680, Wetetjhetep (G 8980), G 4530 A, (G 7777 H), Ankhhaf (G 8640), or Washptah (G 8860). At Abu Rawash, limestone model pieces were discovered in tombs F 5 and F 21.

An interesting feature of some assemblages of limestone model vessels is their yellow colour, which was painted on their surface. It was well documented in case of Nefer (AS 68d, shaft 1), in shaft 2 of AS 67 at Abusir, in the tombs of Neferseshemre, Kagemni, Mastaba A and Mastaba E at North Saqqara, Meretites II at South Saqqara, Iby (G 7710 B), G 7132 A and G 8640 (shaft 626) at Giza. Those that could have been studied by the author of the present thesis in person were made of white fine-grained limestone. The colour was also not hiding any patches after repairs, and therefore, there was no practical reason for the yellow paint on their surface. The incentive for such an extra treatment thus dwelled in the sphere of imagination. All these yellow pieces were meant as imitations of more valuable travertine vessels. Besides yellow colour, red was also used, at least once. The shouldered jar from shaft

2 in G 1501 was coloured dark red. It may be used to refer either to pottery or copper, both having reddish colour.



Fig. 17 Yellow painted limestone model cylindrical jar from AC 68d (L. Jirásková, archive of the Czech Institute of Egyptology)

Interestingly, some of the model stone assemblages were a combination of travertine and yellow painted pieces. Such a mixture was found in the tomb of Kagemni, Mereruka, Nikauisesi and Mastaba E at Saqqara North, Meretites at Saqqara South, G 5232 A at Giza, and mastaba F 21 at Abu Rawash.<sup>54</sup> In these assemblages, mostly the tall jars are made of travertine, whereas the bowls from limestone. The opposite is true for the assemblage coming from the tomb of Nedjetempet at Saqqara. Three assemblages from Giza – G 5170, D 208 and shaft 890 A – are all made travertine, except for the ewer and basin, which are in these three examples made of limestone.

There are also a few assemblages of model vessels that stand somewhere on the border between stone and pottery. These were made of some kind of ground soft stone, such as gypsum or limestone. There are just two assemblages found by the author of the thesis so far that were made of this material. One was collected in the mortuary temple of Queen Khentkaus II at Abusir (find no. 353/A/78), the other was discovered in room 1 of exterior chapel of the tomb of Ankhhaf (G 7510), below his bust.

At least the assemblage of Khentkaus II., which could have been studied in hand by the author of the thesis, was made in a particular way. The muddy substance was evidently pressed into a mould in the shape of a bowl, and then dried. It is not clear why the craftsmen

<sup>&</sup>lt;sup>54</sup> These are the well-preserved assemblages with a large number of vessels. There are more examples of mixture of limestone and travertine, but the number of vessels is too low to find out any pattern of distribution (see the catalogues).

chose this material and manufacture. It must have been quite fragile, especially when using in the regular cult activity the mortuary temple of the queen. Similar to these are only pottery pieces, which are however made either in hand or on a potters' wheel, but never in a mould.

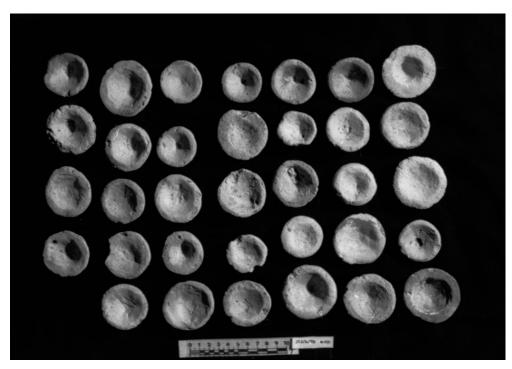


Fig. 18 The set of bowls with excav. no. 353/A/78 from the mortuary temple of Khentkaus II. (M. Zemina, archive of the Czech Institute of Egyptology)

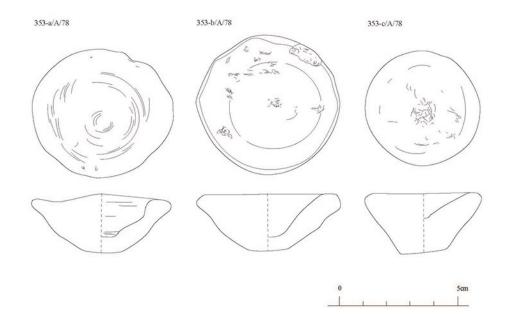


Fig. 19 Profiles of several bowls from the assemblage 353/A/78 (L. Jirásková, archive of the Czech Institute of Egyptology)

### 4.1.4. Rock crystal

It is a transparent form of quartz, often found in the Western Desert between the Faiyum and Bahariya oasis, as well as in the Sinai Peninsula (Nicholson – Shaw 2000: 52; Aston 1994: 64–65). Its clarity was probably the main reason, why it quite fast substituted the more milky quartz or travertine. Rock crystal is not only translucent, but also transparent. The only disadvantage is its hardness, which reaches no. 7 on Mohs scale.

Rock crystal was not widely used, and its exploitation must have been limited. It became popular mainly in the Sixth Dynasty, when it became the most popular material for the production of "white" vessels for the Opening of the mouth ritual sets (see the Chapter 8 and the catalogue for more details on occurrences). These were either simple flasks, or beakers. The early examples are sometimes drilled inside, the late ones are often solid pieces with a mere "dot" in the orifice part.



Fig. 20 A rock-crystal beaker 81/HH/2000 from the burial chamber of Qar Junior (AS 17) at Abusir (M. Zemina, archive of the Czech Institute of Egyptology)

#### 4.1.5. Basalt

Basalt is a volcanic rock that is to be found at several places in Egypt. The best known are the sources north of the Faiyum, which run westwards to Abu Rawash. The quarry activities in this area were dated back from the late Neolithic to the Old Kingdom (Bloxam – Storemyr 2002; Storemyr – Heldal – Bloxam *et al.* 2003; Klemm – Klemm 2008: 315–321). The large-scale exploitation was connected with the Old Kingdom architecture, especially the Fourth

and Fifth Dynasty royal mortuary complexes, which is evidenced by pottery found at the quarries on one side, and basalt features, such as floors of the mortuary temples on the other.

Basalt stone vessels were very popular in the Predynastic period (Mallory 2000). Later on they almost disappeared, and emerged again in higher numbers in the Opening of the mouth ritual sets by the middle of the Fifth Dynasty. The use was the same as in case of rock crystal – flasks and beakers for the "black" part of the set.



Fig. 21 Basalt vase 18/Q/94 from the tomb of Nakhtsare at Abusir (M. Zemina, archive of the Czech Institute of Egyptology)

# 4.1.6. Obsidian

Obsidian is a volcanic glass. Its sources lie in Arabian Peninsula and Eritrea, and it seems that most of Egyptian artefacts were made of the Eritrean stone (Nicholson – Shaw 2000: 46–47). Contrary to the above-mentioned basalt, it was a more luxurious kind of dark stone used for the Opening of the Mouth ritual sets. In this respect, it is more often to be found in the contexts of the Sixth Dynasty. Both materials are easily distinguishable. Basalt is mostly matte, whereas obsidian pieces are shiny and smooth.



Fig. 22 Obsidian vase 113/HH/2001 from the burial chamber of Senedjemib (AS 18) at Abusir (K. Voděra, archive of the Czech Institute of Egyptology)

### 4.2. Production process

## 4.2.1. Location of workshops

There is not much information available on the process of stone quarrying, transport, and subsequent working of stones used for the stone vessel production. Especially, the location of workshops for the manufacture of model stone vessels thus remains a matter of future research. There are only hints that enable at least some interpretation. One of them is the situation in quarries, and traces left there at the spot after the extraction of stone blocks and their working. For instance, at Hatnub quarries only several worked fragments and piles of debris are to be found surviving after the ancient quarrying activity that probably involved vessel-making in particular. Occasional unfinished vessels are also to be found, but no tools and other equipment referring to the on-site production have been noticed, and also dating of these remains is a matter of question (Shaw 2010: 26).

A different evidence comes from Sheikh Said, an industrial site near Deir el-Bersha. On a hill covered by stone drills and its vicinity, a small settlement and stone workers' workshop was discovered (Willems – Vereecken - Kuijper *et al.* 2009). The site lies on the way to Hatnub, and therefore, the local production was probably connected with this quarry site. The earliest pottery collected on the site was dated to the Old Kingdom and is represented by bread moulds and Meidum bowls. Concerning the tools, about 1000 artefacts were gathered there, many having clear marks after usage in the process of drilling. Also, numerous fragments of travertine vessels were noticed all around. Due to such an amount of material, the site was interpreted as a stone vessel workshop. Interestingly, most of the drills were made of probably local silicified limestone. Besides the most common local material used for the tools, also about 200 crescent-shaped flint borers, and 30 rounded black granite artefacts were collected. The size of crescentshaped flint borers at Sheikh Said varies between  $2.0 \times 2.0 \times 0.9$  cm and  $7.8 \times 4.1 \times 2.0$  cm. A peculiar feature of the site is an almost complete absence of cylinder cores (only 2 pieces were found), the usual leftover of the shaft drilling. This may be due to their secondary use in the production of either model vessels or a different kind of small size product, such as cylinder seals, *etc.* It means that if the workshop had served for the production of model vessels, there would not have been much material left.

During archaeological excavations at the site, several levels were distinguished. The oldest occupation is dated to the early Old Kingdom. Apart from the stone vessel workshop (chips of worked travertine), there is also evidence of the food production area represented mainly by the bread moulds. Clay sealings with the imprints of ropes are the only evidence of storage jars. One of them, unfortunately only partly preserved, should have been attributed either to Snofru or Khufu. Another one bears the Horus name of Khufu.

A similar situation was discovered at the quarry at Umm es-Sawan in Faiyum when excavated by Gertrude Caton-Thompson (Caton-Thompson – Gardner 1934; Heldal – Bloxam – Degryse *et al.* 2009). She also found large numbers of crescent-shaped borers that should have been used for the production of gypsum stone vessels already at the quarry site. However, except for the number of tools, there was, again, not much waste after the production itself left at the site. The dating of the quarries corresponds to those near Deir el-Bersha, which is the early Old Kingdom, and not the main period of the mass production of model stone vessels.

Also, the Old Kingdom workshop for stone vessel production discovered at Elephantine gives evidence for activity at the same time, the early Old Kingdom, Third to early Fourth Dynasty (Kaiser – Arnold – Bommas *et al.* 1999: 77–80).

Another well excavated Old Kingdom quarry lies at Gebel el-Asr. It is a site of mass exploitation of hornblende gneiss, often used in statuary and stone vessel production of the Old Kingdom (Heldal – Storemyr – Bloxam *et al.* 2016). The area of the site was covered by gneiss boulders that still bore tool marks. The shape of the boulders and tool marks point to the pre-working of stone pieces at the site. The pounders and hand axes used for on-site working were made of local dacite and gneiss naturally appearing in the appropriate shapes. The working process at the site involved basic preparation of the pieces, *i.e.* spherical to disk-

shaped blanks in case of stone vessels. These could have been easily transported to the workshop probably situated by the royal residence at Memphis.

Although the evidence on workshops at quarry sites is so far limited, it gives no clear support to believe that the model stone vessels were produced at the site. And there are more reasons why one shall search for the manufacture areas in the centre, close to the royal residence at Memphis, rather than in the distant provinces.

It would be logical to expect at least some basic local "preparation" of stone before its shipment to Memphis. However, in contrast to such a presumption seems to be the analyses performed on the assemblage of limestone model vessels of Neferinpu and Nefer at Abusir. All the jars of the same type are shaped in one way, and therefore, it is probable that they were made at least at one spot by one craftsman. How striking are then the results of the X-ray fluorescence analyses performed on a few pieces from both sets, which point to the various sources of stone for their production (Neferinpu in Bárta *et al.* 2014: 189–190; in case of Nefer, personal communication with M. Bárta). In this respect, one would rather imagine a central workshop(s) situated in the Memphite area, with different blocks of stone coming from several different quarries stored there to be used for the stone vessel production.

There is also another reason for the location of royal workshops for the production of model stone vessels in the Memphite area, and that is the limited reach of this particular tradition connected with burial habits. No assemblages of model stone vessels have been discovered in the provinces, yet. If there were local workshops in the provinces, one would expect the local people, at least to be inspired. Although the production was probably a royal monopole, and the king was the one who distributed the vessels, which represented a kind of social markers, a kind of influence would have been perceived in the provinces. It does not necessarily mean that there would have been complete sets found, but at least single or several models. So far, no single piece of model stone vessel was discovered in a provincial cemetery.

In fact, such a kind of inspiration is traceable only from the end of the Fifth Dynasty onwards, and rather seems to be connected with the more intensive involvement of the provincial officials in the royal administration, and also growing interest and presence of the king in the provinces. From this time on, it is possible to find in the provincial centres small or middle size functional cosmetic jars, which were evidently inspired by the shapes of the model vessels produced in Memphis. The main difference is that the provincial ones were completely drilled inside and appeared in limited numbers.

#### 4.2.2. Techniques of production and tool marks

The process of production of ancient Egyptian stone vessels was in detail studied by Denys A. Stocks (2003: 139–168). Another author dealing with the same subject, Andrew Bevan, devoted his publication to the general discussion on the production of stone vessels in the Mediterranean (Bevan 2007). They were both concerned mainly with the large size vessels and did not pay much attention to the model vessels with their specifics, such as material and size. However, the general description of the whole production process remains the same for all the sizes of stone vessels (*e.g.* Bevan 2007: 52, Fig. 4.11). The first step surely involved the modelling of the vessel from outside, often with all details, and then the craftsmen proceeded to the shaping of the interior. In case of large size vessels, it can be noticed on the reliefs, where all the vessels are being drilled only when they already have their final shape (*e.g.* Arnold 1999: Fig. 73).<sup>55</sup>

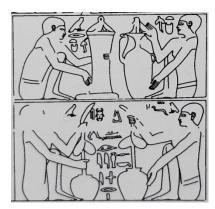


Fig. 23 Production of stone vessels as presented in the tomb of Ankhmahor. The upper register shows the first step – outer treatment, the second register the second step – drilling of the vessels inside (taken from Kanawati – Hassan 1997: Pl. 40)

Almost all the model vessels that could have been studied in person by the author of the present thesis bear traces left after production. The tools were not determined only on the basis of the tool marks, but a series of simple test boring and smoothing was also undertaken by the author of the thesis to find out the real possibilities of working of the two basic kinds of stone used for their production, *i.e.* limestone and travertine. For the boring part, she used sharp flint chips that could be easily obtained from the flint cobbles that lie on the desert surface. Subsequent smoothing was performed by a pebble, which was likewise collected

<sup>&</sup>lt;sup>55</sup> More examples can be found in the online iconographical database of the Oxford Expedition to Egypt: https://archaeologydataservice.ac.uk/archives/view/oee\_ahrc\_2006/queryThemes.cfm?section=details&theme=1 0.11&CFID=cbee402a-4f5f-4921-a101-b02e97ce576b&CFTOKEN=0

from the desert surface. The harder stones were not tested for two reasons. It is quite difficult to obtain a piece of those materials for the test, and they are too hard to be processed by hand flint borers and would have required special tools (copper drill, above all) and treatment. Since the vessels belonging to the Opening of the mouth ritual were almost all made of harder kinds of stones, their production must have followed the steps of the large size vessel manufacture with all the special tools involving especially the hard stone drills.



Fig. 24 Test boring made in a piece of limestone by L. Jirásková using a sharp flint chip for drilling and a pebble for smoothing (L. Jirásková, archive of the Czech Institute of Egyptlogy)

From the observations of the tool marks, it is clear that there was not a single way of production. Most of the model stone vessels were made of limestone and travertine, and since these two materials have slightly different hardness, they were treated differently. Limestone was softer and its working was much easier. All the vessels made of limestone were processed from small blocks of stone cut by saws. The tool marks left on the bases of the vessels, and sometimes on the rims point to the use of saws. When the area remained unsmoothed, there are fine regular line grooves visible on the plane.



Fig 25 Fine regular grooves left after the use of a saw on the base of the shouldered jar 19\_27/AS37/2007 (L. Jirásková, archive of the Czech Institute of Egyptology)

Many of the vessels still have visible planes on the surface of their walls. These were left after the first stage or working of the stone. The rough shape of the vessel was probably cut by copper adzes. In most cases, the edges of the planes were later smoothed, and the walls rounded, but some vessels still bear them. These show that the shape of the future vessel was well defined already by the time of rough cutting. The next stage probably involved small copper chisels and sharp chips of flint.<sup>56</sup> These implements served to model the grooves and other – sometimes only decorative – features of the vessel. The surviving tool marks are often still visible, especially in the depressions, where the surface could not have been smoothed properly. The final treatment of the outer surface involved smoothing by a pebble that eliminated the sharp edges.





Fig. 26 Several vessels from the burial chamber of Neferinpu (AS 37) at Abusir. Most of them still have visible the cutting planes (L. Jirásková, archive of the Czech Institute of Egyptology)

The depressions of bowls and inner cavities of tall jars made of limestone could be crafted in several ways. In case of bowls, there is evidence of crescent-shaped borers that were twisted by hand. It is interesting to notice that these tools could have left two different tool marks. One of them are circular grooves, the other triangular ones. If the bowl was not smoothed

<sup>&</sup>lt;sup>56</sup> The flint tools of the Early dynastic period and the Old Kingdom were recently catalogued by M. Kobusiewicz. Concerning the tools suitable for the production of stone vessels, he discussed the crescent-shaped and other borers, as well as microperforators (Kobusiewicz 2015: 20–22).

properly inside, these lines can be well recorded. They are mostly centrally oriented towards the bottom, in some instances, the drilling was done irregularly and had its centre not at the bottom, but in the wall of the bowl. The author's test boring demonstrated that the circular grooves are left after firmly hold, mostly a narrow piece of a crescent-shaped borer that stays in position, whereas the triangular tool marks are left after a wider borer that twists irregularly out of its axis. Many of the limestone bowls bear triangular tool marks, which point to rather fast process of their production. These tool marks could have been later smoothed by a pebble. However, the evidence shows that the smoothing process was often neglected. All these details of various approaches to the vessels and their final treatment support the idea of larger workshops employing more craftsmen with different skills and approach to the material working on a set together.

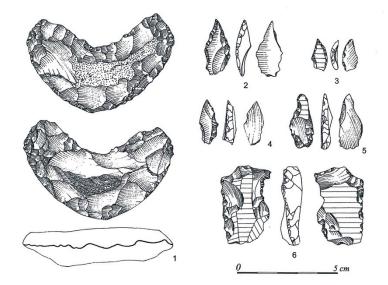


Fig. 27 Flint crescent shaped borers and perforators, which could be used for the drilling part of production process of model stone vessels (taken from Kobusiewicz 2015, 81, Fig. 48)



Fig. 28 Several examples of drillings traces inside model bowls. Both come from the tomb AS 67, the one on the left is from the southern shaft, the one on the right from the northern shaft (L. Jirásková, archive of the Czech Institute of Egyptology)

Another variant of the treatment of the depression of a limestone bowl involved the use of copper chisel instead of the crescent-shaped borer. A well-documented example is the assemblage of Neferinpu (Jirásková in Bárta *et al.* 2014: 147), where a chisel of approximate width of 0.6–0.8 cm was used to hollow out the depressions of the roughly shaped bowls. Such a use of chisels for the working of interiors of vessels is more often documented for the production of the Syria-Palestine territory (Bevan 2007: 55–56; Sparks 2007: 194). However, the study of the tool marks on various Old Kingdom stone vessels that could have been done in hand by the author of the present thesis showed that the chisels were used much more than it was expected and documented in the past (Jirásková 2019a).



Fig. 29 A bowl from the assemblage 19/AS37/2007 with unsmoothed chisel marks in its interior (L. Jirásková, archive of the Czech Institute of Egyptology)

The cavities of tall jars made of limestone bear two kinds of tool marks, again. Most of them were probably simply bored by a very narrow flint chip. There are regular circular groves left inside after such a process. The tubular drill was not necessary, since limestone is soft enough. There are also no remains of cylindrical cores left inside the cavities, such as in case of the travertine pieces (see below). The only assemblage that may point to the use of tubular drill comes from the tomb of Nefer at Abusir. The depressions inside the jars definitely involved a copper chisel of the width of approximately 0.6–1.0 cm (Jirásková 2019a). It is a

matter of question, if the interior of these jars was simply cut out using the chisel and probably a kind of pick for the shaping of the bottom part, or if the chisel served as a tool for the extraction of the cylindrical core left there after drilling. The first possibility seems to be more plausible, since the chisel cuts are in various directions in a single jar, and they also seem to be used for modelling the cavity without any subsequent smoothing. If the chisel had been used merely to get out the core, one cut in one direction would have been enough.



Fig. 30 An example of interior (excav. no. 16\_9/AS67/2012), which was probably cut by shaft drill and smoothed inside (L. Jirásková, archive of the Czech Institute of Egyptology)



Fig. 31 The interior of jar 383\_13/AS68/2014 was modelled with a copper chisel (L. Jirásková, archive of the Czech Institute of Egyptology)

Travertine is slightly harder, and since it was more precious than limestone, there were not as many tool marks left as in case of limestone pieces. The treatment of the outer surface was similar as in case of limestone, *i.e.* small blocks cut by saws, rough shaping with adzes

followed by detailed modelling and smoothing. The depressions of bowls bear the same circular or triangular grooves as those of limestone bowls, and therefore, they must have been made by the same tools, *i.e.* crescent-shaped borers. D. Stocks and I. Shaw deny the possibility of the use of flint or chert borers in case of drilling travertine (Stocks 2003: 139; Shaw 2010: 26–27). However, the tool marks point to the same instrument used for both materials, limestone and travertine. Also, the test drilling of travertine performed by the author of the thesis proved that the small size model vessels could have been worked using simple flint borer, although the work was not as fast as with softer limestone. There is no example of a chisel work in the depressions of model bowls among travertine assemblages.

The cavities of tall jars were made differently. The tool marks clearly point to the use of small tubular drill. There are at least two examples, where the bottom parts of the drilling cores were left unprocessed inside the cavity. These are represented by a beaker (excav. no. 239b/AC30/2014) coming from the tomb AC 30 at Abusir, and a model beer jar (excav. no. 15-12-35) from the tomb G 4510 A at Giza. Also, other pieces with exceptionally deep cavities surely involved tube borer for drilling (*e.g.* 25-11-116 from G 6010 A, 25-12-29 and 25-12-30 from G 6020). Most of the cavities are, however, smoothed inside by a narrow pebble, and the only visible tool marks are the horizontal circular lines.

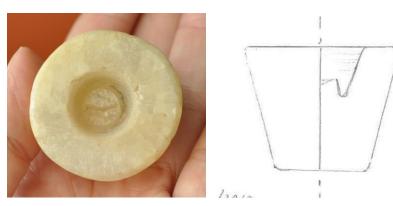


Fig. 32 Beaker 239b/AC30/2014 was drilled inside by a shaft drill. Its core was never completely extracted, and the interior of the vessel remained unsmoothed (photo L. Jirásková, drawing J. Malátková, archive of the Czech Institute of Egyptology)

One might wonder, if some of these small size vessels could have been made from the waste material of the large size jars, *i.e.* presumably the drilling cores. It is possible, for there are not many cores left after the Old Kingdom production at the sites (*e.g.* Deir el-Bersha production site in Willems – Vereecken – Kuijper *et al.* 2009). Indeed, the general lack of raw cores in Egypt points to their secondary usage, but there is no clear evidence that would indicate their

subsequent processing in the production of model stone vessels. None of the studied model vessels bore outside any horizontal circular drilling marks. Obviously, these might have been smoothed in the process of outer shaping and smoothing, even in case of cylindrical jars that would be the most suitable shape for the secondary usage of the cylindrical drilling cores.

The main corpus of model stone vessels is made from limestone and travertine. The Opening of the Mouth ritual sets involved much harder kinds of stone. These could not have been worked by flint tools, but needed lots of copper and hard stone tools, such as diorite, chert, sandstone and crystalline limestone (Stocks 2003: 143) in the form of rubbers. The basic shaping was probably performed by copper saws. If the stone was too hard, sand was added to help. The same abrasive was used with shaft drills, which created inner cavities in the jars and beakers. The shaping of the outer walls and basic smoothing was probably done with smaller cobbles of quartzite or dolerite. The final polishing probably involved smooth pebbles, again. The specific outer features were according to Stocks completed with "flint chisels, punches and scrapers" (Stocks 2003: 141).



Fig. 33 Basalt and rock-crystal vessels belonging to the Opening of the Mouth ritual set from the tomb G 2381 A (taken from https://collections.mfa.org/)

# 5. Typology and chronology

#### 5.1. Typology of model stone vessels

There are several approaches to the description of vessels and their typological classification. The author of the work follows the rules of class-type typology (Hill – Evans 1972). The whole group of model vessels is sometimes called a class, but in such a specific case the term "class" cannot be applied without a problem. Although the model vessels are different from the large size vessels regarding their size, they also represent containers, *i.e.* functional vessels. In this respect, the group of model vessels should be treated in the same way as the large size pieces. Therefore, the whole group of models is divided into classes according to the function of each of them, and then various types are observed and studied. Such a description enables not only a simple definition of the group and its purpose in the burial chamber, but it also leads to a detailed chronological study of the assemblages and development of various forms in the Old Kingdom.

Concerning the shape description of classes and types, the system of B. Aston was adopted (Aston 1994: Appendix C), but partly simplified, due to the reasons described below. Its main benefit is its simplicity, which enables its application on all vessels made of any kind of material (*i.e.* stone, pottery, copper, glass, *etc.*).

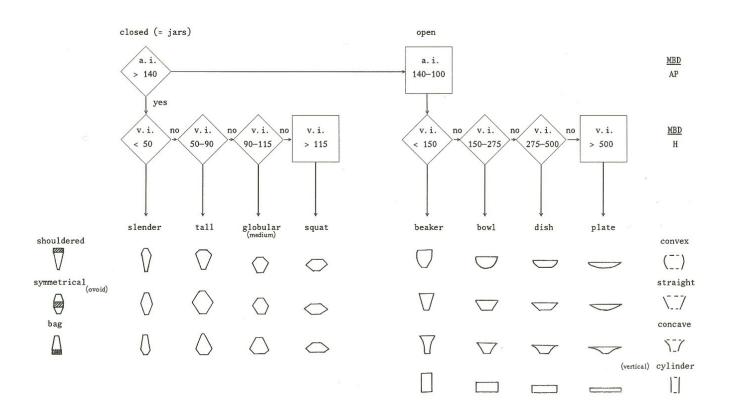


Fig. 34 Shape classification and description according to B. Aston (taken from Aston 1994: 181, Fig. 22)

The terminology of Aston is based on the proportions of vessels considering above all their height, maximum body diameter and aperture diameter. In this respect, she recognizes two groups of vessels, the open and closed ones. When applied on the miniature and model stone vessels, the vessels belonging to the assemblages of the Old Kingdom tombs can be also divided into open and closed forms. The author of this thesis, however, decided to change this classification. She works with the two groups, but they are called "basic open forms" and "basic closed forms". These two are followed by another group, which the author of this study calls "special forms". The term special is used on purpose, since they are not regularly found within the assemblages of the Old Kingdom model vessels. The group includes tables, incense burners, basins and ewers and sets of ewers with basins (crafted as a single piece). If they are classified according to Aston's table, the tables, basins and incense burners would be open forms and ewers, squat jars and basins combined with ewers as one piece would be closed forms. The reason for the specific division used in this thesis is practical. When the assemblages are compared, they all contain a heap of open forms, such as beakers, bowls, plates and basins. The other part consists of tall jars being represented by one-handled jugs, cylindrical jars, shouldered jars, jars with net imitation and jars with modelled wavy rim. Besides these regularly appearing, there are sometimes included also the "special forms" tables, basins, ewers, sets of ewers with basins in one piece, incense burners or squat jars. The classes included in the third group represent rather rarer vessels that do not occur regularly, and therefore, they are treated separately.

These three groups then gather individual classes of vessels of various types, which changed in some features during the Old Kingdom, and therefore reflected the particular part of the period. Each of the classes will be studied separately with emphasis on practical purpose, typical characteristics, and different types.

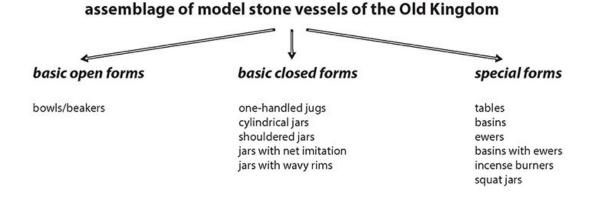


Fig. 35 The first step in division of forms of the model stone vessels. The open and closed forms are the two basic groups, which are always included, whereas the special forms appear randomly (L. Jirásková)

## 5.1.1. Open forms

There are usually tens of pieces of open forms within the Old Kingdom sets of model stone vessels. They represent the essential, and far most numerous group. According to Aston's classification, they shall be further sorted with respect to their height and width into classes of beakers, bowls, dishes and plates. Although some authors carefully follow such a classification when describing the Old Kingdom model bowls, it does not play any important role in the meaning and interpretation of the assemblages of the Old Kingdom model stone vessels. In fact, their size and appearance were probably only the result of various sizes and shapes of the pieces of stone cut for the manufacture of model bowls and the system of work of the craftsmen. If the assemblages are compared, the number of beakers, bowls, dishes and plates in individual assemblages does not correspond at all and they are often difficult to be distinguished from each other. Only the larger beakers, intended to be used with an ewer as a basin shall be described separately, or the beakers that once have belonged to the Opening of the Mouth ritual sets. In this respect, all the basic open forms will be called bowls/beakers in this thesis.

Not only the number of individual beakers, bowls, dishes and plates in individual assemblages differ, but also the quantity of the whole group within an assemblage. It is possible to demonstrate it on several examples coming from the intact burial chambers:

tomb	owner	site	number of bowls
AS 37	Neferinpu	Abusir	59 pieces
G 7440 Z	unknown	Giza	65 pieces
G 8887	unknown	Giza	66 pieces
D 208, shaft 9	Neferihy	Giza	69 pieces
G 4733 E	unknown	Giza	87 pieces

The open forms of model stone vessels always have simple rims, either unmodelled flat, or modelled rounded. However, various shapes of the rims shall be perceived as random treatment of craftsmen, rather than an aim characterising either a period or a particular purpose of the vessel. For instance, in case of the assemblage 16/AS67/2012 from shaft 1 of the tomb AS 67 at Abusir South all the bowls have simple rounded rims. Contrary, the assemblage of Neferinpu (AS 37) contains either roughly shaped bowls with sharp edges and no modelling at all, but also well-crafted pieces with smoothed interior and modelled rounded rims (Jirásková in Bárta *et al.* 2014, 145–162).

#### 5.1.1.1. Bowls/beakers

The class of model bowls covers a wide span of normally typologically distinctive classes, such as beakers, bowls, plates and dishes. In practical thinking, they were all in model forms supposed to serve as containers of various kinds of solid nourishment, such as bread, meat, fruits, *etc.* In this respect, it is possible to search at least for particular kinds of food in the offering lists, where a determinative of a bowl follows the particular item. In case of Barta's list A of the Fifth Dynasty, there are 69 items that might have been put in bowls (Barta 1963: 47–50). The same number of bowls was collected only in the tomb D 208, shaft 9 at Giza. However, the number of bowls is never the same in complete and almost complete sets. It seems that it was not made according to a standard, which would define how many of them should be made, but it was supposed to be a heap of bowls serving as model containers of food. On the other hand, Barta's standard offering list is a modern construct, which included the most common items. Since the particular contents of offering lists and the number of items differ in various tombs, one may also think either of individual request or random number of model stone vessels made during production process.

Not only the number changes, but there are major differences in craftsmanship. The better crafted the tall jars in an assemblage were, the more elaborate were also the bowls. For

instance, the limestone bowls/beakers of Neferinpu (AS 37) were very roughly made mostly without any smoothing of their surface, having various shapes, depths, *etc.* The travertine set coming from shaft 3 of AS 104 was earlier and much better crafted. There were two clear groups. One was represented by 29 small beakers and the other by 39 bowls with rounded base. The two shafts of AS 67 were hiding two different sets. The one coming from the burial chamber of the tomb owner contained perfectly made limestone bowls, all resembling halves of spheres. The northern burial chamber was equipped with smoothed but rather roughly shaped limestone pieces, all having flat uneven bases.

Also, the maximum rim diameter was never a case of standardisation. A single set often contained various sizes of bowls/beakers, which was once again probably the result of various sizes of the original pieces of stone cut by saw as a source for their production. However, the usual width was somewhere around 5 cm.

There is also one important chronological feature. The bowls/beakers of the Fourth Dynasty are very fine pieces, those from the Fifth Dynasty can be both better or worse shaped and crafted, depending on the social position of their owner. The bowls/beakers coming from the Sixth Dynasty contexts, particularly those from the latter part of the Sixth Dynasty have in common a simple rough shape, and above all the shallow and narrow drilling, such as in case of shafts A and J in the tomb of Inty (AS 22) at Abusir. They can be really called model bowls/beakers, since their drilled parts could hardly hold any – even small – content.

AS 67, N shaft	AS 67, S shaft	AS 37	AS 22
			4. 
	<b>B</b>		

Fig. 36 Some major types of bowls/beakers (drawings L. Jirásková (AS 67), H. Benešovská (AS 37),P. Vlčková (AS 22), photos L. Jirásková (AS 67, AS 37), K. Voděra (AS 22), archive of the Czech Institute of Egyptology)

There are only a few bowls/beakers bearing inscriptions. These are exceptional pieces, which appeared only in three contexts. One of them comes from the tomb of Kai (G 8720) at Giza. Their findspot is not known, Hassan just noted "we found them when clearing the tomb" (Hassan 1941: 31). All three pieces bear the same inscription, which was incised in the inner wall. It reads "the king's son Kai" ( $s_3 [n_j]swt K_{3i}$ ). Similar five bowls were found in the temple of Khamerernebty II – the possible mother of Kai – at Giza (Reisner 1931: 55). The last example is more peculiar and comes from shaft A of G 5480. One cylindrical jar and six bowls made of travertine, which were deposited in the burial chamber were inscribed on their bases with difficult-to-read signs that might have indicated their contents (Manuelian 2010: 247–248, Figs. 33–34).

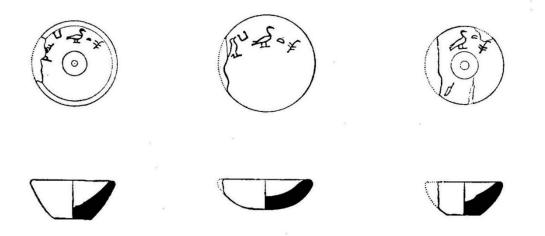


Fig. 37 The inscribed bowls from G 8720 (taken from Hassan 1941: Fig. 30)

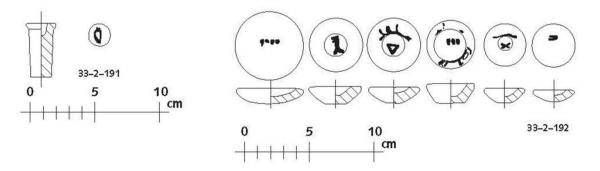


Fig. 38 The inscribed vessels from G 5480 (taken from Manuelian 2010: Fig. 34)

#### 5.1.2. Closed forms

Most of the assemblages of model stone vessels contain about 80 pieces of vessels, but only up to 20 are usually represented by closed forms. These are tall jars of several classes that were once supposed to hold liquid substances necessary either for nourishment of the deceased or performance of rituals.

One of the problems of typology of the model stone jars dwells in their archaic aspect. The first assemblages were defined by the beginning of the Fourth Dynasty, and they lasted in more or less the same number and scale until the end of the Sixth Dynasty. Some of the model stone jars were mere copies of the large size stone vessels, such as cylindrical jars, shouldered jars, or one-handled jugs. These classes did not change much during these hundreds of years, either in the large or small form. Others, such as beer jars or wine jars, were designed in the same way as the large size pottery vessels of the time of their first production, *i.e.* the beginning of the Fourth Dynasty. However, the pottery jars underwent major morphological changes during the Old Kingdom. Although the craftsmen responsible for the production of model stone vessels were aware of the function of the vessel, they soon lost the original specimen in the large size pottery vessels that changed during time (for instance, the development of beer jars in the Old Kingdom was presented by K. Arias Kytnarová, 2018). Due to this circumstance, they started to stylise the form of the model vessels, and therefore in some cases they changed substantially the original concept (*e.g.* Arias Kytnarová – Jirásková 2015).

The study of model stone vessels presented in this thesis started with uncovering new assemblages during excavations at Abusir South. The subsequent publication of these finds required deeper research, and the author of this thesis started collecting documentation on the surviving assemblages from the earlier archaeological excavations. Soon, she felt need for a definition of the assemblage as a whole to understand why it became a common part of the burial equipment. Thoughts about its purpose let her to recognition of the functional aspects of particular jars that gave foundations to the classification presented in this thesis. The typology was then defined as involving only several classes represented by a larger scale of types. The model tall jars were sorted in five classes, which changed typologically through the time. Two classes represented by one-handled jugs and cylindrical jars belonged to the ritual part of equipment, whereas the other three should have held the liquid part of sustenance.

# 5.1.2.1. One-handled jugs

The jugs can be either slender or rather wide shouldered jars with a handle. The handle is mostly solid, unpierced, but real loop examples also do appear (G 4733 E, G 7710 B, AS 68d, Perneb, G 5232 A). None of the jugs have a foot. Their body always tapers towards a flat base. The rim is usually either angled or rounded lip rim, sometimes with flat orifice. Their height ranges between 4.0 and 10.8 cm.

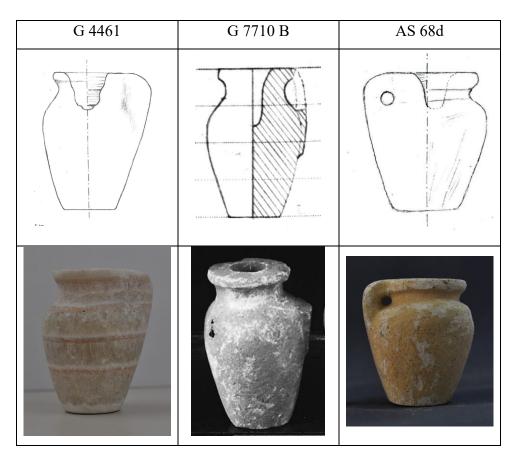
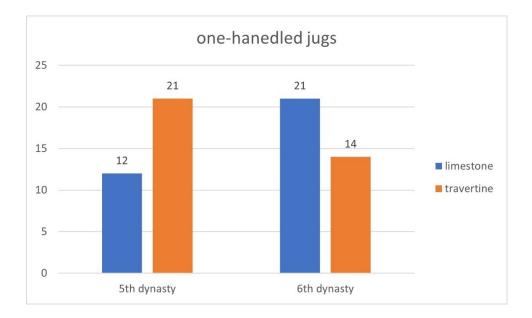


Fig. 39 Some major types of one-handled jugs (G 4461 and AS 68d – drawings and photos L. Jirásková, archive of the Czech Institute of Egyptology, G 7710 B – taken from http://giza.fas.harvard.edu)

Most of the collected jugs were made of travertine (35), limestone was less common (33). 33 pieces come from the Fifth Dynasty tombs, 35 from the Sixth Dynasty tombs. However, the Sixth Dynasty jugs were collected in 12 contexts, compared to 32 contexts dating to the Fifth Dynasty. For instance, 18 pieces were collected merely in the burial chamber of Queen Meretites II at South Saqqara.



In the iconography, jugs were often used to store oil or wine (*e.g.* Hassan 1943: 140, Fig. 81; Moussa – Altenmüller 1977: 106–109, Abb. 14). In correspondence with the other model jars, it must have represented a container for one of the seven sacred oils, presumably the *nhnm* oil, which was written using the sign *hnm* (one-handled jug; Balcz 1934: 90–93). A clear example are the Seven sacred oil tablets. Sometimes they contain just names of oils, but if there are determinatives added, they mostly show six cylindrical jars and a jug (Tawfik 1978; Málek 1979; Vachala 1981; 1982; 2004; Bolshakov 1992; Rochholz 1996; Koura 1999; Abdel-Raziq 2016).



Fig. 40 Seven sacred oil tablet from the tomb G 7671 A at Giza. There are six cylindrical jars and a jug as determinatives for the oils (taken from http://giza.fas.harvard.edu)

There is always a single piece in an assemblage for the whole period of Fifth Dynasty. From the Sixth Dynasty on up to three jugs are to be found in an assemblage, such as in case of Iput or Neferseshemre at the Teti cemetery at Saqqara. It may be no coincidence that even the Seven sacred oil tablets dating to the Sixth Dynasty can have two or three jug determinatives instead of just one (*e.g.* Abdel-Raziq 2016: 132, Figs. 3–4), or there are also other classes of jars included, such as two handled shouldered jars (*e.g.* Bárta 2009: 269–270, Fig. 6.3.161).



Fig 41 Seven sacred oil tablet from the tomb of Senedjemib, son of vizier Qar (AS 18), who was buried at Abusir (K. Voděra, archive of the Czech Institute of Egyptology)

# 5.1.2.2. Cylindrical jars

The most numerous and easily distinguishable class is represented by cylindrical jars. The shape of model cylindrical jars corresponds exactly with the shape of the large size cylindrical jars of that time. In this respect, they are mostly slender, with rather concave-shaped sides, sometimes having splayed foot. The upper part may be also slightly convex-shaped with modelled angled, rounded or simple unmodelled rim. Just in one rare case, the jar had a flat lid (G 5080 B), the others are always without any cover. The same tomb G 5080 B contained four more lids that should have once belonged to other model cylindrical jars that were not preserved. In Kawab's burial chamber in G 7120 B were also collected three flat lids that once probably likewise belonged to model cylindrical jars. A flat lid comes from the tomb of Sekhemankhptah in G 7152 A. There was also a cylindrical jar preserved in the remains of the burial chamber. However, the diameter of the jar is 3.4 cm and that of the lid is 4.9 cm, which means that they do not fit.

Another interesting feature to compare is the drilling. So far only two examples were found completely drilled inside (G 4240 and G 4640), both coming from the late Fourth Dynasty. These might be called miniatures, whereas all others are simple model vessels with a symbolic shallow cavity inside.

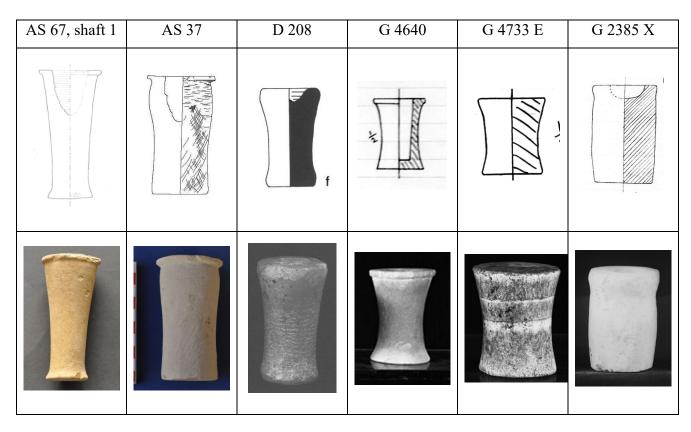


Fig. 42 Some major examples of cylindrical jars (Abusir pieces were drawn by L. Jirásková and H. Benešovská (AS 37) and photographed by L. Jirásková, those from Giza were taken from http://giza.fas.harvard.edu)

The large size cylindrical jars were usually found in the context of oil production, and their distribution and representation are connected with various kinds of oils and ointment (Balcz 1934: 83–85). Reflecting their primary function, also the model pieces represented containers of ointment. Since they usually appear in the number of six pieces, together with the one-handled jug they make a group of seven, which corresponds with the number of seven sacred oils. This is clear mainly in the well-preserved contexts dating to the later part of the Fifth Dynasty (*e.g.* the intact tombs G 5070 and AS 37, or disturbed, but well preserved assemblages from AS 47). These oils were an important part of ritual equipment necessary for the deceased and by the middle of the Fifth Dynasty, they started to appear in the burial chambers of officials not only in the form of model stone vessels, but also as a tablet with

seven shallow depressions (Abdel-Raziq 2016: 133–134). Later on, they became parts of offering lists and were depicted on the walls of the decorated sarcophagi or coffins (Barta 1963; Dobrev – Laville – Onézime 2015).

# 5.1.2.3. Beer jars<sup>57</sup>

Another class of vessels is denoted as beer jars, since the shape of various types is not as unique as in case of the previously described classes. The definition and determination of the function of these jars was based on the early pieces. The basic shape of the first model beer jars corresponds with the Third Dynasty large size pieces, which are represented by slender jars with rounded base, wider shoulders, a groove above them, and a straight top part tapering towards the orifice. However, these early pieces underwent changes throughout the Old Kingdom period. In fact, it happened soon after the beginning of the Fourth Dynasty and it was probably the main reason for a fast modification of their morphology.

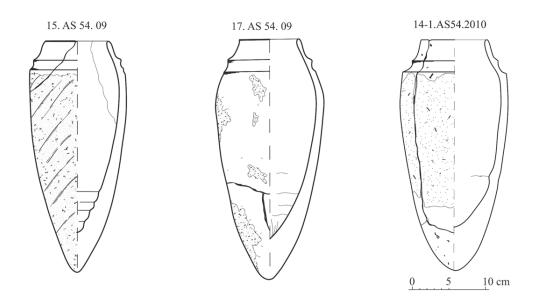


Fig. 43 Large size pottery beer jars of the form typical for the Third and beginning of the Fourth Dynasty from the tomb AS 54 (K. Arias Kytnarová, archive of the Czech Institute of Egyptology)

The original flat or slightly concave-shaped rim part turned into a thick wavy rim. The rounded or almost pointed base was impractical for the model vessel production, and therefore, the vessel was modelled as inserted in a stand. Such a union led to a shape that

<sup>&</sup>lt;sup>57</sup> The model beer jars were already discussed by the author of the thesis and K. Arias Kytnarová (2015). Details on their identification are to be found in the article.

became the far most popular. It was represented by a flaring foot of the jar. Sometimes the joint of the jar and stand was expressed by a ledge in the lower part of the body. Therefore, most of the Old Kingdom model beer jars have a flaring foot, and their top part looks like a double collar.

The very early type comes from the tomb G 4000, and it is still divided into two separate parts – the jar with slightly rounded base and stand. The model beer jar of Meretites (G 4140) is similar, but the base is already flat, for it needed no stand. Comparable types are to be found in the tomb of Iunu (G 4150 X) or in G 4160, *etc*.

The Fifth Dynasty brought change in the rim part, and the original form turned into the wavy collar. The bottom parts can be sorted in two variations, either a simple flat base, or flaring foot imitating a stand, with or without the ledge. The first group is represented by tombs AC 15, AS 47, G 4461, G 4811 B, G 7111 C, AS 68d (shaft 1), G 2370 B, G 5070, Perneb at Saqqara, F 19 at Abu Rawash. To the other group without the ledge may be counted AS 67 (shaft 1), D 208, G 7710 B. The ledge representing the upper part of the stand is to be found in the assemblage of AS 37, G 4520 B, G 4631 B, G 7132 A, G 8402. The only different ones come from the tombs AS 67 (shaft 2) and G 6020, where the rim part resembles to the early one. Somewhere in between the two types are the model beer jars from tomb G 2353 B or G 7440 Z, which do not have a traditional wavy rim part, but rather its sharp angular form.

The Sixth Dynasty forms do not differ much from the Fifth Dynasty ones. They can have wavy collared rims and flat bases (*e.g.* G 8887) or rims similar to the early pieces (*e.g.* AS 27). The Teti cemetery gives a mixture of types even in a single assemblage (Firth – Gunn 1926).

G 4000	AC 15	AS 37	AS 68d	AS 67, shaft 2	G 7440 Z
	CA TA TA TA				



Fig. 44 Some major types of model beer jars (those from Giza are taken from http://giza.fas.harvard.edu, https://collections.mfa.org/ and Junker 1929: Abb. 11 (G 4000); the jars from Abusir were drawn by L. Jirásková and H. Benešovská (AS 37) and photographed by M. Zemina (AC 15) and L. Jirásková)

The beer jars usually appear in number of four or five pieces in complete or almost complete assemblages, such as AS 37 or G 5070. There is an assemblage, that of Princess Khekeretnebty at Abusir (AC 15) where some of the tall jars bear black ink inscriptions defining the jars and their contents (Verner – Callender 2002: 34–38). The model beer jars with wavy collared rims are inscribed with *dwjw nfr*, referring to the beer jars (Balcz 1934: 49–51; Faltings 1998: 223–224). It seems that the forms of some model jars were already so archaic that the original meaning of the jars was almost forgotten. The loss of connection with the shape of real vessels might have been the reason for these inscriptions, giving clear explanation of the function of the models. Interestingly, the cylindrical jars were all without any inscription in this assemblage of Princess Khekeretnebty (AC 15). The reason for it is quite simple. The shape of cylindrical ointment jars remained almost the same for the whole Old Kingdom period.

## 5.1.2.4. Wine jars

The definition of model wine jars follows the same criterion as model beer jars. There are many types belonging to this class, and its description based on the function rather than morphological details of these jars is preferred. As in case of beer jars, also the wine jars are a kind of archaic form of the vessel stylised in later periods. The original wine jars were simple long shouldered jars with rounded or pointed base and simple rounded rim. Their characteristic feature must have been a net wound around their body since this element was a basic attribute of the first model wine jars. Moreover, it was also often used in iconography

(Balcz 1934; Junker 1953: 211, Abb. 81; Moussa – Altenmüller 1977: Abb. 16), and especially as a hieroglyphic determinative in the offering lists (Hassan 1948: Plates).

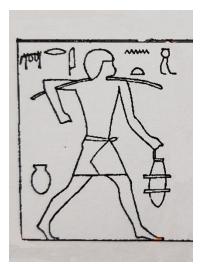


Fig. 45 Depiction of a wine jar in the tomb of Seshemnefer IV (taken from Junker 1953: 211, Abb. 81)

Taking into consideration the transformation of shape, several types can be defined. The early model wine jars had a perfectly crafted net decoration around the central part of the body (G 4150 X, G 4250, G 7350 A). The later forms were mostly only stylised pieces having often a simple band around their body (AC 15, AS 47, AS 68d, G 2150 A, G 4461, G 4530 A, G 7710 B, G 7070 B, Perneb, Akhethotep) or a groove in the upper part of the body and another one in the lower part (G IV S, S shaft, G 2382, G 4733 E, G 1208 B, G 7710 A, G 8640, G 8402). As well as the beer jars, they are also often to be found with a foot, which represented a stylised stand, sometimes stressed by a ledge around the lower part of the vessel (AS 37). The tomb AS 67 at Abusir contained two distinct assemblages, both with a specific type of wine jars. The pieces discovered in shaft 1 had a very thin band around the upper part of the body of the jar, and those coming from shaft 2 had just a groove in the middle part of the body creating then a convex cup-like shape of the upper half. The most extraordinary type comes from the tomb of Neferinpu (AS 37). Taking into consideration the whole assemblage, the wine jars must have been represented by two vessels of traditional slender shape; however, decorated by two modelled rectangular features, situated at the rim opposite each other (Jirásková in Bárta et al. 2014: Figs. 8.7, 8.9, 8.11). One can imagine that they might have been meant as handles.

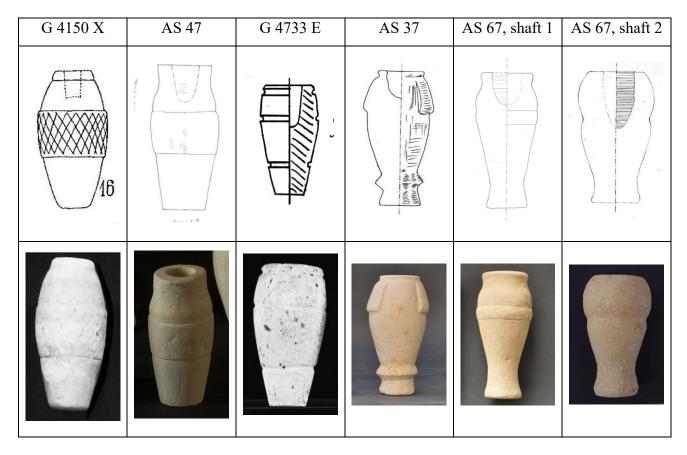


Fig. 46 Some major types of model wine jars (those from Giza are taken from http://giza.fas.harvard.edu, https://collections.mfa.org/ and Junker 1929: Abb. 11 (G 4150 X); the jars from Abusir were drawn by L. Jirásková and H. Vymazalová (AS 47) and photographed by K. Voděra (AS 47) and L. Jirásková, archive of the Czech Institute of Egyptology)

A confusing situation happened to occur in the tomb G IV S, S shaft. The two wine jars of this assemblage resemble to the shape of the earliest beer jars. The real model beer jars are present in this assemblage in their traditional later form – tall, shouldered jars on conical stands, having wavy collared rims. In this respect, it seems that someone made a mistake by the middle of the Fifth Dynasty, when this assemblage came into existence.

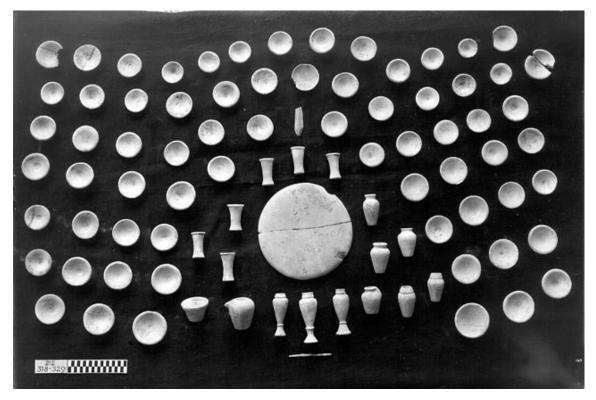


Fig. 47 The assemblage from the southern shaft of G IV S (LG 52) with three beer jars below the table top and two wine jars to the right of the jug (taken from Junker 1951: Taf. XXII/b)

Teti cemetery at Saqqara is also interesting. Generally, all of the assemblages from the Sixth Dynasty do not correspond to the system of the Fourth and Fifth Dynasties (see explanation further below). The shapes vary, as well as the number of vessels. The wine jars from these tombs have characteristic grooves, but randomly situated on various parts of the body of the vessels (see Mereruka, Kagemni, Neferseshemre, Ankhmahor, Iput in the catalogue).

All the intact assemblages contain two pieces of wine jars, which corresponds with the iconography of the offering lists, where the name *irp* '*bš* is followed by the determinative of two jars with net on their bodies. The identification of the vessels with wine jars is based on the iconography, as well as on epigraphy. The unique assemblage of Khekeretnebty (AC 15) inscribed in black ink contained one of the vessels with band, which held the word '*bš* (Verner – Callender 2002: 36, Fig. B25). Since this word is to be regularly found in the offering lists together with wine – *irp*, it is quite clear what the vessel should have once contained wine. Even other attestations lead to the same conclusion (Hannig 2003: 266–267). It is also of interest that the offering lists usually mention *irp* several times, but only one of them is *irp* '*bš* is determined by two jars bound together by net (*e.g.* Hassan 1948: Pls. XXIII, XXXIX, XLVII, *etc.*).

# 5.1.2.5. Shouldered jars

Simple tall, shouldered jars regularly appear within the sets of model stone vessels in the Old Kingdom tombs. Although one would expect them to be of a single shape, there are again several types, sometimes reflecting the chronological development. The basic form is represented by a tall jar with rounded or angled lip rim or collared rim, such as the earliest examples from G 4150 and G 4250. The body might be slender or wider, usually having wide shoulders, but always tapering towards the flat base. Rarely a short rather ovoid version is to be found (*e.g.* G 4461). Some pieces have short necks (G IV S, northern shaft, G 1208, G 4610, G 6020). A specific type comes from the tomb G 7440 Z. The body of these shouldered jars is tapering towards the base but being widened again into a flaring foot. Another distinct type comes from the Giza tombs G 5380 A, G 7753 A and G 8640. These vessels are perfectly crafted pieces with slender body, flaring foot, high neck and modelled rim. Contrary, there are other types without modelled rims, having only necks ended with flat orifice (AS 47, G 4520 B and G 4631).

AS 67, shaft 1	G 4461	G 4610	G 7440 Z	G 7753 A
	3115	4/5		

Fig 48 Some basic types of model shouldered jars (drawings and photos of AS 67 and G 4461 are by L. Jirásková, archive of the Czech Institute of Egyptology, the rest is taken from http://giza.fas.harvard.edu/ and https://collections.mfa.org/)

There are a few pieces that were found covered by slightly convex shaped lids (G 7766 B). Except for cylindrical and shouldered jars, none of the model stone vessels had any lids. It means that just these two classes were usually closed by lids even in their large size. Cylindrical jars were normally closed by flat lids, while the domed lids are typical for the canopic jars.

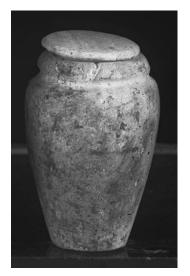


Fig. 49 Shouldered jar from G 7766 B with a slightly convex shaped lid (taken from http://giza.fas.harvard.edu/)

Such as for beer and wine jars, there are a few inscribed shouldered jars. Three examples come from the tomb of princess Khekeretnebty at Abusir, another one from mastaba F 21, its

southern shaft. Both of them bear black ink inscription  $\bigcirc \widecheck{\square} \stackrel{\bullet}{\square} (rprt).^{58}$  It is a designation of a vessel, which does not appear very often, and there are not many examples in the written sources and iconography. The vessel is mentioned in some of the earliest offering lists, unfortunately without any connection to a particular offering. One of them is to be found in the offering list of Mastaba IIn (Junker 1929: Abb. 36), but it seems to be a tray or the bread form of the same name. Another example comes from the first offering list of Werkhuu, the

<sup>&</sup>lt;sup>58</sup> Bisson de la Roque misinterpreted the word inscribed on a shouldered jar from F 21 as "green" (Bisson de la Roque 1925: 64).

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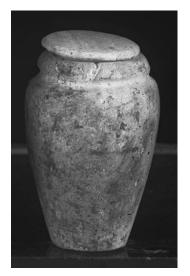


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<sup>&</sup>lt;sup>58</sup> Bisson de la Roque misinterpreted the word inscribed on a shouldered jar from F 21 as "green" (Bisson de la Roque 1925: 64).

archaic one (Hassan 1944: 251, Fig. 109). The word is written there with the same signs as on the model vessels, and its determinative are three shouldered jars. Although there is no information on the contents, it is situated in the first part of the list, between cultic instruments and other necessities. The nourishment containers are included further below, and therefore it seems that the "*cprt*" jars were not meant as containers for storage of food or beverages at that time. Roberto A. Díaz Hernández used the term "Libationskrug", for he saw it in the Opening of the Mouth ritual, where it was used for libation during recitation of spells, in the tomb of Metjen (Díaz Hernández 2014–2015: 33–34). But there is no such inscription, which would prove that it is the "*cprt*" jar.

Other examples of "*prt*" vessels are mentioned in the papyrus archive of king Raneferef. Interestingly, one example of the "*prt*" jar is recorded next to the "*nmst*" jar (Posener-Kriéger – Verner – Vymazalová 2006: 84–85, Pls. 30–30A). These two seem to be of the same shape according to other iconographical evidence, but in this case, they are listed as two different jars with only slightly altered determinatives, which might be just a matter of hieratic writing, since most of the other jars with different denominations are followed by similar determinatives. Moreover, another record of the "*prt*" jar in the same papyrus archive is transcribed as a bag-shaped jar with neck in the hieroglyphic version (Posener-Kriéger – Verner – Vymazalová 2006, 88–89, Pls. 32–32A). In this respect, it seems more probable that the determinatives written in hieratic are the same for many jars, including "*nmst*" and "*cprt*". The definition of the function of the jar is therefore very difficult. It might have been originally meant as a container of oil or water<sup>59</sup> in the tombs of the Fourth Dynasty. Oil is more probable, however, for the pottery water jars had usually rounded body with rounded bases, although they could also had a flat base (Faltings 1998: 5–20).

The number of four, in which the shouldered jars appear in the tombs of the late Fifth Dynasty leads to another interpretation. If the assemblages of model stone vessels were meant to secure the afterlife of the deceased, and therefore, substituted all the large-size vessels necessary for the rituals and nourishment, the four shouldered jars could have represented the four canopic jars. In fact, the variety of types of the model shouldered jars corresponds to the variety of types of canopic jars of the Old Kingdom (Jirásková 2014).

<sup>&</sup>lt;sup>59</sup> Water could have been held in various containers, such as the *nmst* jars (Hassan 1948: 161).

#### 5.1.3. Special forms

The above-described classes were the most common and regularly appearing. The following category is devoted to special kinds of vessels, such as basins, and ewers with the combination of basin with an ewer crafted in one piece, tables, either monolithic or separated top and stand, or incense burners. These model vessels were probably no essential parts of the Old Kingdom assemblages and were included only in some contexts.

#### 5.1.3.1. Tables

Model tables can be found in two basic variants. Some of them are a single piece of table on a stand (G 2360 A, G 4530 A, G 4631 B, G 5070, G 7440 Z, G 7777 H, G 8402, and probably G 7710 A), the other group contains two-piece-sets of a separate stand and table top (AC 33, AS 27, AS 104, D 20, G IV S, N shaft, G 4461, G 4733 E, G 2416 D III, G 2009, S 125, Baboon galleries). In some contexts, only the top part (AS 31, AC 25, G IV S, S shaft, G 6010 A, G 8887, G 1459/1460) or stand (G 4000, Mastaba E at Saqqara) were preserved. Both groups include several types. The most beautiful pieces are perfectly shaped and smoothed complete tables. If the top and stand are separated, the better worked pieces usually have hollowed stand. These finely made tables have a thin flat top part and a stand flaring towards the base. In case of two-piece tables, the table top was commonly "glued" to the stand using fine white plaster. A more elaborate example comes from the tomb G 2416 D III. The top had a depression in its bottom part for it could have been positioned on a stand, which had appropriately modelled stand with convex-shaped top.

The *h3wt* table was quite commonly included in the offering lists (Hassan 1948: Plates). It was above all supposed to hold offerings in the form of nourishment. The earliest representations of offering scenes did not omit the table loaded with slices of bread, which was in fact the most important feature of the scene. Later, it is possible to find many examples of tables full of various kinds of food in the scenes of offerings presented to the deceased in the chapel of the late Old Kingdom tombs. However, the big table loaded with bread or later reed leaves remains the essential offering.

There is an only example of a model table holding real offerings, which were 4 miniature breads. It was found in the tomb G 5070, shaft 316 (Junker 1944: 56). Contrary to the others, this piece was larger than usual, measuring 27 cm in width, but belonged to the assemblage of model vessels through its material and position in the burial chamber. The

other tables were found empty also in undisturbed contexts, and represented mere models functioning in symbolical way only.

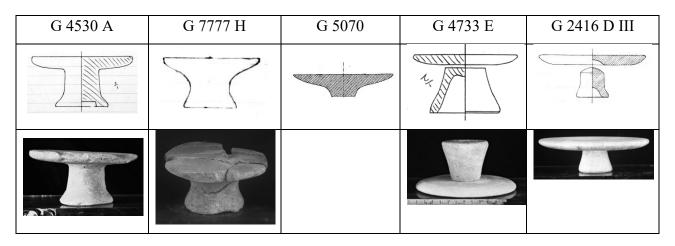
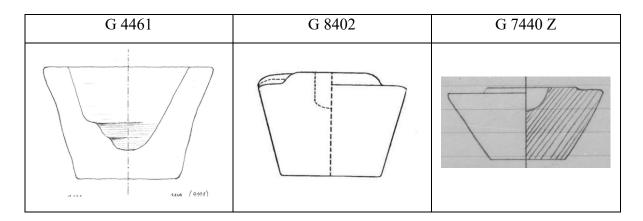


Fig. 50 Some major types of model offering tables (all, except for G 5070, which is taken from Junker (1944: 56, Abb. 22), are taken from http://giza.fas.harvard.edu/)

## 5.1.3.2. Basins (with ewers) - washing sets

The class of model basins is represented by larger types of deep open forms ("beakers" according to Aston 1994: 181, Fig. 22), which can be without any hesitation ascribed to the washing set. The basins are always much larger than the small bowls, and they can be distinguished easily. They usually reach up to 9.0 cm in diameter and up to 7.5 cm in height. Their sides can be either straight or slightly concave flaring towards the orifice. The sets with ewers were crafted either in one piece or separated as a basin and an ewer. If they are one piece, the ewer is put inside the basin. It is a clear manifestation of their symbolic function.



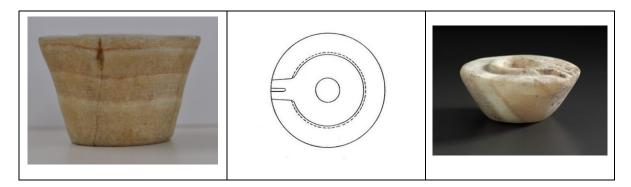
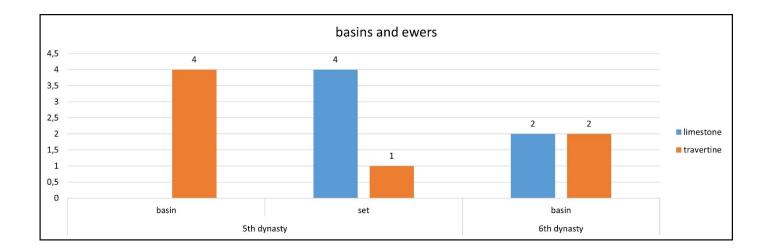


Fig. 51 Some major types of basins. The one from G 4461 is a huge basin, the other two are a combination of a basin with an ewer inside, both crafted as one piece (G 4461 was drawn and photographed by L. Jirásková, G 8402 was taken from Hassan 1941: 231, Fig. 201, Pl. LXIV, G 7440 Z was taken from http://giza.fas.harvard.edu/)

The basins are quite rare, only 13 pieces were recorded so far, five of them being solid sets with an ewer modelled inside (D 20, D 208, G 5170, G 7440 Z, G 8402). The others were simple basins belonging to a separate ewer (shaft 890 A, G IV S northern shaft, G 2381 A, G 4461, G 4530, G 5070, AS 27, AS 104). Six were made of limestone, others of travertine, in both variations. All of them can be dated to the Fifth and Sixth Dynasties.

tomb	owner	site	type	material	dynasty
D 20	Tepemankh/Djadjaemankh	Giza	set	limestone	5
D 208	Neferihy	Giza	set	limestone	5
G IV S, N shaft	Niankhre	Giza	basin	travertine	5
G 2381 A	Ptahshepses Impy	Giza	basin	travertine	6
G 4461	Kapuptah	Giza	basin	travertine	5
G 4530	unknown	Giza	basin	limestone	6
G 5070	unknown	Giza	basin	travertine	5
G 5170	Seshemnefer III	Giza	set	limestone	5
G 7440 Z	unknown	Giza	set	travertine	5/6
G 8402	unknown	Giza	set	limestone	5
S 890 A	Ptahhotep	Giza	basin	limestone	6
AS 27	unknown	Abusir	basin	travertine	6
AS 104	Sekhemka (?)	Abusir	basin	travertine	5

The graph below shows that most of the basins come from the Fifth Dynasty, and moreover the sets of ewers and basins crafted together as one piece disappeared in the Sixth Dynasty.



## 5.1.3.3. Ewers

Model stone ewers (and basins) were not as common as tables, but there are also several examples to be named. The ewers can have slightly different shapes. They are mostly shorter shouldered jars with narrow mouth and flat base. The ewer channel starts on the shoulder of the jar. It can be either long (AS 104) or short (G 5070, G 4140), hollowed or not (G 7777 H, 4530 A), and it can also be separated from the jar (AS 27, shaft 890 A).

It is a small copy of a large size copper vessel (Radwan 1983). It was used for ritual washing before the repast as a part of the offering ritual (Odler 2017: 293–295). During this part of the ceremony, water was poured from the ewer into the basin. Due to this interconnection, both vessels were sometimes crafted as a single piece.

G 4140	AS 27	G 4530 A	G 5070

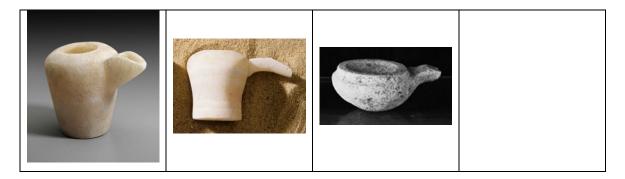


Fig. 52 Some major types of model ewers (AS 27 drawn by K. Smoláriková and photographed by K. Voděra, archive of the Czech Institute of Egyptology; G 5070 is taken from Junker 1944: 55, Abb. 21; the rest is taken from http://giza.fas.harvard.edu/ and https://collections.mfa.org/)

## 5.1.3.4. Incense burners

The incense burners are very rare class of model stone vessels. The only two examples so far have been found in the burial chamber of shaft E in the tomb G 4733. They are perfect copies of the large size copper pieces (Radwan 1983). They have a long stand, flaring towards the base. The upper part is a wide bowl with shallow drilling. The only difference between this stone and other copper piece is the absence of lid. Their height reaches 9.5 and 9.7 cm respectively. The shorter one is now kept in the Museum of Fine Arts in Boston (http://giza.fas.harvard.edu/objects/16302/full/), the other remained in Egypt (http://giza.fas.harvard.edu/objects/66744/full/). Although the assemblage of shaft E in G 4733 was made of travertine, the incense burners were crafted from limestone.

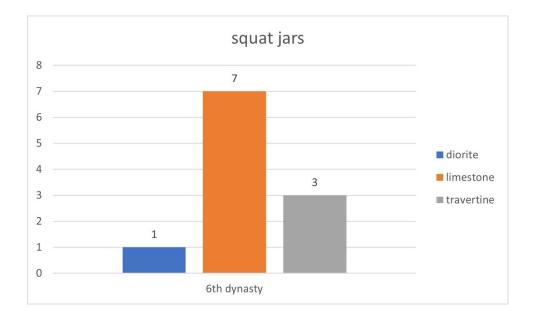
The incense burners were quite a common part of the ritual equipment used during the *prt hrw* ritual. It served in the early part of the offering ritual for smoke purification of offerings. The presence of incense burners in the papyrus archives of Kings Raneferef and Neferirkare within other ritual equipment points to its regular use (Posener-Kriéger – Verner – Vymazalová 2006: 81, Pl. 28A). They are not included in the offering lists, but they can be connected with *sntr*, which is almost always to be found there (Barta 1963).



Fig. 53 A model incense burner from the tomb G 4733 E (drawing taken from http://giza.fas.harvard.edu/, photo from https://collections.mfa.org/)

# 5.1.3.5. Squat jars

Squat jars belong to the group of special forms, since they do not belong to the traditional repertory of model stone vessels. They started to appear at the beginning of the Sixth Dynasty, mostly in the Teti cemetery at Saqqara. Altogether 11 pieces are known so far. Only one of them comes from Giza. It was made of travertine and belonged to the assemblage of model vessels in shaft 125/157 (Junker 1951: 173, TAF. XXIIc). It was 6.4 cm wide. There are two more travertine pieces, one from the tomb of Mereruka (Firth – Gunn 1926: 26, Fig. 21, Pl. 13B), the other from the burial chamber of Queen Meretites II, the possible daughter of Pepy I (Minault-Gout 2019: 139, 300, Fig. 46). And one made of diorite coming from the tomb of Kagemni (Firth – Gunn 1926: 21, Fig. 16). All other were made of limestone, however, several of them were coated with creamy-white plaster (Inumin, Hesi, Nikauisesi; Kanawati 2006: 67, Pls. 65d, 73e; Kanawati – Abdel-Raziq 1999: 52, Pl. 67; Kanawati – Abdel-Raziq 2000: 64–65, Pls. 36, 72). Moreover, those of Nikauisesi and Meretites II were painted with black dots, thus imitating harder stones (possibly diorite or metagabbro). The one from Mastaba E was just painted yellow, imitating travertine (Firth – Gunn 1926: 29, Fig. 26). The graph below sums up the material variability.



All of them are squat shouldered jars with model tubular handles. Only the one from the tomb of Mereruka has pierced handles. That of Inumin is without any handles at all. Two pieces from the tomb of Meretites II, those from the tomb of Nikauisesi, and the one from the tomb of Hesi have rounded bases. Others have flat narrow bases. The rims are mostly rounded, but also angled are to be found among them. They reach up to 5.3 cm in height and up to 5.0 cm in width.

S 125/157	Mereruka	Nikauisesi	Inumin

Fig. 54 Some basic types of model squat jars (taken from Junker 1951: TAF. XXIIc; Firth – Gunn 1926: 26, Fig. 21, Pl. 13B; Kanawati – Abdel-Raziq 2000: 64–65, Pls. 36, 72; Kanawati 2006: 67, Pls. 65d, 73e)

#### 5.2. Composition of the assemblages

The primary source for the study of the composition of the assemblages of model stone vessels are the intact burials. Unfortunately, there are not many, and therefore, it is necessary to take into consideration also the well-preserved sets from partly disturbed burials. It is of importance to distinguish between the tombs that were looted in antiquity and those robbed in modern times. The ancient looters knew very well what to expect in the burial chamber, and therefore their effort was put into limited scale of activities. The tombs that were disturbed in antiquity usually bear the same features. Most of the burial equipment is left aside or is found thrown away to get access to the sarcophagus. The sarcophagus was hiding the most tempting objects, such as jewellery and decorated staffs. Vessels were usually of no interest, and most of them (sometimes all of them) were left in the tomb in their primary position (*e.g.* shaft A in the tomb AS 22, Bárta – Vachala *et al.* in preparation; or shaft 3 in the tomb AS 104, Odler *et al.* 2019: 64–67). This is often valid for all of the materials and sizes, but sometimes copper vessels were also taken away. Contrary, the tombs robbed in the modern times were often emptied completely, except for the pottery and bones (*e.g.* the tomb of Ptahwer in AS 76b, Dulíková – Jirásková – Vymazalová *et al.* 2017).

There are a few strange examples of tombs with disturbed burial equipment and sealed sarcophagi. This is, for instance, G 7440 Z (G 7442). The sarcophagus was found untouched, with all its contents, including gilded bead net, anklets, bracelets, and headrest. However, the burial equipment situated to the east of the sarcophagus seems to be incomplete. There were only two canopic jars found, which is the most striking deviation to a commonly accepted rule. Also, no pottery was reported to be collected in the burial chamber (http://giza.fas.harvard.edu/sites/2165/full/). The burial chamber G 7753 A is likewise dubious. Although sealed, the apartment was found filled with debris, upon which were situated 4 canopic jars and 8 beer jars. To the east of the sealed sarcophagus (with body and headrest inside), on the floor of the chamber, below the debris, were collected limestone model vessels and copper model tools. At least the assemblage of model vessels seems to be incomplete (http://giza.fas.harvard.edu/sites/1284/full/).

tomb	dating	bowls	jugs	cylindrical	beer	wine	shouldered	tables	washing	other
				jars	jars	jars	jars		sets	class
AS 37	5	59	1	6	5	2	4	0	0	0
D 208	5/6	69	2	6	4	2	4	0	1+1	0

G 2416 D	5/6	0	0	0	0	0	0	1	0	0
III										
G 5070	5	18+x	1	6	5	2	4	1	1	0
$(316)^{60}$										
G 5070	5	х	Х	Х	x	х	Х	1	х	Х
$(315)^{61}$										
G 7440 Z	5/6	65	1	3	5	0	5	1	1	0
G 8220	6	2	0	4	0	0	0	0	0	0
G 8640	6	27	1	4	4	2	1	0	0	0
(626)										
G 8887	6	66	1	6	4	2	1	1	0	0

The intact tombs listed in the table above are only the ones with assemblages of model stone vessels.<sup>62</sup> The author of this study relies on the observations of excavators concerning the sealing of the chamber. The burial chamber of Neferinpu in the Abusir tomb AS 37 is a well-documented example, discovered and published recently (Bárta *et al.* 2014). The others were excavated long time ago, their descriptions are often rather brief, and the number of available photos limited. The author of this thesis could study in hand the complete assemblage of Neferinpu and parts of those from shaft 316 in G 5070 (see note 4) and D 208<sup>63</sup>. Most of the others remained in Egypt, while that from G 7440 Z was transferred to The Museum of Fine Arts in Boston (MFA 27.1469 – 27.1546, https://collections.mfa.org/). Scare evidence on model stone vessels collected in some of these tombs represents another obstacle in their study. In this respect the number of vessels and their types are in some cases approximate. Various researchers used different terminology/typology, and without a drawing, a good quality photo or personal study of the assemblage, one can never be sure of the form.

As will be shown below, the numbers of particular vessels normally follow a rule. However, some of the assemblages coming from the intact burials do not correspond with

<sup>61</sup> There was no exact number of individual classes given in the publication (Junker 1944: 61).

<sup>&</sup>lt;sup>60</sup> The number of vessels was not specified, only the classes were presented in a drawing (Junker 1944: Abb. 21). The author of this thesis, however, had the possibility to study some of the vessels in the Kunsthistorisches Museum in Vienna. All of the jars and special forms with a few bowls were on display and they could not be handled, but they could be at least counted.

<sup>&</sup>lt;sup>62</sup> A list of all intact contexts from the Giza necropolis can be found in Arias Kytnarová – Jirásková – Odler 2018.

<sup>&</sup>lt;sup>63</sup> Only the vessels, which are today stored in the Ägyptisches Museum der Universität Leipzig. The assemblage is split between three institutions: Ägyptisches Museum der Universität Leipzig, Pelizaeus Museum in Hildesheim and Egyptian Museum in Cairo.

them. The best examples for the latter part of the Fifth Dynasty are tombs AS 37 and G 5070. D 208 comes rather from the very end of the Fifth Dynasty or early Sixth Dynasty, although it contained a sealing with the name of Niuserre.<sup>64</sup> The assemblage from G 7440 Z (G 7442) is strange, above all because of the low number of cylindrical jars. Since there were only two canopic jars present (see above), and no pottery recorded, one would doubt its intactness, although the sarcophagus was found sealed. The tomb G 8887 was well described by Hassan (1936: 139–150), drawings and photographs of all vessels from the burial equipment were included. However, in case of model stone vessels, 80 pieces are recorded in the text and drawings, but 82 vessels were shot in a photograph. The assemblage seems to come from the same time as D 208, both dating either to the end of Fifth or to the early Sixth Dynasty.

The contents of the burial chamber III in shaft D of the tomb G 2416 belongs to the odd ones. The mastaba is one of the family tombs, which are typical for the late Fifth or Sixth Dynasties. It has four shafts, A, B and C having just one burial chamber each, but shaft D contained three burial chambers, no. III being the lowest one, cut in the rock at the bottom of the shaft (http://giza.fas.harvard.edu/unpubdocs/39902/full/). There was just a small burial chamber, which contained the body of the deceased in a wooden coffin situated by the western wall, with all offerings to the east of it. These were represented by a heap of model pottery bowls, 10 model pottery jars, 1 small pottery spouted bowl, 1 small copper bowl and a model travertine table (http://giza.fas.harvard.edu/sites/865/full/). Some of the tombs from the late Fifth Dynasty contained pottery model vessels, but these were usually of particular shapes (*e.g.* AS 47 at Abusir), including cylindrical jars, which were completely missing in G 2416 D III.

The burial chamber of the wife (?) of Nekhetka (G 8220, shaft 1628), Hetepheres, contained probably a rather modest burial, which was represented by the six travertine vessels (2 bowls and 4 cylindrical jars), a model ewer and basin, plus some more copper model objects (in fragments), two pottery beer jars with conical sealings, a faience necklace, wooden headrest and wooden gold-plated stick (Hassan 1953: 33–34). Everything was situated in the burial pit dug in the bedrock. Although Porter and Moss dated the tomb to the span of mid

<sup>&</sup>lt;sup>64</sup> The reason for such a dating is the nature of the assemblage. If all the vessels that are presented to be found in shaft 9, do really come from its burial chamber, they rather point to the early Sixth Dynasty dating (http://www.giza-projekt.org/Funde/UL\_MinGefD208/UL\_PM\_KA-Gefaesse.html). One of the reasons is the presence of two jugs, the other are several roughly shaped bowls with only a symbolical drilling of the depression, the heights of the tall jars vary quite much. Moreover, the two jugs, basin with ewer and a spouted bowl were made of limestone, while the rest was made of travertine. The spouted bowls are likewise typical for the Sixth Dynasty contexts.

Fifth Dynasty or later, from the point of view of model vessels, it should rather be dated to the end of the Fifth or early Sixth Dynasty. It is very unusual to find only a few model stone vessels in an undisturbed burial chamber in the latter part of the Fifth Dynasty (see explanation below in this chapter). Since there are several copper model vessels that started to appear in larger numbers in the latter part of the Fifth Dynasty (as well as headrests), first in the elite tombs, later in the non-elite, one would think of later date. K. Arias dated the two pottery beer jars likewise to the latter part of the Fifth Dynasty (Menkauhor – Djedkare, personal communication).

Tomb G 8640 belonging to Ankhhaf with the good name Qar contained two main shafts (plus one more dug in the courtyard), both being found undisturbed. The burial chamber of the owner of the tomb did not contain assemblage of model stone vessels. Apart from the canopic jars and a water pot (Jirásková 2016), there were only pottery jars and a bowl, many pieces of copper model tools and a bowl, a limestone headrest, Seven sacred oil tablet and personal jewellery (Hassan 1941: 138–142). The other burial chamber situated at the bottom of shaft 626 was likewise intact and seems to be of slightly later date. It contained a set of model copper vessels including both jars and bowls (at least 26 pieces), model limestone vessels (12 jars and 27 bowls), canopic jars, a few pottery vessels, Seven sacred oil tablet, travertine headrest and jewellery (Hassan 1941: 142–146). The low number of model stone vessels on one hand and large number of copper model vessels on the other hand point to the early Sixth Dynasty dating of the burial.

If there are not enough intact tombs, it is necessary to take into consideration partly disturbed tombs, especially these that were looted soon after the burial and most of the original burial equipment remained inside the burial chamber. The table below gives a number of examples of the well-preserved (one can dare to state "complete" or "almost complete") assemblages of model stone vessels.

tomb	dynasty	bowls	jugs	cylindrical	beer	wine	shouldered	tables	washing	other
				jars	jars	jars	jars		sets	class
F 19	5	65	1	5	3	2	4	0	0	0
AC 33 (shaft 2)	5	67	1	4	3	1	3	1	0	0
AS 22 (shaft J)	6	46	0	0	0	0	0	0	0	0
AS 22 (shaft A) <sup>65</sup>	6	118	?	8	?	?	?	?	?	?

<sup>&</sup>lt;sup>65</sup> Apart from cylindrical jars, the other tall vessels cannot be recognized as particular class. They are all too roughly cut.

AS 27	6	67	1	6	4	3	3	1	1	0
AS 47	5	73	1	6	4	2	4	0	0	0
AS 67 (shaft 1)	5	67	1	3	2	2	2	0	0	0
AS 67 (shaft 2)	5	55	1	5	3	2	4	0	0	0
AS 68d	5	71	1	5	5	2	3	0	0	0
AS 104 (shaft 3)	5	68	0	0	5	2	3	1	1	0
Perneb	5	49	1	6	4	2	4	0	0	0
Iput	6	3	2	5	1	2	3	0	0	2
Neferseshemre	6	3	3	3	2	2	2	0	0	0
Kagemni	6	2	0	6	2	3	5	0	0	4
G IV S (N shaft)	5	68	1	6	3	2	3 or 4	1	1	0
G IV S (S shaft)	5	63	1	2	4	2	4	1	0	0
G 2156	5	69	1	6	3	1	4	1	0	0
G 2353 B	5	67	1	0	3	2	4	0	0	0
G 2385 <sup>66</sup>	6	45	?	8	?	?	?	?	?	?
G 4150 X	4	11+x	0	0	4	2	2	0	0	0
G 4250 A	4	41	0	0	2	3	3	0	0	2
G 4461	5	68	1	5	5	1	3	1	1 (basin)	0
G 4530 A	6	78	0	14	3	7	7	1	2	0
G 4610 A	6	67	1	4	4	2	3	0	0	0
G 4631 B	5	65	1	6	2	2	4	1	0	0
G 4733 E	6	87	1	7	5	2	6	2	0	3
G 5232 A	5	79	1	4	5	2	3	0	0	0
G 6020	5	45	1	6	4	2	4	0	0	0
G 7111 C	5	62	1	6	4	2	4	0	0	0
G 7132 A	5	58	0	0	4	2	3	0	0	0
G 7710 B	5	50+x	1	5	5	2	4	0	0	0
G 8402	5	28	1	6	4	2	4	1	1	0
S 125	6	55	0	1	1	0	0	1	0	1
S 1680	5	34	0	6	2	1	2	0	0	0
LG 53	6	732	0	0	0	0	0	0	0	0

The dating of the tombs shows prevalence of the Fifth Dynasty contexts, only a few have survived from the Fourth Dynasty, several date to the early Sixth Dynasty and a couple of them can be dated to the end of the Old Kingdom. Such a state of affairs is not a mere coincidence and does not refer to a bad state of preservation of the early and late Old

<sup>&</sup>lt;sup>66</sup> The same problem with identification of classes as in case of AS 22 (shaft A).

Kingdom tombs. If the development of the burial equipment is traced in the long-time perspective, it becomes clear that in general most of the assemblages must come from the late Fifth Dynasty contexts. It will be discussed in detail in the concluding chapter that the "boom" of model stone vessels came with the middle of the Fifth Dynasty and finished quite soon after the beginning of the Sixth Dynasty.

For this chapter are important the numbers of individual classes in the well-preserved assemblages. The number of bowls usually reaches up to 80 pieces, unless they are found in the Sixth Dynasty contexts, where it might be much higher. For instance, in the burial chamber of Seshemnefer IV 732 roughly cut bowls were collected. Only one jug is usually present in the assemblage, except for the Sixth Dynasty tombs, again. In the Teti cemetery at Saqqara, mostly two or three pieces in an assemblage were found. Likewise, the burial chamber of the Sixth Dynasty Queen Meretites II is an exception. It contained 291 model vessels made both of limestone and travertine, including 18 jugs, 45 cylindrical jars, 30 shouldered jars or 3 squat jars, *etc*.

Six cylindrical jars seem to be the optimum number. Logically, one jug and six cylindrical jars stand for the seven sacred oils. The most common number of beer jars is four, although five is also frequent. Five beer jars would mean one for every two days of the week. The intact tomb of Neferinpu (AS 37) contained ten real beer jars and five model beer jars (Bárta et al. 2014: Fig. 3.29). The reason for the number of four is not clear. A possible explanation is connected with two wine jars and four water jars (shouldered ones), which would be altogether ten – a weekly ration. There are mostly two wine jars in an assemblage. It may be connected with some well-preserved or intact burial contexts with two large size wine jars as the only representatives of the pottery vessels in the burial chamber. They come from the chamber of Kapuptah (G 4461; Junker 1943: TAF. XXc) or G 5070, shaft 316 (Junker 1944: TAF. XIa). There is also another piece of evidence for two wine jars, and *i.e.* the offering list. In the standardised ones, the column with *irp* 'bš is determined by two wine jars bound together in a net. The other kinds of wine are usually followed by a determinative of a bowl. Interestingly, in the early representations, also three jars can be found in this determinative (Hassan 1948: Plate I), which well correspond with the three model wine jars found in the Fourth Dynasty tomb G 4250 A (Junker 1929: 191–194). The shouldered jars mostly appear in the number of four, which may correspond to the number of canopic jars. Tables and ewers with basins are much rarer. They are mostly absent, in one instance appearing in the number of two in a single burial chamber. New classes of vessels, such as squat jars usually date to the Sixth Dynasty and are very sporadically recorded.

Summing up, the most common numbers of vessels are these: 1 jug, 6 cylindrical jars, 4 or 5 beer jars, 2 wine jars, 4 shouldered jars, 1 table and 1 ewer with basin, 50–70 bowls.

# 5.3. Old Kingdom offering lists

H. Junker perceived the assemblages of model stone vessels and the 3D offering list (Junker 1929: 108). He was basically right, since the nature of vessels corresponds with the items listed in the lists, but Junker never tried to compare both features in detail. The aim of this chapter will be comparison on the Old Kingdom offering lists with the assemblages. Taking into consideration the nature of offering list, which changed throughout the Old Kingdom, it is not an easy work. The Fourth Dynasty lists are much more individual than the later examples.

W. Barta also pointed to the variations, but he attempted to find out a standardised version that could have been studied in detail. He did not find it in the evidence earlier than the Fifth Dynasty. The so-called offering list of the type A was defined by the offering list of Debeheni inscribed in his tomb at Giza (1963: 72). The Fifth Dynasty context perfectly correlates with the Fifth Dynasty intact or well-preserved assemblages that could be compared with the written evidence.

There are 95 items recorded in Debeheni's offering list, all relating to the food offering ritual (*idem*: 47–50). They are listed below only simply named to specify the nature of the item and its container:

1	pouring of water	bowl	1
2	incense	incense burner	1
3	oil	cylindrical jar	1
4	oil	cylindrical jar	1
5	oil	cylindrical jar	1
6	oil	cylindrical jar	1
7	oil	cylindrical jar	1
8	oil	cylindrical jar	1
9	oil	cylindrical jar	1
10	green paint	packet	1
11	black paint	packet	1
12	linen	roll	1

13	incense	incense burner	1
14	libation	ewer and basin	1
15	offering table	table	1
16	offering	loaf of bread	2
17	offering	loaf of bread	2
18	sitting	nothing	1
19	meal	loaf + jar	2
20	bread	loaf	1
21	bread	loaf	1
22	drink (dsrt-beer)	jar	1
23	drink (hnms-beer)	jar	1
24	bringing	loaf + bowl	2
25	meal	loaf + jar	2
26	meat	piece of meat	1
27	water	bowl	2
28	natron	bowl	2
29	meal	loaf + jar	2
30	bread	loaf	1
31	bread	loaf	1
32	bread	loaf	2
33	bread	loaf	2
34	bread	loaf	4
35	bread	loaf	4
36	bread	loaf	4
37	bread	loaf	4
38	bread	bowl	4
39	bread	bowl	4
40	bread	loaf	4
41	bread	loaf	4
42	bread	loaf	4
43	bread	loaf	4
44	onion	bowl	4
45	meat	piece of meat	1

46Inteatpiece of meat147meatpiece of meat148meatpiece of meat149meatpiece of meat150meatpiece of meat151meatpiece of meat152meatpiece of meat153meatpiece of meat154meatpiece of meat155poultrypoultry156poultrypoultry157poultrypoultry158poultrypoultry160breadloaf161breadloaf162breadbowl263breadbowl264drink ( <i>lnms</i> -beer)jar265creambowl266drink ( <i>kith</i> dates)bowl270liquid substancebowl271fruit (figs)bowl272fruit (grapes)bowl274fruit (grapes)bowl275fruit (grapes)bowl276fruit (grapes)bowl277breadbowl278breadbowl2	46	moot	piece of meat	1
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	78	bread	bowl	2

79	fruit	bowl	2
80	fruit	bowl	2
81	fruit	bowl	2
82	wheat	bowl	2
83	barley	bowl	2
84	fruit	bowl	2
85	fruit	bowl	2
86	bread	bowl	2
87	fruit	bowl	2
88	sweats	bowl	1
89	offering	bowl	1
90	beer offering	bowl	1
91	bread	3 loaves of bread	1
92	offering	loaf + jar	1
93	offering	loaf + jar	1
94	choice	meat	1
95	table	loaf + jar	1

Counting all the containers marked, there are:

- 2 incense burners
- 7 cylindrical (oil) jars
- 1 ewer and basin
- 1 table
- 17 jars (9 for general meal columns, 8 beer jars (5 *hnkt* and 3 *dsrt*))
- 68 bowls (in this particular case including *irp* 'bš)

The number of incense burners fits with the only preserved assemblage that included these specific vessels (G 4733 E). The number of oil jars is also the same; however, the oil jars could have three basic types of determinatives: cylindrical jars, two-handled shouldered jars or one-handled jugs. Sometimes six cylindrical jars and one jug is to be found (Hassan 1948: Plate IX), which is usually the case of model stone vessel assemblages. One table and one ewer with basin for libation also correspond to the model vessels. But again, these were not always included, and often miss, especially in the limestone assemblages.

If the general terms for "meal" and "offerings" recorded in the lists are meant as extra containers with drinks, there would be too many jars in the list (17) compared to the assemblages that usually contain 10–11 jars. If these are not counted, there are only 8 jars left, all meant to hold a sort of beer (*hnkt* and *dsrt*), but the number 3 for *dsrt* would not fit the 4 shouldered jars, even though 5 beer jars correspond. The offering list of Debeheni does not determine the *'bš* sort of wine by two bound jars, as many other lists do (*e.g.* Hassan 1948: Plate XXIII). Wine is not the only drink determined by a bowl. Also, *shpt* (no. 68) and *dwjw sšr* (no. 70) should be liquid substances. In fact, *shpt* and *dwjw sšr* is often in other Fifth Dynasty lists determined by a jar, even in case when *hnkt* and *dsrt* are determined by a bowl (*idem*: Plate XXX). Moreover, the term *dwjw* denotes a kind of container that differs from *nmst*, which is sometimes found together with *hnkt* and *dsrt* (*idem*: Plate XVIII). Apart from these, there are no other substances in the Fifth Dynasty offering lists that would have been presented to the deceased in a jar. Altogether, there are five liquids recorded in the Fifth Dynasty offering lists, which were probably stored in jars – *hnkt*, *dsrt*, *irp 'bš*, *shpt* and *dwjw sšr*. Summing up, their number (14) exceeds the usual number of stone model jars (10–11).

68 bowls (66 without two wine jars for the *bš* sort of wine) still contain several pieces used for offerings or purification rituals. However, since the numbers of bowls change even in assemblages coming from the intact burials, it seems that their quantity was never fixed.

It should be also emphasised that the above-described comparison was based on the offering lists and assemblages of model stone vessels from the late Fifth Dynasty. The early offering list from the Fourth Dynasty record more kinds of liquid substances stored in the jars (*e.g.* Hassan 1948: Plate III). The Sixth Dynasty offering lists are much wider and also the assemblages of model stone vessels of that time are not the same as in the Fifth Dynasty.

How is it then with Junker's assumption? The assemblages should be perceived as the 3D models of offering lists with caution, since they do not correspond exactly. It would be better to establish the term "symbolic representation of ideal burial equipment". In the eyes of ancient Egyptians it must have functioned similarly. The assemblages contained many items from the offering lists, but they were another kind of instrument through which the deceased could have been provided with all basic necessities either for crucial rituals or for sustenance. It is necessary to take into consideration the purpose of the burial dwelling with all its equipment. The deceased could live their afterlife only if they had particular things at hand. These things were first of all put into the burial chamber as real objects. It means that the main part of burial equipment constituted of real food and drink offerings, as well as ritual objects, such as an ewer and basin, incense burners, oils or Opening of the Mouth ritual sets.

At some point in history, only some of these real things found their way to the burial chamber and many of them were omitted. At that time, the assemblages of model stone vessels substituted all of these necessities, regardless the presence of some of them in the real form. Another way of securing the flow of these items and substances was the list situated either in the chapel, where the soul of the deceased was supposed to regularly come through the false door, or in the burial apartment itself. This multiple presence of ritual equipment and offerings in the tomb points to their importance and a kind of fear of their deficiency. It can be perceived that with the return of real offerings and ritual items into the burial chambers of the Sixth Dynasty officials, the importance of assemblages of model stone vessels declined and their production soon ceased.

#### 5.4. Chronological aspects

The tables of intact and well-preserved assemblages of model stone vessels presented above point to the importance of chronological aspects of this particular kind of material culture. From the first glance, it is clear that the composition of the assemblages changed several times. The aim of this chapter is to follow the rules and mark the turning points.

The first model stone vessel sets appeared by the time of Khufu. They were all made of travertine, and belonged to the most important officials of the state, *i.e.* members of the royal family. So far, the Fourth Dynasty contexts with model stone vessels come only from the royal cemetery at Giza (see the catalogue). Unfortunately, there are only a few assemblages that have been better preserved – G 4150 X and G 4250 A. Both examples come from the time of Khufu. It is difficult to count the number of vessels, since none of the assemblages survived intact, and both of them were originally probably larger. However, the earliest examples are very important not only for the chronological reasons, but also from the point of view of their typology. Only the first model jars well reflect their large size originals, and if one wants to search for the purpose of the jars, it is necessary to study the pieces coming from the time of Khufu, when their production was established.

A very important feature of the early vessels is their perfect manufacture with no simplification in shape, which is typical for later periods. The cylindrical jars have well modelled rim parts, and they are completely drilled inside in some cases (G 4240 A, G 4640 A). There is no jug preserved from this time. The only ewer is simple, but also completely drilled inside even with the shaft in the pouring part (G 4140). All the wine jars of this period have a carefully incised nets around their body parts (G 4150 X, G 4250 A, G 7350 A). The

beer jars resemble to the real pottery beer jars of the Third and early Fourth Dynasty (Arias Kytnarová – Jirásková 2015). They have a specifically modelled high rim with a groove below. The shouldered jars are also well-crafted pieces with a carefully modelled rim part, having no necks as some later examples (G 4150 X, G 4250 A).

Comparison of the larger assemblages points to the rather random numbers of various classes. Moreover, there are also a few extra classes of vessels in the early assemblages, such as kbh or hs jars from G 4250 A and a hs jar from G 7560 B. these classes of vessels do not appear later any more in stone, but in copper instead. Also, the vessels later belonging to the Opening of the Mouth ritual sets are all made of travertine and seem to be made in one group with the other model vessels, including the ps š - kf knife.

The Fifth Dynasty contexts shall be divided into two parts. The time from its beginning until the reign of Shepseskare and then Niuserre until the end of the dynasty. The nature of assemblages points to a kind of change by the middle of the Fifth Dynasty that affected administrative core of the society, as well as the material culture, architecture, *etc.* (Bárta 2005a).

The beginning of the Fifth Dynasty seems to follow the development of the earlier period. Unfortunately, there are not many tombs with assemblages of model stone vessels that could be dated to the early part of the Fifth Dynasty. One of the better-preserved sets come from the tomb G 4631 B.<sup>67</sup> The tomb G 2150 A contained mostly beakers and only two jars, but they clearly refer to the Fourth Dynasty style. An example dated to the middle of the Fifth Dynasty comes from Abusir, from a secondary shaft in tomb AS 104 (Odler – Peterková Hlouchová – Havelková, *et al.* 2019: 35). Of a similar dating are the tombs G IV S (northern and southern shaft) and G 7111 C and G 7111 D.

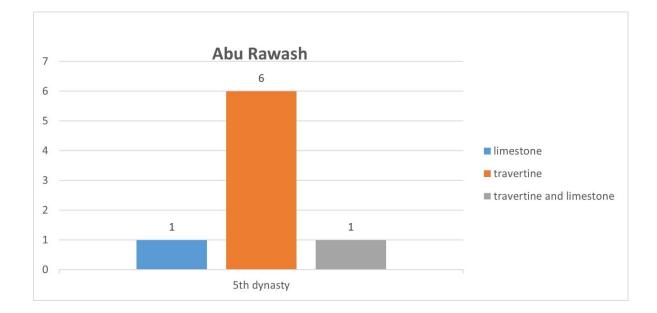
It seems that the only difference related to the earlier assemblages was a starting simplification of the shapes defined by the time of Khufu. It is best visible on wine jars. They lost their well-crafted nets in favour of simple bands or mere incised lines.

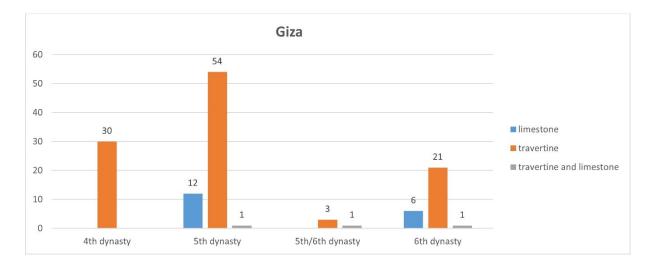
There is a massive rise of the number of assemblages of model stone vessels after the middle of the Fifth Dynasty. Since the time of Niuserre, much more officials could have afforded the stone sets. Moreover, travertine ceased to be the only material. Limestone found its way to the burial chambers not only in the form of canopic jars, which started to appear regularly in the middle and high officials' tombs, but also in the assemblages of model vessels. However, it remained a kind of material of minor importance and use. The limestone

<sup>&</sup>lt;sup>67</sup> The author of this thesis is not convinced by the sealing with the name of Weserkaf that the tomb should be dated to his reign. The bulging shape of shouldered and wine jars rather refer to middle of the Fifth Dynasty.

assemblages usually omit the table and ewer with basin, which are rather to be found in the travertine sets. The only known two tables from the latter part of the Fifth Dynasty come from the tombs G 8402 and D 20.<sup>68</sup> Ewers with basins were collected in the tombs D 20, D 208, G 5170<sup>69</sup> and G 8402, all made in one piece.

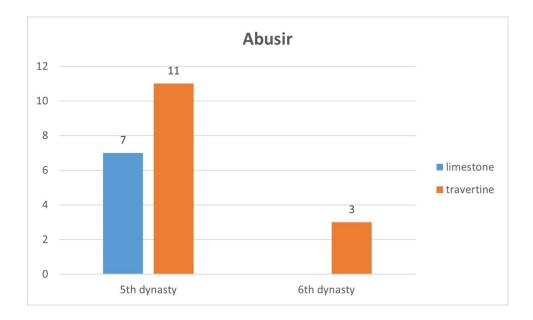
The graphs below show the material distribution within the Fifth Dynasty contexts at individual sites of the Memphite necropolis:

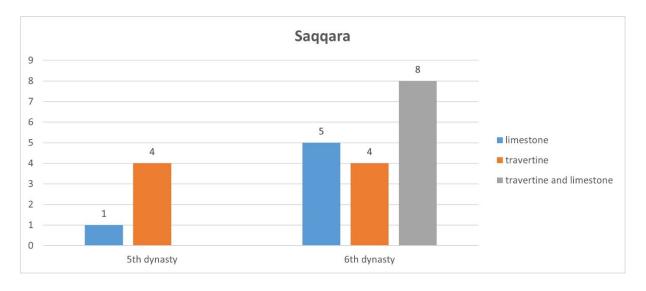




<sup>&</sup>lt;sup>68</sup> The tomb D 20 can be dated either to the very late Fifth Dynasty or to the early Sixth Dynasty.

<sup>&</sup>lt;sup>69</sup> The other model vessels were made of travertine (Junker 1938: 214)





Generally, this is the period of standardisation. The above-mentioned numbers of particular vessels within the sets are valid above all for this period. Even the two materials bring new means of social differentiation, although the burial place also played a role. A detailed study of the Abusir assemblages performed by the author of this thesis has proved that the social position of the person was also reflected in his burial equipment at that time (Jirásková 2017a). The tombs situated at the royal cemetery contained only travertine assemblages of model stone vessels, and already some vessels belonging to the Opening of the Mouth ritual sets were discovered in the tombs of the members of the royal family. Contrary, the only travertine model vessels discovered in the northern part of Abusir South cemetery were found scattered around the tomb AS 31, a large rock-cut tomb belonging to an important – so far unknown – official (Bárta 2011). The other officials buried in this area in the latter part of the

Fifth Dynasty had only limestone sets, although some of them must have been members of important families of that time (*e.g.* Nefer, who was buried in AS 68d, a part of the burial complex of princess Sheretnebty).

Such a situation is rather confusing in comparison to Giza. The bulk of assemblages were still made of travertine there. When one compares the nature of the tombs and the position of their owners, they must find the inequality striking. For instance, the spacious burial chamber of the owner of the tomb AS 67 (Nefershepes/Memi, Shaft 1) at Abusir South had a casing of fine-grained limestone blocks, it contained a perfectly crafted sarcophagus made of white Tura limestone, and a set of four limestone canopic jars. Although the burial was looted in antiquity, an almost complete assemblage of model vessels was found still inside the chamber. The bowls and jars were the most beautiful, and best crafted pieces of all found at Abusir so far, but still it was made of limestone (Arias Kytnarová - Havelková -Jirásková, et al. 2013). Contrary, Kapuptah (G 4461) was buried in a roughly cut burial chamber with a simple sarcophagus pit cut in the bedrock covered by a narrow slab. His canopic jars were mere imitations of limestone pieces - they were pottery jars plastered with a thick layer of white gypsum. How surprising is that Kapuptah could afford a set of travertine model vessels (Junker 1943: Tafel XX-XXI). Unfortunately, decoration of both tombs was damaged and not much information survived to specify the social position of these two officials. One of the titles of the owner of AS 67 was *imy-r<sup>c</sup> sšw <sup>c</sup>prw*. Kapuptah's only surviving title was *irj-ht nzwt pr-*3. In such a case, when there is not enough information, it is difficult to approach to an explanation of the difference. The reason might be connected with the position of the tomb. The Giza cemetery was probably an exclusive place with its own rules (Arias Kytnarová – Jirásková – Odler 2018).

Although the pottery model vessels ceased to be produced by the middle of the Fifth Dynasty in favour of the limestone ones, it is still possible to find some in the burial chambers, but very rarely, and always together with stone pieces, such as in AS 47 (Arias Kytnarová 2011). Other tombs start to contain copper model vessels, but still together with stone model jars and bowls, such as Ptahshepses (AC 9; Dulíková – Jirásková – Odler in press) or Khekeretnebty (AC 15; Verner – Callender 2002) at Abusir.

The very end of the Fifth Dynasty, represented by the reign of Unas, shows slow weakening of the rules again, and noticeable decline in production. It can be detected at the beginning of the Sixth Dynasty, when the nature and composition of the assemblages change quite substantially. Apart from the traditional shapes, new classes of vessels found their way to the assemblages. The Teti cemetery at Saqqara can be taken as an example of transformation. The numbers of particular classes defined in the latter part of the Fifth Dynasty are not respected any more. Instead, it is possible to find several one-handled jugs in one set, as well as a huge number of cylindrical jars (*e.g.* Nikauisesi; Kanawati – Abder-Raziq 2000: 64–65, Pls. 36, 72). Moreover, the tombs situated in this area are often equipped by model squat jars, a completely new class in the sphere of model vessels (see the appropriate chapter above). There are many types of individual classes to be found in these assemblages, pointing to a negligence of original forms.

Concerning material, a mixture of limestone and travertine in one assemblage started to be a standard (see the catalogue). In many of these assorted sets, limestone vessels are painted yellow as an imitation of travertine. The tomb of Kagemni can be named within these. Moreover, his assemblage included a model quat jar made of diorite, an only example of material different than limestone and travertine (Firth – Gunn 1926: 21, Fig. 16).

Recently a publication of the stone vessels from the tombs of the queens of Pepy I appeared (Minaul-Gout 2019). It presented documentation on many pieces of model stone vessels that were collected by the French mission in the burial chamber of Queen Meretites II, the possible daughter of Pepy I. The context is royal, however, the tradition is still quite strong in this particular contexts and follows the same pattern as the sets coming from the Teti cemetery.

By the middle of the Sixth Dynasty the character of burial equipment changed quite substantially once more. In this respect, the model stone vessels started to be unimportant pieces that were replaced by real large size offering vessels. The Fifth Dynasty tombs were besides the model stone vessels usually equipped only by some large size pottery pieces, rarely some copper vessels and canopic jars. Contrary, the Sixth Dynasty burial chambers contained again real size stone vessels, meant to hold cosmetic oils and ointment, large size copper vessels, used for purifying rituals and large size pottery vessels for beverages and nourishment. The society was evidently wealthy enough to afford saturation of its administrative officials with high amounts of precious materials, which did not serve the everyday life, but were buried in the tombs forever. In this respect, the economical mode of provision, represented by model stone vessels was not necessary anymore. If the model stone vessels appeared in a burial chamber of the latter part of the Sixth Dynasty, such as in the tomb AS 22, shaft A at Abusir, they were very roughly crafted, their number was high, and their shapes were hard to recognize. They just represented a dying tradition.

#### 6. Stone versus pottery and copper model and miniature vessels (typology, context)

Stone model and miniature vessels are not the only ones to be found in the Old Kingdom tombs. In fact, pottery miniature bowls are the most typical piece of pottery from the Old Kingdom cemeteries, and in many cases, their number exceeds a hundred in a single burial context. On the other hand, copper miniature vessels are usually rare, but they also appear in larger numbers in one context in a particular part of the period. This chapter will attempt to find out relations between the small size vessels made of these three materials, either from typological or historical point of view. A great deal of work has already been done in cooperation with Katarína Arias and Martin Odler for the evidence from the cemeteries of Giza (Arias Kytnarová – Jirásková – Odler 2018). However, the scope of this chapter covers finds from all the Memphite necropoleis.

It is of importance to mention the terminology, again. Whereas most of the stone small size vessels of the Old Kingdom are model vessels with a clear symbolic function, the pottery and copper pieces (especially jars) are always hollowed inside that they can hold a substance. In this respect, they should be called miniatures. Unfortunately, there is little evidence for the Old Kingdom period, which would prove that they really held any contents. The only records mentioning offerings laid upon miniature pottery bowls were published by Jacques de Morgan (1903: 24). Herman Junker also uncovered an example of small loaves of bread once spread over a stone table deposited in shaft 316 of the tomb G 5070 at Giza (Junker 1944: 56). However, since there is no evidence of any contents inside the "miniature" pottery or copper jars,<sup>70</sup> the term miniature is used just in relation to the possibility, rather than real usage of the vessels (see also a discussion in Arias Kytnarová 2018: 37). This is moreover indicated by the fact that even the large size pottery jars could have a merely symbolic function. It is evidenced by mud filling, which was found in many of the large size pottery beer jars that were deposited either in burial chambers or cultic areas (Bárta *et al.* 2014: 133).

#### 6.1. Pottery

The pottery miniature jars and bowls can be found either inside the burial chambers, or outside by the cult places. They started to appear inside the tombs at the beginning of the Fourth Dynasty, as well as the stone pieces. Their shapes were very similar to the stone ones, such as in tomb G 4340 (Reisner 1942: 472–473, Fig. 285). The assemblage is a combination

<sup>&</sup>lt;sup>70</sup> There is a later piece of evidence of copper bowls containing bread that I was informed about by my colleague Martin Odler. They come from Meir and date to the First Intermediate Period (Radwan 1983: 62).

of stone and pottery. Stone – travertine – was used for the production of high beakers and regularly shaped bowls. They were collected in the number of 12. Besides them, the burial chamber in shaft A contained also pottery pieces of small size vessels. These were represented by several wheel-made miniature bowls, but also shouldered jars, beer jars and wine jars. All of these pieces resemble to the large size pottery vessels as well as the model stone vessels found in the other tombs from the same period. For instance, the wine jars were crafted with a net (or band) decoration in the middle part of their bodies. The beer jars imitated the large size pieces with the specific ledge of the Third and early Fourth Dynasty time (Arias Kytnarová – Jirásková 2015; Arias Kytnarová in press). They were also not crafted altogether with a stand, but separately. Such as in case of Hemiunu (G 4000), the beer jars had pointed or very narrow bases. They were supposed to fit in small pottery stands that were part of the set. The beginning of the Fourth Dynasty is the time of the rise of stone model vessels, and the question is, if there was a specific pattern of distribution of these two materials.



Fig. 55 Pottery model vessels from the tomb G 4340 (taken from http://giza.fas.harvard.edu/).

The stone vessels from the Fourth Dynasty are to be found mostly in the tombs of the members of royal family or higher officials (see the catalogue), the other officials' tombs

were usually equipped with the pottery pieces, mostly being well crafted and red slipped vessels. However, there was no clear line that would divide the two groups, and exceptions appear, such as a few examples of combination of both materials (G 4160, G 4240, G 4340 and G 4640). It was also the case later in the Fifth Dynasty, when the pottery miniature vessels started to disappear from the burial chambers. A typical feature of its latter part is the existence of intentional combination of pottery and stone model and miniature vessels in some burial chambers. These are AS 47 at Abusir, D 20 (shaft 1), G 4510 A, G 4520 A, G 4811 B, G 5070 (shaft 311) and G 7112 A at Giza.

For instance, the substructure of the tomb AS 47 at Abusir contained almost complete set of limestone model vessels in the burial chamber – 1 jug, 6 cylindrical jars, 2 wine jars, 4 beer jars and 4 shouldered jars and 73 bowls. The pottery miniature vessels were piled together with the stone ones to the east of the sarcophagus, except for a few vessels of both materials being found in front of the entrance to the looted burial chamber. The pottery pieces collected in the shaft and chamber numbered 82 and were by represented 13 cups (stylised bowls on stands, see below), 62 shallow bowls and 7 cylindrical jars (Arias Kytnarová 2011). It is an unusual find, since the burial chamber contained two sets of jars symbolically supposed to hold seven sacred oils. One of them was made of limestone, the other from pottery. Two pottery miniature cylindrical jars come from D 20. In the heap of travertine model jars in G 4811 B were several pottery miniature cylindrical jars, but their number was not stated in records. They were also present in shaft 311 in G 5070 with other interesting miniature pottery vessels, such as pots with the convex base tapering towards the mouth (*dšrt*), which are typical for the Fourth Dynasty contexts (Junker 1944: 63–64). The types of miniature pottery jars from G 7112 A were neither described nor photographed.

The relatively new area of usage of pottery miniatures in the latter part of the Fifth Dynasty are the cult places of tombs, or dumps with discarded material. It is of interest that even the shapes of the vessels changed. The pottery pieces found within the burial chambers often corresponded with those made of stone, especially in the Fourth Dynasty. Later on, as well as the stone models, even the pottery miniatures underwent changes in time. But some types are almost never to be found outside the burial chambers, such as pottery miniature cylindrical jars. This may reflect slightly different purpose of the miniatures below and above ground. The typology of the cultic miniatures is quite restricted, and mostly three basic types are to be found in the Fifth Dynasty contexts. These are two kinds of cups, one of them being probably an imitation of a beer jar (Arias Kytnarová – Jirásková 2015), the other is a stylised bowl on a stand (Arias Kytnarová 2015). The third – and most numerous – kind are simple

wheel made bowls. This means that the vessels brought by the bereaved to the chapel or offering niche of tomb served to supply them with food and drinks.



Fig. 56 Pottery miniature jars from the tomb AC 29 at Abusir. Two types typical for the "above ground" contexts – a stylised beer jar on the left and a stylised bowl on a stand on the right (M. Frouz, archive of Czech Institute of Egyptology).

There must have been once a mass production of these miniatures designated for the cultic purposes. They still bear clear traces of production pointing to the wide usage of potters' wheel. The first pieces of the Fourth and early Fifth Dynasty were usually finely made red-slipped vessels (*e.g.* Bárta 2001: 185, Pls. LXXIIIb, LXXIVa). However, their quality slowly decreased, and the late pieces from the Sixth Dynasty were often just roughly hand-made (Arias Kytnarová – Jirásková – Odler 2018, Arias Kytnarová 2018).

### 6.2. Copper

The time of small size copper vessels came later than that of stone and pottery, and it was probably connected with general trends of social differentiation in the bureaucratic area, and maybe also with a better access to the sources of copper or a different mode of its distribution (Radwan 1983: 51–80). They do appear as individual pieces already in the Fourth and first part of the Fifth Dynasty (*e.g.* a neckless shouldered jar in G 2150 A), but assemblages found their way to the burial chambers later in the Fifth Dynasty. One of the earliest examples of sets of miniature copper vessels were found in the tomb Khnumbaf (or Babaef) at Giza (Hassan 1953: 9, Pl. XI) or in the burial chamber of princess Khekeretnebty at Abusir (Verner

- Callender 2002: 42–45). The tomb of Khnumbaf was found intact, that of Khekeretnebty was looted. Although it was robbed, quite much of the original burial equipment remained in the burial chamber. And apart from the set of inscribed model stone vessels, a set of copper vessels was uncovered. The debris, which was filling the chamber with collapsed roof, contained 7 miniature pots with the convex base tapering towards the mouth (dšrt), 8 miniature neckless shouldered jars (nmst), a miniature basin with ewer and a miniature bowl. All of the pieces were found by the north-east corner of the sarcophagus, which is the usual place of model stone vessel sets. In this respect, although they do not exactly correspond to the assemblages made of stone, they might have represented a step towards replacement of earlier traditional material with a new, more luxurious (?), one. Copper is a typical material for the production of vessels used in the process of ritual cleansing and libation. Also the miniature vessels from this context and with this morphology probably served the same purpose. The nature of *dšrt* jars is not clear, but the *nmst* jars and ewer with basin are well documented for cleansing and libation. From the morphological point of view, the pots with convex bases are especially interesting, since they were typical kinds of pottery vessels in the Fourth Dynasty (e.g. Reisner – Smith 1955, Figs. 59–60). After their disappearance from the pottery assemblages, they appeared once again in copper and pottery as miniatures.

The burial chamber of Khnumbaf was different. Besides the miniature vessels, it contained a large copper basin and an ewer. The miniatures were represented by several cylindrical and tall shouldered jars, a few rounded bowls and a couple of rectangular ones (Hassan 1953: Pl. XI). This context differs from the previous one. The traditional vessels used for ritual cleansing were present in the large size form, while the miniature size was present in the form of bowls and slender jars. Moreover, there were no model stone vessels present in the burial chamber of Khnumbaf, whose burial equipment was quite "humble". In this respect, the miniatures of Khnumbaf might have substituted the stone ones, having thus similar forms.



Fig. 57 Examples of copper miniature vessels coming from the burial chamber of Princess Khekeretnebty (AC 15) at Abusir (K. Voděra, archive of Czech Institute of Egyptology).

Another tomb with a larger number of copper miniature vessels is G 4733 E at Giza. The seal imprint found in shaft E mentioned the name of King Djedkare, but the equipment of the burial chamber is rather unusual for that time, and the author of the present study would date it to the very end of the Fifth Dynasty or the beginning of the Sixth Dynasty. The main reason is the nature of the assemblage of model stone vessels, which do not correspond with those from the time of Djedkare. Their number is too high, and some forms are unusual (http://giza.fas.harvard.edu/sites/1123/full/). The high number of copper model vessels likewise supports the later dating. The rich copper assemblage contained a model incense burner, ewer and basin, bowls and quite rare flat base pots with handles.<sup>71</sup>

<sup>&</sup>lt;sup>71</sup> My colleague M. Odler informed me that fragments of a similar bowl were collected in burial chamber of shaft E in AS 68d at Abusir (Bárta 2014: 4–5). This shaft is dated to the Sixth Dynasty, which would support similar dating for the context in G 4733 E.



Fig. 58 Some copper miniature vessels from the burial chamber at the bottom of shaft E of tomb G 4733 (taken from http://giza.fas.harvard.edu/).

Taking into consideration the available evidence (especially in Radwan 1983), there are several types of vessels that were crafted in small size from copper in the Old Kingdom. These are predominantly vessels used in the washing process, either in profane, or in sacred sphere. These are a wide basin and a jar with spout (ewer). The jar can also be made in the form of a shouldered *nmst* jar or *hs* and *kbhw* jars (Díaz Hernández 2014–2015). The cleansing ritual involved not just water, but also incense. In this respect, copper was likewise a typical material for incense burners. The last type are bowls. They can be of several forms. If they are larger, they are just wide, quite shallow pieces with rounded base. The smaller – miniature – ones were usually made with flat base and straight or slightly concave flaring sides. The last type are rectangular basins with flat base and flaring sides.



Fig. 59 The set of copper miniature vessels from shaft A in the tomb AS 22 at Abusir (K. Voděra, archive of Czech Institute of Egyptology).

Less common are model copper cylindrical jars. They were found in the burial chambers of Khnumbaf (Hassan 1953: 9, Pl. XI) and Seshemu (Hassan 1941: 92). This shape was rather unusual for copper, as well as for pottery. The Sixth Dynasty contexts also contain models of beer jars. These pieces imitate stone ones in every detail. And it seems that the purpose of the model vessel was already lost in minds. The Sixth Dynasty also witnessed rise of copper altars – earlier known just in wood<sup>72</sup> – in the form of *htp* sign, which served as a table for the copper model vessels (Radwan 1983: Tafel 30).

<sup>&</sup>lt;sup>72</sup> For instance, in the tomb of Kahotep at Abusir (Borchardt 1907: 130, Abb. 110).



Fig. 60 Rectangular copper miniature bowls/basins from shaft 3 in AS 104 at Abusir (S. Vannini, archive of Czech Institute of Egyptology)

## 6.3. Comparison

The typology of model stone vessels and the above-mentioned examples of miniature copper and pottery vessels have shown that the "limits" of material were crossed only in some parts of the Old Kingdom and in particular cases. Pottery was always a cheap kind of material and therefore it was used for the production of vessels of everyday use that served as containers of the most common liquid substances, such as water, beer and wine. The bowls and trays could hold anything of solid consistence, including broth or mush. Moreover, it was a suitable material for various production processes, such as baking bread, brewing beer, moulding copper objects, *etc.* There were several kinds of pottery material, the most common being Nile mud tempered with straws. It could have been gained anywhere on the riverbank. If a finer piece of pottery was needed, the potters used well-sieved fine clay, which enabled production of thinner and harder vessels. These are usually represented by thin red-slipped Meidum bowls. Some Upper Egyptian sites were sources of light, yellowish marl clay used in production of tall wine jars with narrow necks.

On the contrary, stone and copper were exquisite materials controlled by the king himself. He organised expeditions to deserts and foreign lands to acquire these materials (Eichler 1993; Tallet 2018) and it is logical that the gained products could not have been used by anybody on their own will. It was the king, who awarded his officials presenting them objects made of precious materials (*e.g.* Strudwick 2005: 266, 303, 311, 315, 319, *etc.*). In

this respect, the vessels made from stone and copper were used either as luxurious variations of pottery vessels, or to produce specific objects, mostly of religious or cultic purpose. Naturally, stone was the best material for oils and ointment, since it could keep them cold and prevented them from going rancid. Its containers thus became symbols of the contents in various contexts and iconography, respectively. These vessels were of typical shapes, which could be easily recognized in the epigraphy and iconography. The most common were cylindrical jars, followed by shouldered jars of various heights (often almost squat) or one-handled jugs (*e.g.* Hassan 1975: 90, Fig. 94b; Altenmüller 1998: Tafel 98/4).

Copper was from the earliest times largely involved in the offering ritual. Several inscribed pieces from the Old Kingdom mention the *prt-larw* ritual on their bodies (Odler 2017). The types of vessels used in this ritual were mostly of the libation and purification nature, such as basins with ewers, *hs* and *kbhw* jars or incense burners. The reason for such a choice of material is ambiguous. It is highly probable that it consisted in the nature of the material, which was luxurious, but still quite easy to be worked. And when compared with stone, it was also much lighter. The large ointment jars could just be stored somewhere without moving, whereas the vessels used for washing were regularly raised being full of water. If they were made of stone, they would be too heavy. The incense burners could not be made of stone, for the heat would damage its surface and they might crack.

In case of the large size vessels, the rules of the appropriate material almost always pay. Concerning the model and miniature vessels, situation is slightly different. Vessels made of pottery and copper usually reflect the large size pieces. An exception are pottery sets from the Fourth and early Fifth Dynasty burial chambers, which approximately correspond to the stone sets and their individual pieces. There are cylindrical jars made of pottery to be found, but no miniature pottery ewers and basins are evidenced.<sup>73</sup> If they were present in a burial chamber of the Fourth Dynasty, they were made of copper in large size. Also miniature *nmst* jars with long body and flat bases or one-handled jugs were evidently not crafted in pottery.

The copper miniature vessels only rarely reflect those made usually from other materials, such as model beer jars (Arias Kytnarová – Jirásková 2015) and various bowls including those with convex bases (Arias Kytnarová – Jirásková – Odler 2018). There are only a few copper model cylindrical jars, coming from the tombs of Khnumbaf (Hassan 1953: 9, Pl. XI) and Seshemu (Hassan 1941: 92). However, copper never served for the production of miniature wine jars or one-handled jugs.

<sup>&</sup>lt;sup>73</sup> However, they are known in large size in pottery (*e.g.* Verner – Callender 2002: 40–41).

Summing up, the evidence shows, that stone is the only material used to produce models of vessels normally made from all three materials. The assemblages of model stone vessels included types traditionally made of stone (for body care), copper (for purification ritual), as well as pottery (for nourishment). No sets of similar nature are to be found in pottery and copper.

The chronological comparison points to shifts in the usage of particular materials. As was stated above, the Fourth Dynasty tombs were equipped either by stone model vessels or pottery miniatures, respecting the social position of their owners. The middle of the Fifth Dynasty brought another means of social stratification of burial equipment. It involved replacement of pottery miniature vessels by limestone sets. The latter part of the Fifth Dynasty also witnessed rise of copper miniature vessels, first being deposited in the tombs of members of the royal family. The predominance of copper miniature bowls is typical for the early Sixth Dynasty assemblages. At this point in history, the copper miniature vessels substituted the sets of stone model vessels. As an example, may be mentioned the tombs of vizier Qar and his sons at Abusir. Except for the tomb of his son Inty, no stone model vessels were present in their burial chambers at all. Instead, a number of model copper bowls was collected in their burial apartments (Bárta 2009).

The Sixth Dynasty society started once again to favour large size vessels made of the appropriate materials. Although there are still examples of assemblages of model stone vessels, most of the burial chambers of the latter part of the Sixth Dynasty contained large size ointment jars (mostly of cylindrical shape), pottery jars and bowls, as well as copper vessels used for cleansing and libation. A well-preserved example is the burial chamber of Ptahshepses Impy (G 2381 A). His apartment was found to be intact and therefore, all the original equipment was preserved *in situ*. The head of the official was surrounded by two tall ointment jars made of travertine. Apart from them, the only other stone vessels were the model jars and beakers used in the Opening of the Mouth ritual. The chamber was filled with large size copper vessels and altars with miniature copper vessels, including uncommon types. Pottery was represented by 5 examples of two-handled combed jars of Syropalestinian origin, red polished bowls and deep basins with spouts.



Fig. 61 Travertine headrest and two oil jars found by the head of Ptahshepses Impy (taken from http://giza.fas.harvard.edu/).



Fig. 62 Large size copper vessels deposited in the burial chamber of Ptahshepses Impy (taken from http://giza.fas.harvard.edu/).



Fig. 63 Model copper vessels found in the burial chamber of Ptahshepses Impy (taken from http://giza.fas.harvard.edu/).



Fig. 64 Pottery bowls and deep basins with spout from the burial chamber of Ptahshepses Impy (taken from http://giza.fas.harvard.edu/).

## 7. Model and miniature vessels in the provinces

The areas outside Memphis with its royal cemeteries must have always been connected to the centre through royal administration in the whole period of the Old Kingdom. The royal court and all the people belonging to it were dependent on the products coming from distant areas, both from the Delta and valley (agricultural products), and from the deserts (rocks and minerals). In this respect, it is natural that the state administration was involved at least in the taxing and redistribution system supplying the royal court and other centres of state administration. Such a fact is evidenced at least in the lists of domains recorded on the walls of royal monuments and named in some private tombs (Jacquet-Gordon 1962; Papazian 2012; Khaled 2020). Another piece of evidence are administrative titles involving activity in remote areas (for the most recent publications see Brovarski 2013; Martinet 2019). The expeditions heading to the desert areas in search of precious stones are attested in inscriptions on the desert roads or in mine and quarry areas (Eichler 1993; Tallet 2018).

Unfortunately, there is not much archaeological evidence of involvement of royal administration in the provinces especially for the middle part of the Old Kingdom. The large tombs with objects bearing royal names slowly disappeared at the beginning of the Fourth Dynasty. Snofru is the last king widely attested in the provinces (see the discussion in Chapter 2). The changes that might have been introduced already by Snofru (Gundacker 2006) but became evident in the time of Khufu had definitely a wide impact on various aspects of ancient Egyptian state. Concerning the burial customs, the most prominent and remarkable feature was his pyramid cemetery, being a centrally planned and built complex of resting places for the relatives and officials of the king. One cannot avoid a feeling of strong influence of well-defined organisation, and also of drawing the members of state administration to the centre, either in their life, or after death. Some of these people might have been born outside Memphis, but since this time they were probably definitely moved to the centre with no return to the provinces. Most of the researchers in the administration pointed to the specific situation in the Fourth Dynasty, when the Memphite officials held titles involving maintenance of more than one provincial nome. In this respect, their work consisted in fulfilling particular tasks in the remote areas that were limited in time. Afterwards, they returned back to the centre, where they might work at other positions (Martinet 2011: 137).

Nicole Alexanian presented a thorough research in the provincial cemeteries dating to the Old Kingdom and First Intermediate Period. She also noticed the lacuna in the middle of the Old Kingdom, when there are no elite or monumental tombs present in the provinces. She explained it as lack of local elite that would communicate with the centre (Alexanina 2016: 499). The first clearer archaeological evidence on "presence" of royal administration in the provinces can be found there from the middle of the Fifth Dynasty onwards. It is demonstrated especially through the temple construction or involvement in the local cults (Bussmann 2010). It was followed by rising activity in building of large tombs for local elite, which is remarkable from the beginning of the Sixth Dynasty (Alexanian 2016: 487). The trend of the ruling elite coming solely from the royal family was abandoned by the beginning of the Fifth Dynasty and it was probably the same time, when the provincial elite started to grow. The first officials born in the provinces worked in the centre and were buried there. They also sent their sons to the royal court for education (Kanawati 1977: 71; El-Khouli – Kanawati 1990: 18; Strudwick 2005: 343). Through this system, the families of powerful provincial men who might be potentially dangerous to the king were tight to the court. There is one exception, Kakhenet, an official buried in tomb A2 at el-Hammamiya at the beginning of the Fifth Dynasty. Not only held he interesting administrative titles, but he was also married to the royal princes (z3t nzwt n ht.f) Ifi (El-Khouli – Kanawati 1990; Martinet 2011: 138–140). Probably due to this alliance, he likewise gained the title of royal prince (z3 nzwt), singular in the provinces at that time. The reason for his choice of burial place is unclear, and so far, remains unique.

The system of central administration worked approximately until the middle of the Fifth Dynasty, when there is a break usually connected with King Niuserre (Bárta 2005a; Dulíková 2016). Martinet claimed that there were three reforms performed during the Fifth Dynasty, one was division of provincial titles into general administrators of nomes and officials with specific functions in the nomes. The second was decentralisation of provincial administration, when the nomarchs started to administer only one province, where they reside and built their burial apartments. The last change lies in the new system of control of nomarchs though the chief of Upper Egypt – jmy-r<sup>3</sup> šm<sup>6</sup>w (Martinet 2011: 154ff). The first official bearing the title *jmy-r3 šm<sup>c</sup>w* were Rashepses and Kai from the time of Niuserre – Djedkare, both buried in Memphis. The first holder of the title attested to be buried in the provinces was according to Browarski Hemenu from Akhmin, who lived in the time of Teti (Browarski 2013: 91-92). Due to this involvement, the provincial cemeteries witnessed once again rise of building activity reflected in large tombs belonging to local elite. I.e., to the people who were bound more to their homeland than to the royal court, where they held particular administrative positions, at the beginning connected with provincial management. The evidence coming from their tombs point to their high social position, especially when

dealing with their titulary (Martinet 2011: 13–107). Unfortunately, many of the burials situated in large and splendidly decorated rock-cut tombs and mastabas were disturbed by robbers and no equipment survived in the subterranean apartments at all.

By the Sixth Dynasty, not only priests, local overseers, or military officials, but also viziers being buried in provincial centres are no exception, such as Izi from Edfu, Weni, the elder from Abydos<sup>74</sup>, and others from Meir and Deir el-Gebrawi (Alliot 1933: 22–24; Richards 2002; 2003; Blackman – Apted 1953; Kanawati 2011; 2014; 2015; 2017; Davies 1902). The trend of wealthy burials of high positioned courtiers continued and pointed to the weakening of central power and authority of the king. The homogeneous way of maintaining the provinces turned into heterogenous, and new titles connected with provincial administration appeared. The control of provinces was secured by new ways, such as marriages of King Pepy I with two sisters of vizier Djau, a noble from Abydos. Both of them later became mothers of new kings – Merenre I and Pepy II (Martinet 2011: 177ff). Kanawati described an interruption that occurred by the end of the reign of Pepy I, which is detectable in the growing number of nomarchs, who were once again buried in the residence (Kanawati 1992b: 87).

It is especially the Sixth Dynasty, when large numbers of stone vessels appeared in the burial chambers of provincial officials. They enable comparison with the centre and from the point of view of material culture lead to an interpretation of connections and ways of goods flow.

## 7.1. Stone vessels in the provincial cemeteries

The target of the thesis is the research in model and miniature stone vessels. When dealing with the material coming from the provincial tombs, an interesting fact comes out. There has been no set of model stone vessels uncovered in the Old Kingdom provincial cemeteries so far. There is still a strong tradition of stone vessels as important contents of the burial equipment, even in the provinces, but the only examples are functional, *i.e.*, hollowed, large size vessels and small size – miniature or miniaturised – vessels. The following list of evidence will present the available material to find out particular trends and involvement between the centre and remote areas.

<sup>&</sup>lt;sup>74</sup> New research of French mission at South Saqqara uncovered new evidence that may point to the real burial of Weni by the pyramid of Pepy I, leaving Abydos as a place of his cenotaph (Collombert 2015).

The Delta was always closely connected to Memphis, the capital, centre of administration and base of the royal court. Even the Lower Egyptian nomarchs remained throughout the Old Kingdom in Memphis, where they were buried (Martinet 2011: 210). The excavation of the fertile land of the Delta is limited due to many aspects (*e.g.* introducing chapter in Wilson 2012; https://www.ees.ac.uk/delta-survey-project) and there are still only a few Old Kingdom sites known so far. The best recorded tombs relevant for the present study were discovered at Tell Basta and Mendes.

The excavations of Mohamed I. Bark at Tell Basta that started in 1978 and uncovered a series of Old Kingdom tombs in the Eastern cemetery, dated to the Sixth Dynasty (Bakr 1992: 21). Among these, a large stone-built mastaba is of interest. It is described as having several rooms decorated with paintings; however, there is no information on the burial equipment of its owner.

The excavations at Mendes brought to light a couple of tombs dating to the Old Kingdom. Some of them were built from stone and might have been well equipped, but no finds were collected at all (Hansen 1965; 1967). The only tomb that probably contained some burial equipment was that of Ishetef-Teti, but none of its contents were published (Chabân 1910).

Contrary to the Lower Egypt, the Upper Egyptian sites are more numerous and wealthier. The main reason should be their far distance from the centre, which caused rise of local elite in some parts of history. However, most of the cemeteries contain rather small shaft tombs with humble burial equipment. Stone vessels were usually present either in the tombs of the state officials mostly from the Sixth Dynasty, or in wealthier shaft tombs of the same dating. The list will provide relevant evidence from the target cemeteries, such as in case of Chapter 2, going from north to south and ending with the oases.

The northernmost noteworthy cemetery is that of Deshasha, where are located the tombs of Inty, Shedu and Nenkhefetka. Unfortunately, no finds were discovered in their eternal dwellings (Petrie: 1898; Kanawati – McFarlane 1993). Similar situation is to be found in the so-called Fraser tombs at Tehna (Thompson 2014), situated further south.

The undisturbed tomb no. 14 of Niankhpepy, who held titles *jmy-r3 wpwt m sp3wt 9*, -"overseer of commissions in 9 nomes" (Jones 2000: 101, no. 413), *hq3 hwt* – "chief of the estate" (*idem*: 670, no. 2453), *hry-tp nzwt* – "royal chamberlain" (*idem*: 788, no. 2874), *smr w*<sup>c</sup>ty – "sole companion" (Jones 2000: 892, no. 3268), from Zawiyet el-Meytin, dated to the Sixth Dynasty (reign of Pepy I or later), contained three miniature jars and a bowl made of travertine (Varille 1938: 6, 28, pl. XIX). The jars are drop-shaped with wavy collars, completely drilled inside. Their heights are 5.6 cm, 5.8 cm and 6.2 cm. The bowl is very similar to those coming from Memphite assemblages of model stone vessels. Its rim diameter was 7.0 cm.

Other tombs of Zawiyet el-Meytin were excavated and published by Raymond Weill. Unfortunately, they were just listed with descriptions and no drawings or photographs were added (Weill 1913). Patrizia Piacentini work on the material later, but even her publication included only a few photographs (Piacentini 1993). In this respect, one can rely merely on the descriptions of individual vessels. A well-equipped tomb was RS 4, whose owner and his titulary are unknown. It contained five travertine vessels, a copper mirror, faience beads and a pottery bowl (*idem*: 67–68). The first jar was described as an ovoid jar with rounded base, narrow neck and flaring rim (no. E 11459; measurements were not provided for any item), the second was a conical jar with flaring neck (no. E 11460), the third and fourth were ovoid jars with flat bases and wide flaring mouths (nos. E 11461 and E 11462). The last piece was a spouted bowl (no. E 11463).

Five vessels, a Seven sacred oil tablet, a headrest, all made of travertine, and a set for the Opening of the mouth ritual were brought to light from the burial chamber of Neferetiit in tomb no. RS 5 (Piacentini 1993: 68–69), the *jry-ht nzwt* – "custodian of the property of the king" (Jones 2000: 325, no. 1200) and *hmt-ntr Hwt-Hr* – "priest of Hathor" (*idem*: 540, no. 2012). The vessels were described as two small globular jars with wide horizontal rims (nos. E 11471 and E 11472). The next is a globular jar with pointed base and flaring neck (no. E 11473) and the last two are probably elongated jars with pointed bases and flaring necks (nos. E 11474 and E 11475).

The last well-preserved tomb equipment was that of Metu collected in tomb no. RS 6 (Piacentini 1993: 69–70), the hq3 hwt – "chief of the estate" (Jones 2000: 670, no. 2453), *smr*  $w^{c}ty$  – "sole companion" (*idem*: 892, no. 3268) and <u>hry-tp nzwt</u> – "royal chamberlain" (*idem*: 788, no. 2874). It contained a travertine Seven sacred oil tablet, a set for the Opening of the Mouth ritual, a travertine headrest and two pottery jars. No stone vessel was, however, present.

There is a group of tombs marked as Q in Deir el-Bersha, which are dated to the Sixth Dynasty according to the dating of the large tomb of Ankhy. They were published by Francis Llewellyn Griffith and Percy E. Newberry, but no finds were listed (Griffith – Newberry 1894). Newer excavations, which took place at the site, brought to light a tall shouldered jar with flat base, higher neck and flat rim from tomb 15J15/1, shaft A, belonging to an elderly woman (Vereecken – De Meyer – Dupras – Williams 2009: 188, Pl. XVI/a).



Fig. 65 The jar from 15J15/1A at Deir el-Bersha (taken from Vereecken – De Meyer – Dupras – Williams 2009: Pl. XVI/a)

No finds were recorded at some more sites with Old Kingdom tombs, such as Sheikh Said (Davies 1901), Quseir el-Amarna (El-Khouli – Kanawati 1989) and Meir (Blackman – Apted 1953; Kanawati 2011; 2014; 2015; 2017).

At Deir el-Gebrawi a stone vessel was found in the burial chamber of Djau (tomb no. 12), whose tomb was dated to the reign of Pepy II (Kanawati 2013: 58, pls. 37b, 81). It is a 3.5 cm high elongated jar with rounded base, short neck and thick rim. It was made of travertine and completely drilled inside. Other Old Kingdom tombs in the site did not contain any stone vessels (Kanawati 2005; 2007).

The cemeteries of Mostagedda were excavated by Guy Brunton (1937), who claimed to find a Fifth Dynasty cemetery that "start the long series of graves of the Old Kingdom and First Intermediate Period". However, he did not provide any dating criteria. The stone vessels were found in several tombs presented also in drawings in his publication (*idem*: Pl. LXIII). One of them was tomb no. 689 with a vaulted burial chamber containing a wooden coffin. Outside the coffin, by the feet of the deceased were found two travertine vessels, both being elongated jars with pointed bases, one having a wavy collar (ca 8.0 cm high)<sup>75</sup>, the other with flaring neck (ca 13.5 cm high). Both vessels are of the Sixth Dynasty shapes.

<sup>&</sup>lt;sup>75</sup> Measurements were taken according to the scale from the electronic version of the book.

Tomb no. 1209 contained a copper mirror and four travertine jars – a cylindrical jar (ca 6.3 cm high), two tall, shouldered jars with short necks, one having a concave-shaped lid (ca 7.2 cm and 6.3 cm high), and a tall jar with flat base and wavy collar (ca 8.1 cm high). All was lying piled behind the knees of the deceased. Shapes of these jars indicate dating to the late Fifth Dynasty. However, the combination of the copper mirror and stone vessels as the main part of the burial equipment is typical for the simple provincial tombs of the Sixth Dynasty.

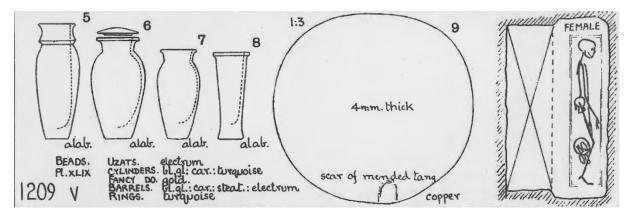


Fig. 66 Tomb 1209 from Mostagedda with its equipment (taken from Brunton 1937: Pl. LXIII)

Another tomb labelled as Fifth Dynasty burial was no. 3540. Inside the wooden coffin, by the head of the deceased was uncovered a cubical wooden box. Its contents were two miniaturised stone vessels and a ceramic pot. The burial contained a copper mirror, beads, a bracelet made of horn and a tubular steatite seal. One of the two vessels was a travertine cylindrical jar (ca 6.3 cm high), the other was a bowl with a groove below the thick rim (ca 6.0 cm in diameter; Reisner's type Vb, Reisner 1931: 141). Even these vessels may come from the Fifth Dynasty, however, the whole context could be also dated to the Sixth Dynasty.

In fact, the Fifth Dynasty dating should be ascribed to the bowl with recurved rim (the so-called Meydum bowl) from tomb no. 2635, which was dated to the Fourth Dynasty by Brunton (ca 22.2 cm in diameter). A striking feature of the whole context is that it was a simple pot grave with two stone vessels as the only burial equipment. One of them was the travertine bowl, the other was a limestone circular offering table on a stand made in one piece. Since such tables may occur even in the Sixth Dynasty (*e.g.* Izi from Edfu in Aksamit 2001: Fig. 3), it is difficult to date it more precisely. The whole context gives impression of a reuse of older types of stone vessels in a younger tomb.

The rest of the tombs were dated to the Sixth Dynasty (Brunton 1937: 98–100, Pls. LXIV–LXVI). Most of these tombs were equipped by stone vessels, copper mirrors, beads, button seals and cosmetic utensil. The stone vessels are of typical shapes of the middle and latter part of the Sixth Dynasty, such as cylindrical jars, elongated jars with pointed bases and wavy collars or high flaring necks, small drop-shaped jars with wavy collars or the bag-shaped jars with flat bases and narrow mouths with short necks.

Guy Brunton worked also at the near site at Matmar, where he likewise dated some of the excavated tombs to the Fifth Dynasty (Brunton 1948: 29–31, Pls. XXXIV, XXXVII, XXXVIII). Several of the tombs contained one stone vessel each. The most interesting piece comes from the tomb no. 3234. By the head of the deceased was lying a scribe's utensil including an ivory palette with red and black paint inside, a green schist vessel (ca 10.5 cm in diameter)<sup>76</sup> and a copper trowel with ivory handle. The vessel had a specific shape of the scribes' water pot, it was a short cylindrical jar with splayed foot and wide flat rim (Jirásková 2016). It is to be found only in the Memphite tombs and this is an only example from the provinces. The Memphite examples come from both the Fifth and Sixth Dynasty contexts.

The tomb no. 3243 contained three vessels of interest. It was described as a female burial in wooden coffin. By the head of the deceased was a squat shouldered jar without handles (ca 5.3 cm high), a concave-shaped cylindrical jar (ca 10.8 cm high) and a jar being a beaker on a stand (?) or a beaker on high foot (?) inscribed with the names of King Teti (ca 11.4 cm high). The squat jar is made of black and white porphyry, the other two of travertine (Brunton 1948: Pl. XXXVIII). Its shape resembles to the jar of Queen Ankhnespepy II from the Metropolitan Museum of Art (Arnold 1999: 454–455) or two jars from the tomb of Queen Neit (Jéquier 1934: 113, Fig. 19).

The other vessels dated to the Fifth Dynasty by Brunton are listed at the beginning of Plate XXXIV. The one from tomb no. 5304 and a similar from tomb 5318 in Plate XXXVIII come from late Sixth Dynasty contexts; however, the rest can be dated also to the late Fifth Dynasty. Some pieces slightly differ from those found usually in the provinces in the Sixth Dynasty burials. They seem to be more carefully crafted and their shapes resemble to the model stone vessels from the Memphite cemeteries. Those from tombs nos. 3255 and 5301 look like the Fifth Dynasty model beer jars on stands, in this case being larger and fully drilled inside. Also, the shouldered jar with neck coming from the tomb no. 3251 resembles to the model shouldered jar (ca 7.1 cm high). One can think of a possibility of transmission of

<sup>&</sup>lt;sup>76</sup> Measurements were taken according to the scale from the electronic version of the book.

forms from the centre into the provinces already at the time, when the officials in the Memphite region had only model vessel made for their eternal dwellings. Since there was no tradition of the assemblages of model vessels in the provinces, the local craftsmen would make them larger and completely drilled inside as functional vessels. It is one possible explanation. Another interpretation would be a different dating of the tombs. The first functional vessels of the discussed types appeared in the Memphite tombs in the first half of the Sixth Dynasty, by the time of Pepy I. In this respect, these tombs from Matmar, dated by Brunton to the Fifth Dynasty, would come from about the middle of the Sixth Dynasty.

The vessels coming from the Sixth Dynasty tombs, such as no. 603, 813, 851 are most probably of its latter part (Brunton 1948: 32–34).

Brunton also excavated the Old Kingdom tombs at Qau and Badari, where he claimed to find both Fifth and Sixth Dynasty shafts (Brunton 1927: 23–33). One of the Fifth Dynasty tombs should be no. 978. There was a box containing four travertine vessels stored in a niche in the southern part of the grave. One of them was a tall cylindrical jar with splayed foot, flat rim and flat lid with a stopper, another was an elongated jar with flat base and wavy collar and the last two were models of granaries (*idem*: Pl. XXXI). The types and shapes of the vessels are rather of the early Sixth Dynasty dating. Another one is tomb no. 1224, which contained several pottery vessels, beads and three travertine jars and a rough bowl (*idem*: Pl. XLIII). One jar was a shouldered jar with flat base, short neck and wide flat rim (ca 6.3 cm high), the other two were elongated jars with flat bases and wavy collars (ca 12.3 cm and 5.5 cm high).<sup>77</sup> Rather than the Fifth Dynasty, the assemblage should be dated again to the early part of the Sixth Dynasty. Such a dating was suggested by Stephan Seidlmayer, who based his chronology on the study of pottery in particular, also taking into consideration shapes of stone vessels (Seidlmayer 1990: 210ff).

<sup>&</sup>lt;sup>77</sup> Measurements were taken according to the scale from the electronic version of the book.

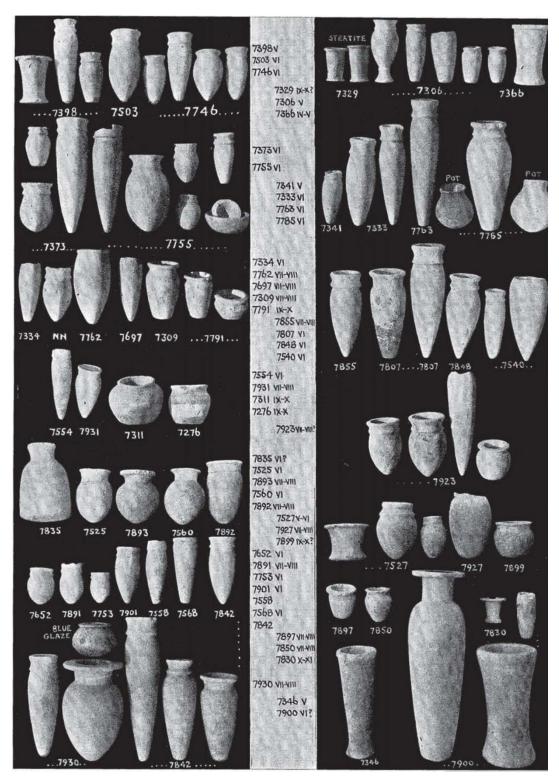


Fig. 67 Some stone vessels from the cemeteries of Qau and Badari (taken from Brunton 1927: Pl. XXX)

The Sixth Dynasty tombs contained various vessels of traditional shapes, such as tall cylindrical jars with splayed foot and wide flat rim, elongated jars with flat or pointed base and wavy collars, some having flaring neck and wide rim, or small drop-shaped jars with

wavy collars (Brunton 1927: Pls. XXVI–XXXI). One is tempted to conclude that the tombs dated by Brunton to the Fifth Dynasty were of the first half of the Sixth Dynasty, whereas those dated to the Sixth Dynasty were of its latter part.

Unexpectedly, three of local simple tombs were equipped with three stone vessels bearing the names of King Pepy II, one in the form of the name of Queen Ankhnespepy. All were inscribed on the bodies of cylindrical jars and come from tombs nos. 3202, 3217 and 4870 (*idem*: 30, 36, Pls. XXVI and XLI).

A miniature vessel imitating the model beer jar on stand typical for the Memphite assemblages of model stone vessels was discovered in tomb no. 3217. It was ca 12.0 cm high and completely drilled inside except for the stand (*idem*: Pl. XXVII/80).

The small cemetery at Zarabi was excavated on the outset of the 20<sup>th</sup> century by Ernst Mackay from the British School of Archaeology (Petrie 1907: 10). The field work brought to light 126 tombs dated to the late Fifth and Sixth Dynasties. The burials were quite humble, represented by simple pits with burials at the bottom. Petrie included several stone vessels in the publication giving evidence of usual types, however, he did not specify their position and number in individual tombs (Petrie 1907: Pl. VIIE). He only noted that some of them – the smaller slender forms – were deposited by the head of the deceased, which was always directed to the north. Others – mostly the large forms – were laid by the feet.

The material is not mentioned, but they all seem to be made of travertine. Concerning the classes, there were cylindrical jars of typical late shape with slim body, splayed foot and wider flat rim. Contrary, the cylindrical jar from tomb no. 34 represents a rather archaic type. Another large group are the elongated jars with pointed base and wavy collar. Others are the small drop-shaped jars with pointed base and wavy collar. There are also two tall, shouldered jars with necks and flat rims and a neckless squat shouldered jar of Reisner's type Vc (Reisner 1931: 141, 184). There also seem to be a tall jar with a small lug handle (tomb no. 83), unique in such a type of poorer burials.

Petrie dated the tombs according to similar finds from Hu to the Sixth Dynasty. Alexanian refers to the time spam between the Fifth – Sixth Dynasties (Alexanian 2016: 197). From the point of view of the stone vessels, they should rather be dated to the Sixth Dynasty by the author of the thesis.

The site of Hammamiya is known to contain some Fifth Dynasty tombs, such that of Kakhenet, the first holder of the title *z3-nzwt* and husband of the royal Princess Ifi, who was buried with him in the provinces. Unfortunately, there is no information on the contents of

their burial shafts, which were probably found empty of any equipment (Mackay – Harding – Petrie 1929; El-Khouli – Kanawati 1990).

Naguib Kanawati presented in a ten-volume publication a wide range of officials who were buried at el-Hawawish (Kanawati 1980; 1981; 1982; 1983; 1985; 1986; 1987; 1988; 1989; 1992a), many of them belonging to the late Old Kingdom period. Most of the tombs, however, did not contain any stone vessels, except for a few, which were included in the tenth volume. One of them, coming from the anonymous tomb M52, was only a fragment, but of an interesting piece. It was originally a travertine bowl "with a sculpted monkey's head forming the handle. Monkey's back and spread arms are shown in relief on the outer side of the dish. On the arm of the monkey a very small and finely incised inscription with blue paint reads nzwt-bjty Mrjjr<sup>c</sup>." (Kanawati 1992a: 14, Pl. 1). Kanawati estimated that the diameter of the bowl was about 15.0 cm. It seems that it was probably a similar piece as the monkey bowl, which came to light during excavations in the tomb of Igit at Balat (Valloggia 1998: 81-82). The other find from el-Hawawish comes from the tomb of Nebet (H27), who was hm(t)-ntr Hwt-Hr nbt nht "priestess of Hathor, lady of the sycamore" (Jones 2000: 545, no. 2024), hkrt nzwt w<sup>c</sup>tt "sole royal ornament" (idem: 795, no. 2900). It is represented by a diorite squat jar with wide flat rim and unpierced tubular handles (16.5 cm high, Kanawati 1992a: 21, Fig. 6b, Pl. 3b). The tomb was dated by Kanawati to the first half of Pepy II's reign.



Fig. 68 Short shouldered jar from the tomb of Nebet at el-Hawawish (taken from Kanawati 1992a: Pl. 3b)

Naguib Kanawati also re-visited with his team the tombs from the Fifth to the Eighth Dynasties at el-Hagarsa; however, no stone finds were collected at all (Kanawati 1993a; 1993b; 1995).

The large cemeteries of Naga ed-Deir contained tombs from various periods of ancient Egyptian history (Reisner 1908: 1–3). Those from the Old Kingdom were published by Georg A. Reisner (1932) and included graves from the Second to the Sixth Dynasties. Edward Brovarski, who focused in his dissertation (recently published as Brovarski 2018) mainly on the end of the Old Kingdom and the First Intermediate Period, revised the dating of individual cemeteries from the point of view of archaeology (Brovarski 2018: 3). Majority of the Old Kingdom tombs lie within the cemetery 500–900 and later continuation in cemeteries 100–300 and Sheikh Farag.

Reisner perfectly described the state of affairs in the provinces in the latter part of the Old Kingdom in comparison with the wealthy pyramid field in Memphis: "At Memphis during the period from Zoser to Pepy II, the stone architecture, the sculpture, and in general the culture of Egypt reached its finest and its greatest climax and began the downward course towards the degeneration of the obscure period between the Old and Middle Kingdoms. But if we had only the contemporary tombs and graves of Cem. N 500-900, we should know almost nothing of this great development. In this provincial cemetery, stone was not used at all in masonry; no reliefs or statues seem ever to have been present; and writing is exhibited by only a few rough gravestones of Dyn. V-VI with rudely scratched hieroglyphics. Nevertheless, the vessels of stone, copper, or pottery, and the beads and amulets present the same series of types as those which have been found in the mastabas of Giza and Saqqarah." (Reisner 1932: vii). Reisner also recognised the difference between two traditions, one belonging to the Third and Fourth Dynasties, the other to the Fifth and Sixth Dynasties, although he claimed that the stone vessels of the Fourth Dynasty "pass insensibly" into the forms of the Fifth Dynasty tombs, whereas the Sixth Dynasty brought completely new forms (idem: 36). The problem is that he does not differentiate between the Fifth and Sixth Dynasty tombs. All are listed in small tomb types vi a-f, since large tombs do not appear in this time (*idem*: 8).

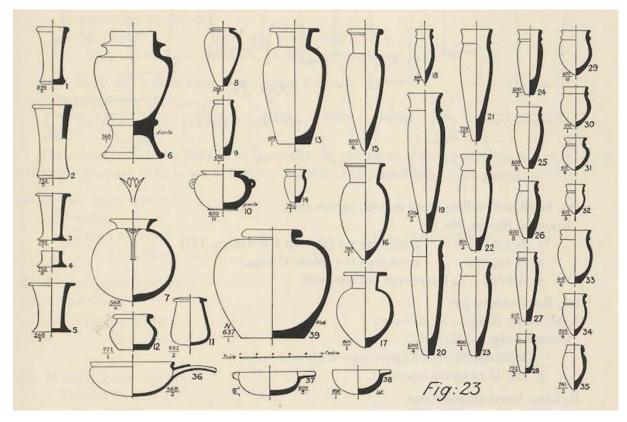


Fig. 69 "New types" of stone vessels from the late Old Kingdom tombs at Naga ed-Deir (taken from Reisner 1932: 57, Fig. 23)

Such as in case of Brunton's excavations, the vessels presented in Fig. 23 as the old and new forms of the Fifth and Sixth Dynasties are mostly of the Sixth Dynasty shapes. For instance, the tomb N 568 contained five pieces of stone vessels situated behind the head of one of the two deceased, who were buried in this tomb (idem: 270, Fig. 244, Pl. 38d). One was a cylindrical jar with splayed foot and wide flat rim (6.0 cm high), another was a high shouldered jar with narrow mouth and flat rim (7.0 cm high). Both were made of travertine, as well as the third one – a globular jar with flaring neck, decorated on its body with a lotus ornament (10.0 cm high) – the nw jar. A travertine spouted bowl also belonged to the assemblage of the miniature and miniaturised vessels (10.5 cm in diameter). The last jar was made of diorite and represented a model beer jar on a stand, perfectly resembling to the pieces coming from the Memphite assemblages, although a little bit higher (15.5 cm high). The only difference is that this piece was drilled inside from two sides, the top and stand separately. Such as in case of the two pieces from Matmar, one can imagine that it was inspired by the northern tradition coming from the centre. On the contrary, the globular jar does not have any parallel in Memphis in the Fifth Dynasty. A similar piece with rather straight than flaring neck is kept in the Museum of Louvre (E 32372) and bears inscription with the nzwt-bity

name of King Unas. It does not necessarily mean that it was made in the time of this king. Its provenance is unknown, and it is supposed to come from Edfu (Ziegler in Arnold 1999: 361–362), where other of jars of this class were collected (see below). Another example with unknown origin, but more roughly shaped is a part of collection of the Oriental Institute in Chicago (https://oi-idb.uchicago.edu/id/b1828ebc-44ee-4ff8-a0c1-1a1200699876). It also bears the name of Unas.

Typical examples of the Sixth Dynasty stone vessels come from the tomb N 570a. They contain a drop-shaped jar with wavy collar (5.0 cm high) and an elongated jar with pointed base and wavy collar (17.0 cm high; Reisner 1932: 271, Fig. 245). Similar types of vessels were excavated from the tomb N 600. There were six elongated jars with wavy collars and pointed bases of various sizes (6.5–14.0 cm high), a shouldered jar with narrow flat base and thick rounded rim (8.5 cm high), an elongated jar with pointed base and high flaring neck (15.0 cm high), a drop-shaped tiny jar with wavy collar (5.5 cm high) and a spouted bowl with the spout starting in the area of the rim and a handle on the opposite side (10.0 cm in diameter). All of these were crafted from travertine. The last piece was a squat shouldered jar with flat base, pierced tubular handles and wide rim, made of "white and black granite". If one considers its height, which was 4.8 cm, it is almost unbelievable that it was possible to make it without any harm (*idem*: 273, Fig. 249, Pl. 38). Another similar set comes from N 615 (*idem*: 274–275, Fig. 253). Worth noticing is also tomb N 801, which included an ovoid jar with pointed base, high neck and wide flat rim (9.2 cm high) and an elongated jar with narrow flat base and wavy collar (11.8 cm high), all made of travertine (*idem*: 307, Fig. 321).

The cemeteries of el-Mahasna contain burials from several periods of ancient Egyptian history (Garstang 1903). The part forming cemetery M counted between 500 and 600 burials according to the excavator. There were tombs of various kinds of shafts without superstructures, similar to many other provincial cemeteries. The depths of the shafts reached between 3 to 6 m, sometimes being lined with mudbricks at least in the upper unstable part. The burial was situated either at the bottom of the shaft, in a niche or in a burial chamber. Most of the pits were void of any contents except for the body of the deceased. Among the wealthier ones, there were several undisturbed burials giving evidence of the local burial customs and equipment. Regarding the nature of the equipment, it becomes clear that as luxurious products were considered stone vessels and copper vessels and instruments, as well as jewellery represented by beads and amulets. Pottery was counted in lower numbers.

Garstang described the most interesting tombs in detail. The first one is M 70, where the body lay on the left side with head to the north. The burial was equipped with a copper mirror under the head and four travertine vessels at the feet of the deceased (*idem*: Pl. XXXVI/12–15). No. 12 is a bag-shaped jar with flat base, short neck and wide rim (ca 11.1 cm high),<sup>78</sup> no. 13 is a drop-shaped jar with short neck and rounded rim (ca 9.3 cm high), no. 14 is an elongated jar with pointed base and flaring neck (ca 21.7 cm high), no. 15 is similar in shape, but shorter in height (ca 12.6 cm high). All of them can be well dated to the latter part of the Sixth Dynasty.

Tomb M 107 contained 13 pieces of travertine vessels including cylindrical jars, the elongated jars with pointed bottom and flaring neck, drop-shaped jars and a short, shouldered jar with flat base (*idem*: Pl. XXXVIII). The jars were spread to the south of the crouched legs, the head was originally supported by a travertine headrest. The drop-shaped jars were small (with height around 6 cm) having either rounded or pointed base. Four of them had wavy collar imitating the one used for model beer jars. One had a simple rounded rim, the last having short neck and flat rim. One of the elongated jars had a kind of collared neck (no. 7), the three others had the flaring one, such as in case of M 70. The cylindrical jars were of two types. No. 14 imitated the common shape of the Old Kingdom cylindrical jars with straight sides, splayed foot and flat squared rim (ca 15.9 cm high). The other (no. 13) is a typical example of the Sixth Dynasty. Its body is slightly concave, whereas the rim and base part are extremely wide, creating two planes, one at the base, the other at the orifice (ca 10.3 cm high).

<sup>&</sup>lt;sup>78</sup> Measurements were taken according to the scale from the electronic version of the book.

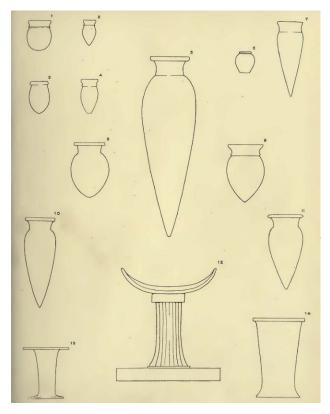


Fig. 70 Stone vessels from the tomb M 107 (taken from Garstang 1903: Pl. XXXVIII)

The tomb No. 349 also contained a larger group of stone vessels. In this case, they were positioned behind the head of the deceased. Although, it was a richly furnished burial, it was dug just about 2 m in the ground and situated in a shallow niche. Aside the stone vessels, it also contained several pottery pieces, a copper mirror and a couple of copper implements (*idem*: 30–31). The jars included a tall, shouldered jar with rounded lip rim (no. 16, ca 10.5 cm high) and three elongated jars with narrow flat bases and wavy collars (no. 22 ca 5.4 cm high, no. 28 ca 8.8 cm high and no. 29 ca 13.8 cm high; *idem*: Pl. XXXVI).

The tomb No. 441 was likewise shallow, about 2 m deep. However, it had all the vessels stored in a wooden box (with some other offerings) places by the feet of the deceased. Moreover, the vessels involved a larger scale of material. The archaic forms were a squat shouldered jar with unpierced tubular handles (no 3, ca 11.0 cm high) and a deep bowl with flat base and slightly concave widely flaring sides (no. 10, ca 12.6 cm in diameter). The jar was made of steatite, the bowl of diorite (*idem*: Pls. XXXIV–XXXV). The rest of the vessels, 4 elongated jars with narrow flat bases and wavy collars of two sizes were made of travertine.

The cemeteries of Abydos contain tombs of various periods, including the Old Kingdom. The so-far known and at least partly cleaned Old Kingdom cemeteries are mostly of the Sixth Dynasty dating (except for some Fifth Dynasty burials). W. Leonard Loat excavated and described simple one-chambered tombs clustered one next to another with burials in wooden coffins at Cemetery F. "Many small alabaster vases were found, these being often of slender and graceful shapes" (Loat 1923: 162). One of the unplundered tombs, F 60, is described: "Skeleton in a decayed wooden coffin, lying on its side in a huddled-up position, knees sharply bent. In the top left-hand corner was a white pottery vase, under the left cheek a small alabaster vase; lying between the pelvis and the heels were the following objects: an alabaster vase full of small beetles with, as a lid, the valve of a clam shell containing a black substance (kohl?), a mirror, and two other alabaster vases. Immediately in front of the face was a small alabaster vase, and round the neck a string of beads. Outside the coffin, at the head end, were two rough vases and a bowl of red polished ware" (*idem*). Unfortunately, no figures of the described finds were added to the description.

Karin Sowada once again returned to the Cemetery F in an article, where she presented finds from tomb F 40, which contained three stone vessels. One of them was the elongated jar with rounded base and wavy collar (E17848, 10.4 cm high), and another a slender cylindrical jar with splayed foot (E17849, 7.8 cm high). The third piece was of unusual shape. It was represented by a very short cylindrical jar with wide flat rim and a convex-shaped lid decorated by a rosette drilled into its surface (4.5 cm high without the lid). All of the pieces were made of travertine, except for the lid, which was made of siltstone (Sowada 2010). It is not a rare example, since there are more vessels made of travertine with lids crafted from siltstone, such as that from the tomb of Izi at Edfu or chamber 3100 at Balat. Cemetery E was another one with simple poor burials (Peet 1914; Frankfort 1930).

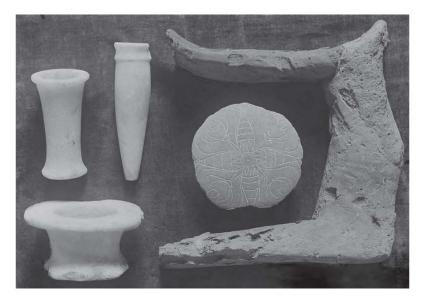


Fig. 71 Stone vessels from the Abydos tomb F 40 (taken from Loat 1923: Pl. 29/2)

The wealthier tombs are those of the Mixed and Middle cemeteries. Both seem to contain burials from the first half of the Sixth Dynasty, especially the reign of Pepy I. An undisturbed tomb was found in the Mixed cemetery by Edouard Naville. It was no. E 21, which contained several statues of the official and an Opening of the Mouth ritual set (Naville 1914: 20, Pls. IV and VI). A few stone vessels were collected outside the wooden coffin in front of the face of the deceased in tomb no. 101 (*idem*). The vessels were represented by a short, shouldered jar with flat rim, an elongated jar with flaring neck and pointed base and another elongated jar with rounded base and wavy collar. Their sizes were not provided; however, they seem to be of similar heights as those of the same shapes coming from similar provincial cemeteries.

The most interesting tombs come from the Middle cemetery and were excavated by the team of Janet Richards. They include the large mastabas of the Sixth Dynasty officials, including those with the titles of viziers, such as Iuu and Weni, the elder. Unfortunately, their burial equipment has not been completely published yet (Richards 2002; 2003).

Deir el-Nawahid is a locality situated to the south of El-Amra. A part of its cemeteries was excavated in the 1940s by Muhammad A. M. Asfour, who later published his most interesting finds (Asfour 1979). The Old Kingdom tombs had no visible superstructures, and only shafts either with chambers or niches remained there. Nine of them were presented in a table including finds being mostly stone vessels, copper mirrors and statues. Shapes of the vessels, as well as the style of statues point to the Late Old Kingdom up to the First Intermediate Period dating. It is of interest that quite many of the vessels were made of different material than usual travertine.<sup>79</sup> For instance, tomb no. 8 contained an elongated jar with pointed base and flaring neck made of porphyry, two others made of travertine, two cylindrical jars and a spouted bowl made of breccia or steatite. Well-equipped tomb no. 15 contained a 21.8 cm high travertine cylindrical jar and another one similar, but smaller (15.3 cm high). The other vessels were represented by a dolomite squat shouldered jar with tubular handles (9.0 cm high), small cylindrical breccia or steatite jar (6.8 cm high), an elongated jar with wavy collar (6.5 cm high), a drop-shaped jar with wavy collar (11.0 cm high), both with pointed base, and a taller shouldered jar with flat base (12.6 cm high). There was also another spouted bowl made of travertine present in the assemblage. However, the most interesting piece was a vessel of the shape of Reisner's type Vc (similar was discovered at Zarabi and other sites, see above), this time with a separate neck (8.5 cm high; Asfour 1979: Fig. V:4).

<sup>&</sup>lt;sup>79</sup> One has to be aware that the kinds of stone might have been misrecognised by the author of the publication.

The vessel itself was crafted from travertine; the neck is described as steatite. It is an unusual connection, since these vessels are usually without necks. Asfour did not specify, if it was glued together or if it was found separate, and the neck might be a shallow stand instead.



Fig. 72 Finds from the burial chamber of Shemai at Deir el-Nawahid (taken from Asfour 1979: Fig. X)

All the cylindrical, elongated or drop-shaped jars are of the shapes typical for the latter part of the Sixth Dynasty. The squat shouldered jar is an archaic piece, which resembles to the vessels coming from the Third and beginning of the Fourth Dynasty, but this is the miniaturised piece dating to the Sixth Dynasty. The squat jar with wide shoulders and separate neck can be found throughout the whole Old Kingdom. In this respect, the assemblage of tomb no. 15 seems to combine older vessels with new types. Its owner is known, due to a travertine headrest, which was inscribed bearing his name Shemai epithets and titles *jrr hzzt* – "he, who does what is praiseworthy" (Jones 2000: 340–341, no. 1262), *hq3 hwt* – "chief of the estate" (Jones 2000: 670, no. 2453), and *smr* "courtier" (Jones 2000: 891–892, no. 3263). The style of the headrest also points to the late Sixth Dynasty date. Such a dating of the cemetery is supported by a travertine globular vessel with short neck bearing an inscription with the Horus and *nzwt-bity* name of King Pepy II, which was found in the tomb no. 35 (10.0 cm high; Asfour 1979: Fig. X).

Cemetery D at Abadiya seems to belong to the Sixth Dynasty period; however, many of the tombs were filled with burials from younger periods of Egyptian history. There were 23 simple burials and two large mastabas excavated (Petrie – Mace 1901: 37–38). Mastaba

labelled as D 5 belonged to an official named Idy. The excavators did not list any finds in the publication. However, the British Museum houses a collection of finds coming from the tomb of Idy from Abydos, which might be the same one

(https://www.britishmuseum.org/collection/term/x30594). Some of them were bought from Henry Salt in 1835. Among them are some typical parts of burial equipment from the Sixth Dynasty tombs, such as a copper offering *htp*-table with an assemblage of copper miniature vessels (EA5315), a travertine headrest (EA2523), copper model tools (EA6075-EA6093), a travertine Seven sacred oil tablet, an Opening of the Mouth ritual set and a number of stone vessels. Almost all of them are inscribed with his name and titulary. One bowl was made from shist (EA4697, 25.4 cm rim diameter), the other from travertine, being of carinated shape typical for the latter part of the Old Kingdom (EA4695, dimensions are not presented). Then there was an inscribed shouldered jar with flat base, short neck and wide rim made of travertine (EA4691, 16.5 cm high, no photo or description), a travertine libation vessel "with foot and spout beneath rim" and a column with hieroglyphic text (EA4685, 19.7 cm high; it is similar to the one from Metropolitan Museum in New York inscribed with the name of Queen Ankhnespepy II, Arnold in Arnold 1999: 454–455), an inscribed travertine circular offering table on a high stand (EA4684, 34.3 cm in diameter), and 7 travertine "offering-vessels" (EA4686–EA4692). From the virtual guide of the museum and from measurements, it seems that they were represented by two jars of ovoid shape, one having a short neck and wide rim, the other with wavy rim. One jar was a slender jar with wavy collared rim. Two other jars were also slender, one similar to a model beer jar on a stand, the other being a more stylised version of it. Then there was a beaker and a bowl probably with simple incurved rim.



Fig. 73 One of the bowls from the tomb of Idy (taken from https://www.britishmuseum.org/collection/object/Y\_EA4697)

The tomb D 14, a simple burial in a shaft belonging to a young woman, contained four pieces of stone vessels placed in front of the body. One of them was a diorite bowl. Only a photograph is available,<sup>80</sup> which gives idea of a carinated bowl with a high rim (?). Then there are two jars, rather drop-shaped than elongated. One of them was made of limestone and had pointed base and short, slightly flaring neck. The other one, made of travertine, seems to have a wavy collar and rounded base. The last vessel is hardly recognisable, of rounded shape. It should have been made of travertine, but although Petrie claimed that there were "one pointed vase of limestone, a dish of diorite, and two vases of alabaster", it is more probable that the two drop-shaped jars were made of travertine as usually and the last rounded (?) vessel was made of limestone (Petrie – Mace 1901: 38, Pl. XXVIII).

The other large mastaba was D 25. Its superstructure was largely destroyed, and only little evidence survived giving at least the name of the possible owner of the tomb – Wehai. Tomb N 19 at neighbouring cemetery field can be also dated to the Sixth Dynasty (probably its half) due to the four stone vessels. Three had pointed bases and flaring neck, the fourth was with flat base and straight neck with wide rim (*idem*).

The same team excavated tombs from the Sixth Dynasty in the cemeteries Y and W of Hu (*idem*: 38–41). The contents of the burial equipment were similar to other contemporary cemeteries – stone vessels, copper mirrors and beads. All the vessels in the presented contexts belong to the types of the latter part of the Sixth Dynasty, such as the elongated jars with pointed bases and wavy collars (tombs 6, 8 and 16), or a perfectly crafted diorite cylindrical jar with wide flat rim, funnel-shaped body and splayed foot (tomb 9; Petrie – Mace 1901: Pl. XXVIII).

Flinders Petrie also excavated a vast area to the south of the temple of Hathor in Dendera. In its western part a large amount of Old Kingdom tombs were uncovered, the earliest dating to the Third and Fourth Dynasties, later to the Sixth Dynasty (see also Fischer 1968). The most important of the Sixth Dynasty tombs were that of Idu I and Idu II (Petrie 1900: 8–10). The only recorded find is an Opening of the Mouth ritual set labelled as found in the tomb of Idu I (*idem*: Pl. XXI). An intact burial with a group of stone vessels was found in a small burial chamber of an unfinished tomb situated to the north or that of Tjati B. It belonged to a woman, who had 10 vessels buried with her. One of them was "a carved shell of translucent diorite", another diorite bowl and a limestone deep bowl with a spout. The closed

<sup>&</sup>lt;sup>80</sup> For the same reason, no measurements were possible to be done.

forms included a squat shouldered jar with tubular handles made of porphyry, a travertine bag-shaped jar with flat bottom, similar to the type found at M 70 at el-Mahasna. There were also 2 elongated jars with pointed bases and flaring necks, one similar but shorter, and two elongated jars with flat bases and wavy collars (Petrie 1900: 8, Pl. XXI). Another tomb containing a stone vessel was no. 524 with an elongated jar with flat base and wavy collar by the feet of the deceased (*idem*: 8, Pl. XX). The tombs of other deceased contained only pottery vessels.

A stone vessel was found at Thebes, in the tomb of Wenisankh, dated to the end of the Fifth and beginning of Sixth Dynasty (Saleh 1977: 16, Fig. 22). It is a 3.2 cm high travertine cylindrical jar with a wide splayed foot and wide flat rim. The vessel was completely drilled, again. Its shape does not correspond with the Fifth Dynasty cylindrical jars, and it rather reflects the types from the Sixth Dynasty.

The cemeteries of Gebelein contain a number of tombs dating to the Old Kingdom, however, they have not been properly published yet (Fiore Marochetti 2013; Ejsmond 2016). Especially the Fourth Dynasty tombs and their contents are badly accessible (Donadoni Roveri - D'Amicone - Leospo 1994; Fiore Marochetti - Curti - Demichelis et al. 2003). More available are the objects coming from the Fifth Dynasty tombs, presented either in a few publications (Brunton 1940; D'Amicone - Pozzi Battaglia 2009: 65-66) or in the exposition of the Museo Egizio, Torino. The author of the present study could not study Brunton's article, but she was provided with some photographs from the museum exposition.<sup>81</sup> There is a presentation of an intact tomb from the Fifth Dynasty, which contained a shaft with three burial chambers. The largest one was the central chamber (B) oriented to the south-west, containing three sarcophagi. Two were made of wood, one of stone. Behind the large wooden sarcophagus situated at the back of the chamber were deposited several objects, such as a headrest, sandals, a box and two stone vessels. Both were of traditional shapes, made of travertine – a circular table on a high stand and a cylindrical jar. By the stone sarcophagus was lying a diorite bowl, very similar to the pieces coming from Memphite tombs. In this respect, they belong to the old tradition, which persisted in the provinces until the appearance of the new forms by the end of the Fifth Dynasty.

<sup>&</sup>lt;sup>81</sup> I am indebted to my colleague M. Odler to provide me with the photos.



Fig. 74 Some burial equipment from the anonymous tomb from the Fifth Dynasty Gebelein (M. Odler)

On the sides of the huge kom of Edfu were excavated several mastabas, some of them dating to the Old Kingdom. They are generally dated to the late Fifth until the end of Sixth Dynasty, based on the personal biographies of Izi and Qar and inscriptions on vessels from Mastaba M02 and NOI01 (Seidlmayer 1990: 63; Martinet 2019: 762, 764). Maurice Alliot excavated in 1932 an anonymous mastaba with two preserved burials. The principal one was situated in the northern shaft, which lead to a large burial chamber equipped with sarcophagus. However, stone vessels were collected only in the southern one. There were five of them, all situated by the knees of the deceased, being made of travertine. Besides these, the chamber contained pottery vessels and copper objects, such as a washing set or a mirror. The stone vessels were made of travertine and were represented by two cylindrical jars. One was found incomplete, only the funnel-shaped upper part being preserved. When compared with the others and the range of heights given by Alliot (7–15 cm), it seems to be ca 8 cm high. The other cylindrical jar was probably about 14 cm high and it was quite robust with splayed foot and wide thin rim. The third jar was an ovoid one with very short neck. The last two pieces were the elongated jars with narrow flat bases and wavy collars, one probably reaching the height of 15 cm, the other about 11 cm (Alliot 1933: 37-38, Pls. XXXII-XXXIII). The assemblage does not seem to be a Fifth Dynasty one, it should be rather dated to the first half of the Sixth Dynasty.

In 1933 Alliot excavated the tomb of Izi, but he did not pay attention to the underground parts of the tomb. Its substructure was cleaned by the team of Kazimier Michałowski right before the World War II (Michałowski – Desroches-Noblecourt – De Linage 1950).<sup>82</sup> Other excavations in the Old Kingdom cemetery were conducted by Bernard Bruyère working with the Polish mission led by Michałowski. They cleared about ten new mastabas, dated to the Old Kingdom and First Intermediate Period. Mastabas nos. II and VIII were presented as probably from the time Pepy I, Mastaba no. I (that of Sabni) from the time of Pepy I or Merenre I, Mastaba no. V (that of Qar) to the time of Merenre I and Mastabas nos. VI and IX (those of Hornakht and Nefer) to the end of the Sixth Dynasty and beginning of the First Intermediate period (Bruyère – Manteuffel – Michałowski *et al.* 1937: 58).

Mastaba no. II contained four pieces. The most interesting is a travertine squat shouldered jar with narrow mouth decorated by incision. There is a lotus flower in the area of the base, a falcon just as in case of the vessel from Balat on the body and a line of inscription surrounding the mouth. The text mentions the Horus and *nzwt-bjty* name of king Teti (inv. no. M II 1, 12.6 cm high; *idem*: Pls. XVII and XXII). The other vessels from the same context included another squat shouldered jar, this time made of diorite and smaller in size. It is the typical example with flat top and narrow mouth (inv. no. M II 6, 6.2 cm high). The third vessel is a travertine elongated jar with narrow flat base and wavy collar (inv. no. M II 7, 11.6 cm high). The last piece is represented by a bowl described as made of breccia (inv. no. M II 8, 10.5 cm in diameter). They can really be dated to the reign of Pepy I (*idem*: 107, Pl. XXII).

In the burial chamber of Mastaba no. VIII were collected four stone vessels, all made of travertine, that do not look like those typical for the first half of Sixth Dynasty. There is a cylindrical jar with splayed foot (inv. no. M VIII 7, 12.0 cm high), a tall, shouldered jar with flat base and wavy collar (inv. no. M VIII 9, 8.0 cm high), a bag-shaped jar with wavy collar and flat (?) base (inv. no. M VIII 8, 12.9 cm high) and a jug without handle with wide base and four circular grooves around its shoulders (inv. no. M VIII 10, 13.3 cm high). A similar, but slender jar with grooves was found in the burial chamber of Inty Pepyankh at Abusir (AS 22, shaft A; Bárta 2019). There is also a copper mirror represented as found with them (Bruyère – Manteuffel – Michałowski *et al.* 1937: 108, Pl. XIX/1). All the jars (except for the cylindrical jar) are of unusual shapes, and difficult to be dated.

The last mastaba that was dated to the Old Kingdom and contained stone vessels was that of Qar, called Pepynefer/Meryranefer. There are three vessels described as coming from

<sup>&</sup>lt;sup>82</sup> Unfortunately, this publication was not available to the author of this thesis. She thus worked with the publication of this corpus prepared by J. Aksamit (2001).

Mastaba no. V (*idem*: 108: Pl. XX). The first one is a travertine bag-shaped jar with high neck and flat (?) base (inv. no. M V 2, 22.5 cm high), the second a diorite squat jar with handles (inv. no. M V 3, 11.0 cm high) and the third one is described as a travertine small jar with spout (inv. no. M V 4, 5.0 cm high), being a spouted bowl, with the spout starting from the body of the bowl, not its rim (Aksamit 2001). There were also a copper mirror and a large ewer and basin made of the same material found in the same burial chamber. All the vessels can be dated to the middle of the Sixth Dynasty, as is the tomb.

A summary of the vessels from the Old Kingdom tombs of the officials from Edfu was published by Joanna Aksamit (2001). She presented a group of vessels coming from the mastaba NOI I, dated to the Fifth Dynasty, due to the presence of a jar mentioning the name of King Unas. However, the shape of the jars rather points to the Sixth Dynasty dating. There was this taller globular jar with inscription incised in its body, another globular jar with high neck and flat rim reaching about half of the height of the first one. The last piece was a slender cylindrical jar (idem: Fig. 2). She also presented a set of vessels collected in the burial chamber of Izi's wife, Sesh-Seshet. Izi's chamber was severely plundered and only a shist bowl remained there. Contrary, the burial apartment of his wife was found intact (idem: 20, Fig. 3; https://manualzz.com/doc/36152359/tell-edfu). It contained a marvellous assemblage of stone vessels, which included a cylindrical jar with a lid inscribed with the name of king Teti. Other pieces now stored in the National Museum in Warsaw were a small globular jar with short neck, a rounded offering table and a bowl with recurved rim (the so-called Meydum). The bowl was made of gneiss, other vessels of travertine. However, there were three more, very specific vessels belonging to this assemblage. One of them was a globular jar decorated by an incised '*nh*-sign between two uraei. Moreover, the rim part of the jar was formed as a wide bowl with wide flaring neck (Jd'E 71818, 12.6 cm high). The second one was a tall, should red jar with a spout and handle decorated by an ureus (Jd'E 71819, 16.0 cm high). The last one was a hes jar with flat lid (Jd'E 71820, 12.6 cm high). All three jars were made of travertine, just the lid of the last one was from siltstone. Aksamit mentions two more pieces that were sent to Louvre – a small, spouted bowl and an oval bowl (Aksamit 2001: 20– 21; https://manualzz.com/doc/36152359/tell-edfu; Deroches Noblecourt – Vercoutter 1981: 72).

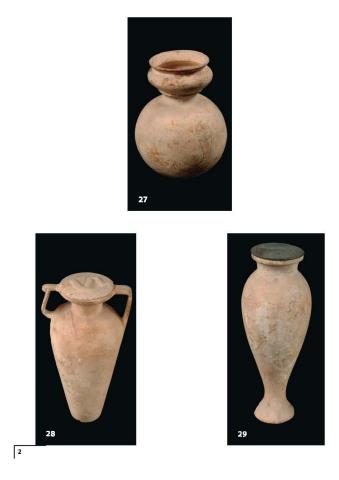


Fig. 75 Extraordinary stone vessels that were collected in the burial chamber of Izi's wife Sesh-Seshet (taken from https://manualzz.com/doc/36152359/tell-edfu)

Although there is a number of the Old Kingdom tombs of local rulers at Qubbit el-Hawa, not much was left from their burial equipment. It is mostly pottery that survived in the chambers until modern excavations. There were only two sets of stone vessels unearthed in the rock-cut tombs (Edel 2008: 101–102, 256, 838–839, 867). One of them comes from an undisturbed chamber  $\beta$  in shaft III of QH 25 and contained eight vessels of various forms. 25/251 is a bag-shaped jar with wide slightly rounded base and flaring neck (14,2 cm high), 25/252, 25/254 and 25/255 are ovoid jars with rounded base and flaring neck with wide flat rim (heights: 11.1 cm, 16.1 cm and 9.2 cm), 25/253 is an elongated jar with narrow flat base, long neck and flat wide rim (13.1 cm high), 25/256 is a short cylindrical jar with flaring body, splayed foot and wide flat rim (5.3 cm high). The last two, nos. 25/257 and 25/258 are spouted bowls (widths: 9.0 cm and 8.7 cm).

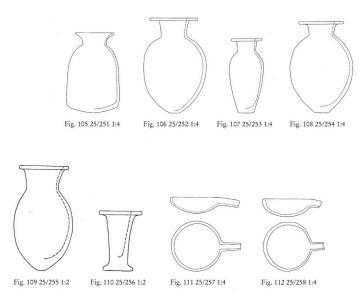


Fig. 76 Stone vessel from QH25 at Qubbit el-Hawa (taken from Edel 2008: 111)

The other assemblage was collected already by Labib Habachi in another undisturbed context QH 35e/  $\beta$  SK II. He described its stone vessel contents as: "a big vase of granite which has a lid decorated with triangular designs (probably Abb. 25), a breccia small pot (Abb. 25) and a big beautiful alabaster vase with a lid (Abb. 26 mitte)." It seems that some of the vessels might be identified with those in photos in Abb. 25 and 26 (Edel 2008: 867).

The vessels from the first context shall be dated to the second half of the Sixth Dynasty, whereas the second context might be earlier.

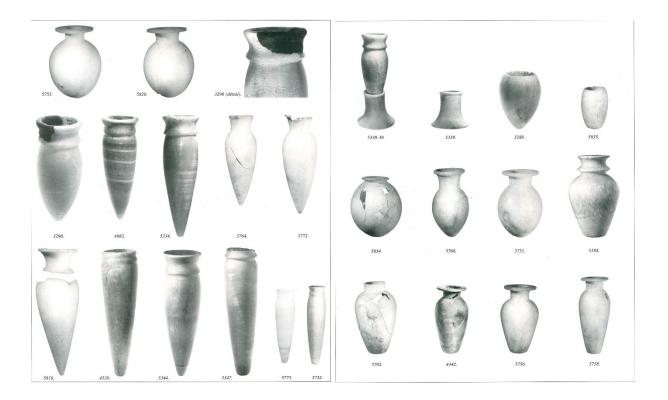
All of the studied sites are situated by the river Nile, where most of the inhabitants of Ancient Egypt lived. The fertile, regularly inundated land was surrounded by hostile desert – the red land. It served as a source of raw material, especially the Eastern desert, as well as area of trade routes, either to the Red sea coast to reach Sinai or Punt, or to the south to Nubia. The Western desert had several natural stations on such ways represented by oasis. Some of them being smaller, some large. The largest ones became more prominent during the Sixth Dynasty, when they also served as sources of crops and goods. There is probably still much to excavate to make clearer their role in the Old Kingdom. The only quite well-known example is the town and cemetery in Dakhla. The target of this thesis is the cemetery at Balat, with large tombs of the local elite, the governors of oasis. All the main tombs have been already uncovered and published providing information on the original burial equipment of the wealthy group of royal officials, who probably spent their lives outside Memphis.

The first published was that of Medunefer (Mastaba V, Valloggia 1986), who had a longer titulary including *imy-irty*  $^{\circ}pr(w)$  wi3 – "captain of a ship's crew" (Jones 2000: 47–48,

no. 243), *imy-irty* – "captain" (*idem*: 47, no. 242), *hq3 wh3t* – "governor of the Oasis of Dakhla" (*idem*: 664–665, no. 2435), *imy-r3 hm(w)-ntr* – "overseer of the *hm-ntr* priests" (*idem*: 171, no. 651), *dd nrw Hr m h3swt* – "he, who places the dread of Horus in foreign lands" (idem: 1009, no. 3739). His burial chamber contained many vessels of various classes and types, as well as the underground storerooms accessed from the antechamber. The one situated to the north-west was full of pottery, the north-eastern one contained stone vessels kept in wooden boxes. The classes in both contexts were similar. One of them were the small drop-shaped jars with wavy rims reaching heights of 3.0-7.1 cm (inv. nos. 900, 906, 907, 909 and 1020). Another class are the elongated jars with flaring neck or wavy rim and pointed bases (inv. nos. 905, 912, 913, 914, 915) or narrow flat base (inv. no. 904). There was an only cylindrical jar found in the burial chamber. It was the type with rather concave body, tapering towards the splayed foot and wide flat rim (inv. no. 894, 20.0 cm high). There were two examples of the squat neckless shouldered jars without handles, with flat bases and wide rim in one case and a narrow rim in the other (inv. nos. 842 and 916, 10.4 cm and 13.2 cm high). All of the ovoid jars with necks come from the storeroom. The burial chamber contained two rather unusual vessels. One was a jar with bent body, short neck, and flat rim, the other was an ovoid jar with flat base and simple narrow mouth (inv. nos. 903 and 917, 12.0 and 25.0 cm high). The open forms were in the burial chamber represented by a small, like model shaped, beaker (inv. no. 911, 4.6 cm rim diameter) and a spouted bowl with the spout below rim, not in it as was more usual in the latter part of the Sixth Dynasty (inv. no. 910, 12.0 cm rim diameter). Except for the small jar with inv. no. 901, which was made of agate, all the vessels were crafted from travertine (Valloggia 1986: 106-117, Pls. LXI-LXXI and LXXX-LXXXV). There were also several decorated vessels discovered mostly in the storerooms. One of them was a cylindrical jar with splayed foot and wide flat rim, decorated with an inscripiton mentioning the first jubilee of King Pepy II (inv. no. 1018, 13.7 cm high). Another jar was much taller, being a shouldered jar with two lug-handles, long, slightly flaring neck and squared rim with a groove in its side. A concave shaped lid belonged to it. Also this one bore an inscription mentioning a jubilee of King Pepy II (inv. no. 1130, 28.0 cm high). The lid with inv. no. 1042 held the name of Pepy II, but it was of larger size than the inscribed cylindrical jar (inv. no. 1042, 14.0 cm in diameter). The last inscribed vessel was that of the monkey shape, having the name of the king Pepy II inscribed in its chest (inv. no. 1046, 11.8 cm high). All of the vessels were made of travertine, except for the monkey, which was made of serpentinite (idem: 78-81; Pls. LXXX-LXXXI). There was one more vessel in the shape of a monkey with its young on its chest (inv. no. 1045, 17.1 cm high; *idem*: 116–117, Pl. LXXXI).

The burial chamber of Ima-Pepy (Mastaba II), whose titles were *imy-irty* r(w) wi3 – "captain of a ship's crew" (Jones 2000: 47–48, no. 243), hq3 wh3t – "governor of the Oasis of Dakhla" (*idem*: 664–665, no. 2435) and *imy-r3 hm(w)-ntr* – "overseer of the *hm-ntr* priests" (idem: 171, no. 651), likewise contained a number of stone vessels. There were three of the cylindrical jars mentioning jubilee festival of the kings - two of Pepy I and one of Pepy II (Minault-Gout – Ballet – Wuttmann 1992: 81–82). Other vessels included cylindrical jars (inv. nos. 1931, 1932, 1921, 1922 and 1924, first two 16 and 16.6 cm high, the other two 22.2 and 25.6 cm high and the last one 35.7 cm high) and a tall, should red jar with flat base and incurved squared rim (inv. no. 1923, 20.0 cm high). The shortest cylindrical jar was made of serpentinite, other of travertine. The rest of vessels were collected in the antechamber or in tomb C. Tomb C was an intact burial, contemporary to that of Ima-Pepy. Its entrance was situated next to that of the governor. There were several interesting pieces in these two contexts. Of unusual shape for the Sixth Dynasty context is a tall ovoid jar with flat base and rounded rim that resembles to the taller Predynastic and Early Dynastic shapes (inv. no. 1816, 13.5 cm high; Reisner's type V, Reisner 1931: 183, Fig. 49). Another piece of archaic style is the neckless shouldered jar with handles and thick rim, however, of a much smaller size (inv. no. 1817, 9.7 cm high). A diorite bowl with incurved squared rim also points to the older tradition (inv. no. 1878, 23.0 cm rim diameter). Contrary, the short, shouldered jar with wide flat base, short neck and flat rim reminds of the First Intermediate Period or the Middle Kingdom kohl pots (inv. no. 1875, 8.7 cm high) Of unique shape is the beaker with incurved rim and projecting decoration on its top (inv. no. 1877, 8.0 cm high) (Minault-Gout – Ballet – Wuttmann 1992: 107–113, Pls. 35–39).

The publication of the monument of Ima-Pepy – Meryre (Mastaba I) did not provide much information on his burial apartment, since it was largely damaged, but it included several other shafts situated in the eastern corner of the courtyard of the mastaba (Valloggia 1998). Some of these chambers were despite plundering still well equipped. The most numerous were the vessels coming from the tomb of Igit (T5), a possible wife of Ima-Pepy, who was *jryt-ht nzwt* – "custodian of the king's property" (Jones 2000: 328, no. 1206), *hmt hq3* – "wife of the chief" (not included in Jones 2000), hm(t)/hm-ntr Hwt-Hr – "hm-ntr priest/priestess of Hathor" (Jones 2000: 540–541, no. 2012) and *špst nzwt* – "noblewoman of the king" (*idem*: 990–991, no. 3664). It contained two small drop-shaped jars with wavy collars (inv. nos. 5760 and 5810, 3.7 cm and 2.5 cm high). The 10 ovoid jars were of several types with differently shaped bodies and necks (inv. nos. 5816, 5781, 5809, 5755, 5779, 5767, 5753, 5820, 5768 and 5751). There were three elongated jars with flaring necks and pointed bases (inv. nos. 5764, 5772 and 5719, 13.2 cm, 17.5 cm and 17.9 cm high), three elongated jars with pointed bases and wavy collars (inv. nos. 5752, 5775 and 5808, 17.4 cm, 16.9 cm and 15.2 cm high), two similar jars with narrow flat bases (inv. nos. 5763 and 5765, 11.1 cm and 13.4 cm high). The tall, shouldered jars with necks, flat bases and flat rims counted 9, the tenth being without the rim part (inv. nos. 5756, 5758, 5759, 5761, 5776, 5777, 5780, 5782, 5784 and 5762). The cylindrical jars were represented by three pieces (inv. nos. 5770, 5771 and 5778). There were also two spouted bowls (inv. nos. 5766, 5769 and a bowl with a recurved rim (inv. no. 5773). More unusual class was represented by two one-handled jugs (inv. nos. 5783 and 5818, 11.2 cm and 13.9 cm high), a completely drilled model beer jar on a stand (inv. no. 5774, 15.0 cm high) and a short squat jar with thin rounded rim (inv. no. 5757). There was also a piece with the motive of a monkey deposited in the tomb of Igit. It was a spouted bowl decorated on its bottom part by a monkey, having the name of King Pepy II incised on its one arm (inv. no. 5754, 10.8 cm in diameter, Valloggia 1998: 81-82). All the vessels were made of travertine (idem: 122-141, Pls. C-CV).



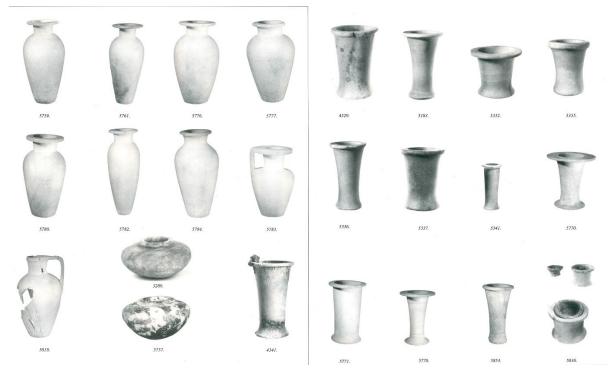


Fig. 77 Stone vessels from Mastaba I, the tomb T5 belonging to Igit (taken from Vallogia 1998: Pls. XCIV, XCVI–XCVIII)

The tomb of Khentika (Mastaba III), who held the titles of *imy-irty* r(w) wi3 – "captain of a ship's crew" (Jones 2000: 47–48, no. 243) and hq3 wh3t – "governor of the Oasis of Dakhla" (*idem*: 664–665, no. 2435), contained not only the shaft and burial chamber of the governor himself, but also three more shafts leading to three burial chambers of his relatives (Castel – Pantalacci – Cherpion 2001). The apartment of Khentika was largely disturbed, but the other burials survived in perfect condition. Stone vessels were discovered in all burial chambers, shafts contained just pottery. In case of Khentika, there were also some collected in the antechamber. Aside pottery vessels and copper objects, the burial apartment of Khentika contained two ovoid jars with short neck and flat rim (inv. nos. 5504 and 5499, 10.3 cm and 12,5 cm high). There was also a bowl (inv. no. 5479, rim diameter 24.5 cm), a funnel-shaped cylindrical jar with played foot and wide flat rim (inv. no. 5498, 17.0 cm high) and an elongated jar with pointed base and high flaring neck (inv. no. 5500, 32.0 cm high). The most interesting piece, however, was a set of basin and ewer of exactly the same shape as the model pieces from Memphis (inv. no. 5478, rim diameter of the basin 10.7 cm, height of the ewer 7.4 cm). The only difference was its complete drilling, thus representing a miniaturised vessel. All the jars were made of travertine, whereas the bowl was from limestone (*idem*: 170–191, 181-189, Fig. 30).

The burial chamber no. 3100 was equipped with three ovoid jars with short necks and flat rims (inv. nos. 6088, 6080 and 6087, 10.0 cm, 10.0 cm and 11.5 cm high), two bagshaped jars, one short (inv. no. 6078, 10.0 cm high) one tall with high neck (inv. no. 6086, 12.0 cm high), an elongated jar with a wavy rim (inv. no. 6079, 12.8 cm high), a cylindrical jar of rather archaic short form with a rope decoration under the rim (inv. no. 6081, 22.5 cm high), an elongated jar with pointed base and high flaring neck (inv. no. 6077, 32.8 cm high), a tall shouldered jar with flat base, short neck and wide flat rim and a flat lid (inv. nos. 6090, 6091, height of the jar 22.0 cm, diameter of the lid 9.2 cm). The last piece was a spouted bowl decorated on its lower surface by a figure of a monkey (inv. no. 6089, 8.0 cm rim diameter). Except for the lid, which was made of grauwacke, all the vessels were made of travertine (*idem*: 170–191, 181–189, Fig. 34).

The burial chamber no. 6100 is less interesting for there are mostly elongated jars with pointed bases and wavy rims to be found, side by side with two high shouldered jars with short necks and flat rims and a spouted bowl (*idem*: 170–191, 181–189, Fig. 46).

Contrary, burial chamber no. 5100 is the wealthiest of all three and contained several exceptional pieces. One of them was an ovoid jar made of ostrich egg decorated by an engraving of a falcon with stretched wings embracing the jar (inv. no. 6076, 14.2 cm high). Three more stone elements were added – a stand, a neck, and a lid (inv. nos. 6063, 6042 and 6036, stand 2.1 cm, neck 2.4 cm high, lid 5.0 cm in diameter). The lid was made of grauwacke, the other pieces of travertine. There were two drop-shaped jars, one with rounded rim, the other with wavy neck, several elongated jars with wavy rims, 6 ovoid jars with short necks, a couple of bag-shaped jars, three tall, shouldered jars with flat bases, short necks, and flat rims, and two bowls. The six cylindrical jars were all of typical Sixth Dynasty shape, but of various sizes. A lid belonged to one of them being inscribed with the name of Pepy II (inv. no. 6060). The assemblage contained a squat neckless jar with narrow mouth and incurved plain rim, which is usually to be found in the earlier phases of the Sixth Dynasty (inv. no. 6034, 5.9 cm high). It was made of diorite. Jar with inv. no. 6055 was an elongated jar with flat base and wavy collar (inv. no. 6055), but it was also equipped with a small lid (inv. no. 6065, 2.4 cm in diameter). An unusual vessel was that with inv. no. 6040. It represented an elongated jar with bent-shaped sides with a rim shaped in the form of a stack of several circles. It was crafted as one piece with a stand at its base, al being 13.8 cm high (idem: 170-191, 181–189, Fig. 40). All the vessels were distributed in approximately 6 boxes, and they were not sorted according to their shapes, but each box held various classes mixed together.

The publication of the eastern and western cemetery around the mastaba of Khentika gave information on the tombs of local middle level of society (Castel - Pantalacci -Dzierzykray-Rogalski et al. 2005). Most of the tombs were simple, 2 to 3 m deep, roughly cut shafts with burial chambers opening at its bottom. Some of the burials were humbler without any stone vessels, others were well equipped, containing more than 3 pieces. One of the wealthy tombs was no. 30. It did not contain only a large number of stone vessel, but they were of specific manner and point to the social position of the tomb owner. The burial equipment included also a tens of pottery vessels, a copper mirror, a bead necklace and a sealing. The stone vessels were represented by two elongated jars with wavy rims and flat, but very narrow bases (inv. nos. 5896 and 5895, 12.0 and 13.4 cm high), a short shouldered jar with symbolic handles and thick flat rim (inv. no. 5905, 14.0 cm high), a bowl with incurved unmodelled rim (inv. no. 5898, rim diameter 13.5 cm), a tall shouldered jar with short neck and a ledge under the rim, and narrow flat base (inv. no. 5903, 24.6 cm high) and a vessel in the shape of an elongated granary with wide flat base and narrow mouth (inv. no. 5897, 23.0 cm high). All of the vessels are described as made of travertine, except for the inv. no. 5908, which was from breccia (*idem*: 429-440, 35, 140).

The other tomb of interest is no. 101, which contained 5 stone vessels – two dropshaped jars with wavy rims (inv. nos. 3225 and 3226, 6.6 cm and 6.7 cm high) and 3 elongated jars with wavy rims, one with pointed base and two with very narrow flat bases (inv. nos. 3224, 3223 and 3222, 8.4 cm, 7.9 cm and 6.9 cm high). Other equipment included a copper mirror, bead necklace, a seal, a shell and 3 pottery jars (*idem*: 429–440, 35, 155). Both tombs are dated to the late Sixth Dynasty or to the beginning of First Intermediate Period.

### 7.2. Nature of stone vessels in the provinces in the latter part of the Old Kingdom

A number of sites that contain burials with stone finds from the latter part of the Old Kingdom have been presented in the previous chapter. Although there have often been several attempts to date them more precisely, in some cases, it is still not clear and not enough precise. A question rises, if it is possible to date the tombs on the typology of stone vessels. The most common criterion is in this case the name of a king on some of the vessels. And all the authors are aware that it can be interpreted only as a *post quem* date. A list of stone vessels with royal names coming from provincial tombs was presented by Alexanian in her dissertation. Although it is incomplete, it clearly shows that except for a piece mentioning the

name of King Unas from Edfu, the bulk of evidence bears the names of the Sixth Dynasty kings from Teti to Pepy II (Alexanian 2016: 489–491).

The table below presents the dating pattern of the target provincial sites. Some of them were already studied by Seidlmayer, who came to the conclusion that to the latter part of the Fifth Dynasty can be dated tombs from Edfu, Dendera and Qau (Seidlmayer 1990: 395, Abb. 168).

site	large size	small size	model	miniature	dating
Zawijet el-Meytin	-	yes	-	-	Pepy I – Pepy II
Deir el-Gebrawi	-	yes	-	-	Pepy II
Mostagedda	yes (reuse?)	yes	-	-	late 5D – Pepy II
Matmar	yes (1)	yes	-	yes	late 5D – Pepy II
Qau and Badari	-	yes	-	yes	6D
Zarabi	-	yes	-	-	6D
el-Hawawish	-	yes	-	-	6D
Naga ed-Deir	-	yes	-	yes	late 5D – Pepy II
el-Mahasna	yes (1)	yes	-	-	6D
Abydos	yes (1)	yes	-	-	6D
Deir el-Nawahid	yes (1)	yes	-	-	late 6D
Abadiya	-	yes	-	-	6D
Hu	-	yes	-	-	6D
Dendera	-	yes	-	-	6D
Thebes	-	yes	-	-	6D
Edfu	yes	yes	-	-	late 5D – Pepy II
Qubbit el-Hawa	yes (?)	yes	-	-	late 5D (?) – Pepy II
Balat	yes	yes	-	yes	6D

The table shows that only the mastabas of Edfu and Balat contained larger numbers of largesize vessels that are a symbol of elite status of their owners. The other cemeteries contained only one larger piece within assemblages of miniaturised jars. For the purpose of this comparison, the height of vessels should exceed 20 cm to be considered as large size. In case of Mostagedda, the target tomb seems to contain reused vessels. In Matmar and Abydos, it is the scribe's water pot. Although they are small, their rim diameters are comparable with those from Memphis (Jirásková 2016: 48). At el-Mahasna, one of the elongated jars from tomb no. 70 was 21.7 cm high, at Deir el-Nawahid tomb no. 15 contained a 21.8 cm high cylindrical jar. A little bit problematic is Qubbit el-Hawa, with the tombs uncovered by Habachi. One of the finds from QH 35e is described as "a big vase of granite". It is a very unusual find for the Sixth Dynasty contexts in such a size, and therefore it is possible to think about an earlier dating, or again of reuse of an older piece.



Abb. 25 QH 35e ... ... Habachi: BBa (Aufnahme Habachi)

Fig. 78 Jar on left was probably a part of burial equipment in QH 35e (taken from Edel 2008: 867, Abb. 25)

The usual burial equipment for most of the tombs contained pottery vessels with a few tiny stone vessels, most of them being up to 10 cm high. Richer tombs contained copper objects. Especially mirrors are quite frequent even in simple shaft tombs of the Sixth Dynasty. What is necessary to say, is that most of these poorer tombs equipped with stone vessels are dated to the Sixth Dynasty. From the point of view of stone vessels and their occurrence in the provincial cemeteries, it seems that they were used rather in wealthier tombs by the late Fifth Dynasty.

The table also recorded attestation of miniature vessels. These were found in Matmar, Naga ed-Deir and Balat. The difference between miniature and other small size vessels was described in the introductory Chapter 1. The basic distinction is that miniatures are of stylised forms, whereas small size ("miniaturised" according to Arias Kytnarová 2014: 227–250) are "normal" forms in smaller size. All the miniature stone vessels listed above are those that resemble to the model stone vessels from Memphis, however, they are functional, which means drilled completely inside. They are represented by beer jar on a stand crafted in one piece.

In fact, this is the only resemblance to the Memphite repertory of stone vessels in nonroyal tombs. The large size vessels are still to be found in the tombs of officials of the Fourth Dynasty, but their scale and number decreased substantially. There are mostly one to three bowls to be found. The Fifth Dynasty tombs are rather void of any large size stone vessels except for a few exceptions (such as G 2089 or G 2353) and several scribes' water pots. The Sixth Dynasty tombs still prefer assemblages of model stone vessels at its beginning, later turning to the shapes common even in the provinces, such as cylindrical jars with wide splayed feet and wide flat rim, or jars with wavy collars, etc. That change happened approximately during the reign of Pepy I. Christopher Eyre claims that the central control of the provinces was limited before the reign of this king. And the reigns of Pepy I and Merenre I are seen as time of growing complexity in government (Eyre 1994). The political change is thus reflected also in the distribution of stone vessels.

Many of the new forms, as Reisner called them (1932: 57, Fig. 23) were inspired by the particular classes of model stone vessels, such as shouldered jars, beer jars or cylindrical jars. The cylindrical jars tend to have more stressed base and rim, the shouldered jars have higher necks and the beer jars change into the elongated jars with pointed bases and wavy collars. The drop-shaped jars with wavy collars probably derived their shape from the same model jar.

The globular jars (and probably also ovoid) jars may have origin in the *nw* jars, which were used only in ritual contexts for libation of water and wine (Balcz 1933: 207–208). Most of these vessels are really of small size, just to be put into a palm. Maybe the larger ceremonial pieces were just enlarged forms of these small ones. Or they have parallels in the pottery pieces commonly used from the Fourth to the Sixth Dynasty (Arias Kytnarová 2014: 118–119).

However, one can only doubt, where some other forms found their inspirations. For instance, the bag-shaped jars with wide flat base, such as those from Matmar tombs nos. 5304 or 5318 or Qubbit el-Hawa no. 25/251. They do not have any parallel in stone, but slightly similar jars appear in pottery (Reisner – Smith 1955: Figs 59, 60), or they may have model in pottery granaries (*idem*: 133). Some other types are higher and narrower.

The bowls are mostly the spouted types, the earlier forms seem to be the deeper bowls with spouts starting on the shoulder, whereas the later types are shallower with the spout in the area of the rim.

If there are almost no large size stone vessels present in the burial chambers of Memphite officials from the Fifth Dynasty or early Sixth Dynasty, the only solution to gain some comparative material is the study of royal monuments, where the tradition of large size vessels remained uninterrupted. There is one obstacle – scarce evidence. The available evidence was collected by Petra Vlčková in her work on the stone vessels from the tomb of King Raneferef at Abusir (Vlčková 2006). The collections coming from the pyramid complexes of Sahure and Raneferef suit best for comparison, both dating to the Fifth Dynasty. Unfortunately, none of the new forms appeared within this assemblage. Except for many fragments of bowls, only the cylindrical jars and short shouldered jars with or without handles were discovered in the temple.

When there is not enough material to compare, it is difficult to date the provincial contexts more precisely. The jars with royal names can show one path of research. The one with the name of Unas was discovered in Mastaba no. NOI I at Edfu in a tomb of a high official. In this respect, it could have been a royal gift to the loyal and competent administrator. The name of Teti was found in more contexts. Two pieces come from Edfu, again, both from the burial chamber of the possible wife of Izi. One of them is a lid of a cylindrical jar, the other is a globular jar with a bowl as its decorated rim. Izi was likewise an important provincial official, and the vessels could be a royal gift. Another jar with the name of King Teti comes from a peculiar tomb at Matmar. It is a nameless, average burial without a chamber, and there is severe doubt that the vessel really belonged (or was given by the king) to the person, who had it buried with her. It might have been kept in the family for some time or it could be reused.

The name of King Pepi I was engraved on a bowl decorated by a figure of a monkey, which was found in a rock-cut tomb M 52 at el-Hawawish. The tombs were severely plundered, but they originally belonged to local nomarchs and the bowl can be perceived as a royal gift. Other two existing examples come both from Balat, the burial chamber of Ima-Pepy II. In this case, there is not only the titulature of the king, but also celebration of his first Sed festival.

A specific jar from Deir el-Nawahid bore the name of King Pepy II on its body. It was a bag-shaped jar with narrow mouth. A square part of its body, which could be separated was the inscribed piece. It is very unusual feature and also brings doubts on its origin. The tombs of Deir el-Nawahid were like those in Matmar simple shaft tombs with or without burial chambers. Still, there is a difference between these two tombs. Tomb no. 35 at Deir el-Nawahid contained also three statues of its owner, two more stone vessels, an Opening of the Mouth ritual set and a copper mirror. In fact, such a burial equipment resembles to that of tomb no E 21 at Abydos, which was also just a shaft with burial chamber and no superstructure in the form of a mastaba (Naville 1914: 20–21). However, the presence of statues and especially the Opening of the mouth ritual set may point to some kind of connection with the court.

Three travertine vessels with the name of King Pepy II were discovered in three tombs at Badari (no. 3202, 3217 and 4870). Tomb no. 3202 was a simple shaft tomb with a burial chamber, belonging to a female. Brunton claimed that it was found intact, but it contained only a pottery jar by the head, two travertine vessels at the feet and one steatite cylinder bead at the neck. The one with the king's name was a slender cylindrical jar about 10.0 cm high (Brunton 1927: 30, Pls. XXVI/28, XXIX/197 and XLI/17). Tomb no. 3217 was a shallow grave, half of it completely damaged by a Roman burial. By the feet of the deceased were preserved two travertine jars, one cylindrical with the name and title *mwt-nzwt* of Queen Ankhnes-Pepy ca 8.1 cm high. The other parts of burial equipment were represented by a pottery jar, several shells, a button amulet of bone, bone spoon and bone spatula, several beads and two copper rings (idem: 30, Pls. XXVI/29,80, XLI/17, XLIX). It does not seem to be a poor burial, but still, a royal gift is rather improbable in this case. The last one is tomb no. 4870. It was included to the list of the Seventh to Eighth Dynasty tombs by Brunton on purpose. There is a detail of shells deposited on the ankles of the deceased, which is, as he claimed, a feature of burials younger than the Sixth Dynasty. The name Neferkare, which may belong to Pepy II survived on a fragment of a cylindrical jar (its upper part without the foot, ca 11.5 cm high). And as Brunton wrote "may well have been handed down for a generation or two" (idem: 36, Pls. XXVI/30, XLI/15). Nothing else of interest was collected in the tomb.

All of the three tombs do not bear features of wealthier burials of local administrators and royal officials, who would be awarded a gift from the King himself. However, it is difficult to interpret the way they could get into these modest tombs. Could they be recycled? Or were they inherited in families for generations as Brunton suggested? Were these people connected to the provincial officials and the vessels could be obtained from them?

The last bulk of vessels with royal names come from the Dakhla oasis, the cemetery of local governors in Balat. One of them was found in the precinct of tomb of Ima-Pepy II, in the tomb of Igit, a probable member of his family. It is another example of a bowl decorated by a figure of monkey on its outer wall. The inscription is in both cases (the other comes from el-Hawawish, see above) inscribed in the animal's hand.

The substructure of Ima-Pepy II contained not only two ceremonial jars with the name of Pepy I, but also another one with the name of Pepy II, mentioning likewise his first celebration of Sed festival. Mastaba of Medunefer was very well-equipped in this respect. It still contained a cylindrical jar, similar to those of Ima-Pepy II, mentioning the first Sed festival of Pepy II. The other ceremonial jar inscribed with the name Pepy and jubilee was found broken, and the inscription is incomplete. However, the shape of the vessel is completely different and points to the royal jars of King Pepy II, which were found in his burial complex (Jéquier 1934: 103, Fig. 11). It is a masterpiece with no parallel in the provinces. The name Neferkare is engraved in a flat lid coming from one of the subterrain storerooms and on a vase in the shape of a monkey coming from the same context. There is no doubt that Medunefer gained much praise from the king.

Even the tomb of Khentika was no exception and contained an inscribed object. However, it was not discovered in the burial chamber of the governor himself, but in the adjacent burial chamber no. 5100. One of the cylindrical jars had a lid inscribed with the name of Pepy II.

king's name	site	tomb	type of vessel
Unas	Edfu	mastaba NOI I	globular jar
Teti	Edfu	mastaba of Izi	lid of cylindrical jar
Teti	Edfu	mastaba M II	globular jar
Teti	Matmar	tomb no. 3243	beaker on stand
Реру І	el-Hawawish	M 52	monkey-bowl
Реру І	Balat	mastaba of Ima-Pepy II	cylindrical jar
Реру І	Balat	mastaba of Ima-Pepy II	cylindrical jar
Pepy II	Deir el-Nawahid	tomb no. 35	bag-shaped
Pepy II	Badari	tomb no. 3202	cylindrical jar
Pepy II	Badari	tomb no. 3217	cylindrical jar
Pepy II (Ankhnes-Pepy)	Badari	tomb no. 4870	cylindrical jar, fragment
Pepy II	Balat	mastaba of Ima-Pepy I,	monkey-bowl
		tomb of Igit	
Pepy II	Balat	mastaba of Ima-Pepy II	cylindrical jar
Pepy II	Balat	mastaba of Medunefer	cylindrical jar
Pepy II	Balat	mastaba of Medunefer	two-handled jar
Pepy II	Balat	mastaba of Medunefer	flat lid

Pepy II	Balat	mastaba of Khentika,	flat lid
		chamber 5100	

From the list of evidence is clear that the most common inscribed vessels were cylindrical jars or their flat lids. There are also two monkey-bowls and two globular *nw*-jars. The beaker on stand has a parallel in the one kept by the Metropolitan Museum (see above) and the two-handled jar in the vessels from the burial complex of Pepy II. The only unparalleled piece is the bag-shaped jar from Deir el-Nawahid.

### 7.3. Centre versus periphery

Provincial sites are of various nature, some contain wealthier tombs, some were evidently less important, some were used in the long term, others in short time span. Nicole Alexanian divided the provincial cemeteries in four categories (Alexanian 2016: 476–480:

- a) Elite cemeteries
- b) Cemeteries of the nome capitals
- c) Town cemeteries
- d) Village cemeteries

The first group contains only Bet Khallaf with the Third Dynasty tombs and Middle cemetery at Abydos and Qubbit el-Hawa with the elite mastabas and rock-cut tombs of the Sixth Dynasty officials. The local administrative centres included cemeteries at el-Kab (Third to Sixth Dynasty), Edfu (Fifth to Sixth Dynasty), Dendera (Fourth and Sixth Dynasty), Reqaqna (Third to Fourth Dynasty) and Balat (Sixth Dynasty). The town cemeteries were probably Abydos (cemetery D from Fourth Dynasty), Naqada, Naga ed-Deir (cemetery 500–900 from Third to Fourth Dynasty), Abadiya, Sedment, Bashkatib at el-Lahun and Kafr Ammar/Tarkhan. Among the simple village cemeteries were counted the rest of uncovered Old Kingdom cemeteries with smaller, mostly shaft tombs without superstructures.

The first group – the elite cemeteries – are difficult to study from the point of view of stone vessels. Bet Khallaf was discussed in Chapter 2, since it comes under the period before introduction of model stone vessels. The material culture discovered in the tombs of the Middle cemetery at Abydos is not published, yet. Although there are many rock-cut tombs of elite officials a Qubbit el-Hawa, evidently bound to the royal court, as is evidenced by their biographies (Strudwick 2005: 327–340), there are only two contexts containing stone vessels to be found. All of the wealthy burials of the highest officials were found emptied by robbers.

The evidence is more abundant in the cemeteries belonging to the nome capitals. At el-Kab, the Sixth Dynasty tombs are yet unknown. Alexanian only pointed to the textual evidence attesting their existence. The so far known and published tombs date to the Third and Fourth Dynasties and belong to the old tradition, which was discussed in Chapter 2 of this thesis.

Efdu is actually the only site with elite tombs of the late Fifth Dynasty officials, who were without any doubt in regular contact with the royal court and central administration. It is evidenced once again by the autobiographical text of Izi, who grew up in the time of Djedkare, whom he served as the elder of the doorway. He follows naming other offices he held under the Kings Unas and Teti. The last one probably awarded his loyal nomarch with the title of vizier. (Strudwick 2005: 340–342). Since he died by the beginning of the Sixth Dynasty, the burial equipment should be considered from approximately the same time. There was only a bowl discovered in his burial apartment, but a number of stone vessels of exquisite quality come from the burial chamber of his wife Sesh-Seshet. Some of them are easily recognisable pieces with parallels in the Memphite area, such as the carinated bowl, table on stand and a cylindrical jar (cf. Reisner 1931: 175, Fig. 43). Other pieces are either unique in form or rather rare in archaeological contexts of the central cemeteries. For instance, the nw jars are not attested in non-royal context at all, either in the Fifth or Sixth Dynasties in Memphis. They should be considered ceremonial vessels with particular meaning for the king, who was the one in direct contact with the gods (cf. the statue of Pepy I from Brooklyn museum, https://www.brooklynmuseum.org/opencollection/objects/3448). However, they found their way into the provincial cemeteries very early in the Sixth Dynasty and became quite common part of stone vessel assemblages. One of the two globular jars found in the burial chamber of Izi's consort is a unique piece, since it is a mixture of the globular jar with a bowl in the form of its rim, made in one piece. The large *hs* jar and the jug have parallels only in model vessels. It is therefore a matter of question, if these two vessels were made in royal workshops or somewhere in the provinces. All the other jars definitely came from the royal court and they were probably a gift of the king.

Izi's son Qar with the good name Meryrenefer mentions in his autobiography that he was educated at the court of King Pepy I and afterwards sent back to his nome as its administrator (Strudwick 2005: 344). The squat jar of diorite with tubular handles is an archaic piece, but its size points to the Sixth Dynasty dating, as well as the spouted bowl. They are average pieces regularly appearing in the contemporary tombs, and in this respect, they might have been crafted in the provinces.

The other capital was Dendera, where there are tombs from the Fourth and Sixth Dynasties. Unfortunately, the large mastabas of local elite from the Sixth Dynasty were found void of stone vessels. Reqaqna falls into the pre-model stone vessels period, and the last provincial capital with elite tombs is that of Balat in Dakhla oasis. This cemetery was evidently bound with royal court through the luxurious vessels with royal names. Most of the vessels are of traditional shapes, which are to be found even in simple burials. In Balat, however, some of them are in larger sizes. There is no source of travertine in the oasis, and therefore, it is highly probable that the vessels were imported there from Memphis.

There are only a few other cemeteries, where there are tombs possibly dating to the Fifth Dynasty. None of them is an elite one, but still, there is a possible connection with the centre and its habits to be found. The main feature are the shapes of vessels imitating the model stone vessels made as completely drilled, functional jars. These can be found for instance at Naga ed-Deir or Matmar. It seems that these vessels did not come from the centre, where there was still a strong tradition of assemblages of model stone vessels. It is rather more probable that they were crafted in the provinces. One can imagine and official ordering at a local craftsman a vessel of the shape produced in the centre. However, model vessels had no history in the provinces and therefore, the craftsman would make it in the way he was used to make the vessels, as a completely drilled piece to serve its real function.

The problem is that in the Memphite cemeteries, the evidence of the forms widely spread and popular in the Sixth Dynasty in whole Egypt (including provinces) does not date to contexts earlier than the time of Pepy I. There are some more travertine large size jars coming from the tomb of Mereruka, but none of them is similar to the types of elongated jars either with flat or pointed bases and wavy collars or flaring necks (Firth – Gunn 1926: 24, Fig. 20, Pl. 13).

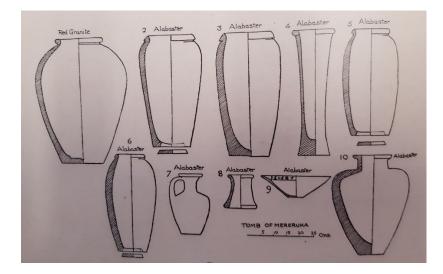


Fig. 79 Some large size stone vessels from the burial chamber of Mereruka (taken from Firth – Gunn 1926: 24, Fig. 20)

Such a situation might be cause by the lack of evidence in the capital, or wrong dating of the provincial tombs. However, at this moment, it seems more probable that they have origin in the provinces, where they started to be made as imitations of model vessels, and later returned back to the centre to become generally used. Their beginnings might be initiated by local administrators, who had them made for their tombs, which were no longer completely furnished by the king. There is evidence on gaining sarcophagi from the king (Strudwick 2005: 353), but it is a large piece compared to about 5 to 10 cm high vessels, and it was a special gift of the king as a reward for the official's service.

This was probably also the reason, why there was not much influence of the centre in burial and mortuary cults and habits to be found there, except for the basic concept of these activities. The rather humble burials in the provinces in the Fourth and first half of the Fifth Dynasty point to the local habits and a kind of personal impact on the burial equipment, *i.e.* everybody was responsible for their eternal belongings. Contrary to this "individualised" approach, the Memphite cemeteries present a different image. The officials involved in the royal administration and service to the king were dependent on him and his wealth both in the life on earth, and in the afterlife. He provided them with land, material and products as a reward for their work. During the first phase of their existence, they profited from the royal income through the redistribution system. The same system provided them with the burial equipment, which was a gift from the king himself (Alexanian 2006). The standardised form of assemblages of model stone vessels deposited in the tombs of Memphite officials clearly points to the central production in royal workshops. Not only the craftsmen, but also the material was under royal control, and it was probably impossible to gain any stone without the permission of the king at that time. He was the one, who organised expeditions sent to mining areas to gain precious stones and metals that were later transformed into luxurious products in royal workshops (Eichler 1993).

This situation probably changed during the Sixth Dynasty, when the "individualised" approach was once again put into general order and homogeneity. By the latter part of the Sixth Dynasty, there is no difference between scale of material and classes of stone vessels in the wealthier tombs and the simple shaft tombs. The only difference is in their number, and occasionally their size.

### 8. Opening of the mouth ritual sets

Model stone vessels deposited in the tombs of the Old Kingdom officials were usually of two kinds, belonging to two different assemblages. One of them was discussed in previous chapters and represents larger numbers of model jars and bowls made mostly of travertine or limestone. The other group belongs to the so called "Opening of the Mouth ritual set". This assemblage numbers only a few vessels, usually being made of black and white material. In some cases, all of the vessels were inserted in a tablet, as well as other components of the group, the *psš-kf* knife and *ntry/ntrty* blades. As the name of the set recalls, all this equipment is supposed to had been used in the ritual of the Opening of the Mouth – *wpt-r3*.

The ritual and the items belonging to the sets have been already widely discussed (Otto 1960; van Walsem 1978–1979; Macy Roth 1992 and 1993). The ritual in its specific form is attested already in the Old Kingdom, both in royal and in private contexts. It was involved in statue rituals, embalming rituals and offering rituals (Otto 1960: 4–6). Its role in private tombs was probably more limited, since the only evidence comes from the burial chambers of the deceased and is generally represented by a tablet with a *psš-kf* knife, *ntry/ntrty* blades and six model vessels.

Due to its presence in the burial chambers, the existence of the ritual was tackled by excavators, such as Selim Hassan (1948: 158–160). The first broad study on the ritual itself throughout the Ancient Egyptian history was presented by Eberhardt Otto (1960). He mainly focused on the evidence coming from the New Kingdom, but origins of the ritual were also characterised. Apart from the Pyramid Texts and other evidence from the royal context, there are also mentions in the non-royal tombs. The earliest one comes from the tomb of Metjen, where it is to be found in connection with cleaning and offerings (Otto 1960: 6–7), and therefore points to the main purpose of the ritual. Unfortunately, Otto only touched the general significance of the ritual in the Old Kingdom. Van Walsem attempted to describe the purpose of the *psškf* knife in these sets. Based on the interpretation of the knife, he defined the meaning of the whole set. In his point of view, the knife was used in the mummification process to hold the jaw of the deceased (van Walsem 1978–1979). On the contrary, Roth later revised his interpretation and pointed to different evidence. She saw in *psš-kf* an object used to cut the umbilical cord of a new-born baby (Roth 1992).

Much effort has been already put into a thorough study of the Opening of the Mouth ritual and origins of the *psš-kf* knife, but the author of the thesis does not wish to discuss the

already existing interpretations on the origins, since it is not the main object of the study. The chapter aims at typological, material and chronological study of the Old Kingdom Opening of the Mouth ritual sets. In fact, there is no evidence from the Old Kingdom, which would have explicitly mentioned this ritual. The available written sources record only particular parts of the set, such as *psš-kf* knife, *hnt* beakers and *h3ts* jars. The *ntry/ntrty* blades are called there *sb3wy* (*e.g.* Posener-Kriéger 1976: Pl. XXA; Posener-Kriéger – Verner – Vymazalová 2007: Pl. 27A; concerning the terminology see Helck 1967). However, although it is not the main target, the available evidence leads to the reinterpretation of the usage of the set in the Old Kingdom in the end, especially through the discussion on the reason for the presence of the set inside the burial chambers.

### 8.1. Typology and material

Although the *psš-kf* knife is well documented from Predynastic and Early Dynastic Periods (van Walsem 1978–1979), the earliest attestations of model vessels of the shape typical for the Opening of the Mouth ritual are to be found in the Fourth Dynasty tombs. However, the first examples of the complete (or almost complete) sets are evidenced from the middle of the Fifth Dynasty onwards. Contrary to the assemblages of model stone vessels, the Opening of the Mouth ritual sets have been documented not only in the cemeteries of Memphis, but also in the provinces.

The traditional sets follow particular pattern including shapes of vessels and material used. Most of the assemblages contained a tablet,  $ps\breve{s}$ -kf knife, white and black h3ts jars and *hnt* beakers and sometimes also ntry/ntrty blades.



Fig. 80 A complete Opening of the Mouth ritual set from the Sammlung E. und M. Kofler-Truniger in Luzern (taken from Müller 1964).

The proper scope of material involved limestone for the tablet, flint for the *psš-kf* knife, rockcrystal for the white vessels and obsidian for the black vessels. The *ntry/ntrty* blades are usually made of schist. This material is sometimes also called "slate" and geologically belongs to the groups of siltstone and greywacke (Nicholson – Shaw 2000: 57–58). The problem is that this material is not suitable for a blade, which is supposed to be sharp. Since the examples of sets that included the blades come from late Old Kingdom, when also *psš-kf* knife is never made of worked flint, one can suggest that even the *ntry/ntrty* blades were originally made of a different material. The evidence coming from the papyrus archive of the King Raneferef points to copper as the early material for the *sb3wy* blades, as they are called there (see the discussion below). The case of *psš-kf* was already mentioned. The early examples, such as the ones from G 7560 or G 7550 were made of travertine, and their edges were not sharp at all. The ceremonial pieces coming from Menkaure's valley temple or from private tombs (two shafts in G 7320) from the latter part of the Fourth Dynasty or even Fifth Dynasty are made of flint, but they lack the retouched edges. They are finely smoothed and polished. Two of the knifes coming from the valley temple of Menkaure also bear inscriptions. The completely preserved one mentions the Horus and *nzwt-bity* name of Khufu, the fragment of the other reads "mother of the king, Khamerernebty" (*mwt nzwt H<sup>c</sup>-mrr-nbty*).



Fig. 81 The set for the Opening of the Mouth ritual coming from the valley temple of Menkaure (taken from https://collections.mfa.org/).

The Fifth Dynasty brought back the flint retouched *psš-kf* knifes resembling to the Predynastic pieces. However, contrary to the early thick knives with rather small fish-tail at the wide end, all the Old Kingdom *psš-kf* knives were narrow wands with an emphasis on the splitting end. Those with retouched surface were discovered at Abusir in the tombs of Kahotep (AC 10) and the anonymous mastaba AC 31. Another piece is coming from Saqqara, the tomb of Rawer II (G 5470). Another similar one is kept in a private collection in Barcelona (http://www.alaintruong.com/archives/2017/01/17/34817452.html). Contrary to these marvellous objects, the *psš-kf* uncovered in the mortuary temple of King Raneferef at Abusir was like those of the royal pieces from Menkaure's valley temple.



Fig. 82 The *psš-kf* knife of Rawer II (G 5470) made of flint (taken from http://giza.fas.harvard.edu).

The Sixth Dynasty knives are almost the same. The early, well-crafted pieces keep the shape of the flint unretouched ones, but with the exception of material. They are not made of flint anymore. Instead, limestone prevails. The very late sets, such as the two from the collections of the British Museum (EA 23222 and EA 58404) have much shorter size and rather schematic shape.

In case of the vessels, the colour of the stone was the most important feature. Even the Pyramid Texts or papyrus archive of King Raneferef do not pay attention to the particular kind of stone, and label them as "black stone" and "white stone" (Spell 33b, 36c, 37a, 39c, 36b, 39b in Allen 2005; Posener-Kriéger – Verner – Vymazalová 2007: pls. 27A, 28A). In that respect, the rock-crystal could have been substituted by quartzite or travertine, and basalt was sometimes used instead of obsidian. The beakers were quite tall with flat base and straight flaring sides. The jars had drop-shaped lower part with pointed or narrow flat base. The upper part constituted of quite a long neck flaring into a wide rim with flat orifice. The examples of jars and beakers coming from the Fourth and Fifth Dynasty were hollowed inside, whereas the Sixth Dynasty pieces often have only shallow drilling or mere dots in the area of orifice.

Only a single vessel from the Opening of the Mouth ritual set is known to bear an inscription. It is a quartzite beaker now kept in the Sammlung E. und M. Kofler-Truniger in Luzern (Müller 1964: 52). There are two signs from the name Neithotep (*Nt-htp*), and due to it, the 6.8 cm high beaker of an unknown origin was dated to the First Dynasty.

The tablet was usually made of limestone and had truncated shape. Other materials might have also been used, such as in case of a set from Abydos (now in British museum EA 23222), where the tablet was made of wood. The upper (larger) surface was hollowed out in order to hold the vessels, knife and blades. The hollows follow the shape of the vessels since they were laid there. In some examples, the beakers were place inside in the upright position, such as in case of Inty-Pepyankh (shaft A in AS 22) at Abusir, Degem at Saqqara, the tomb of Niankhpepy (no. 14) at Zawiyet el-Meytin and the tomb of Idu at Dendera. In this respect, only circular depressions were drilled in the tablet.

### 8.2. Chronology and meaning

There are only a few complete sets of a tablet, knife, vessels and blades (at least defined by the presence of particular hollows, if some of them were lost):

- 1. Set from the tomb of Degem (Pepy-mer) at Saqqara
- 2. Set Jd'E 25971 from Saqqara (now in Egyptian Museum in Cairo)
- 3. Set from the tomb of Itnefret (RS 5) at Zawiyet el-Meytin
- 4. Set from the tomb E 21 at Abydos
- 5. Set from the tomb of Idy at Abydos (now in British Museum)
- 6. Set EA 23222 from Abydos (now in British Museum)
- 7. Set EA 58404 from Abydos (now in British Museum)
- 8. Set from the tomb no. 35 at Deir el-Nawahid
- 9. Set from the tomb no. 80 at Deir el-Nawahid
- 10. Set from the tomb of Idu I at Dendera
- Set K 414 H with unknown origin (now in Sammlung E. und M. Kofler-Truniger in Luzern)
- Set E 2674 with unknown origin (now in Musées royaux d'Arts et d'Histoire in Brussels)
- 13. Set Jd'E 28417 with unknown origin (now in Egyptian Museum in Cairo)
- 14. Set with unknown origin (now in Museo Egipcio de Barcelona)

Other examples of sets with a tablet usually miss some of the contents. Only vessels in a tablet come from the tomb M X at South Saqqara. And there is a couple of examples, where the knife was never meant to be included, such as AS 18 (Abusir) and Idu Seneni (Hamra Dom). The blades were omitted in case of MET\_07.228.117 of an unknow origin, G 2382 at

Giza, Inty-Pepyankh (shaft A in AS 22) at Abusir, Niankhpepy and Metu (RS 6) at Zawiyet el-Meytin and tomb S 12 at Der el-Gebrawi.

Concerning the number of depressions in the tablets, the most common is 2 for h3ts jars and 4 for *hnt* beakers:

tomb number	owner	site	h3 <u>t</u> s	<u></u> ḥnt
G 2382	unknown	Giza	2	4
AS 22, shaft A	Inty-Pepyankh	Abusir	2	4
AS 18	unknown	Abusir	2	4
M X	unknown	Saqqara	2 (?)	3 (?)
unlabelled	Degem (Pepy-mer)	Saqqara	2	4 or 5 (?)
unknown (Jd'E 25971)	unknown	Saqqara	2 (+ 3)	5
tomb no. 14	Niankhpepy	Zawiyet el-Meytin	2	3
RS 6	Metu	Zawiyet el-Meytin	2	4
S 12	unknown	Deir el-Gebrawi	4	4
E 21	unknown	Abydos	2	4
unlabelled	Idy	Abydos	2	4
tomb no. 35	unknown	Deir el-Nawahid	2	4
tomb no. 80	unknown	Deir el-Nawahid	2	4
T 66	Idu Seneni	Hamra Dom	2	2
unlabelled	Idu I	Dendera	2	4
unknown (Jd'E 28417)	unknown	unknown	2	4
unknown (EA 23222)	unknown	Abydos	3	4
unknown (EA 58404)	unknown	Abydos	2	4
unknown (MET 07.228.117)	unknown	unknown	2	4
unknown (K 414 H)	unknown	unknown	2	4
unknown (E 2674)	Tesha	unknown	2	4
unknown (Barcelona)	unknown	unknown	2	4

The number of vessels in sets without a tablet are:

tomb number	owner	site	h3 <u>t</u> s	<u></u> ḥnt
G III	Menkaure	Giza	2	4

G 2011	unknown	Giza	0	1
G 2100 A	Sedit	Giza	0	1
G 2377 A	unknown	Giza	2	4
G 2381 A	Ptahshepses Impy	Giza	6	10
G 2381 Z	unknown	Giza	2	2
G 4250 A	unknown	Giza	1	0
G 5080 B (G 2200)	Seshemnefer II	Giza	0	1
G 7550 B	Duaenhor	Giza	2	1
G 7560 B	unknown	Giza	2	2
G 8130	unknown	Giza	1	2
G 8150 G 8862	Dersemat	Giza	1	3
		Abusir	0	_
AC 3	Raneferef			2
AC 15	Khekeretnebty	Abusir	1	1
AC 22	unknown	Abusir	0	1
AC 24, tomb 1	unknown	Abusir	1	0
AC 24, tomb 2	unknown	Abusir	1	1
AC 25	Nakhtsare	Abusir	2	0
AC 31	unknown	Abusir	0	1
AS 17	Qar junior	Abusir	1	2
AS 18	Senedjemib	Abusir	2	4
AS 22	Inty-Pepyankh	Abusir	2	4
unlabelled	Akhethotep	Saqqara	1	2
unlabelled	Perneb	Saqqara	2	2
unlabelled	Iput	Saqqara	0	4
unlabelled	Nefersheshemre	Saqqara	1	1
unlabelled	Kagemni	Saqqara	0	3
Mastaba A	unknown	Saqqara	1	1
Mastaba E	unknown	Saqqara	1	0
XV	Nypepy	Saqqara	2	3
N II	Henut	Saqqara	0	1 (?)
unlabelled	Nedjetempet	Saqqara	0	2
unlabelled	Ankhsen	Saqqara	1	0
M 55	Akhti	Saqqara	2	2

unlabelled	Weni	Abydos	1 (?)	0
unlabelled (PM 4826)	unknown	unknown	2	4

Summing up, there are the earliest examples of *psš-kf* and vessels belonging to the Opening of the Mouth ritual sets already from the Fourth Dynasty, all being made of travertine. By the middle of the Fifth Dynasty, the first sets appear, still including only the knife and vessels, but this time in the appropriate colours and number. Since that time the sets follow a fixed pattern involving usage of particular stones. The number of vessels is two flasks and four beakers, half of them being white, half black. However, they all miss the tablet, which seems to come into usage by the very end of the Fifth Dynasty and became a common part of the sets in the Sixth Dynasty. The number of vessels and materials remained the same. What came new, was the presence of *ntry/ntrty* blades. They are archaeologically attested from the Sixth Dynasty on, but epigraphic evidence mentioned them even before. They are called *sb3wy* in the Abusir papyrus archives (see above), but the determinative used with the word does not leave any doubt about their nature. Exceptions from this rule come from the very end of the Sixth Dynasty, when other kinds of material were used.

The archaeological context of all the sets is quite clear. They come from the officials' burial chambers. They were usually positioned by the head of the deceased, either behind it to the north of the sarcophagus, or by the north-eastern corner. From the Sixth Dynasty on the items belonging to the Opening of the Mouth ritual set became part of the offering lists (Barta 1963: 78–82). Moreover, taking into consideration the meaning of the burial equipment, there is no doubt that the ritual was a part of the whole offering ritual that was supposed to be performed by the deceased in his tomb every day. It involved cleansing, anointment and opening of the mouth, which was followed by the funerary repast. The presence of the set in the burial chamber points to the importance of such an activity, which could have also been performed on the body of the deceased before its placing into the sarcophagus, as is recorded in the New Kingdom evidence (Otto 1960). In the Old Kingdom, the Opening of the Mouth ritual was supposed to be performed regularly – probably on a daily basis – to enable the deceased to refresh themselves. Based on the interpretation of the Pyramid Texts, the ritual was supposed to "revive" the deceased with all his abilities that also involved consumption of offerings (Roth 1992b). That is probably why the set was not regularly situated to the east of the sarcophagus with other objects connected with nourishment, but more often to the north, behind the head with the ointment jars. It was presumably perceived as a ritual object of

rebirth and special treatment of the body, rather than an item directly connected with the offerings themselves.

The only evidence being found outside the substructure of the tombs comes from the royal context. One of the three examples were collected in the Valley temple of King Menkaure. Georg A. Reisner discovered there an assemblage composed of a flint *psš-kf* inscribed with the Horus name of Khufu, 4 beakers and 2 flasks from basalt, travertine and rock crystal. He also found a fragment of another flint psš-kf inscribed for Queen Khamerernebty in the remains of Menkaure's mortuary temple. Both were made of flint. The third example comes from the mortuary temple of King Raneferef at Abusir. One of the storerooms contained a set of schist *psš-kf* and two beakers, one made of basalt, the other from rock-crystal. All the pieces – and also others – were recorded in the papyrus archive, which was discovered in Raneferef's temple. A list of ritual equipment evidenced during an inspection of a storeroom names among contents of a large box: one h3ts jar made of white stone and one h3ts jar made of black stone, one hnt beaker made of white stone and two hnt beakers made of black stone, one psš-kf and two sb3wy blades. (Posener-Kriéger - Verner -Vymazalová 2007: Pl. 27A). The second part of the papyrus starts with a head "purification" and records contents of another large box, which was under the control of a land tenant (hnty- $\delta$ ). There were: one *h*<sub>3</sub>*ts* jar made of white stone and one *h*<sub>3</sub>*ts* jar made of black stone, one *h*<sub>1</sub>*ts* beaker made of white stone and three (?) *hnt* beakers made of black stones (two kinds), another *hnt* beaker made of copper, as well as two *sb3wy* blades and other purification vessels made of copper including an incense burner. The ending probably refers to the nature of the storeroom, which was *pr-mnht* – the storeroom of cloth. It was situated close to the hypostyle hall, and the cultic objects were thus used in the rituals performed in that hall. (Posener-Kriéger - Verner - Vymazalová 2007: 244, Pl. 28A). Concerning the sb3wy blades, they were evidently made of copper.

The evidence from royal contexts points to the fact that the instruments for the Opening of the Mouth ritual were commonly used even in the everyday ritual in the mortuary temple. It was probably performed on the statues of the king together with purification, before they were presented nourishment. This process attested both in substructures as well as superstructures of the tombs refers to the same rituals necessary for a well-being of the deceased in the afterlife. The more complex ritual activity in royal mortuary temples involved the presence of the set in the storerooms of the temple. There is no evidence of such an activity in non-royal tombs. They were usually not equipped with statues of the deceased that could have served the ceremony. The statues were mostly hidden in serdabs, sometimes

watching the activity at the offering place through a narrow window, sometimes being completely sealed. Moreover, no textual evidence mentions such activity, but it is not possible to exclude its existence. Since there are no storerooms for cultic equipment in private tombs, the *psš-kf* with the appropriate vessels could have been brought by the relatives or priests there and back, and the ritual might have been performed in a symbolic way in front of the false door.

What is of interest in the context of private tombs, is the absence of some items in the sets. For instance, shaft A in the tomb AS 22 at Abusir still held almost complete burial equipment, when excavated by the team of Miroslav Bárta in 2002. Among the number of luxurious goods, such as large copper purification vessels, there was an Opening of the Mouth ritual set with a tablet. The most peculiar feature of the set is the lack of two pieces of beakers, and *psš-kf* knife. Indeed, only four pieces of vessels were found lying on or close to the tablet, and there was no evidence of the *psš-kf* knife at all. Since the burial equipment is considered to be found in situ untouched by looters, it is highly probable that these missing parts never got into the burial chamber. In case of vessels, there is a possibility that they became part of the set of h3ts jars and hnt beakers that were found together with copper htp table to the east of the sarcophagus in the same burial chamber. However, there is no explanation for the absence of the *psš-kf* knife. Although the burial chamber was visited by robbers, they evidently entered the space in the antiquity. They were interested only in the jewellery of the deceased, and therefore the burial equipment remained untouched, and only the body encountered severe devastation (Bárta - Vachala et al. in preparation). A similar example is an incomplete set found in an undisturbed tomb E 21 at Abydos. As was described by the excavator, the *psš-kf* knife was missing and one of the vessels did not fit the depression in the tablet (Naville 1914: 20). There are more Sixth Dynasty Opening of the Mouth ritual sets, where the *psš-kf* is not preserved, although there is a space for it in the tablet. This would mean that it was either of importance to the looters, or it was seldomly deposited in the tomb. Apart from these possibilities, another one comes to mind. It is the pre-burial use of the set and loss of the knife and some vessels before the burial (although the pieces do not bear any clearly visible traces of wear).

### 9. Conclusions

Stone vessels have always been luxurious objects. They involved much effort not only in their production process, but also in acquisition of the raw material. In this respect, there were two aspects of their value that originate in these two facts. One of them was the material, which could have been abundant in Egypt on one hand or rare on the other. It could be acquired close to the valley, or it required well-organised long-distance expeditions. It could be quite soft and easy to be worked, or it was hard and difficult to be extracted from the mother rock and later processed in the workshop. Therefore, the more hardly accessible, rarer in resources and harder on Mohs scale the material was, the more luxurious and prestigious the final products were. The other feature of prestige was the size of the vessel as well as its final treatment. The larger and better worked pieces were likewise understood as more valuable than the small and roughly made ones. All these aspects were considered in the process of production and especially distribution of stone vessels in Ancient Egypt. In this respect, these aspects play an important role in the interpretation of not only the stone vessels themselves, but also the archaeological contexts, in which they were found. The broader research in stone vessels can thus offer a unique view of the Old Kingdom society and its historical and social development.

## 9.1. Interpretation of model and miniature stone vessels in the Old Kingdom burial context

Since the beginning of ancient Egyptian history, stone as material was effectively employed in the production of containers of oil and ointment (Arnold – Pischikova 1999: 124–125). It was of practical purpose, for the oily matter required lower temperature to avoid it going rancid. And stone was the best of materials available. In this respect, the typical class of stone vessels included closed forms, such as cylindrical jars or various forms of shouldered jars either with or without handles. All other classes represented merely luxurious versions of vessels commonly made of different materials – pottery or copper. That group covers especially open forms, such as tables, bowls and beakers.

The Predynastic Period witnessed a distribution of stone vessels mostly based on local production from the resources that could have been relatively easily reached. The Early Dynastic Period brought a radical change in one specific field. The variety of classes and kinds of stones started to be controlled centrally. Such a development followed the political unification of the land raising an only king as its head. As he became the owner of all the land

with its resources, he started to control not only the mining activity, but also the production workshops (Wilkinson 1999; Tallet 2018). It is a matter of discussion if he moved all the skilful craftsmen to the new centre of administration. There is no evidence for such a step, yet. If he did or not, the production featured centralised traces, such as particular forms and materials (*e.g.* Early Dynastic mastabas at Saqqara in Emery 1938; 1939; 1949; 1954; 1958). It is also of importance that the tombs furnished with masses of stone vessels belonged mostly to the members of the royal family and the newly established administrative system. Since the production process of stone vessels involved much time and efforts, it evidently turned into a heavy burden at the moment, when the royal family and people involved in administration became excessively numerous. At that moment, the large-scale building activity of kings at the time of pyramid construction, as well as large mastabas of their closest subjects that depended on state budget, with all its furnishing became not sustainable anymore.

It is not a coincidence that the change appeared after the reign of Snofru, who was able to manage a construction of three huge pyramids in his lifetime (Verner 2001: 153–189). Savings were evidently needed. As they could not be applied (or there was no will to apply them) on royal projects, they were employed in the non-royal context. The cemeteries of royal and administrative members at Giza were strictly defined from the point of view of their architecture, as well as equipment (Jánosi 2005). And that was the point when the first assemblages of model stone vessels appeared in the non-royal context. They substituted not only the large size stone vessels, but also other kinds of pottery and copper vessels and thus became a kind of "ideal burial equipment" including everything what was necessary to be at hand in the burial chamber for an adequate afterlife of the deceased. They were all made of travertine, a relatively easily accessible kind of stone, which was also soft enough to be quite fast crafted. Side by side with the stone models (although slightly earlier), pottery assemblages also found their way into the burial chambers of the officials of non-royal origin. However, the pottery miniatures are evidenced in the burial chambers already at the time of Snofru (Bárta 1995b; Alexanian 1999: 110–156). By the middle of the Fifth Dynasty, a new element of social differentiation appeared. It was an introduction of limestone as a substitution of pottery miniatures, which almost completely left the burial chambers and remained to be used at the above-ground cult places.



Fig. 83 A part of the well-preserved assemblage of travertine model vessels, which were collected in shaft 316 in G 5070 at Giza (L. Jirásková, archive of the Czech Institute of Egyptology)

Generally, the assemblages of model stone vessels became an essential part of burial equipment of officials until the Sixth Dynasty, when the society returned to the production of large size, functional (= fully drilled inside) vessels made of the appropriate materials. For the whole period of the Fourth to Sixth Dynasties both traditions were maintained, and it is still possible to find both model vessels and the large size stone vessels in one burial chamber, however, in a limited number of non-royal contexts. The large size functional stone vessels were in this time exclusive products made for the king himself. In this respect, they can be still found in large numbers in the royal mortuary temples, but they are rare for the officials' tombs. This is valid only for the area of Memphis. The provincial tombs contained either the large size vessels from the time up to the early Fourth Dynasty, or later became equipped by the functional full-size jars of the new types appearing there probably from the late Fifth Dynasty. The details of development and changes will be discussed in broader context below.

# 9.1.1. Meaning of assemblages of model stone vessels in the burial and mortuary customs in the Old Kingdom

The research presented in this dissertation focused on the general interpretation of the specific kind of burial equipment, which the assemblages of model stone vessels are. The tradition of their production originated without any doubt in the economisation of the burial customs. The royal treasury evidently met its limits during Snofru's reign. The trend of minimising of effort involved in the production of stone vessels can be traced from the Early Dynastic Period through the so-called "dummy" vessels. Their broader attestation in the early Old Kingdom points to the deliberate lowering of economic costs for particular parts of Ancient Egyptian

society. Such a trend culminated at the beginning of the Fourth Dynasty and led to the sudden turn, when the royal workshops passed to a new mode of production of non-royal burial equipment. The kings were still supplied with large size luxury stone goods, whereas their subjects were presented model stone vessel sets.

The assemblages were defined to contain all the traditional and necessary parts of burial equipment. The purpose of burial equipment was an eternal provision of the deceased with sustenance and ritual necessities, as well cloth, jewellery, tools and social status markers. This was its functional part. The depository part involved objects used in the dead body treatment (for the Old Kingdom the real "mummification process" is not yet clearly evidenced – Jirásková 2015). These were canopic jars and particular kinds of pottery bowls or jars (Rzeuska 2002). Therefore, the burial chambers usually contained vessels for purification either by water (ewers and basins) or smoke (incense burners). Ointment containers were represented by cylindrical jars and one-handled jugs, later also by the Seven sacred oil tablets. The Opening of the Mouth ritual involved a *psš-kf* knife and several *h3ts* jars with *hnt* beakers/basins. All these goods served in the first part of the *prt-hrw* (offering) ritual. Its second part consisted in consummation, which was ensured by beer jars, wine jars, water jars, the *h3wt* table and a number of bowls and beakers. Cloth usually did not survive until modern times as well as many of the real offerings, which included fruit and vegetables. Jewellery was on the body of the deceased and his social status markers close to it, inside the sarcophagus. Copper tools were usually present in their model form.

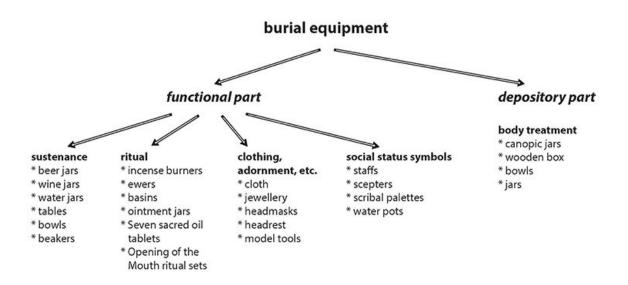


Fig. 84 The table presents basic division of burial equipment in the Old Kingdom Memphite tombs (L. Jirásková)

Most of the above stated burial equipment was supposed to be present in its real size and functional form. However, for a great part of the Old Kingdom, they were deposited in the tombs in a miniature size and model form. The assemblages of model stone vessels thus included sustenance and ritual necessities, maybe also the canopic jars in the latter part of the Fifth Dynasty. The presence of models, however, did not exclude the presence of large size pottery (more often) and copper (more rarely) vessels in some contexts. Although everything was small and without real offerings, it could – in the symbolic way – fulfil its function without any obstacle for ever. If the service in the above-ground cultic parts of the tombs failed, the deceased could rely on the eternal supply of various substances and products represented by the model stone vessels, which were lying in their immediate vicinity.

The typical position of the assemblages of model stone vessels within the burial chamber was its north-east corner. In general, all the Old Kingdom burial chambers can be divided into four parts, each of them being a place for a particular part of the burial equipment. The most important was the sarcophagus and its contents, including the body of the deceased decorated with jewellery and personal ornaments. By the body were usually placed objects symbolising their social status, such as staffs or water pots. The southern part of the burial chamber was devoted to the objects connected with the treatment of the dead body (a kind of primitive mummification). These included canopic jars (often sealed in a wooden box) and specific kinds of pottery (*cf.* Rzeuska 2002). The northern part of burial chamber was normally a place for the cultic implements including ointment, which was usually stored in stone vessels. Sometimes the vessels were situated outside the sarcophagus, sometimes inside it by the head of the deceased.

### **Burial chamber**

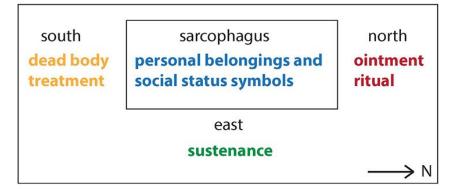


Fig. 85 Distribution pattern of burial equipment in the burial chambers of the Old Kingdom officials (L. Jirásková)

The most important deposit was, however, placed to the east of the sarcophagus. The body of the deceased was commonly oriented with the head to the north and feet to the south. Therefore, the food offerings were deposited rather by their head at the northern part of the sarcophagus. The face was supposed to be turned to the east as the place of sunrise. And the offerings were thus prepared immediately in front of it. As the assemblages of model stone vessels were connected with the offering ritual being involved both with its ritual and refreshment parts, their position in front of the face of the deceased in natural.

Such a distribution is evidenced not only by a number of well-preserved Old Kingdom Memphite burial chambers, but also by wooden sarcophagi from the latter part of the Old Kingdom (*e.g.* Idu II v Junker 1947: 96–106, Taf. XVIII) or decorated burial chambers from the same time (*e.g.* Jéquier 1929; Dobrev – Laville – Onézime 2015; Jánosi – Vymazalová 2018). The northern wall of the sarcophagus bears depiction of seven sacred oils, the eastern wall is covered by the offering list and by its north end, where the head was, is a representation of the false door, a symbolic opening. The southern wall situated by the feet can be decorated by sandals.

### 9.1.2. Political and social implications

Assemblages of model and miniature stone vessels were produced for one and only purpose, and that was to fulfil their role as everlasting sources of ritual equipment and nourishment in the burial chamber. For that reason, they were a kind of "consumer goods", which was made approximately at the time of the preparation of the interment of the deceased. While the large size stone vessels could have been kept in circulation for a considerable time, the model vessels probably found their way to the burial chamber quite fast after their production. In this respect, they can be taken as a dating criterion for the target burial contexts. The research of the author of this dissertation thesis have shown that the major turning points in the history of production of model and miniature stone vessels were closely connected with the development in the political and social environment. The first milestone can be found in the reign of King Khufu, the second in the reign of King Niuserre, the third in the reign of King Teti and the fourth in the reign of King Pepy I.

The first turning point is represented by the occurrence of the first assemblages of model stone vessels. Their production was initiated by the need for economisation in costs which were heading to the non-royal burial and mortuary sphere. The growing number of officials who felt to have right to gain from the king an appropriately positioned and large tomb with corresponding burial equipment forced him to reconstruct the whole process and define new ways of building and furnishing. From the point of view of the stone vessels, it consisted in introduction of assemblages of model stone vessels, which substituted the large size functional vessels made of various materials. Some of the Fourth Dynasty tombs at Giza still contained one or more functional large size vessels, but their occurrence in the Fifth Dynasty was very rare (*e.g.* tomb of Seshemnefer II (G 5080) or Senedjemib Inty (G 2370), for the complete list see Chapter 3). The change is sometimes ascribed already to Snofru from various reasons (Bárta 1995b and 2005b; Alexanian 1999: 15–18; Gundacker 2006), but first assemblages of model stone vessels are attested in the cemeteries built by his successor at Giza (*e.g.* the tomb of Hemiunu (G 4000), Iunu (G 4150) or anonymous tomb G 4250; for the complete list see the Catalogue in Appendix 1).

The second change was probably once again caused by a growing number of officials. The royal administration must have started employing people of non-royal origin at the beginning of the Fifth Dynasty, and the power of these people and their families started to grow in the course of that time (e.g. Baer 1960; Kanawati 1977; Strudwick 1985; Bárta 2013 and 2016a). The result of this process might be a need for further social stratification of state administrators. The introduction of limestone as a new kind of material involved in the production of assemblages of model stone vessels was a compromise. It seems that the members of royal family started to be afforded copper model vessels as a part of their burial equipment, the higher members of society were given travertine models, and the lower administrators were provided with limestone models. The homogenous nature of assemblages also points to the strong royal control over the production and distribution. Especially Abusir, the area of burial monuments of the Fifth Dynasty kings, where many of their officials were buried, follows this well-organised pattern (Jirásková 2017a). The efforts to strengthen the control of the king over his officials is also reflected in other new elements in burial and mortuary practice, as well as introduction of Usir, as the main provider of the eternal life (Bárta 2005a) or marriages of royal princesses to the people of non-royal origin (Dulíková 2016: 19-55). Pottery miniatures abandoned burial chambers at that time (except for a few exceptions) and remained to be used only in the offering places in the above-ground parts of the tombs (Arias Kytnarová – Jirásková – Odler 2018: 23).

The third milestone lies somewhere at the very end of the Fifth or at the beginning of the Sixth Dynasty. The assemblages of model stone vessels from the latter part of the Fifth Dynasty followed a particular pattern of contents and forms. Especially the tall jars were of clearly defined numbers, such as a one-handled jug and six cylindrical jars for the ointment, five jars for beer, two jars for wine, four jars for water or as four canopic jars, an ewer with a basin, a table and varying number of bowls. Such a strict rule was abandoned at least at the beginning of the Sixth Dynasty, as it is not attested anymore in the Teti pyramid cemeteries. The numbers and classes of model vessels were random there and new classes appeared in the burial chambers of the highest officials of the royal court. A combination of travertine and (yellow-pained) limestone became quite common in one burial context. It seems that the tight links between the king and his officials were interrupted, and central control was not as strong as before. Teti is known to have many daughters, who he married to the high-ranking officials residing in Memphis, such as Mereruka, Kagemni, Neferseshemptah, etc. One of them was probably also married to an important provincial official and most likely the first provincial vizier, Izi from Edfu (Kanawati – Swinton 2018: 27–30, 46–49). A Similar marriage strategy as was performed before by Niuserre may point once again to the effort of strengthening the control of the king over his officials.

The last change came during the reign of Pepy I (Strudwick 1985: 340–341; Kanawati – Swinton 2018: 77–164). From the point of view of the production of model and miniature stone vessels, the major difference was slow abandoning of the tradition of assemblages of model stone vessels and a new flow of full-size functional vessels. These mostly did not reach the size of the pieces from the beginning of the Old Kingdom. Moreover, they were of new shapes. The typology of the vessels typical for the latter part of the Sixth Dynasty was inspired by that of model stone vessels, and many of the pieces closely resemble to the models. The research provided in Chapter 7 of this thesis points to the origin of these forms in the provinces, which would mean that the ways of inspiration turned over and the centre accepted a provincial concept.

The above mentioned way of flow of ideas, *i.e.* from the provinces to the centre, may have been caused by the movement of some high-ranking provincial officials back to the court of the king. As Kanawati observed, the number of tombs of nomarchs grew in Memphis during Pepy I's reign (Kanawati 1992b: 87). It means that they might have also brought with them local artists or that they presented the king and his artists the new shapes and concept, which was already well-working in the provinces. Another possibility is personal presence of the king in the provinces and acquiring new inspiration there.

The change in the burial equipment was larger, similar to the radical change by the time of Khufu. The king started to provide his officials with luxurious goods, this time represented in Memphis mainly by copper objects. The records from tombs, desert roads, mines and quarries point to a larger activity in the area of expeditions sent to the sources of copper (*cf.* Strudwick 2005; Eichler 1993; Tallet 2018). In this respect, it seems that the resources augmented, and the king could afford a large-scale production and distribution heading not only to the Memphite cemeteries, but also to the provinces. The homogeneous nature of material along the Nile valley and oasis does not leave any doubt that the workshops remained centralised.

### 9.1.3. Practical consequences (dating and social criteria)

Taking into consideration the above discussed aspects of the Old Kingdom model and miniature stone vessels and their production modes, there are ways of using them as a dating criterion and social marker. It is necessary to stress once more that such a statement can be applied mainly on the non-royal contexts. As was claimed at the beginning of this thesis, there are major differences between royal and non-royal burial contexts in case of stone vessels and these two should be treated separately. The royal tradition was based on large size functional stone vessels as a luxurious representation of common vessels made mostly of pottery. The non-royal context, meaning all the tombs except for the tombs of kings, represents a different tradition with its own rules and history.

The individual phases of different traditions in the production and distribution of the Old Kingdom stone vessels in general are presented in following Chapter 9.2. They can serve as the basic criterion for the dating of newly found assemblages. A detailed chronological description of the assemblages was presented in Chapter 5.4. Both these chapters define standards, but obviously, anomalies might have occurred. It is rather difficult to distinguish between the Fourth and early Fifth Dynasty assemblages. In fact, there are not enough well-preserved contexts from the first part of the Fifth Dynasty (Veserkaf – Neferirkare) to find out a difference from the Fourth Dynasty. The basic rule is that the model vessels were made of travertine or pottery, the stone ones being deposited in the tombs of the members of the royal family and high-ranking officials of state administration. The numbers of individual vessels were not yet strictly defined. What is of importance, particularly in the first half of the Fourth Dynasty, are the shapes of vessels. They resemble the full-size functional vessels even in

many details. The beer jars have rounded or very narrow bases and extra stands, the wine jars have nets engraved on the body parts.

The reign of Niuserre by the middle of the Fifth Dynasty brought an important change, which was an introduction of new material. In this respect, all the limestone model vessels can be dated from the time of this king onwards. And the material also points to the social status of the owner of the set. Especially members of the royal family and high-ranking officials were provided with the travertine assemblages, limestone was given to the middle- and lower-class administrators. The sets from the latter part of the Fifth Dynasty, particularly from the Niuserre – Djedkare period (which are abundant and well documented), can be recognised due to their homogenous nature. There are defined numbers of jars to be counted, and although the types have changed quite substantially in the Fifth Dynasty, they can be recognised due to the systematic nature of assemblages. The morphology has changed quite much especially with beer and wine jars. They are more schematic and only remotely resemble to the original pieces from the Fourth Dynasty. However, they can still be recognised (for details see Chapter 5).

Probably already the end of the Fifth, but definitely the beginning of the Sixth Dynasty brought chaos to the rules, and the concrete numbers are not followed any more. The traditional shapes are more stylised, and they sometimes completely cease to resemble the archaic ones. New types of model vessels found their way into the sets, yet being still limited in number. Moreover, the assemblages from this time often combine travertine and yellow painted limestone as imitation of the more precious material. This is a particularly interesting point. The Fifth Dynasty burial contexts point to the yellow painted limestone assemblages as cheaper imitations of travertine. One is then surprised to find similar pieces in the burial chambers of Teti's viziers or Queen Meretites II, the possible daughter of King Pepy I. The reason for such a combination is not clear. If there was a lack of material, there would be no large size travertine vessels in Mereruka's tomb, and there were several of them. Moreover, the small size vessels could have been made from waste material. The reason for such a distribution of yellow painted limestone model vessels might then dwell in the process of fading of this tradition, which started to be replaced by copper as another kind of material used for the production of miniature vessels. In this respect, the social boundaries between the "wealthy" and "poorer" burials from the point of view of model and miniature stone vessels are difficult to be set for this period. A criterium of the social position thus could rather be the number and size of goods, which was deposited in the burial chamber (cf. Bárta 2009–2010), a trend which continued even in the middle and latter part of the Sixth Dynasty.

206

About the middle of the Sixth Dynasty, the assemblages of model stone vessels lost their importance and purpose, for the burial chambers started to be filled with large size functional vessels again. If still present, they are mostly roughly made, sometimes in exaggerated numbers. Their meaning was probably completely lost, and they no more played any role in social stratification of society. The large size stone vessels seem to stop playing an economic and social role in the burial equipment. They were often present in the form of two or more ointment jars of regular or smaller size. The wealth of the owner of the tomb was at that time expressed rather by the architecture and decoration of the tomb, as well as the amount of copper being deposited in the substructure for the needs of its owner (*cf.* the burial chamber of Ptahshepses Impy at http://giza.fas.harvard.edu/sites/831/full/).

#### 9.2. Stone vessels in the Old Kingdom – general overview

The Old Kingdom was a long period of social and economic development of ancient Egyptian society, and therefore even the mode of production and distribution of all sizes of stone vessels underwent several changes. Dorothea Arnold and Elena Pischikova (1999: 124) divided the stone vessels of the Old Kingdom into three main groups:

- (a) cosmetic oil and ointment vases
- (b) imitations in stone of everyday pottery and metal vessels
- (c) model vessels

This is basically true, but there is another class of vessels that were traditionally made of stone and had a specific purpose in the Old Kingdom. These are (d) canopic jars. This classification maybe applied in general on the production of the Old Kingdom, but still, the repertory of the whole period cannot be perceived as a homogeneous collection. Moreover, there were major differences between the centre represented by Memphite cemeteries, or rather cemeteries lying close to the royal pyramids of the Old Kingdom, and the Egyptian provinces.

The chronology introduced below is based mainly on the Memphite area, since the other parts of Egypt were untouched by some trends common in the centre for a part of the period. The main difference is the nonexistence of assemblages of model stone vessels and canopic jars in the provinces during the Fourth and Fifth Dynasties. It corresponds to the social and administrative development, when there is almost no evidence of royal presence in the areas out of Memphis (for details see Chapter 7). The nature of evidence of stone vessels in the provinces is similar to the one in the centre until the early Fourth Dynasty, the reign of Snofru in particular (for details see Chapter 2). Then, there are almost no stone vessels in the

provincial tombs to be found, and most of the tombs become very poor. Stone vessels started to appear again in the provincial cemeteries by the end of the Fifth Dynasty, being represented by the Opening of the Mouth ritual sets and functional small cosmetic jars (for details see discussion in Chapter 7). In this respect, the provinces preceded the development in the area of the royal residence. Later on, from the middle of the Sixth Dynasty (Merenre I), the production remains almost the same along the whole Nile valley, as well as in the oases.

As it was already tackled in the previous summary discussion on miniature and model stone vessels in the Old Kingdom in Chapter 9.1, it is possible to split the Old Kingdom period into five phases of particular development from the point of view of stone vessels in general:

Phase 1	Third to early Fourth Dynasty	Netjerikhet – Snofru
Phase 2	Fourth to middle Fifth Dynasty	Khufu – Neferirkare
Phase 3	Late Fifth Dynasty	Niuserre – Venis
Phase 4	Early Sixth Dynasty	Teti – Pepy I
Phase 5	Late Sixth Dynasty	Merenre I – Pepy II

All of the chronological steps determined in this table have a specific production scale and distribution pattern of either small or large size stone vessels. The earliest one is nothing more than continuation of the previous standard. The burial chambers of the Third and very early Fourth Dynasty mastabas were filled with masses of large size functional stone vessels (for details see Chapter 2). Although they were perfectly crafted and could have been used for various purposes, they were often deposited in the tombs empty of any contents, only with traces after previous usage in some cases (for instance, see the assemblage coming from the tomb AS 54 at Abusir South in Jirásková 2011). Contrary to the Early Dynastic Period (First Dynasty above all), the number of stone vessels is limited, and they do not occur in hundreds, but rather in tens. The economisation and standardisation of the Early Dynastic Period is also visible in case of the Third and early Fourth Dynasty assemblages. The number of classes diminishes, and the inventory covers mainly bowls, tables and cylindrical jars. Other classes, such as beakers or shouldered jars are less numerous. Also, the variety of material is reduced to limestone, travertine, diorite and dark metagabbro (with some exceptions only).

It is also necessary to point to the difference between royal and non-royal contexts. All the characteristics discussed here are valid above all for the officials' tombs, or the tombs of kings' relatives. The royal funerary and mortuary structures keep the tradition of large-scale production of the vessels of groups (a) and (b), and the position of the king is also strengthened by the occurrence of many vessels made of hard stones, which required more time for their production, and skilful workmen. This state of affairs persisted during the whole Old Kingdom, and the large-scale production of luxurious large size vessels made of precious stones is reserved as a privilege for the king himself (*e.g.* Macramallah 1936; Goneim 1957: Pl. XXXVIII–XLVIII; Reisner 1931: 130–201; Borchardt 1910: 113–118; Vlčková 2006; Jéquier 1936). In this respect, the distribution pattern of stone vessels in royal contexts is of less interest than that of his family members and officials occupying administrative posts. From the point of view of historical development, the tombs and burial chambers of these social groups reflect many important turns in the ancient Egyptian society, as it was presented in Chapter 9.1.2.

When discussing Phase 1, there is one particularly intriguing characteristic typical for the Third and early Fourth Dynasty officials' tombs (but being introduced already during the Second Dynasty). The economisation did not touch only the variety of shapes and material, but also the mode of production. The mastabas of the most important people of the society were still equipped with the large size functional vessels, whereas the smaller tombs contained more and more of the so called "dummy" vessels. These are not the typical model vessels, although they are very similar. It is possible to perceive them as a step towards the rise of the Old Kingdom assemblages of model vessels appearing from the time of Khufu onwards. They both have in common the shape of a cylindrical jar, and the material used limestone or travertine. However, they still tend to be imitations of the large size functional vessels, and therefore they are taller than the typical model vessels of the Old Kingdom. The term "dummy" is used on purpose since they are never completely drilled inside. They only have a shallow depression in the area of orifice. Moreover, their outer surface is sometimes only roughly dressed without smoothing (for details see Chapter 2). The "dummy" vessels are to be found either in the number of one or two, or as assemblages of tens in a single burial chamber. There are many examples to be found especially at North Saqqara (Quibell 1923), but they were also recorded at Abusir (Bonnet 1928: Tafel 10), Helwan (Köhler 2014: 155, 223, 240) or Meydum (Petrie – Mackay – Wainwright 1910: 26).

The "dummy" vessels and the diminishing number of large size functional vessels in the Third and early Fourth Dynasty mastabas and tombs might be understood as a "preparation" for the change that came with the time of Khufu. Hetepheres' burial equipment is the last one to contain a larger number of functional stone vessels, although their size is limited, and the shapes of some of them resemble to the models produced later (Reisner –

Smith 1955: Figs. 41, 135, 137, 141, 142, 144). The other tombs of the newly founded cemeteries around Khufu's pyramid, contained assemblages of either model stone vessels or their miniature pottery versions. If there was a large size stone vessel, it was usually a bowl or a cylindrical jar in the low number, up to 3 pieces (*e.g.* in the tomb of Prince Kaemah (G 1223), Priest Seshatsekhentiu (G 2120) or the anonymous tombs G 4160 or G 4440; for the complete list see Chapter 3). It seems that at the beginning, by the introduction of these sets, pottery was the preferred material. Stone was probably reserved only for the members of the royal family, such as the king's son and vizier Hemiunu (G 4000, Junker 1929: 161, Abb. 11/8, 11/22, 11/36). This particular reflection of social position can be observed until the middle of the Fifth Dynasty (Niuserre).

Phase 2 started with the introduction of assemblages of model stone vessels at the Khufu cemeteries at Giza. Although, they are far to be homogenous groups, there were already some basic rules, which can be found in all the assemblages of this phase. Their most important feature is the standardisation of forms that lasted (with some minor changes) over the whole Old Kingdom, and which was based on the shape of vessels of the early Fourth Dynasty. Interestingly, they did not fulfil only the role of previously produced large size functional stone vessels, but also pottery and metal ware. In this respect, they were a kind of symbolic expression of the "ideal burial equipment" or as Junker said, "3D offering list" (Junker 1929: 108–112) in stone (see the discussion on this problem in Chapter 5.3).

Unfortunately, none of the assemblages of Phase 2 was preserved complete, and the reconstruction of the exact number of particular vessels is impossible. On the other hand, all the main classes are to be found. These can be divided into several groups based on their purpose. One of them are containers of cosmetics, represented by a jug and cylindrical jars. The other group provided the deceased with nourishment – beer and wine jars, bowls and tables. The last part is represented by the cultic equipment connected with the funerary and mortuary cult – ewers, basins and incense burners. There were also shouldered jars regularly included in the assemblages. Their function is more difficult to determine, since at the time of their introduction they might have been either cosmetic vessels, or water jars. Later on, in the Fifth Dynasty, it seems that they took over the function of model canopic jars.

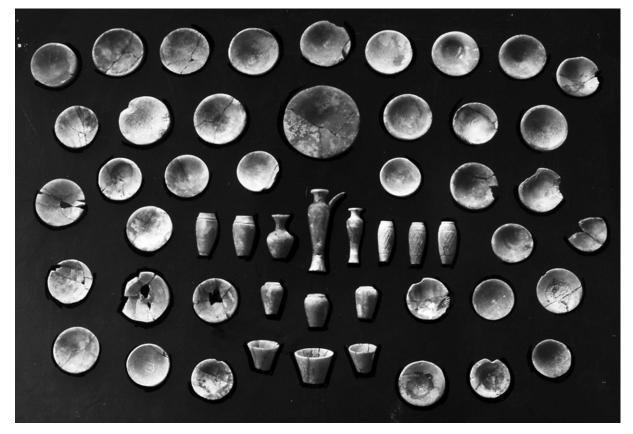


Fig. 86 A well-preserved assemblage from Phase 2 from the anonymous tomb G 4250 at Giza (taken from http://giza.fas.harvard.edu)

The early assemblages of the Fourth Dynasty sometimes contained other pieces of cultic equipment typical for the Opening of the Mouth ritual sets (for details see Chapter 8). Contrary to the examples from Phases 3 to 5, these were made only from travertine, and contained a *psš-kf* knife, jars and beakers. Interestingly, they are not yet evidenced in the late Fourth and early Fifth Dynasty tombs, and they appear again, rather suddenly by the middle of the Fifth Dynasty (time of Niuserre) in a fresh, but one can say their typical, form. After this new emerge, they constitute a separate part of the burial equipment made of exactly defined material - rock crystal, travertine or milky quartz for the "white" pieces, and basalt or obsidian for the "black" pieces. According to the Pyramid Texts, the two contrasting colours shall be related to the eyes of Horus (Roth 1992a). The psš-kf knife, involved in the rebirth of the deceased, is either made of flint (Khufu's and Khamerenebty's from Menkaure's valley temple, Rawer's from his tomb G 5470, Kahotep's from his tomb AC 10 or that from the anonymous tomb AC 31), siltstone/greywacke (Raneferef's from his mortuary temple at Abusir), or limestone (most of the Sixth Dynasty non-royal pieces). The presence of a stone or wooden tablet with depressions prepared for particular jars and beakers with a *psš-kf* knife in the middle is not recorded prior to the early Sixth Dynasty, as well as the presence of

*ntry/ntrty* blades. These are, however, well known already from the Pyramid Texts (Spell 33b, 36c, 37a, 39c, 36b, 39b in Allen 2005), and as a real cultic equipment were recorded in the papyrus archives of Kings Neferirkare and Raneferef, where they are called by their other name *sb3wy* (Posener-Kriéger 1976: Pl. XXA; Posener-Kriéger – Verner – Vymazalová 2007: Pl. 27A).

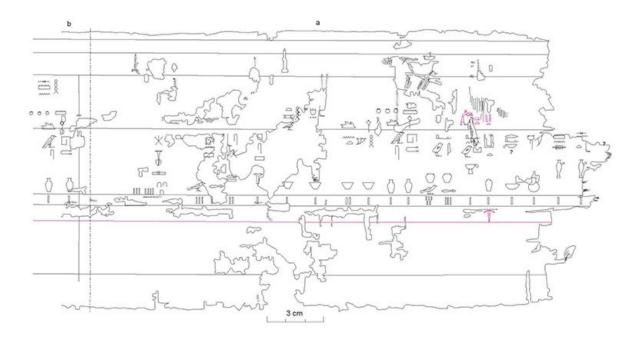


Fig. 87 A part of a papyrus scroll from the mortuary temple of King Raneferef at Abusir with the list of cultic equipment including the *sb3wy* blades (taken from (Posener-Kriéger – Verner – Vymazalová 2007: Pl. 27A)

The last group of the Old Kingdom stone vessels – (d) canopic jars – likewise came into existence during the Fourth Dynasty. Their first examples are to be found also in the cemeteries of Khufu, but rather rarely. Their number and shape were clearly defined since the beginning of their existence, and in the subsequent periods they underwent only minor changes. Almost all of the non-royal pieces were made of limestone. The royal canopic jars were all made from travertine from the beginning, as evidenced by an example from Abu Rawash (Valloggia 2011: Fig. 252, inv. 171). As well as the travertine model stone vessels, even the canopic jars tend to be limited to the members of the royal family until the time of Niuserre, when they started to appear regularly in the burial chambers of middle- and high-ranking officials (Jirásková 2014).

Apart from the assemblages of model stone vessels, a few examples of large size functional vessels were recorded in non-royal tombs during phases 2 to 4. The standardisation

of assemblages of model stone vessels points to the production in royal workshops, being a gift of the king to his subjects. Also, the large size vessels should be perceived as a kind of reward to the officials. They usually appear in single pieces from the Fourth to the middle of the Sixth Dynasty. They are mostly represented by diorite bowls or travertine cylindrical jars (for the list of evidence see Chapter 3.1).

As it was mentioned several times above, another well recognizable change came with the reign of Niuserre by the middle of the Fifth Dynasty (Phase 3). From the point of view of social development, it seems that the number of officials increased, and the king was "forced" to make a difference between the newly defined levels of administration. In this respect, the travertine assemblages were presented to the royal family members and the highest officials, whereas the middle-class officials were provided with limestone assemblages. Limestone was newly introduced evidently on purpose to guarantee a comfortable afterlife for the officials of non-royal origin. The pottery assemblages, which were commonly used before as a part of burial equipment almost disappeared from the burial chambers at that time. They are rarely found by sarcophagi, and if yes, they are mostly not alone, but side by side with the limestone pieces (see Chapter 6.1).

The introduction of new material also brought new rules concerning their typology. Although the limestone pieces imitated the travertine ones, the assemblages were more modest in number of jars. There are almost no tables, ewers, and basins to be found in limestone. Due to several intact tombs, it is possible to reconstruct even the precise numbers of individual vessels. In general, there are: 1 jug, 6 cylindrical jars, 4 or 5 beer jars, 2 wine jars, 4 shouldered (canopic) jars, and about 60 bowls (for details see Chapter 5.2).



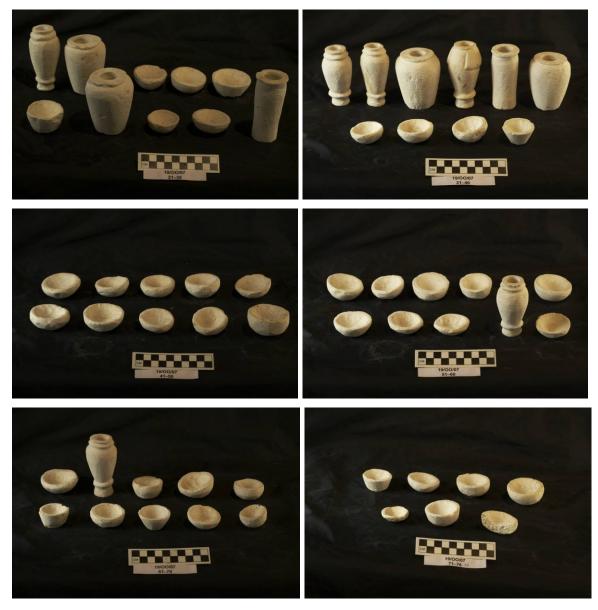


Fig. 88 Complete assemblage of limestone model vessels, which was found in the intact tomb of Priest Neferinpu in his burial chamber in the tomb AS 37 at Abusir (M. Frouz, archive of the Czech Institute of Egyptology)

As was stated above, the new type of the Opening of the Mouth ritual sets started to appear in this period. They are to be found both in royal and non-royal contexts, always perfectly crafted and polished in Phase 3. Travertine, as the only material for their production in Phase 2 (except for the later assemblage uncovered in the mortuary temple of Menkaure), was in most cases substituted by more precious rock crystal and obsidian or basalt. The vessels were of two classes – flasks with almost pointed base, short neck and a flaring rim, and simple straight-sided beakers. In the latter part of the Fifth Dynasty, they were still quite well drilled,

but not completely. In this respect their symbolic function was clear from the beginning, and they are rather model than miniature vessels.

The canopic jars become an essential part of the burial equipment of the officials of the latter part of the Fifth Dynasty (except for the poor shafts of the mudbrick mastabas). They remained to be produced in limestone, except for the royal burials (Vlčková 2002; Labrousse 1996: 159–160), the royal mothers buried in pyramids, such as Khentkaus II (Vlčková 2002: 154–155) and the queen from the tomb Lepsius XXIV (Krejčí – Callender – Verner 2008: 102–104), both buried at Abusir, and several high-ranking officials – Akhethotep and Hetep from Saqqara (Ziegler 2007: 170–172; Hassan 1975: 58) and probably Seshemnefer II (G 5080), Seshemnefer IV (LG 53) and Neferbauptah (G 6010) from Giza (Martin-Pardey 1980: 136–137; http://giza.fas.harvard.edu/).

The shape of canopic jars was unified in tall, shouldered jars with flat base and rounded rim, at this time still without necks. Interestingly, except for the royal context (Labrousse 1996: 159–160) and a few non-royal examples (Derry 1947: 140; Bárta – Jirásková – Krejčí *et al.* 2020: 50), all of them were found (and probably also deposited) empty of any contents. Therefore, they might be also perceived as merely symbolic objects. However, severe damage and repair noticed on the bodies of most of them point to their different – pre-burial – usage (for a detailed discussion on the Old Kingdom canopic jars see Jirásková 2015).

The latter part of the Fifth Dynasty also introduced pottery canopic jars. They are represented by two types, either imitations of stone pieces, or a completely new shape with wide shoulders and narrow base. The first type is rough ware coated with white plaster (Reiser-Haslauer 1989: 186–187; Martin-Pardey 1980: 47–52; Hassan 1953: Pl. XI), the latter is fine ware with red slip (Reiser-Haslauer 1989: 65–70; Martin-Pardey 1980: 53–68, 151–158; 1991: 149–151; Reisner 1942: Fig. 267; http://giza.fas.harvard.edu/objects/17871/full/; http://www.mfa.org/collections/object/neckless-shouldered-jar-148078; www.giza-projekt.org/Mastaba/Mastaba\_D112.html).



Fig. 89 Pottery kinds of canopic jars. The one on the left is rough ware coated with white plaster from the tomb of Kapuptah (G 4461), the one on the right is fine ware with red slip from the tomb Nensesjerkai (G 4631) (photo on the left L. Jirásková, photo on the right taken from https://collections.mfa.org/)

Phase 4 is a kind of transitional period between two traditions. By the beginning of the Sixth Dynasty, well represented at the Teti pyramid cemetery, the tight rules of the previous phase were weakened. Although the tombs were still equipped with assemblages of model stone vessels, they were not the only small size pieces present in the burial chambers. Already at the end of the Fifth Dynasty, assemblages of copper model vessels were introduced (first in the royal later in non-royal contexts), and their number grew rapidly in the Sixth Dynasty (for details see Chapter 6.2). It is possible to state that they slowly substituted the stone pieces. The reason probably dwelled in another social and economic change that caused "hunger" for more precious and apparently also more available copper (compare the growing number of evidence on expeditions to Sinai during the Sixth Dynasty in Eichler 1993 and Tallet 2018). On the other hand, the stone model vessels were probably slowly loosing their importance. As can be evidenced in Mereruka's tomb, he already had several large size functional stone vessels buried with him in his burial apartment (Firth – Gunn 1926: 24, Fig. 20, Pl. 13).

Concerning the stone vessel assemblages, the preferred (and most common) material was once again travertine. An interesting feature of the Teti pyramid cemetery is a frequent presence of combination of both materials, travertine and limestone in one assemblage,

limestone often being painted yellow as an imitation of travertine (Firth and Gunn 1926: 19, 21, 27, 28). The number of individual vessels changed, and from then on, it is possible to find either an assemblage with three one-handled jugs, or completely new classes of vessels, such as squat jars (Kanawati 2006: Pls. 65d, 73e; Firth – Gunn 1926: Figs. 16, 21, 26). Sometimes merely bowls without any model jars were present in a tomb, or they were found in a context outside the burial chamber, which was until then possible only in royal mortuary structures.

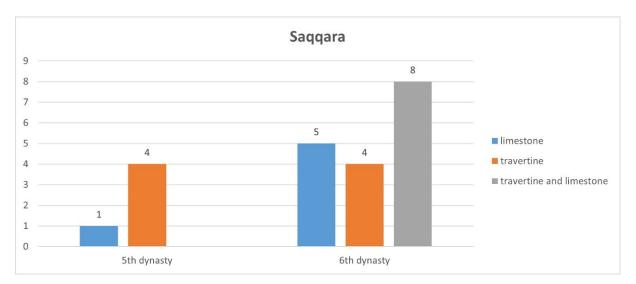


Fig. 90 The table shows the high number of contexts with a combination of limestone and travertine in one assemblage.

The Opening of the Mouth ritual sets were more elaborately worked and arranged. The perfectly crafted vessels were placed in limestone tablets with shallow depressions to hold them in position. The assemblages of h3ts jars and hnt beakers often contained not only a *psš-kf* knife, but also a pair of *ntry/ntrty* blades. Although the stoneworkers' craftsmanship was on a high level, the drilling of inner cavities was not felt to be important, and many pieces bear nothing more than a kind of "dot-hole" at the orifice.

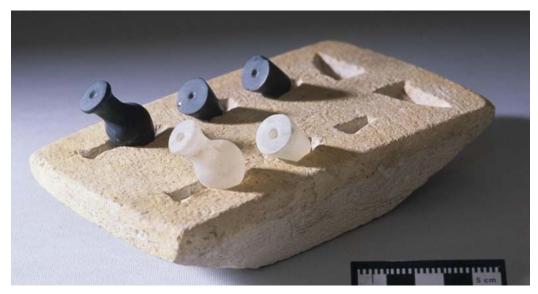


Fig. 91 Opening of the Mouth ritual set, which was discovered in the tomb of the sons of vizier Qar at Abusir (K. Voděra, archive of the Czech Institute of Egyptology)

Officials were still restricted to limestone canopic jars in Phase 4. Although most of them still could not afford (or were not provided with) the more prestigious material, there are again a few examples of travertine pieces – viziers Mereruka and Kagemni (Firth – Gunn 1926: 26, Pl. 12). The typological scale of canopic jars is wider, and there are more examples of jars with necks or other slightly different shapes, including "dummy" pieces. They also tend to lack the craftsmanship of those from Phase 3.



Fig. 92 Roughly made "dummy" canopic jars from the tomb G 4813 at Giza (taken from http://giza.fas.harvard.edu)

Phase 5 is represented by the latter part of the Sixth Dynasty, starting with the reign of Merenre I, which is the time of relatively wealthy burials. The trend in production of stone vessels changed again, this time in favour of cosmetic jars. Assemblages of model stone vessels lost their purpose. The burial chambers, furnished with rather humble equipment in the Fourth and Fifth Dynasties, were in the Sixth Dynasty filled with pottery, copper, and other material and products. The afterlife was once again secured by the full-size functional containers made of all traditional materials, and the assemblages of model stone vessels were no more needed. The only reminiscence of the already past tradition are several sets coming from the late Sixth Dynasty tombs, such as that from shaft A in AS 22 at Abusir belonging to Inty Pepyankh or G 2385 at Giza belonging to an unknown person. In these cases, the model jars and bowls are only roughly shaped, and it is difficult to distinguish between various classes of jars. The only recognizable pieces are cylindrical jars, which keep their shapes. Moreover, the careless workmanship goes in hand with their high number, often reaching several hundreds.



Fig. 93 Assemblage of travertine model vessels from the anonymous tomb G 2385 at Giza (taken from http://giza.fas.harvard.edu)

The trend of the time preferred production of functional stone vessels. These did not reach the size of earlier jars from Phase 1, but they are well crafted and completely drilled inside. After the time of symbolic use of stone to imitate in small size not only stone, but also pottery and copper vessels, the stone vessels once again returned to their primary function – containers of ointment and other cosmetics. One would think that the craftsmen searched for classical

shapes, but it is not entirely true. The shapes used for the manufacture of cosmetic jars of the late Old Kingdom were highly inspired by the model jars produced before in Phases 2 to 4). The cylindrical jars and one-handled jugs remained a strong traditional design that could not have been omitted. The newly added shapes were tall, shouldered jars with a neck, wide rim and flat base, elongated slender jars with a pointed base and wavy collared or flaring rim and tiny drop-shaped jar with wavy collars. These are the most common. The first class developed from the later types of model shouldered jars, the other two from the later types of model beer jars. However, also globular jars and bag-shaped jars found their way to the late Old Kingdom burial chambers. The globular *nw* jars became a new product of the late Fifth Dynasty, whereas the bag-shaped jars might have been inspired by pottery (granaries?). All of these shapes were very popular in the provinces, and it seems that although the model stone vessels were produced just for the Memphite cemeteries, the shapes reached the provinces in the latter part of the Fifth Dynasty and inspired local production, which returned back to the centre and involved changes in Memphis by the middle of the Sixth Dynasty (for details see Chapter 7.3).

It is difficult to trace more exactly the modes of production of this new ware, and find concrete dating for these changes, due to the lack of evidence. One can search for parallels in the royal structures. However, none of the new shapes were found in the mortuary temple of Raneferef by the middle of the Fifth Dynasty, which is the last well-preserved royal assemblage from the Fifth Dynasty kings' pyramid complexes. The first clear proof of the existence of the new forms are the mortuary temples of the queens of Pepy I (Minault-Gout 2019). But none of the jars was collected in the burial chambers. All come from the temples or areas around the pyramids, which means that they could be of later date. All the other attestations date to the time of Pepy II (Jéquier 1929: 83; 1933: 28–32; 1934; Drioton – Lauer 1958: 220–222). In this respect, the tradition of functional stone ointment jars started with the reign of Pepy I, but the new corpus penetrated the Memphite burial chambers from the time of Pepy II.

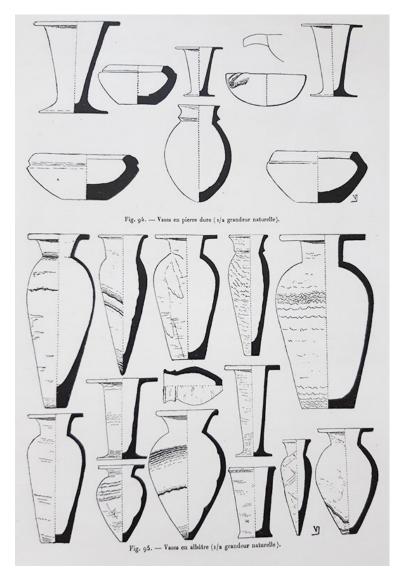


Fig. 94 Stone vessels from the tomb of Priestess Wadjet at South Saqqara (taken from Jéquier 1929: 83, Figs. 94–95)

The Opening of the Mouth ritual sets underwent some minor changes, only. Their tradition was probably also slowly fading away, for many of them, especially by the time of Pepy II, do not resemble any more the perfectly crafted pieces from the beginning of the Sixth Dynasty. Also, the stone used for their production was not so strictly defined, and new kinds of material were employed.

### 9.3. Summary

The main focus of the present thesis are stone model and miniature vessels of the Old Kingdom. The author started to deal with this particular kind of material culture in the course of excavations in the late Fifth Dynasty tombs at Abusir. When working on the complete or almost complete assemblages, she realised that there are specific rules and interesting features worth to study in detail. However, the available publications on the target material were insufficient and regarded the model stone vessels rather as individual pieces, neglecting their general meaning as an assemblage with a concrete purpose. The aim of this thesis is thus a detailed study of this kind of material culture in the contexts of the social and political history, as well as general process of production and distribution of stone vessels in the Old Kingdom period.

The survey of the Early Dynastic and early Old Kingdom tombs has proven that the model vessels without proper drilling had history. The so-called "dummy" vessels represented the first step towards economisation of burial practice that was later expressed by the appearance of assemblages of small size "dummy" jars and bowls. These were introduced by the time of Khufu and soon replaced almost all the large size stone vessels and other copper and pottery vessels that constituted the usual parts of burial equipment. All these necessary components of burial equipment were transformed into its symbolic version that could provide its owner with all necessities. In this respect, the Old Kingdom assemblages of model stone vessels included cultic equipment used for purification and ointment as well as food and liquid containers for the sustenance.

Their material, forms and numbers underwent many changes during the long period. The research showed that they reflected not only the time when they were created, but also the social position of their owner. From this point of view, they can be used as a chronological marker and economic criterion. The main changes in concept of their production and distribution proved to reflect the major turning points in ancient Egyptian society in the Old Kingdom.

The morphological study simplified and sorted the so far used terminology, which was often unclear and ambiguous. The typology presented here looks at the model stone vessels as a phenomenon of particular purpose and importance. It defines basic classes but does not attempt to describe all the known types. On the contrary, it rather focuses on its general meaning. Such an approach leads to interpretations, which encompass the sphere of classical morphological study of material culture and rather reflect sociological and historical perspective of their existence.

When studying the model and miniature stone vessels, one cannot avoid the study of the modes of production and distribution of stone vessels in the Old Kingdom in general. The greatest part of the thesis is devoted to the Memphite area, where the model and miniature stone vessels have been collected so far. It follows relations between the large and small size stone vessels in non-royal contexts and determines the patterns of their production and distribution. However, the provinces are not omitted. The comparison between the centre and provinces led to interesting findings concerning the transfer of thoughts and goods. The study of stone vessels in the provinces pointed to the lack of model vessels in the tombs of royal administrators and nomarchs. Moreover, it presents an unexpected flow of forms and inspiration in both ways. Taking into consideration the usage of stone vessels in the provinces and Memphite cemeteries with respect to their chronology, it comes out that the early stages of the Old Kingdom were influenced by the trends coming from the centre. Whereas the return to the functional stone vessels in Memphis in the latter part of the Old Kingdom was inspired by the provincial production of that time, which was already affected by the central forms. All these ways of transfer of thoughts and forms have a political and social background, and well correspond to the studies of the Old Kingdom administration. The study of the Old Kingdom stone vessels as a kind of "specific" history can thus provide more information to the general history of the ancient Egyptian civilisation.

#### 10. Appendix 1 – Catalogue of assemblages

The catalogue presents the so far uncovered and published model and miniature stone vessels discovered in the tombs of the Old Kingdom. It is divided into three parts based on chronology, *i.e.* the Fourth, Fifth and Sixth Dynasty assemblages. Each of them contains all of the Memphite sites, where the model and miniature vessels were collected. These are listed from north to south. The list of evidence from each site is structured either according to the tomb numbers or chronologically where there are no tomb numbers.

Most of the evidence listed in the catalogue comes from primary contexts, either untouched or disturbed. Therefore, almost all of the assemblages come from burial apartments or shafts, only a few were discovered in the superstructures of the tombs.

#### 10.1. Stone model and miniature vessels of the Fourth Dynasty

#### 10.1.1. Giza

tomb no.	G 1203	undisturbed	no	252
owner	Kanefer			
dating	Fourth Dynasty, Khufu – Khafre			
context	pit and chamber			
find. no.				
material	travertine			
vessels	2 bowls			
bibliography	Reisner 1942: 391			

tomb no.	G 1223	undisturbed	no	34	
owner	Kaemah				A Designed and the second s
dating	Fourth Dynasty, Khufu				
context	pit and chamber				
find. no.	HM_6-19791, HM_6-197	'92			
material	travertine				lor Control Patches on the Conserve
vessels	5 pieces (2 cylindrical jar	s, 3 bowls)			Yellow Red Magenta Whit
bibliography	http://giza.fas.harvard.edu	ı/sites/330/fu	11/		

tomb no.	G 1225	undisturbed no	142	
owner	Nefretiabet			
dating	Fourth Dynasty, middle			and the second second
context	shaft A, burial chamber			
find. no.	HM 6-19794			6-19794
material	travertine			
vessels	1 bowl			
bibliography	http://giza.fas.harvard.edu/s	sites/333/full/		

tomb no.	G 2100	undisturbed	no	151	
owner	Sedit				
dating	Fourth Dynasty				<b></b>
context	shaft A, burial chambe	er			
find. no.	36-1-3				
material	travertine				
vessels	41 + x bowls				
bibliography	http://giza.fas.harvard	.edu/objects/	′22199/fi	ıll/	

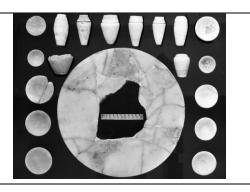
tomb no.	G 2120	undisturbed	no	147	
owner	Seshatsekhentiu				
dating	Fourth Dynasty, Khufu				
context	shaft A, debris of pit				
find. no.	32-12-16, 33-1-3				
material	travertine				
vessels	2 pieces (1 beer jar, 1 bowl)				
bibliography	http://giza.fas.harvard.edu/site	s/686/full/			

tomb no.	G 4000	undisturbed	no	20	North Work	2231 2157
owner	Hemiunu					
dating	Fourth Dynasty, Kh	ufu				
context	southern shaft of the	e mastaba				
find. no.	PM 2155 – 2157, 22	228 - 2231, 3	3174			
material	travertine					
vessels	9 pieces (1 beer jar,	6 bowls, 1 s	tand, 1 lid	)		-
	Junker 1929: 161, A	bb. 11,8; 11	,22; 11,36			
bibliography	http://www.giza-					A second
	projekt.org/Mastaba	/Mastaba_D	60.html		2012	1 2156 2155

tomb no.	G 4140	undisturbed	no		45
owner	Meretites				
dating	Fourth Dynasty,	middle to late			
context	burial pit A				
find. no.	13-11-2 - 13-11-	10, 13-11-21 -	13-11-	-24	
material	travertine				
vessels	24 pieces (21 boy	wls, 1 beaker, 1	beer j	ar, 1	
vessels	ewer)				
bibliography	http://giza.fas.ha	rvard.edu/sites/	1002/f	ull/	



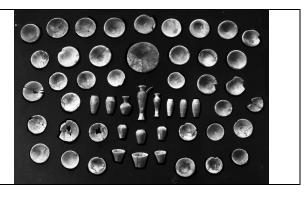
tomb no.	G 4150	undisturbed	no	140
owner	Iunu			
dating	Fourth Dynasty, K	hufu		
context	shaft X (S 883), bi	urial chambe	er (?)	
find. no.				
material	travertine			
vessels	19 + x pieces (8 ja	11 + x bc	owls)	
hibliography	Junker 1929: 180,	Abb. 11/11,	12, 13,	15, 16, 18,
bibliography	26, 34, 37			



tomb no.	G 4160 (Mastaba In)	<i>undisturbed</i> no	200
owner	unknown		
dating	Fourth Dynasty, Khufu		
context	shaft A, burial chamber (?)		
find. no.			
material	travertine		
vessels	10 pieces (4 jars, 6 bowls)		
bibliography	Junker 1929: 168, Abb. 11/3	31, 40, 41, 42, 27, 28, 19, 20	

tomb no.	G 4240	undisturbed 1	10	232	
owner	Snefruseneb				
dating	Fourth Dynasty, la	te			A STATE
context	shaft A				
find. no.	13-11-58				and a second
material	travertine				
vessels	1 cylindrical jar				
bibliography	http://giza.fas.harv	ard.edu/objects/1677	7/full/		

tomb no.	G 4250	undisturbed	no	198
owner	unknown			
dating	Fourth Dynasty	, Khufu		
context	shaft A, burial o	chamber		
find. no.				
material	travertine			
vessels	51 pieces (10 ja	rs, 41 bowls	5)	
bibliography	Junker 1929: 19	91–194		



tomb no.	G 4260 (Mastaba IIn)	undisturbed	no	201
owner	unknown			
dating	Fourth Dynasty, Khufu			
context	burial chamber			
find. no.	PM 2623, 2624, 2626			
material	travertine			
vessels	22 pieces (2 jars, 20 bowls)			
bibliography	Junker 1929: 191, Abb. 11/7			

tomb no.	G 4340	undisturbed	no	142		
owner	unknown					
dating	Fourth Dynasty, middle to late					
context	shaft A, burial chamber					
find. no.	13-10-2 - 13-10-15	13-10-2 - 13-10-15				
material	travertine					
vessels	14 pieces (8 beakers, 6 bowls)					
bibliography	http://giza.fas.harvard.edu/sites/1021/full/					



tomb no.	G 4640	undisturbed	no		99	
owner	unknown					
dating	Fourth Dynasty, middle to la					
context	shaft A					
find. no.	13-12-10					
material	travertine					
vessels	1 cylindrical jar (completely drilled)					
bibliography	http://giza.fas.harvard.edu/si	ites/1097/ful	1/			and the second sec

tomb no.	G 7110	undisturbed	no		127	
owner	Kawab and Hetepheres II					
dating	Fourth Dynasty, Khufu					
context	shaft B, burial chamber (unfinished, unused)					
find. no.	24-12-203, 24-12-259 - 24-12-260, 24-12-1169 - 24-12-1171					
material	travertine					
vessels	6 bowls					
bibliography	Simpson 1978: 5					

tomb no.	G 7120 undisturbed no 2	246
owner	Kawab and Hetepheres II	
dating	Fourth Dynasty, Khufu	
context	shaft B, burial chamber of Kawab	
find. no.	24-12-503, 24-12-536 - 24-12-537	
material	travertine	
vessels	3 lids	
bibliography	Simpson 1978: 6, Fig. 135	

tomb no.	G 7133 (7130 X)	undisturbed no	126	
owner	Minankh			
dating	Fourth Dynasty, Menka	ure		and the second
context	burial chamber 2			
find. no.	24-12-965 – 24-12-967, 1-390	-1-388 - 25-		
material	travertine			
vessels	7 pieces (1 cylindrical ja		26.899	
bibliography	http://giza.fas.harvard.ee	lu/sites/1524/full/		26.01

tomb no.	G 7210	undisturbed	no	144	
owner	Hordjedef				
dating	Fourth Dynasty, mid	dle	AAAAAAA		
context	shaft B, burial chamb	ber			
find. no.	25-1-58 - 25-1-65, 2	5-1-518 - 25-			
material	travertine				
vessels	16 pieces (1 jar, 15 beakers)				
bibliography	http://giza.fas.harvar	d.edu/sites/12	13/full/		

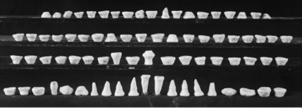
tomb no.	G 7320	undisturbed	no	145
owner	Baufre			
dating	Fourth Dynasty			
context	shaft X, burial chamber			
find. no.	25-1-1007			
material	travertine			
vessels	1 beaker			
bibliography	http://giza.fas.harvard.edu/ob	jects/8719/full/		

tomb no.	G 7350	undisturbed	no		152	
owner	unknown					
dating	Fourth Dynasty, late					
context	shaft A, pit					
find no	28-7-1 - 28-7-9, 28-8	8-1-28-8-20	), 28-8	8-36,	29-	
find. no.	10-1 - 29-10-4					
material	travertine					
vessels	33 pieces (2 jars, 31 bowls)					
bibliography	http://giza.fas.harvar	d.edu/sites/2	154/fu	ı11/		

tomb no.	G 7410	undisturbed	no	230
owner	Meresankh II			
dating	Fourth Dynasty, late			
context	shaft B, burial chamber			
find. no.	25-2-730			
material	travertine			
vessels	1 bowl			
bibliography	http://giza.fas.harvard.edu/obj	ects/10332/full/		

tomb no.	G 7510	undisturbed	no	164
owner	Ankhhaf			
dating	Fourth Dynasty, middle			
context	pit M			
find. no.	25-2-728			
material	travertine			
vessels	1 bowl			
bibliography	http://giza.fas.harvard.edu/objects/1	0330/full/		

tomb no.	G 7510	undisturbed	no		165	
owner	Ankhhaf					
dating	Fourth Dynast	Fourth Dynasty, middle				
context	exterior chape	exterior chapel, room				
find. no.	25-2-409 - 25-2-493					
material	plaster					
vessels	70 + x pieces					
bibliography	http://giza.fas.	harvard.edu/	/sites/	157	0/full/	



tomb no.	G 7550	undisturbed	no	132				
owner	Duaenhor	Y~						
dating	Fourth Dyn	Fourth Dynasty, Khufu – Mekaure						
context	shaft B, burial chamber							
find. no.	28-5-179	28-5-179						
material	travertine							
vessels	19 pieces (3 jars, 16 bowls)							
bibliography	http://giza.fas.harvard.edu/sites/1176/full/							



tomb no.	G 7560	undisturbed	no	163	
owner	unknown				
dating	Fourth Dynasty, midd	lle			
context	shaft B, burial chamb	er			
find. no.	36-12-23 - 36-12-24,	36-12-27			
material	travertine				-
vessels	11 pieces (2 jars, 9 bc	wls)			
bibliography	http://giza.fas.harvard	.edu/sites/11	177/full/		 

tomb no.	G 7650	undisturbed	no	240
owner	Akhethotep			
dating	Fourth Dynasty, Khufu – Khafre			
context	shaft C, burial chambre (of the own	er)		
find. no.	29-3-252 - 29-3-254			
material	travertine			
vessels	2 + x bowls			
bibliography	http://giza.fas.harvard.edu/sites/126	9/full/		

tomb no.	G 7810	undisturbed	no	146	
owner	Djaty				
dating	Fourth Dynasty, late or Fifth Dynasty, early				
context	shaft B, burial chamber				
find. no.	36-1-10 - 36-1-11, 36-1-17				
material	travertine				
vessels	3 pieces (1 beaker, 1 table top, 1 stand)				
bibliography	http://giza.fas.harvard.edu/sites/1606/full/				

tomb no.	G 8884	undisturbed	no		156
owner	unknowr	1			
dating	Fourth D	ynasty, late			
context	burial ch	amber			
find. no.					
material	travertine	e			
vessels	4 pieces	(2 beakers, 2	2 bov	vls)	
bibliography	Hassan 1	.932: 91, Fig	, 153	3	



en as eno a







er (ng. 155).

FIG. 153. Alabaster Cups and Saucers.

tomb no.	G 8976	undisturbed	no		153
owner	Washptah				
dating	Fourth Dynasty late or Fifth Dynasty, early				
context	burial chamber				
find. no.					
material	travertine				
vessels	1 shouldered jar				
bibliography	Hassan 1936: 14				

tomb no.	mastaba I	undisturbed	no	214
owner	unknown			
dating	Fourth Dynasty, Menkaure			
context	shaft 1, burial chamber			
find. no.				
material	travertine			
vessels	2 bowls			
bibliography	Junker 1951: 16			

tomb no.	mastaba III	undisturbed	no	215
owner	Kaemneferet			
dating	Fourth Dynasty, Menkaure			
context	main shaft, burial chamber			
find. no.				
material	travertine			
vessels	8 pieces (6 bowls, 2 tables)			
bibliography	Junker 1951: 36, 40			

# 10.2. Stone model and miniature vessels Fifth Dynasty

# 10.2.1. Abu Rawash

tomb no.	F 5	undisturbed	no	192	
owner	unknown				
dating	Fifth Dynasty,	late			
context	burial chambe	r			
find. no.					
material	limestone				
vessels	3 bowls				
bibliography	Bisson de la R	oque 1924:	15, Pl. V	III	

tomb no.	F 9	undisturbed	no	226
owner	unknown			
dating	Fifth Dynasty, late			
context	burial chamber			
find. no.	257			
material	travertine			
vessels	2 bowls			
bibliography	Bisson de la Roque 1925: 15			

tomb no.	F 10	<i>undisturbed</i> no	227
owner	unknown		
dating	Fifth Dynasty, late		
context	burial chamber		
find. no.	238		
material	travertine		
vessels	54 pieces (9 jars, 45 bowls)		
bibliography	Bisson de la Roque 1925: 19		

tomb no.	F 11	undisturbed	no	193
owner	unknown			
dating	Fifth Dynasty, late			
context	burial chamber			
find. no.				
material	travertine			
vessels	68 pieces (10 jars, 58 bo	wls)		
bibliography	Bisson de la Roque 1924	4: 34, Pl. XV	/III/1	



tomb no.	F 13	undisturbed	no	228
owner	unknown			
dating	Fifth Dynasty			
context	burial chamber			
find. no.				
material	travertine			
vessels	3 pieces (1 jar, 2 bowls)			
bibliography	Bisson de la Roque 1925: 41			

tomb no.	F 19	undisturbed	no		193
owner	unknown				
dating	Fifth Dynasty, N	liuserre – Dj	jedka	re	
context	burial chamber				
find. no.	425, 428, 429				
material	travertine				
vessels	81 pieces (16 jan	s, 65 bowls)	)		
bibliography	Bisson de la Roo	que 1925: 50	)–51,	Pl. XXI	V



tomb no.	F 21	undisturbed	no	196
owner	unknown			
dating	Fifth Dynasty, late			
context	southern shaft, burial chamber			
find. no.	281, 307, 308, 317, 331			
material	travertine, limestone (yellow painte	ed)		
vessels	27 pieces (14 jars, 13 bowls)			
bibliography	Bisson de la Roque 1925: 64, Pl. X	XV		

tomb no.	V <sup>1</sup>	undisturbed	no	197
owner	unknown			
dating	Fifth Dynasty			
context	burial chamber			
find. no.				
material	travertine			
vessels	14 bowls			
bibliography	Bisson de la Roque 1925: 77	, Pl. XXV		

## 10.2.2. Giza

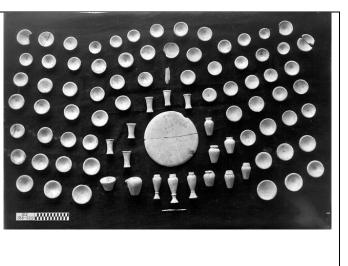
tomb no.	D 6	undisturbed	no	32	2	<u>145</u> /969.
owner	unknown					
dating	Fifth Dynasty, la	te				
context	shaft 1					
find. no.						
material	travertine					00000
vessels	7 bowls					-000-
1 : 1 1: 1	http://www.giza-					D6.
bibliography	projekt.org/Fund		2097.ł	ıtml		2475/16_2448-82

tomb no.	D 20	undisturbed	no			47	
owner	Tepemankh / Djadjaema	nkh					
dating	Fifth Dynasty, late or Siz	kth Dynasty,	early	r			
context	shaft 1						
find. no.	ÄMUL 2484, 2494						2102
material	limestone						
vessels	3 pieces (1 ewer with bas	sin, 1 table to	op, 1	stand)			2484
bibliography	http://www.giza-projekt.	org/Funde/U	JL_24	184/UL	_2484.	html	D 20.

tomb no.	D 208	undisturbed	yes	31
owner	unknown			
dating	Fifth Dynasty	, late or Sixt	th Dyr	nasty, early
context	shaft 9			
find. no.				
material	travertine			
vessels	89 pieces (18 basin)	jars, 70 bow	/ls, 1 e	ewer, 1
bibliography	http://www.g projekt.org/Fu UL_PM_KA- Martin-Parde	unde/UL_Mi Gefaesse.ht	ml	D208/



tomb no.	G IV S	undisturbed	no		27
	(LG 52)				
owner	Niankhre				
dating	Fifth Dynast	ty, early			
context	northern sha	ft, S 107 (ac	cordi	ng	to
context	Junker 69), 1	ourial chamb	ber		
find. no.					
material	travertine				
vessels	87 pieces (1	5 jars, 68 bo	wls,	l tal	ble,
vessels	1 ewer, 1 ba	sin)			
	http://www.	giza-			
1:11:	projekt.org/l	Funde/PM C	GIVS	/	
bibliography	Funde Nord	lschacht.htm	1		
	Junker 1951	: 159–160, 7	Taf. X	XI	[/b



tomb no.	G IV S (LG 52)	undisturbed	no	28	4049.
owner	Niankhre				62 59 59
dating	Fifth Dynasty, n	niddle to late			
context	southern shaft, S burial chamber	69 (accordi	ng to J	unker 107),	
find. no.					
material	travertine				0011111100
vessels	78 pieces (13 jar stand)	s, 63 bowls,	1 table	e top, 1	64-70 
bibliography	http://www.giza Funde_Suedscha Junker 1951: 16	icht.html		/PM_GIVS/	

tomb no.	G VIII S / IX	undisturbed	no	22	
owner	Sekhemka				
dating	Fifth Dynasty, late				
context	southern shaft				
find. no.					
material	travertine				
vessels	6 bowls				
	http://www.giza-projekt.org/Funde/	PM_GVIIIS	5/		
bibliography	Funde_Hofeingang.html				
	Junker 1953: 12				

tomb no.	G VIII S / IX	undisturbed	no	23
owner	Sekhemka			
dating	Fifth Dynasty, late			
context	northern shaft			
find. no.				
material	travertine			
vessels	1 bowl			
hihlio ou an hu	http://www.giza-projekt.org/l	Funde/PM_GVIIIS	S/Funde_Hofeingang	g.html
bibliography	Junker 1953: 14			

tomb no.	LG 78	undisturbed	no	249
owner	Perseneb			
dating	Fifth Dynasty, middle to late			
context	burial chamber 3A			
find. no.	12/22-3/st1			
material	limestone			
vessels	1 bowl			
bibliography	Kormysheva 2018: 51, Fig. 34, Pl.	CXI		

tomb no.	G 1501	undisturbed	no		143
owner	Irankhptah				
dating	Fifth Dynasty, late				
context	shaft 2, burial cham	ber of his wi	fe Ni	ankhha	thor
find. no.	MFA 12.1521, 12.1	524			
material	limestone (jar colou	red dark red	)		
vessels	2 pieces (1 jug, 1 sh	ouldered jar	)		
bibliography	http://giza.fas.harva	rd.edu/sites/2	2100/	full/	

tomb no.	G 2009	undisturbed	no	167	6
owner	Mesi				A CONTRACT OF A
dating	Fifth Dynasty, late				
context	serdab				
find. no.	MFAB_06.1883a-	b			
material	travertine				
vessels	2 pieces (1 table to	p, 1stand)			
bibliography	http://giza.fas.harv	ard.edu/objects/2	5416/full/	(	

tomb no.	G 2093	undisturbed no	35	< <u></u>
owner	Saib			•
dating	Fifth Dynasty, late			
context	shaft A, burial cha	mber		
find. no.	36-8-3 - 36-8-4			barder geinder jar
material	travertine			S BR.
vessels	4 pieces (1 stand, 1	3 bowls)		
bibliography	http://giza.fas.harv	ard.edu/sites/658/full/		

tomb no.	G 2150	undisturbed	no		36
owner	Kanefer				
dating	Fifth Dynasty, early				
context	burial chamber				
find. no.	33-1-35 - 33-1-36, 3	3-1-62 - 33	-1-64		
material	travertine				
vessels	44 pieces (3 jars, 41	beakers)			
bibliography	http://giza.fas.harvar	d.edu/sites/7	708/fu	11/	



tomb no.	G 2156	undisturbed	no	202
owner	Kaninisut II			
dating	Fifth Dynasty, Niuse	rre – Djedka	are	
context	burial chamber			
find. no.				
material	travertine			
vessels	84 pieces (14 jars, 69	bowls, 1 ta	ble)	
bibliography	Junker 1938: 145–15	6, Taf. IXb		

tomb no.	G 2353	undisturbed	no	59	
owner	Herunefer				
dating	Fifth Dynasty, late	e			refff mm eener
context	shaft B, burial cha	umber			VEILI WUTTE
find. no.	12-11-41 - 12-11-	48			
material	travertine				
vessels	77 pieces (10 jars,	67 bowls)			
bibliography	http://giza.fas.harv	vard.edu/sites/8	810/full/	/	Harrison March 199

tomb no.	G 2353	undisturbed no	60	
owner	Herunefer			
dating	Fifth Dynasty, late			
context	pit B4			
find. no.	13-1-532			
material	travertine			
vessels	1 bowl			
bibliography	http://giza.fas.harvard.edu/obje	ects/17311/full/		

tomb no.	G 2360	undisturbed	no	116	
owner	Seshemka				
dating	Fifth Dynasty	, late			
context	shaft A, buria	al chamber			
find. no.	12-11-5 - 12-	-11-9			
material	travertine				
vessels	35 pieces (3 j	ars, 31 bowl	s, 1 tab	le)	
bibliography	http://giza.fas	s.harvard.edu	ı/sites/8	14/full/	



tomb no.	G 2370	undisturbed	no	120	
owner	Senedjemib Inti				maria
dating	Fifth Dynasty, Djedkare				
context	shaft A, pit				
find. no.	12-11-28				
material	travertine				
vessels	1 cylindrical jar				Contraction of the
bibliography	http://giza.fas.harvard.edu/ob	jects/15776/	full/		

tomb no.	G 2370	undisturbed	no		121
owner	Senedjemib Inti				
dating	Fifth Dynasty, Dje	edkare			
context	shaft B, in front of	f pit			
find. no.	12-12-90 - 12-12-	94, 12-12-98	3		
material	travertine				
vessels	33 pieces (5 jars, 2	28 bowls)			
bibliography	http://giza.fas.harv	vard.edu/site	s/821/	full	/



tomb no.	G 2378	undisturbed	no	231		
owner	Senedjemib Mehi					
dating	Fifth Dynasty, Djedkare – Unas					
context	shaft A, burial chamber					
find. no.	12-12-210, 12-12-212 - 12-12-214					
material	travertine					
vessels	6 pieces (1 beer jar, 4 bowls, 1 ewer)					
bibliography	http://giza.fas.harvard.edu/sites/833/full/					

tomb no.	G 2416	undisturbed yes	166		
owner	unknown				
dating	Fifth Dynasty, late or Sixth Dynasty, early				
context	shaft D, chamber III, burial chamber				
find. no.	36-7-25				
material	travertine				
vessels	2 pieces (1 table top, 1 stand)				
bibliography	http://giza.fas.harvard.edu/objects/23432/full/				

tomb no.	G 4410	undisturbed	no		46
owner	unknown				
dating	Fifth Dynasty, Userkaf or later				
context	shaft A, burial chamber				
find. no.	15-12-62				
material	travertine				
vessels	1 jug				
bibliography	http://giza.fas.harvard.edu/objects/1	6896/full/			

tomb no.	G 4461	undisturbed	no		54			and the second
owner	Kapuptah					1000		-
dating	Fifth Dynasty, Nius	serre – Djedka	re					
context	burial chamber							
find. no.								
material	travertine							
vessels	86 pieces (15 jars, 6 basin)	68 bowls, 1 tab	ole top, 1	stand, 1				
bibliography	Junker 1943: 220–2	226, Tafel XX-	-XXI				111.	0

tomb no.	G 4510	undisturbed	no	149
owner	unknown			
dating	Fifth Dynasty, early			
context	shaft A, burial chamber			
find. no.	15-12-35 - 15-12-36			
material	travertine			
vessels	2 pieces (1 beer jar, 1 bowl)			
bibliography	http://giza.fas.harvard.edu/sites/1053	3/full/		

tomb no.	G 4520	undisturbed	no	96	
owner	Khufuankh				
dating	Fifth Dynasty, late				
context	shaft A, burial chambe	er			
find. no.	14-4-1 - 14-4-6				
material	travertine				
vessels	16 pieces (11 jars, 5 bo	owls)			
bibliography	http://giza.fas.harvard.	edu/sites/10	63/full/		

tomb no.	G 4631	undisturbed	no		98				
owner	Nensedjerkai								
dating	Fifth Dynasty, late	Fifth Dynasty, late (?)							
context	shaft B, burial chan	shaft B, burial chamber							
find. no.	14-1-35 - 14-1-44								
material	travertine								
vessels	81 pieces (15 jars, 0	65 bowls, 1 1	table)						
bibliography	http://giza.fas.harva	ard.edu/sites	/1094	/full/					



tomb no.	G 4761	undisturbed	no	210
owner	Nefer I			
dating	Fifth Dynasty, late or Sixth Dynast	y, early		
context	shaft 2075 (owner's)			
find. no.				
material	travertine			
vessels	x pieces ("eine Auswahl der Alaba	ster-Scheinv	asen")	
bibliography	Junker 1943: 74			

tomb no.	G 4733	undisturbed	no		102				
owner	unknown								
dating	Fifth Dynasty, late o	Fifth Dynasty, late or Sixth Dynasty, early							
context	shaft E	shaft E							
find no	14-2-37 - 14-2-40, 14-2-43, 14-2-50, 14-2-76 -								
find. no.	14-2-87, 14-2-103								
material	travertine, limestone								
vessels	115 pieces (22 jars, 87 bowls, 2 table tops, 2								
vesseis	stands, 2 incense burners)								
bibliography	http://giza.fas.harvar	d.edu/sites/1	123/1	ful1/					



tomb no.	G 4811	undisturbed	no		103– 104	
owner	Irankhptah					
dating	Fifth Dynasty, la	te				
context	shaft B, shaft and	l burial chan	ıber			
find. no.	15-12-21, 35-11-	68-35-11-7	70			
material	travertine					
vessels	68 pieces (1 cylin	ndrical jar, 1	beer	jar, 6	66	
vesseis	bowls)					↔n <b>997</b> 97_
bibliography	http://giza.fas.ha	vard.edu/sit	es/11.	37/fi	u11/	

tomb no.	G 5070	undisturbed	yes	21	1	
owner	unknown					
dating	Fifth Dynas	ty, Niuserre	– Djeo	dkare		
context	shaft 316, b	urial chambe	er			
find. no.						
material	travertine					
wagala	39 + x piece	es (18 jars, 1	8 + x 1	bowls,	1	
vessels	table, 1 ewer, 1 basin)					
hihlioguanhu	Junker 1944	l: 55–58, Ab	b. 21,	Taf.		
bibliography	11a, 12a					

tomb no.	G 5070	undisturbed yes	212
owner	unknown		
dating	Fifth Dynasty, Niuserre – Djedkare		
context	shaft 315, burial chamber		
find. no.			
material	travertine		
vessels	92 pieces (undetermined shapes and	d numbers)	
bibliography	Junker 1944: 61, Taf. 13a		

tomb no.	G 5070	undisturbed	no	213
owner	unknown			
dating	Fifth Dynasty, Niuserre – Djedkare	;		
context	shaft 311, burial chamber			
find. no.				
material	travertine			
vessels	1 bowl			
bibliography	Junker 1944: 63–64			

tomb no.	G 5080	undisturbed	no	3	7	
owner	Seshemnefer	II				- 21 V V = 5 7 7 7 7 . K
dating	Fifth Dynasty	, Niuserre				
context	shaft B					
61	33-2-97 - 33-	2-98, 33-2-10	03, 33	-2-108	}	
find. no.	-33-2-110, 32	3-2-150				
material	travertine					
vessels	34 pieces (1 ja	ar, 29 beakers	s, 4 lic	ls)		
bibliography	http://giza.fas	.harvard.edu/	sites/5	530/fu	11/	

tomb no.	G 5170	undisturbed	no		203				
owner	Seshemnefer III				(T)				
dating	Fifth Dynasty, Djedk	are							
context	N shaft, burial chamb	per (wife's o	r mo	ther's)					
find. no.									
material	travertine							Cumille	
wassals	59 pieces (1 basin, 1	ewer, 1 stan	d, x s	shouldere	d jars				٩
vessels	+ undetermined num	bers of other	r shap	bes)		Califie	Castilla .	Chille	
bibliography	Junker 1938: 214, Al	ob. 39							

tomb no.	G 5170	undisturbed	no	234	
owner	Seshemnefer III				
dating	Fifth Dynasty, Djedkare				
context	S shaft, burial chamber (owner's)				
find. no.					
material	travertine				
vessels	x pieces ("einige plump gearbeitete Alabastervasen")				
bibliography	Junker 1938: 214, Abb. 39				

tomb no.	G 5230	undisturbed	no	100	
owner	Babaef				THE OWNER OF TAXABLE PARTY
dating	Fifth Dynasty, early				
context	shaft A, debris of chamber, r		1000		
find. no.	33-1-81, 14-11-152		100		
material	travertine				
vessels	2 pieces (1 cylindrical jar, 1				
bibliography	http://giza.fas.harvard.edu/si	tes/554/full/			100

tomb no.	G 5232	undisturbed	no		129	
owner	unknown					
dating	Fifth Dynasty, Niuserre – Djedkare					
context	shaft A, burial chamber					
find. no.	14-11-173, 14-11-182 - 14-11-195					
material	travertine jars, limestone bowls (painted yellow)					
vessels	94 pieces (15 jars, 79 bowls)					
bibliography	http://giza.fas.harvard.edu/sites/557	/full/				

tomb no.	G 5480 (2340)	undisturbed	no		38		
owner	Heti						
dating	Fifth Dynasty, late or Sixth Dynasty, early						
context	shaft A, burial chamber						
find. no.	33-2-192, GEM_8019,	GEM_8020					
material	travertine						- 11
vessels	7 pieces (1 cylindrical jar, 6 bowls – inscribed)						
bibliography	http://giza.fas.harvard.e	du/sites/117	'1/ful	/			

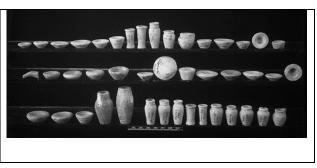
tomb no.	G 6010	undisturbed	no	10	8
owner	Neferbauptah				
dating	Fifth Dynasty, Niuserre – Djedkare				
context	shaft A, burial chamber				
find. no.	25-11-100, 25-11-116 - 25-11-117				
material	travertine				
vessels	26 pieces (1 jug, 24 bowls, 1 table top)				
bibliography	http://giza.fas.harvard.edu/sites/136	3/full/			

tomb no.	G 6020	undisturbed	no	122	
owner	Iymery				
dating	Fifth Dynasty, Niuserre				
context	shaft A, burial chamber				
find. no.	25-12-29 - 25-12-33, 25-12-87 - 25-12-104				
material	travertine				
vessels	62 pieces (17 jars, 45 bowls)				
bibliography	http://giza.fas.harvard.edu/sites/136	9/full/			

tomb no.	G 6040	undisturbed	no		205		
owner	Shepseskafankh						
dating	Fifth Dynasty, Neferirkare						
context	shaft B, burial chamber						
find. no.	25-12-113 - 25-12-118, 25-12-253 -	25-12-113 - 25-12-118, 25-12-253 - 25-12-259					
material	travertine						
vessels	52 bowls						
bibliography	http://giza.fas.harvard.edu/sites/138	7/full/					

tomb no.	G 7070	undisturbed	no	150	
owner	Snefrukhaf				
dating	Fifth Dynasty, early				
context	shaft B, burial chamber				
find. no.	29-10-6 - 29-10-9				
material	travertine				
vessels	5 pieces (1 jug, 1 wine jar, 1 shouldered jar, 2 bowls)				
bibliography	http://giza.fas.harvard.edu/sites/151	2/full/			

tomb no.	G 7111	undisturbed	no		109		
owner	unknown						
dating	Fifth Dynasty, middle to late						
context	shaft C, burial chamber						
find. no.	25-1-439 - 25	25-1-439 - 25-1-517					
material	travertine						
vessels	78 pieces (16 jars, 62 bowls)						
bibliography	http://giza.fas.harvard.edu/sites/1519/full/						



tomb no.	G 7111	undisturbed	no	110			
owner	unknown						
dating	Fifth Dynasty, middle to late						
context	shaft D, burial chamber						
find. no.	25-1-1228 - 25-1-1296						
material	travertine						
vessels	69 pieces (6 jars, 63 bowls)						
bibliography	http://giza.fas.harvard.edu/sites/1519/full/						



tomb no.	G 7112	undisturbed	no	130
owner	unknown			
dating	Fifth Dynasty, Niuserre			
context	shaft A, pit			
find. no.	25-1-180 - 25-1-189			
material	travertine			
vessels	10 bowls			
bibliography	http://giza.fas.harvard.edu/sites	s/1520/full/		

tomb no.	G 7132	undisturbed	no		113		
owner	unknown						
dating	Fifth Dynasty, late						
context	shaft A, burial chamber						
find no	24-12-541 - 24-12-558, 24-12-1007 - 24-						
find. no.	12-1056						
material	limestone (pair	nted yellow)					
vessels	67 pieces (9 jars, 58 bowls)						
hihlioguanhu	http://giza.fas.h	narvard.edu/si	tes/				
bibliography	1523/full/						



tomb no.	G 7150	<i>undisturbed</i> no	133
owner	Khufukhaf II		
dating	Fifth Dynasty, Niuserre		
context	shaft B, burial chamber		
find. no.	26-1-866		
material	travertine		
vessels	1 bowl		
bibliography	http://giza.fas.harvard.edu/obje	ects/14112/full/	

tomb no.	G 7150	undisturbed	no	134
owner	Khufukhaf II			
dating	Fifth Dynasty, Niuserre			
context	shaft C, burial chamber			
find. no.	26-1-521 - 26-1-523			
material	travertine			
vessels	2 pieces (1 beaker, 1 jar)			
bibliography	http://giza.fas.harvard.edu/sites/153	6/full/		

tomb no.	G 7152	undisturbed	no	135	
owner	Sekhemankh	otah			
dating	Fifth Dynasty, late				
context	shaft A, pit				
find. no.	29-5-13 - 29-5-22				
material	travertine				
vessels	12 pieces (1 j	ar, 10 bowls,	1 lid)		
bibliography	http://giza.fas	.harvard.edu/	sites/15	38/full/	

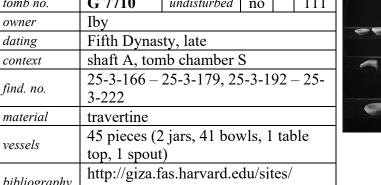
jina. no.	3-222						
material	travertine						
wagaala	45 pieces (2	jars, 41 bov	vls, 1	tab	le		
vessels	top, 1 spout	)					
bibliography	http://giza.fa 2204/full/	as.harvard.ee	du/sit	es/			
tomb no.	G 7710	undisturbed	no		112		
owner	Iby					-	
dating	Fifth Dynas	ty, late					

25-2-1092, 25-2-1101 - 25-2-1151,

limestone (painted yellow)

67+ pieces (17 jars, 50+ bowls)

http://giza.fas.harvard.edu/sites/



shaft B, pit

25-2-1157

2204/full/

context

find. no.

material

vessels

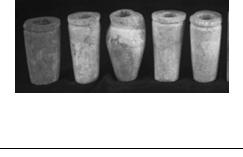
bibliography

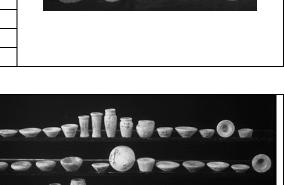
dating	Fifth Dyna	asty, late				100000
context	shaft A, de	ebris of shaft				19537 18
find. no.	31-1-101 -	- 31-1-102				100 B
material	travertine					
vessels	6 jars					
bibliography	http://giza	.fas.harvard.e	du/sites	s/2199/full	/	
	· · · · · · · · · · · · · · · · · · ·					
	G == 1 0		1 1			
tomb no.	G 7710	undisturbed	no			~=

010110 <u>8</u> . up.1.	, http://gizuitubiii	http://gizuitubilitai/uraieaai/biteb/2100/Tail/					
tomb no.	G 7671	undisturbed	no	136			
owner	unknown						
dating	Fifth Dynasty, 1	Fifth Dynasty, late					
context	shaft A, debris	of shaft					
find. no.	31-1-101 - 31-1	-102					
material	travertine						

tomb no.	G 7440 (7442)	undisturbed	yes		124			
owner	unknown							
dating	Fifth Dynasty,	late or Sixtl	ı Dyn	asty, early				
context	shaft Z, burial	shaft Z, burial chamber						
find. no.	27-5-23 - 27-5	5-93						
material	travertine							
vessels	81 pieces (14 j with ewer)	81 pieces (14 jars, 65 bowls, 1 table, 1 basin						
bibliography	http://giza.fas.	harvard.edu/	'sites/	2165/full/				







tomb no.	G 7753	undisturbed	no (?)		172		
owner	unknown						
dating	Fifth Dyna	Fifth Dynasty, late					
context	shaft A, burial chamber						
find. no.	29-12-166 - 29-12-168						
material	limestone						
vessels	69 pieces (8 jars, 61 bowls)						
bibliography	http://giza. 1284/full/	fas.harvard.	edu/si	tes	/		



tomb no.	G 7757	undisturbed	no	243			
owner	unknown						
dating	Fifth Dynasty (?	<b>'</b> )					
context	pit A, room IV						
find. no.	29-11-278 - 29-	11-279					
material	travertine						
vessels	2 bowls						
hibliography	http://giza.fas.ha	arvard.edu/si	ites/128'	7/			
bibliography	full/						



tomb no.	G 7766	undisturbed	no	171	
owner	Niankhmin				
dating	Fifth Dynasty, late or Sixth Dynasty, early				
context	shaft A, burial chamber				
find. no.	29-12-314, 29-12-322				
material	limestone				
vessels	3 pieces (1 beer jar, 2 bowls)				
bibliography	http://giza.fas.harvard.edu/sites/129	7/full/			

tomb no.	G 7766	undisturbed	no	170			
owner	Niankhmin						
dating	Fifth Dynasty, late	Fifth Dynasty, late					
context	shaft B, burial chamb	shaft B, burial chamber					
find. no.	30-1-43, 30-1-49 - 3	30-1-43, 30-1-49 - 30-1-50					
material	travertine						
vessels	5 pieces (2 shouldered jars, 3 lids)						
bibliography	http://giza.fas.harvar	d.edu/sites/1	297/full/				

tomb no.	G 7832	undisturbed	no		245	
owner	unknown					
dating	Fifth Dynasty					
context	pit D, debris					
find. no.	31-1-503					
material	limestone					
vessels	2 cylindrical jars					
bibliography	http://giza.fas.harva	ard.edu/sites	/1629/fu]	11/		

tomb no.	G 8130	undisturbed	no		174
owner	Niankhre				
dating	Fifth Dynasty,	late			
context	burial chamber	and descendi	ing pa	ssag	e
find. no.					
material	travertine				
vessels	58 or 59 (5 jars	s, 53 or 54 boy	wls)		
bibliography	Hassan 1943: 1	57, Fig. 110,	Pls. X	KLIV	// A,
bibliography	XLV/ A				

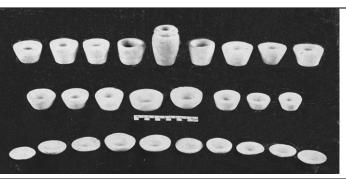


tomb no.	G 8280	undisturbed	no	180
owner	Nira (father	of Tjenti)		
dating	Fifth Dynasty			
context	burial chamber	•		
find. no.				
material	travertine			
vessels	8 bowls			
bibliography	Hassan 1953: 7	79, Pl. XXX	IX /A	



tomb no.	G 8290	undisturbed	no		25
owner	unknown				
dating	Fifth Dyna	asty (?)			
context	shaft S, bu	irial chamber	r		
find. no.					
material	travertine				
vessels	51 pieces	(1 shouldered	d jar,	36	
vessels	bowls, 14	beakers)			
bibliography	Hassan 19	53: 128, Pl.	LVII		

tomb no.	G 8350	undisturbed	no		177
owner	Rekhetra				
dating	Fifth Dynasty				
context	burial chamber				
find. no.					
material	travertine				
vessels	4 pieces (3 jars	, 1 bowl)			
bibliography	Hassan 1950: 7	, Pls. I/C, II	/D, E	, F	





tomb no.	G 8402	undisturbed	no		173
owner	unknown				
dating	Fifth Dyna	sty, Niuserre	e – D	jedk	are
context	shaft 648, p	oit			
find. no.					
material	limestone				
	47 pieces (	17 jars, 28 b	owls	, 1 ta	able,
vessels	1 ewer)	-			
hihlioguanhu	Hassan 194	1: 229–234	, Fig.	201	_
bibliography	207, Pl. LX	XIV			



tomb no.	G 8410	undisturbed	no	175
owner	Itisen			
dating	Fifth Dynasty, middle or later			
context	shaft 1084			
find. no.				
material	travertine			
vessels	4 bowls			
bibliography	Hassan 1944: 274			

tomb no.	G 8412 undisturbed no 176	
owner	Neferhernptah Fefi	
dating	Fifth Dynasty, middle or later	
context	burial chamber	
find. no.		
material	travertine	
vessels	52 bowls	
bibliography	Hassan 1944: 287, Pls. LVI/A, B	

tomb no.	G 8514	undisturbed	no	178
owner	Kaaper and Neferkhuu			
dating	Fifth Dynasty			
context	shaft 1369, burial chamber (probably Kaaper's)			
find. no.				
material	travertine	travertine		
vessels	3 bowls			
bibliography	Hassan 1950: 162			

tomb no.	G 8664	undisturbed	no	160
owner	Kameni			
dating	Fifth Dynasty, late			
context	shaft 580, burial chamber			
find. no.				
material	limestone			
vessels	2 cylindrical jars			
bibliography	Hassan 1941: 107, Pl. XXX/2			

tomb no.	G 8720	undisturbed	no	159
owner	Kai			
dating	Fifth Dynasty, early			
context	"found when clearing the tomb"			
find. no.				
material	travertine			
vessels	3 bowls – inscribed "King's son Kai"			
bibliography	Hassan 1941: 31, Fig. 30, Pl. XIV/2	3		

tomb no.	G 8980	undisturbed no	208	
owner	Wetetjhetep			
dating	Fifth Dynasty, late			
context	shaft 306, burial chamber			
find. no.				
material	limestone			
vessels	x pieces ("some limestone model vessels")			
bibliography	Hassan 1948: 16			

tomb no.	G 8993	undisturbed	no	154
owner	Kaemneferet			
dating	Fifth Dynasty			
context	shaft 213, burial chamber			
find. no.				
material	travertine			
vessels	10 pieces (2 jars, 3 beakers, 5 bowls)			
bibliography	Hassan 1936: 136			

tomb no.	S 37	undisturbed	no	216
owner	unknown			
dating	Fifth Dynasty or Sixth Dynasty			
context	burial chamber			
find. no.				
material	travertine			
vessels	2 bowls			
bibliography	Junker 1951: 109			

tomb no.	<b>S 116</b> <i>u</i>	ndisturbed	no	218
owner	unknown			
dating	Fifth Dynasty or Sixth Dynasty			
context	burial chamber			
find. no.				
material	travertine			
vessels	1 bowl			
bibliography	Junker 1951: 154			

tomb no.	<b>S 1680</b> <i>undisturbed</i> no 181	
owner	unknown	
dating	Fifth Dynasty, Niuserre – Djedkare	
context	burial chamber	
find. no.		
material	limestone	
vessels	45 pieces (11 jars, 34 bowls)	
bibliography	Hassan 1960: 80, Pl. XXXII/A	

#### 10.2.3. Abusir

tomb no.	AC 5	undisturbed	no	101	
owner	Weserkafankh				
dating	Fifth Dynasty, Niuserre – Djedkare				
context	northern burial chamber (wife's)				
find. no.					
material	limestone				
vessels	9 + x pieces (9 jars, x bowls)				
bibliography	Borchardt 1907: 115–116, Abb.	93			

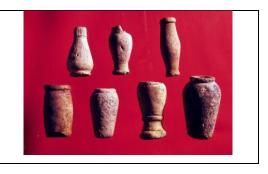
tomb no.	AC 5	undisturbed	no	235		
owner	Weserkafankh					
dating	Fifth Dynasty, Niuserre – Djedkare					
context	southern burial chamber (owner's)					
find. no.						
material	travertine					
vessels	68 bowls					
bibliography	Borchardt 1907: 114–115, Abb. 93					

tomb no.	AC 10	undisturbed	no		236	
owner	Kahotep					
dating	Fifth Dynasty, Menkauhor					
context	burial chamber					
find. no.						
material	travertine					
vessels	160 pieces (21 ja	rs, 139 bow	ls)			
bibliography	Borchardt 1907: 129–134, Abb. 110					



tomb no.	AC 14	undisturbed	no	17–18, 48
owner	Khentkaus II			
dating	Fifth Dynasty, Niuserre			
context	burial chamber			
find. no.	8/A/80, 10/A/80, 17/A/80			
material	travertine			
vessels	3 bowls (1 rectangular)			
bibliography	unpublished			

tomb no.	AC 14	undisturbed	no		55–56	
owner	Khentkaus II					
dating	Fifth Dynasty, late					
context	"room of the tablet"					
find. no.	301/A/78					
material	limestone					
vessels	50 pieces (10 jars, 40 bowls)					
bibliography	Jirásková 2017a: 429					



tomb no.	AC 14	undisturbed	no	58	
owner	Khentkaus II				* * * * *
dating	Fifth Dynasty, late				
context	"room of the tablet	.,,,			
find. no.	353/A/78				
material	plaster				
vessels	34 bowls				Š S S S S S
bibliography	Jirásková 2017a: 4	30			HALFFRENCH THE PARTY

tomb no.	AC 15	undisturbed	no	12	
owner	Khekeretnebty				
dating	Fifth Dynasty, Djedka	are			
context	burial chamber				the start of the
find. no.	87/B/76 - 124/B/76				
material	travertine				
vessels	46 pieces (10 jars, 36	bowls)			
bibliography	Verner – Callender 20	002: 34–38			

tomb no.	AC 22	undisturbed	no	84–89	®
owner	unknown				C Learning
dating	Fifth Dynasty, late				
context	burial chamber				
find. no.	65/J/94, 45/J/94, 50/J/94, 56/J/94, 59/J/94, 73/J/94, 78/J/94				
material	travertine				
vessels	20 bowls				
bibliography	Krejčí – Callender – Ve	erner 2008: 1	00-101		

tomb no.	AC 24 (L25/1) undisturbed no	90	
owner	unknown		
dating	Fifth Dynasty, late		
context	accessing corridor		
find. no.	65/N/2003		
material	travertine		000
vessels	10 bowls		
bibliography	Krejčí – Callender – Verner 2008: 185–186		65/N/03

tomb no.	AC 25	undisturbed	no	9	2–95	
owner	Nakhtsare					A STREET, STRE
dating	Fifth Dynasty, Raneferef – N	Fifth Dynasty, Raneferef – Niuserre				
context	shaft and burial chamber	shaft and burial chamber				
find. no.	17/Q/94, 19/Q/94, 20/Q/94,	17/Q/94, 19/Q/94, 20/Q/94, 26/Q/94				
material	travertine	travertine				
vessels	11 pieces (1 jar, 9 bowls, 1 table top)					
bibliography	Krejčí – Callender – Verner 2008: 52–54					

tomb no.	AC 30	undisturbed	no		195	
owner	Khentkaus III	[				
dating	Fifth Dynasty	, Raneferef	– Niı	userre		
context	burial chambe	burial chamber				
	215/AC30/2014, 222/AC30/2014,					
find. no.	236/AC30/20	14, 239/AC	30/20	)14,		
jina. no.	262/AC30/20	14, 264/AC	30/20	)14,		
	268/AC30/20	14, 274/AC	30/20	)14		
material	travertine					
vessels	23 pieces (4 jars, 19 bowls)					
bibliography	Krejčí 2015: 32, Fig. 5					

tomb no.	AC 31	undisturbed	no		225		0000
owner	unknown						
dating	Fifth Dynasty, Raneferef – Niuserre						
context	burial chamber						
find. no.	128/AC31/2016, 247/AC30/2016						
material	travertine	travertine					
vessels	29 pieces (5 jars, 24 bowls)						
bibliography	Krejčí 2016: 17						

tomb no.	AC 33	undisturbed	no		125	
owner	Kairsu					
dating	Fifth Dynasty, Niuserre	Fifth Dynasty, Niuserre				
context	shaft 1, burial chamber (owner's)					
find. no.	109/AC33/2018					
material	travertine					
vessels	13 pieces (1 cylindrical jar, 12 bowls)					
bibliography	Bárta – Jirásková – Krej	čí <i>et al</i> . 202	0: 49	–50, Pl. VI 1		

tomb no.	AC 33	undisturbed	no		128	
owner	Kairsu					
dating	Fifth Dynasty, N	liuserre				
context	shaft 2, burial ch	shaft 2, burial chamber				
find. no.	128/AC31/2016, 247/AC30/2016					
material	travertine					
vessels	80 pieces (11 jars, 67 bowls, 1 table top, 1 stand)					
bibliography	Bárta – Jirásková – Krejčí <i>et al.</i> 2020: 49–50, Pl. VI 2					







tomb no.	AS 37	undisturbed	yes		4		
owner	Neferinpu	Neferinpu					
dating	Fifth Dynasty, Djedkare						
context	shaft 1, eastern burial chamber						
find. no.	19/AS37/2007						
material	limestone						
vessels	77 pieces (18 jars, 59 bowls)						
bibliography	Jirásková in Bárta <i>et al.</i> 2014						

tomb no.	AS 47	undisturbed	no		6–7		
owner	unknown						
dating	Fifth Dynasty, Niuserre – Djedkare						
context	burial chamber	burial chamber					
find. no.	1/ASW/2007, 2/A	SW/2007					
material	limestone						
vessels	90 pieces (17 jars, 73 bowls)						
bibliography	Jirásková 2017a: 435						

tomb no.	AS 67	undisturbed	no	2	
owner	Nefershepes/Me	mi			A9 20 4 4 9 8 8
dating	Fifth Dynasty, N	liuserre – Djed	kare		26
context	shaft 2, burial ch	amber		33999933	
find. no.	6/AS67/2012				
material	limestone (paint	ed yellow)			
vessels	77 pieces (10 jar	rs, 67 bowls)			
bibliography	Jirásková 2017a	: 435			

tomb no.	AS 67	undisturbed	no		3		
owner	Nefershepes/Mem	Nefershepes/Memi					
dating	Fifth Dynasty, Niuserre – Djedkare						
context	shaft 1, burial chamber						
find. no.	16/AS67/2012	16/AS67/2012					
material	limestone						
vessels	70 pieces (15 jars, 55 bowls)						
bibliography	Jirásková 2017a: 435						

tomb no.	AS 68d	undisturbed	no	115		
owner	Nefer					
dating	Fifth Dynasty, Niuserre – Djedkare					
context	shaft 1, burial chamber					
find. no.	383/AS68/2014	383/AS68/2014				
material	limestone (painted	limestone (painted yellow)				
vessels	87 pieces (16 jars, 71 bowls)					
bibliography	unpublished					









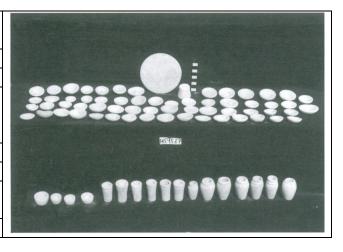
tomb no.	AS 104 undisturbed no 237	
owner	Sekhemka (?)	
dating	Fifth Dynasty, Neferirkare	6. 000000 88800
context	shaft 3, burial chamber	
find. no.	27/AS104/2018	100000 80000
material	travertine	
	82 pieces (11 jars, 67 bowls, 1	000000
vessels	basin, 1 ewer, 1 table top, 1 stand)	
bibliography	Odler et al. 2019: 67	

## 10.2.4. Saqqara

tomb no.	undisturbed	no	229	
owner	Akhethotep			
dating	Fifth Dynasty, late			
context	burial chamber			
find. no.	SA.00//21, SA.00//22, SA.00//28			
material	travertine			
vessels	3 pieces (1 wine jar, 2 bowls)			
bibliography	Ziegler 2007: 168–169, Photos 74–76			

tomb no.		undisturbed	no		123	
owner	Perneb					
dating	Fifth Dynasty, Niuserre – Djedkare					
context	burial chamber					
find. no.	14.7.24 – 14.7.91					
material	limestone					
vessels	67 pieces (18 jars, 49 bowls)					
bibliography	http://www.metmuseum.org/art/collection/search					
	/543937?rpp=30&pg=1&ft=perneb&	xpos=1				

tomb no.	Baboon galleries	undisturbed	no		253			
owner	unknown							
dating	Fifth Dynasty, late							
context	burial chamber (?), "pit below entrance to galleries, just W of Old Kingdom sarcophagus"							
find. no.	H5-1587 (BCO-138)							
material	travertine							
vessels	79 pieces (13 jars, 64 bowls, 1 table top, 1 stand)							
bibliography	Davies 2006: 109, Pl. LI/d							



tomb no.	D 71	undisturbed	no		241	
owner	Ptahwer					
dating	Fifth Dynasty, middle to late					
context	burial chamber					
find. no.	1/D71/2019, 10/D71/2019					
material	travertine					
vessels	8 pieces (1 shouldered jar, 7 bowls)					
bibliography	unpublished					



tomb no.	u	ndisturbed	no	250	
owner	Ptahhotep Niankh				
dating	Fifth Dynasty (?)				
context	burial chamber				
find. no.					
material	travertine				
vessels	53 bowls				
bibliography	Hassan 1975: 103, Pl. LX	XXXI/b,d			

# 10.3. Stone model and miniature vessels of the Sixth Dynasty

### 10.3.1. Giza

tomb no.	LG 53	undisturbed	no	29	
owner	Seshemnefer IV				
dating	Sixth Dynasty, fi	rst half			
context	burial chamber				
find. no.	PM 3728				
material	travertine				
vessels	732 bowls				
bibliography	http://www.giza- projekt.org/Eunde/PM_LG53/Eunde				

tomb no.	LG 53	undisturbed no	222	
owner	Tjeti			
dating	Sixth Dynasty, first half			
context	burial chamber			
find. no.				
material	travertine			
vessels	x pieces (undetermined numbers and shapes)			
bibliography	Junker 1953: 122			

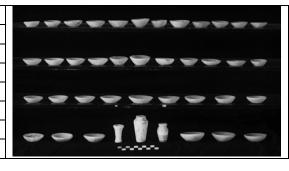
tomb no.	LG 53	<i>undisturbed</i> no	224
owner	Ptahhotep		
dating	Sixth Dynasty, first half		
context	burial chamber		
find. no.			
material	travertine		
vessels	x pieces (undetermined nu	mbers and shapes)	
bibliography	Junker 1953: 125		

tomb no.	LG 54	undisturbed	no	33, 223	
owner	Hetepheres				
dating	Sixth Dynast	y, first half			7cm 8,5
context					
find. no.					SCHEIN-GEFÄSSE
material	travertine				AUS
vessels	63 pieces (4 jars, 59 bowl)				
bibliography	http://www.g projekt.org/M Hetepheres.h Junker 1953:	lastaba/Mastab tml	oa_LG54_	-	

tomb no.	G 1208	undisturbed	no		106		
owner	Akhethotep						
dating	Sixth Dynasty, early						
context	shaft B, chamber I						
find. no.	35-1-7						
material	travertine						
vessels	4 bowls						
bibliography	http://giza.fas.harvard.edu/sites/316/full/						

▰◓▰▰▰▰▰▰▰

tomb no.	G 1208	undisturbed	no		107	
owner	Akhethotep					
dating	Sixth Dynasty, early					
context	shaft B, chamber II					
find. no.	35-5-9 - 35-5-12					
material	travertine					
vessels	41 pieces (3 jars, 38 bowls)					
bibliography	http://giza.fas.har	vard.edu/site	es/316	/full	/	



tomb no.	G 1226	undisturbed	no		105	
owner	unknown					
dating	Sixth Dynasty, second	half				
context	shaft C, burial chambe	r				
find. no.	34-12-24					The and the second second second second
material	travertine					
vessels	1 bowl					
bibliography	http://giza.fas.harvard.	edu/objects/2	22323/f	`ull/		

tomb no.	G 1459 / 1460	undisturbed	no	209	
owner	Seneb				
dating	Sixth Dynasty, mid	dle			
context	chapel				
find. no.					9 9
material	travertine				
vessels	24 pieces (4 jars, 18	8 bowls, 2 ta	ble tops)		
bibliography	Junker 1941: 105, F	Pl. XX			

tomb no.	G 2375	undisturbed	no	199			
owner	Akhetmehu						
dating	Sixth Dynasty, second half						
context	chapel, 1 bowl in the burial chamber						
find. no.	35-12-38, 37-8-1 -	35-12-38, 37-8-1 - 37-8-4					
material	travertine	travertine					
vessels	47 pieces (1 jar, 46 bowls)						
bibliography	http://giza.fas.harvard.edu/sites/826/full/						



tomb no.	G 2381	undisturbed	no	41	
owner	unknown				B-412-15
dating	Sixth Dynasty, Pepy I o	r Merenre I			12-12-17
context	hole 2 south				
find. no.	12-12-17				
material	travertine				
vessels	4 bowls				
bibliography	http://giza.fas.harvard.e	du/sites/831/	full/		

tomb no.	G 2381	undisturbed	yes	42	
owner	Ptahshepses Impy				
dating	Sixth Dynasty, Pepy I	Ι			
context	shaft A, burial chambe	er			
find. no.	12-12-414				
material	travertine				
vessels	1 basin				
bibliography	http://giza.fas.harvard.	.edu/sites/83	1/full/		

tomb no.	G 2381	undisturbed	no	40
owner	unknown			
dating	Sixth Dynasty, Pepy I or Merenre	Ι		
context	shaft N			
find. no.	12-12-8			
material	travertine			
vessels	2 bowls			
bibliography	http://giza.fas.harvard.edu/sites/83	31/full/		

tomb no.	G 2381	undisturbed	no	39
owner	unknown			
dating	Sixth Dynasty, Pepy I or Merenre	Ι		
context	shaft X			
find. no.	12-12-187, 35-7-12			
material	travertine			
vessels	2 bowls			
bibliography	http://giza.fas.harvard.edu/sites/83	31/full/		

tomb no.	G 2385 (2387)	undisturbed	no		117– 118	
owner	unknown					
dating	Sixth Dynast	y, middle to	) seco	nd l	nalf	
context	main shaft of pit	f G 2385 (sł	naft G	238	87 A),	
find. no.	12-12-586 – 12-108	12-12-593,	12-12	2-10	7, 12-	
material	travertine					
vessels	62 pieces (16	jars, 46 bo	wls)			
bibliography	http://giza.fas	s.harvard.ec	lu/site	es/8.	36/full/	

tomb no.	G 2385 (2387)	undisturbed	no	119
owner	unknown			
dating	Sixth Dynasty second half			
context	shaft X, burial chamber			
find. no.	35-12-42 - 35-12-44			
material	travertine			
vessels	3 pieces (2 jars, 1 bowl)			
bibliography	http://giza.fas.harvard.edu/site	s/836/full/		

tomb no.	G 4530	undisturbed	no		97		
owner	unknown						
dating	Sixth Dynasty, early						
context	shaft A, shaft and burial chamber						
find. no.	14-1-51 - 14-1-70						
material	limestone						
vessels	113 pieces (31 jars, 78 bowls, 1 table, 2 ewers, 1						
vessels	basin)						
bibliography	http://giza.fas.harvard.edu/sites/1069/full/						



tomb no.	G 4610	undisturbed	no		114	
owner	unknown					
dating	Sixth Dynasty,					
context	shaft A, burial					
find. no.	35-4-1, 15-11-4	46 - 15-11-5	6			
material	travertine					
vessels	81 pieces (14 jars, 67 bowls)					2
bibliography	http://giza.fas.h	1				
bibliography	full/					

***********

tomb no.	G 4714	undisturbed	no		148		
owner	Neferhetepes						
dating	Sixth Dynasty	, early					
context	shaft A, burial chamber						
find. no.	15-12-24 - 15-12-28, 35-12-5 - 35-12-7						
material	travertine						
vessels	52 pieces (6 ja	rs, 56 bowls	)				
hibliography	http://giza.fas.harvard.edu/sites/1112/						
bibliography	full/						



tomb no.	G 5330	undisturbed	no	131
owner	Ihy			
dating	Sixth Dynasty, early			
context	shaft A, bottom of shaft (4) an	d burial chambe	er (11)	
find. no.	14-11-144, 14-11-145, 14-11-2	200, 14-11-205		
material	travertine			
vessels	15 pieces (1 beer jar, 1 should	ered jar, 13 bow	vls)	
bibliography	http://giza.fas.harvard.edu/site	s/570/full/		

tomb no.	G 5380 (2330)	undisturbed	no	16	8	
owner	unknown					
dating	Sixth Dynasty, middle					
context	shaft A, bottom of shaft					
find. no.	12-1026 - 12-10-29					
material	limestone				the second	Contraction of the second
vessels	4 shouldered jars					
bibliography	http://giza.fas.harvard.edu	u/sites/550/fu	ıll/		Sector	

tomb no.	G 7524	undisturbed	no		137	
owner	Kay					2 2 2 1 2 2
dating	Sixth Dynasty, f	irst half				
context	shaft C, burial c	hamber (4),	pit (14	ŀ)		
find no	28-5-200, 28-5-201, 29-4-4, 29-4-9 - 29-4-					
find. no.	12, 29-4-30, 29-	4-31, 29-4-3	3 - 29	9-4	-35	
material	travertine					
vessels	18 pieces (2 cyli	ndrical jars,	16 bo	wl	s)	
hihlioguanhu	http://giza.fas.ha	rvard.edu/si	tes/11	73	/	
bibliography	full/					

tomb no.	G 7524	undisturbed	no	139
owner	Кау			
dating	Sixth Dynasty, first half			
context	shaft D, pit			
find. no.	29-4-143			
material	travertine			
vessels	1 bowl			
bibliography	http://giza.fas.harvard.edu	/sites/1173/full/		

tomb no.	G 7777 u	undisturbed	no		169		-			an a tha an tack and a s		
owner	unknown					9		-	-		-	
dating	Sixth Dynast	y, early								745		
context	shaft H, buria	al chamber					. W	-	- 400		-	
find. no.	30-12-96 - 3	0-12-102										
material	limestone											
vessels	7 pieces (5 ja	ars, 1 table,	1 ew	er)								
bibliography	http://giza.fas	s.harvard.e	du/sit	es/1	303/							
bibliography	full/											

tomb no.	G 8220	undisturbed	yes		179
owner	Nekhetka				
dating	Sixth dynasty,	early			
context	shaft 1628, bu	rial chamber	•		
find. no.					
material	travertine				
vessels	6 pieces (4 cyl	indrical jars	, 2 bo	wls)	
bibliography	Hassan 1953: 1	33, Pl. XXII	/A		



tomb no.	G 8420	<i>undisturbed</i> no	162			
owner	Nefer					
dating	Sixth Dynasty, early					
context	northern burial chamber	iern burial chamber				
find. no.						
material	travertine (13 pieces), limes	travertine (13 pieces), limestone (1 bowl)				
vessels	14 pieces (undetermined numbers and shapes)					
bibliography	Hassan 1941: 214, Pl. LX/3					

tomb no.	G 8640	undisturbed yes	161	
owner	Ankhhaf (good na	ame Qar)		SARA RAS HEA HEAD
dating	Sixth Dynasty, ea	rly		
context	shaft 626, burial o	chamber		
find. no.				
material	limestone (painte	d yellow)		
vessels	39 pieces (12 jars	, 27 bowls)		
bibliography	Hassan 1941: 145	, Figs. 123–124, Pl. X	KLV	

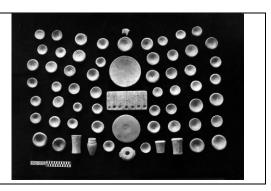
tomb no.	G 8860	undisturbed	no	157	
owner	Washptah				
dating	Sixth Dynasty, firs	t half			
context	shaft 565, burial ch	amber			
find. no.					0000000
material	limestone				
vessels	31 pieces (6 jars, 2	5 bowls)			000020000
bibliography	Hassan 1941: 6, Pl	II/1			and the second

tomb no.	G 8887	undisturbed yes	s 155	
owner	unknown			
dating	Sixth Dynas	ty, early		A B & A A A A A A A A A A A A A A A A A
context	shaft 294, bu	irial chamber		
find. no.				
material	travertine			00000000000000000000000000000000000000
vessels	81 pieces (1-	4 jars, 66 bowls, 1	table top)	
hihlioguanhu	Hassan 1936	5: 139–150, Pl. XL	V/2, Pl.	
bibliography	XLVI/1, Pl.	XLVIII/2		

tomb no.	S 890	undisturbed	no		21	119 *
owner	Ptahhotep	-				
dating	Sixth Dynasty, early					
context	A, southern shaft of t	he mastaba, l	ourial	cham	ber	
find. no.	PM 2526 – 2622, PM	1 2629, PM 2	631 -	- 2632		
material	travertine, limestone	(table stand,		00000000000		
vessels	98 pieces (3 jars, 92 stand)	bowls, 1 ewe	r, 1 ba	asin, 1	table	0000000000
bibliography	http://www.giza- projekt.org/Mastaba/Mastaba_Setka_ Ptahhotep.html Junker 1944: 228, TAF. XXXVIIIa					

tomb no.	S 94/160	undisturbed	no	217	
owner	Iymery II				
dating	Sixth Dynasty, early				
context	shaft 104, burial chamber				
find. no.					
material	limestone				
vessels	36 pieces (3 jars, 33 bowls)				
bibliography	Junker 1951: 154				

tomb no.	S 125/157	undisturbed	no		219
owner	unknown				
dating	Sixth Dynasty, early				
context	shaft 125, burial chamber				
find. no.					
material	travertine				
vessels	61 pieces (2 jars, 5	5 bowls, 1 so	quat	jar, 2	
stands, 1 table top, 1 larger bowl)					
bibliography	Junker 1951: 173, TAF. XXIIc				



#### 10.3.2. Abusir

tomb no.	AS 22	undisturbed	yes	8
owner	Inty			
dating	Sixth Dynasty, Pe	epy I		
context	shaft J, shaft depo	osit		
find. no.	90/JJ/2000			
material	travertine			
vessels	10 bowls			
bibliography	Jirásková 2017a:	437–438		



tomb no.	AS 22	undisturbed	no		9–10	
owner	Inty					A A A A A A
dating	Sixth Dynasty, Pepy I					
context	shaft J, burial chamber					
find. no.	104/JJ/2000, 109/JJ/2000					
material	travertine					
vessels	46 bowls					
bibliography	Jirásková 2017a: 437	/-438				

tomb no.	AS 22	undisturbed	no	11	
owner	Inty-Pepyankh				
dating	Sixth Dynasty, Pepy II				
context	shaft A, burial chamber				20100
find. no.	136/JJ/2002				
material	travertine				le pol
vessels	198 pieces (80 jars, 118 bowl	ls)			
bibliography	Jirásková 2017a: 437–438				

tomb no.	AS 27	undisturbed	no		5	
owner	unknown					
dating	Sixth Dynasty, early	7				
context	burial chamber					
find. no.	28/LA-5A/2002					
material	travertine					
vessels	88 pieces (18 jars, 68 bowls, 1 table top, 1 stand)					
bibliography	Jirásková 2017a: 43	8				



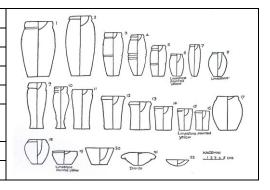
tomb no.	<i>undisturbed</i> no 185	रपन प्रान
owner	Iput	
dating	Sixth Dynasty, Teti	
context	burial chamber	
find. no.		
material	travertine	
vessels	19 pieces (16 jars, 3 bowls)	
bibliography	Firth – Gunn 1926: 13, Fig. 5	

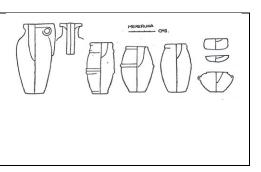
tomb no.	<i>undisturbed</i> no 186	
owner	Ankhmahor	
dating	Sixth Dynasty, Teti	
context	burial chamber	
find. no.		
material	travertine	
vessels	10 pieces (7 jars, 3 bowls)	· · ·
bibliography	Firth – Gunn 1926: 18, Fig. 10	Fig. 10.

tomb no.	undisturbed no 187	
owner	Neferseshemre	
dating	Sixth Dynasty, Teti	
context	burial chamber	
find. no.		
material	limestone (painted yellow)	
vessels	15 pieces (13 jars, 2 bowls)	9 - A Lampandre pariso youre
bibliography	Firth – Gunn 1926: 19, Fig. 13	

tomb no.		undisturbed	no	188				
owner	Kagemni	Kagemni						
dating	Sixth Dynasty,	Sixth Dynasty, Teti						
context	burial chamber	burial chamber						
find. no.								
material	travertine, lime	stone (painte	ed yellow), diorite					
material	(squat jar)							
vessels	22 pieces (19 jars, 2 bowls, 1 squat jar)							
bibliography	Firth – Gunn 1926: 21, Fig. 16							

tomb no.		undisturbed	no		189		
owner	Mereruka						
dating	Sixth Dynasty,	Sixth Dynasty, Teti					
context	burial chamber	burial chamber					
find. no.							
material	travertine (depi	travertine (depicted vessels), limestone					
vessels	7 + x (5 + x jars, 2 + x bowls, 1 squat jar)						
bibliography	Firth – Gunn 1926: 26, Fig. 21, Pl. 13B						





tomb no.	Mastaba A	undisturbed	no		190	
owner	unknown					
dating	Sixth Dynasty, Teti					
context	burial chamber					
find. no.						(P) FR (P) FR
material	limestone (painted yellow)					
vessels	8 pieces (7 jars, 1 beaker)					
bibliography	Firth – Gunn 1926: 26	5, Fig. 25				2113

tomb no.	Mastaba E	undisturbed	no		191		FP3 EP3
owner	unknown					ALL A	
dating	Sixth Dynasty, Teti					( )	
context	burial chamber					M M	
find. no.						$\left( \right)$	MASTABA E
material	travertine, limestone (p	ainted yellov	v)				
vessels	9 + x pieces (5 jars, 1 l	beaker, 1 bow	l, 1 st	and, 1 squa	at)		
bibliography	Firth – Gunn 1926: 29	, Fig. 26					

tomb no.	undisturbed no 183	
owner	Nedjetempet	
dating	Sixth Dynasty, Teti	
context		
find. no.	TNE94:113	
material	travertine, limestone	
vessels	79 pieces (24 jars, 65 bowls)	
bibliography	Kanawati – Hassan 1996: 29, Pl. 11	

tomb no.	<i>undisturbed</i> no	248			
owner	Hefi		Section 2		
dating	Sixth Dynasty, Teti			Part -	
context	main burial chamber				
find. no.	TNE99:21a-e, TNE99:22		- THE	Same and the	11 1
material	limestone (painted yellow)			of the second	
vessels	12 pieces (6 jars, 1 beaker, 5 bowls)		1.3		
bibliography	Kanawati – Abder-Raziq 2001: 55, Pls. 14, 57		12.20		

tomb no.	<i>undisturbed</i> no 238	(men ))	(mart )			ת
owner	Hesi	Prices /				
dating	Sixth Dynasty, late Teti					
context	burial chamber ?	TNE97:4a (i)	TNE97:4a (ii)	TNE97:4a (iii)	) TNE97:4	ta (iv)
find. no.	TNE97:4	FR	FR		per R	
material	limestone (painted yellow)				0	
vessels	9 pieces (8 jars, 1 squat jar)	TNE97:4a (v)	TNE97:4a (vi)	TNE97:4a (vii)		NE97:40
bibliography	Kanawati – Hassan 1996: 50, Pl. 13	(v)	111607.118 (VI)	(incer.in (in)	110071710 110	100000

tomb no.	<i>undisturbed</i> no 233	-
owner	Ibi and Kaaper	
dating	Sixth Dynasty, late Teti – early Pepy I	
context	burial chamber of Kaaper	
find. no.	TNE94:72-73	
material	travertine (cylindrical jar), limestone (painted yellow)	
vessels	4 pieces (1 cylindrical jar, 3 bowls)	
bibliography	Kanawati – Hassan 1996: 50, Pl. 13	

tomb no.	undisturbed no 239	NITAD TYNYYN N
owner	Nikauisesi	
dating	Sixth Dynasty, Pepy I	
context	burial chamber (owner's)	
find. no.	TNE98:7–8	2 8 1 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
material	travertine, limestone (painted yellow)	
vessels	175 pieces (104 jars, 69 bowls, 2 squat jars)	
bibliography	Kanawati – Abder-Raziq 2000: 64–65, Pls. 36, 72	

tomb no.		undisturbed	no	183	
owner	Inumin				
dating	Sixth Dynasty, Pepy I				The second second
context	shaft 2				
find. no.	TNE96:63				
material	limestone				
vessels	1 squat jar				
bibliography	Kanawati 2006: 67, Pls	. 65d, 73e			

tomb no.	undisturbed no 184	
owner	Inumin	the second second
dating	Sixth Dynasty, Pepy I	and the set of the set
context	main burial chamber	A star from the first
find. no.	TNE96:189	States and
material	travertine	19.7 2
vessels	1 cylindrical jar	1 Section 2
bibliography	Kanawati 2006: 71, Pls. 66a, 75b	

tomb no.		undisturbed	no		251				
owner	Meretite	Meretites II							
dating	Sixth Dy	Sixth Dynasty, Pepy I							
context	burial chamber and serdab								
find no	Ss-114, Ss-135, Ss-145, Ss-146, Ss-								
find. no.	, Ss-	, Ss-211, Ss-216							
material	travertin	e, limestone	(pain	ted yello	ow)				
vessels	291 piec	es (183 jars,	30 b	owls, 75					
vessels	beakers,	3 quat jars)							
bibliography	Minault-	Gout 2019: 1	129-	145, Figs	s.				
bibliography	42–51								



tomb no.	M 55	undisturbed	no		254	
owner	Akhti					The second states of the second states
dating	Sixth Dynasty, P	epy II				
context	burial chamber 1	burial chamber 1367a				
find. no.	Tb 371, Tb 373, Tb 376–378, Tb 382–388					
material	travertine					
vessels	12 bowls (probat	oly 7 cylindrical	jars, c	others undeterm	ined)	
bibliography	Dobrev – Laville	– Onézime 201	5: 120	)–121, Figs. 24,	26	

tomb no.	<i>undisturbed</i> no	206
owner	Meru	
dating	Sixth Dynasty	
context	shaft	
find. no.		
material	travertine, limestone	
vessels	2 bowls	
bibliography	Lloyd – Spencer – El-Khouli 1990: 5–6, Plate 13/nos. 9–10	

## 11. Appendix 2 – Catalogue of the Opening of the Mouth ritual sets

### 11.1. Giza

tomb no.	GIII	undisturbed	no		49	9.0
owner	Menkaure					
dating	Fourth Dynasty or Fifth Dyn					
context	Valley temple					
find. no.	08-7-31 to 08-7-37					
psškf	yes, flint	tablet	no			
	3 beakers (basalt), 1 beaker (	jar				
vessels	(basalt)					
bibliography	http://giza.fas.harvard.edu/pl	notos/24609/	/full/			

tomb no.	GIII	undisturbed	no		51		
owner	Menkaure						
dating	Fourth Dynasty or Fifth Dynas		Ka n				
context	Valley temple						
find. no.	07-1-80	07-1-80					
psškf	yes, flint	tablet	no				
vessels	no vessels	R					
bibliography	http://giza.fas.harvard.edu/obje	ects/28463/f	ull/				

tomb no.	GIII	undisturbe	ed no	63	0.0		
owner	Menkaure				2.4		
dating	Fourth Dynasty or Fifth D	ynasty					
context	Valley temple	Valley temple					
find. no.	Jd'E 41982						
psškf	yes, flint	tablet	no		(		
vessels	no vessels						
bibliography	http://giza.fas.harvard.edu	/objects/61253/fu	ıll/				

tomb no.	G 2011	undisturbed	no		43	
owner	unknown					
dating	Fifth Dynasty or Sixth Dynas	sty				· Star Landar and
context	burial chamber (?)					
find. no.	MFA 06.1890					
psškf	no	tablet	no			
vessels	1 beaker (travertine)					
bibliography	https://www.mfa.org/collection	ons/object/m	nodel-	cup-134895		

tomb no.	G 2100 A	undisturbed	no	27	
owner	Sedit				No. of Concession, Name
dating	Fourth Dynasty				
context	burial chamber				
find. no.	36-1-2				
psškf	no	tablet	no		and the second s
vessels	1 beaker (travertine)				
bibliography	http://giza.fas.harvard.edu/sit	es/670/full/			

tomb no.	G 2347 X (G 5562 A)	undisturbed	no	67				
owner	unknown							
dating	Fifth Dynasty or Sixth Dyn							
context	pit	pit						
find. no.	MFA 34.46 and 34.47, MI							
psškf	no	tablet	no					
vessels	1 jar (basalt), 2 beakers (ba							
bibliography	https://collections.mfa.org	/objects/147	585/magic-					
bibliography	bottle?ctx=7392b7cd-0c81	-458b-bc2c-	-5c2372733b	55&idx=0				

tomb no.	G 2377 A	undisturbed	no		4	
owner	unknown					7
dating	Fifth Dynasty, late (?)					
context	shaft A, pit					
find. no.	13-1-516 to 13-1-521					
psškf	no	tablet	no			
vessels	2 beakers (basalt), 1 beaker	(quartzite),	1 bea	ker (limestone),1	jar	
vessels	(basalt), 1 jar (quartzite)					
bibliography	http://giza.fas.harvard.edu/	sites/829/ful	1/			

tomb no.	G 2381 A	undisturbe	d yes		5	
owner	Ptahshepses Impy					
dating	Sixth Dynasty, late Pepy	or Merenre	εI			
context	tomb A, burial chamber o	f the owner				
	12-12-250, 12-12-252, 12	-12-254, 12	-12-282	, 12-12-28.	3, 12-12-	
find. no.	286, 12-12-287, 12-12-31	1, 12-12-32	2, 12-12	2-323, 12-1	2-414, 12-	
	12-415, 12-12-416, 12-12	-417, 12-12	-452, 12	2-12-251,		
psškf	no	tablet	no			
	2 beakers (quartz crystal),	1 beaker (c	uartzite	), 7 beakers	s (basalt),	
vessels	1 jar (rock crystal), 2 jars	(quartz crys	tal), 3 ja	ars (basalt)		
bibliography	http://giza.fas.harvard.edu	l/sites/831/f	ull/			

tomb no.	G 2381 Z	undisturbed	no	6	
owner	unknown				- TO-
dating	Sixth Dynasty, late Pepy I	or Merenre I			
context	tomb Z, burial chamber				
find. no.	12-12-158a				
psškf	no	tablet	no		
vessels	1 beaker (basalt), 1 beaker	(quartzite), 1	l jar (basalt), 1 jar		
vessels	(quartzite)				
bibliography	http://giza.fas.harvard.edu/s	sites/831/ful	1/		

tomb no.	G 2382	undisturbea	no no	44	
owner	unknown				
dating	Sixth Dynasty, Pepy II				
context	courtyard of the Senedjemib	complex			
find. no.	13-1-536				
psškf	no	tablet	yes		TI-
vessels	no vessels found with the table	let			077
hihlioguanhu	https://www.mfa.org/collection	ons/object/tra	y-for-opening-of	-the-mouth-kit-	
bibliography	140759	-			

tomb no.	G 4250 A	undisturbed	no		38	
owner	unknown					
dating	Fourth Dynasty, Khufu					Sec.
context	burial chamber (?)					and the second
find. no.						A STATE
psškf	no	tablet	no			
vessels	jar (travertine), possibly also 3	beakers (tra	vertin	e)		
bibliography	Junker 1929: 191–194			*		

tomb no.	G 5080 B (G 2200)	undisturbed	l no	3	
owner	Seshemnefer II				
dating	Fifth Dynasty, Niuserre				
context	unknown				1025
find. no.	33-2-104				
psškf	no	tablet	no		
vessels	1 beaker (obsidian)				
1 :1.1: 1	http://www.mfa.org/colle	ections/object/mo	odel-cup-from-a	n-opening-of-	
bibliography	the-mouth-set-322974	-	-	- •	

tomb no.	G 5470 (LG 32)	undisturbed	no	66	4
owner	Rawer II				
dating	Fifth Dynasty, Djedkare				and the second
context	S 653 (main shaft)				
find. no.	ÄS 7902				
psškf	yes, flint	tablet	no		
vessels	1 beaker ("white"), 1 beak	er ("black")			
bibliography	Junker 1938: 226, Abb. 45				

tomb no.	G 7320 A	undisturbed	no	72	0.0
owner	Baufre				
dating	Fourth Dynasty (?)				
context	burial chamber				
find. no.	25-1-24				
psškf	yes, flint	tablet	no		
vessels	no vessels				
bibliography	http://giza.fas.harvard.edu/obj	ects/9023/fu	11/		

tomb no.	G 7320 X	undisturbed	no	73	
owner	Baufre				
dating	Fourth Dynasty (?)				EL S
context	burial chamber				
find. no.	25-1-699				
psškf	yes, flint	tablet	no		
vessels	no vessels				
bibliography	http://giza.fas.harvard.edu/obj	ects/7931/fu	11/		

tomb no.	G 7550 B	undisturbed	no		26	
owner	Duaenhor					Y
dating	Fourth Dynasty, middle to	ate				
context	burial chamber					
find. no.	28-5-182, 28-5-183, 28-5-1	85				
psškf	yes, travertine	tablet	no			
vessels	1 beaker (travertine), 1 beal	ker (quartzit	e), 1 jar (b	oasalt), 1 jar		
vessels	(quartzite)					
bibliography	http://giza.fas.harvard.edu/s	sites/1176/fu	111/			

tomb no.	G 7560 B	undisturbed	no	29	
owner	unknown				
dating	Fourth Dynasty, middle to late	- TVT			
context	burial chamber				
find. no.	36-12-25a,b, 36-12-36a,b				
psškf	yes, travertine				
vessels	2 beakers (travertine), 2 jars (tra				
bibliography	http://giza.fas.harvard.edu/sites				

tomb no.	G 8130	undisturbed	no	30	
owner	unknown				
dating	Fifth Dynasty (?)				
context	burial chamber				
find. no.					
psškf	no	tablet	no		
vessels	2 beakers (basalt), 1 jar (basalt)				
bibliography	Hassan 1943: 157, Fig. Ill, PI. X	KLIV, C			

tomb no.	G 8862	undisturbed	no		28			
owner	Dersemat							
dating	Fifth Dynasty or Sixth Dynasty							
context	western burial chamber, debris							
find. no.	find. no.							
psškf	no	tablet	no					
vessels	1 beaker (travertine), 2 beakers							
bibliography	Hassan 1941: 11–13, Fig. 9, 11	, 13C, Pl. IV	/4					

#### 11.2. Abusir

tomb no.	AC 3	undisturbed	no	7	
owner	Raneferef				
dating	Fifth Dynasty, middle to late				
context	Mortuary temple, room CO, ab				
find. no.	683/I/82				
psškf	yes, "black schist"	tablet	no		
vessels	1 beaker (rock crystal), 1 beak				
bibliography	Verner et al. 2006: 61, 351, Fig				

tomb no.	AC 10	undisturbed	no	64	FAF BEA
owner	Kahotep				
dating	Fifth Dynasty, Niuse	rre			
context	burial chamber				
find. no					
psškf	yes, flint	tablet	no		
vessels	no vessels				
bibliography	Borchardt 1907: 130	, Abb. 110			

tomb no.	AC 15	undisturbed	no		75	
owner	Khekeretnebty	2 💬				
dating	Fifth Dynasty, Djedkare					
context	burial chamber					
find. no.	157/B/76, 158/B/76					
psškf	no	tablet	no			
vessels	1 jar (calcite), 1 beaker (basa					
bibliography	Verner – Callender 2002: 32					

tomb no.	AC 22	undisturbed	no	8	
owner	unknown				
dating	Fifth Dynasty, middle to late				La
context	burial chamber				
find. no.	56/J/94a				
psškf	no	tablet	no		
vessels	1 beaker (travertine)		· · ·		
bibliography	Krejčí – Callender – Verner 20	008: 111, Fig	. 4.69		

tomb no.	AC 24 (tomb 1)	undisturbed	no		9		
owner	unknown					Nac I	
dating	Fifth Dynasty, middle to late						
context	burial chamber						
find. no.	69/N/2003						
psškf	no	tablet	no			69/N/2003	
vessels	1 jar (basalt)	S cm					
bibliography	Krejčí – Callender – Verner 20	08: 186–187	, Fig. 5.	.68		12 2010	

tomb no.	AC 24 (tomb 2)	undisturbed	no		10-11			
owner	unknown							
dating	Fifth Dynasty, middle to late	Fifth Dynasty, middle to late						
context	burial chamber and descending	120 - AT						
find. no.	27/N/2003, 33/N/2003							
psškf	no							
vessels	1 beaker (basalt), 1 jar (traverti							
bibliography	Krejčí – Callender – Verner 20	Krejčí – Callender – Verner 2008: 201–202, Figs. 5.115, 5.116a–b						

tomb no.	AC 25	undisturbed	no		12-13			
owner	Nakhtsare							
dating	Fifth Dynasty, Raneferef							
context	burial chamber, passage betwe							
find. no.	18/Q/94, 33/Q/94	18/Q/94, 33/Q/94						
psškf	no	tablet	no					
vessels	1 jar (basalt), 1 jar (travertine)	192						
bibliography	Krejčí – Callender – Verner 20							

tomb no.	AC 31	undisturbed	no	50	
owner	unknown				
dating	Fifth Dynasty, Ranefere				
context	burial chamber				
find. no.	267/AC31/2016, 271/AC	C31/2016			
psškf	yes, flint	tablet	no		
vessels	1 beaker (travertine)				
bibliography	Krejčí 2016: 17				

tomb no.	AS 17	undisturbed	no		14			
owner	Qar junior							
dating	Sixth Dynasty, Pepy I	A PE						
context	burial chamber							
find. no.	58/HH/2000, 81/HH/2000, 93/	58/HH/2000, 81/HH/2000, 93/HH/2000						
psškf	no	tablet	no					
vessels	1 beaker (rock crystal), 1 beaker							
bibliography	Bárta et al. 2009: 223, 241, 259	9, Fig. 6.3.10	)8, Pl	s. 25.1, 25.2				

tomb no.	AS 18	undisturbed	no		17	Contrast of the		
owner	Senedjemib					100		
dating	Sixth Dynasty, Pepy I							
context	burial chamber							
find. no.	110–113/HH/2001, 116–117/H							
psškf	no	tablet	no					
	1 beaker (rock crystal), 1 beaker	er (basalt), 2	beak	ers (obsidian), 1 jar				
vessels	(obsidian), 1 jar (rock crystal)							
bibliography	Bárta <i>et al.</i> 2009: 265–268, Fig. 6.3.108, Pls. 25.3–25.6							

tomb no.	AS 18	undisturbed	no		23	
owner	unknown					
dating	Sixth Dynasty					
context	Corridor leading from sh					
find. no.	130/HH/2001					
psškf	no	tablet	yes	limestone		
	1 beaker (rock crystal), 2	2 beakers (ob	sidia	n), 1 jar (rock ci	rystal),	
vessels	1 jar (obsidian)					
bibliography	unpublished					

tomb no.	AS 22 (shaft A)	undisturbed	no		2	
owner	Inty-Pepyankh					
dating	Sixth Dynasty, Pepy II					
context	burial chamber					
find. no.	138/JJ/2002					
psškf	no	tablet	yes	limestone		
vessels	1 beaker (rock crystal), 1 b	, 1				
vessels	jar (obsidian)		BT BT B			
bibliography	unpublished					1199-33.02

tomb no.	AS 22 (shaft A)	undisturbed	no		1	No.
owner	Inty-Pepyankh					
dating	Sixth Dynasty, Pepy II					
context	burial chamber					
find. no.	128/JJ/2002					
psškf	no	tablet	no			120/27/2004
vessels	1 beaker (rock crystal), 3 b	eakers (obsi	dian), 1	jar (roo	ck	1==712(),2)(202)
vesseis	crystal), 1 jar (obsidian)					
bibliography	Odler 2019					

### 11.3. Saqqara

tomb no.		undisturb	ed no		25			
owner	Perneb							
dating	Fifth Dynasty, Djedkare – U							
context	burial chamber							
find. no.	14.7.30, 14.7.92, 14.7.93, 14	March						
psškf	no	tablet	no					
vessels	2 beakers ("dark stone"), 1 j	ar (traverti	ne), 1 ja	ır ("dark s	tone")			
hibliography	http://www.metmuseum.org	http://www.metmuseum.org/collection/the-collection-						
bibliography	online/search/547080?rpp=3							

tomb no.		undisturbed	no		15	
owner	Akhethotep					
dating	Fifth Dynasty, middle					
context	burial chamber					
find. no.	SA.00/23, SA.00/24,	SA.00/x				
psškf	no	tablet	no			
vessels	2 beakers (grauwacke					
bibliography	Ziegler 2007: 169-170	), Photo 77		·		

tomb no.		undisturbed	no		31	
owner	Iput					T Contraction
dating	Sixth Dynasty, Teti					
context	burial chamber	2 4				
find. no.						6 7 8
psškf	no	tablet	no			Asada T
vessels	"four small cups of rock of		and the second second			
vessels	black marble"					
bibliography	Firth – Gunn 1926: 13, Fi	ig. 5, Pl. 15A	15-8			

tomb no.		undisturbed	no	32	
owner	Neferseshemre				IGI
dating	Sixth Dynasty, Teti				
context	burial chamber	2 4			
find. no.		6 7 8			
psškf	no	tablet	no		
vessels	1 beaker (basalt), 1 jar (ol				
bibliography	Firth – Gunn 1926: 19, Pl	. 15A1,4			

tomb no.		undisturbe	d no		33		
owner	Kagemni					IGT	
dating	Sixth Dynasty, Teti						
context	burial chamber	2 3 4					
find. no.							
psškf	no	tablet	no			HARD	
vessels	"three crystal and alabast						
bibliography	Firth – Gunn 1926: 22, P	1. 15A6–8					

tomb no.	Mastaba A	undisturbed	no	34	
owner	unknown				IGT
dating	Sixth Dynasty, Teti				
context	burial chamber	2 4			
find. no.		6 7 8			
psškf	no	hand the			
vessels	"two small ceremonial vas				
bibliography	Firth – Gunn 1926: 28, Pl.	15A2,5			

tomb no.	Mastaba E	undisturbed	no	35	
owner	unknown				IOT
dating	Sixth Dynasty, Teti				
context	burial chamber	2 4			
find. no.					6 7 8
psškf	no	tablet	no		
vessels	1 jar (rock crystal)		· · ·		
bibliography	Firth – Gunn 1926: 28, Pl.	15A3			

tomb no.		undisturbed	no	16	
owner	Nedjetempet				
dating	Sixth Dynasty, Teti				E.
context	burial chamber (?)				
find. no.	TNE94:115				
psškf	no	tablet	no		
vessels	1 jar (rock crystal)		· · · · ·		
bibliography	Kanawati – Hassan 1996: 2	29, Pl. 11			

tomb no.		undisturbed	no	20	
owner	Ankhsen				
dating	Sixth Dynasty, Pepy I				
context	debris outside				
find. no.					
psškf	no	tablet	no		
vessels	1 jar (basalt or grauwacke)				
bibliography	Minault-Gout 2019: 173, Fig. 7	71			A III-101

tomb no.		undisturbed	no	21	
owner	Behenu				
dating	Sixth Dynasty, Pepy I				
context	north of the pyramid				
find. no.	12-65				
psškf	yes, limestone	tablet	no		
vessels					12-65
bibliography	Minault-Gout 2019: 174, Fig. 7	1			

tomb no.	XV	undisturbed	no		36			
owner	Nypepy							
dating	Sixth Dynasty, late Pepy II	Sixth Dynasty, late Pepy II						
context	shaft 32, burial chamber	and the						
find. no.						THE PART		
psškf	no	tablet	no					
vessels	1 beaker (limestone), 2 beakers							
bibliography	Myśliwiec 2013: 456, Pl. CCI							

tomb no.	M X	undisturbed	no		54				
owner	unknown								
dating	Sixth Dynasty, Pepy I	Sixth Dynasty, Pepy II							
context	burial chamber								
find. no.						a company of the company			
psškf	no	tablet	yes						
vessels	"vases en obsidienne,								
bibliography	Jéquier 1929: 65, Fig.	72							

tomb no.	M 55	undisturbed	no		22	
owner	Akhti					
dating	Sixth Dynasty, Pepy	II				
context	burial chamber 1367	a		2		
find. no.	Tb 379 – Tb 380, Tb	389 – Tb 39	0			
psškf	yes		30			
vessels	1 jar (grauwacke), 1	jar (travertin	cke),			
vesseis	1 beaker (rock crysta	l)				
bibliography	Dobrev – Laville – C	Dnézime 2015	26			

tomb no.	N VII	undisturbed	no		61	
owner	Degem (Pepy-mer)					1 Mars
dating	Sixth Dynasty, Pepy					
context	burial chamber (?)					
find. no.						
psškf	no	tablet	yes			
vessels	2 beakers (basalt)					
bibliography	Jéquier 1929: 120, Fig	g. 137				

tomb no.	NII	undisturbed	no	62					
owner	Henut								
dating	Sixth Dynasty, Pepy II	Sixth Dynasty, Pepy II							
context	burial chamber (?)								
find. no.									
psškf	no	tablet	no						
vessels	1 beaker (?)								
bibliography	Jéquier 1929: 91, Fig. 103								

tomb no.		undisturbed			55	
owner	unknown					
dating	Sixth Dynasty to First Inte	rmediate Pe	riod			
context	unknown					
find. no.	Jd'E 25971					
psškf	no	tablet	yes			
vessels	no vessels					
bibliography	Borchardt 1964: 182, Bl. 1	01.				

## 11.4. Zawijet el-Meytin

tomb no.	no. 14	undisturbed	no		39	
owner	Nyankhpepy					2175
dating	Sixth Dynasty, middle					
context	shaft 11, burial chambe					
find. no.						
psškf	no	tablet	yes	limestone		
vessels	1 beaker	]				
bibliography	Varille 1938: 6, 27					

tomb no.	RS 5	undisturbed	no		77		
owner	Itnefret						
dating	Sixth Dynasty to First Intermediate Period						
context	burial chamber (?)						
find. no.							
psškf	yes	tablet	yes	limestone			
vessels	1 jar (travertine), 1 jar (limestone), 2 beakers (travertine), 1 beaker (limestone)						
bibliography	Weill 1913: 28						

tomb no.	RS 6	undisturbed	no		76	CALIFORNIA STATES
owner	Metu					A Street A Street A
dating	Sixth Dynasty to First I					
context	burial chamber (?)	1.2200				
find. no.						
psškf	no	tablet	yes	limestone		
vessels	1 jar (travertine), 1 jar (					
	beaker (obsidian), 1 bea					
bibliography	Desroches Noblecourt -					

# 11.5. Dara

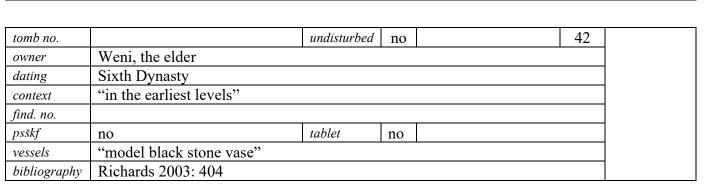
tomb no.	M 2	undisturbed	no	52	
owner	unknown				
dating	Old Kingdom				
context	fill of shaft G				. S. d.
find. no.					
psškf	yes, limestone	tablet	no		
vessels	no vessels				
bibliography	Weill 1958: 66, Pl. XLd				

## 11.6. Deir el-Gebrawi

tomb no.	S 12	undisturbed	no		37	( ACC )
owner	unknown					
dating	Sixth Dynasty (?)					
context	burial chamber					
find. no.	DGS06:2					
psškf	no	tablet	yes	limesto	ne	TUTTE
vessels	no jars found with the tablet					
bibliography	Kanawati 2013: 58, Pl. 36b,	37a, 81				a 1117

# 11.7. Abydos

tomb no.	E 21	undisturbed	yes	41					
owner	unknown								
dating	Sixth Dynasty, Pepi I								
context	burial chamber								
find. no.									
psškf	no	tablet	yes						
	1 beaker (rock crystal), 2	beakers (?), 1	jar (rock crys	tal), 1 jar (?), 2					
vessels	blades (slate)								
bibliography	Naville 1914: Pl. IV								



tomb no.		undisturbed	no		45	
owner	Idy					
dating	Sixth Dynasty					
context	burial chamber (?)					
find. no.	EA5526					
psškf	yes, limestone	tablet	yes	limestone		
vessels	4 beakers (rock crystal), jar	(rock crystal)	, jar (o	bsidian), 1 blade	e	ant
vessels	(schist)					
bibliography	https://www.britishmuseum.	org/collection	n/obje	ct/Y_EA5526		5526

tomb no.		undisturbed			46	and a first of the state of the
owner	unknown					C THE THE
dating	Sixth Dynasty					
context	unknown		AT MA			
find. no.	EA 23222					
psškf	yes, limestone	tablet	yes	wood		
vessels	4 beakers (rock crystal), 2 ja (schist)	, 1 blade				
bibliography	https://www.britishmuseum.	.org/collectio	n/obje	ct/Y_EA2322	22	



# v

tomb no.		undisturbed		4	7	
owner	unknown					
dating	Sixth Dynasty					
context	unknown					
find. no.	EA58404					
psškf	yes, limestone	tablet	yes	limestone		
vessels	3 beakers (limestone), 1 jar (travertine), 1 jar (limestone)					
bibliography	https://www.britishmuseum	04				

## 11.8. Deir el-Nawahid

tomb no.	35	undisturbed	no		18	
owner	unknown					Contract in
dating	Sixth Dynasty, Pepy II or lat					
context	burial chamber (?)					
find. no.						
psškf	yes, steatite	tablet	yes	limestone		
vessels	1 jar (obsidian), 2 beakers (o limestone"), 2 beakers ("bla (schist)					
bibliography	Asfour 1979: 7, Fig. VIII					

tomb no.	80	undisturbed	no		19	
owner	unknown					
dating	Sixth Dynasty, Pepy II or	Same Press of the set				
context	burial chamber (?)					
find. no.						
psškf	no	tablet	yes	limestor	ne	
vessels	1 jar ("black-col'd limest	tone")				
bibliography	Asfour 1979: 7, Fig. XI					

## 11.9. Hamra Dom

tomb no.	T 66	undisturbed	no	40	
owner	Idu Seneni				
dating	Sixth Dynasty, Pepy II				
context	burial chamber (?)				
find. no.	NH 75*30				
psškf	no				
vessels	1 beaker (?), 1 jar (rock cry	ALL O			
bibliography	Säve-Söderbergh 1994: 70-	-71 Pl. 74			

## 11.10. Dendera

tomb no.		undisturbed	no	53	
owner	Idu				
dating	Sixth Dynasty				
context	south-west chamber				
find. no.					the second of the second
psškf	no	tablet	yes		
vessels	2 beakers (obsidian), 1 jar (t	ravertine)			
bibliography	Petrie 1900: 8				

# 11.11. Unknown origin

tomb no.		undisturbed			48			
owner	unknown							
dating	Sixth Dynasty (?)							
context	unknown							
find. no.	MET 07.228.117a-h							
psškf	yes	tablet	yes	limestone	e			
vessels	2 beakers (travertine), 2 bea 1 jar (greywacke)	kers (greywaa	cke), 1	jar (traveı	rtine),			
bibliography	-	http://www.metmuseum.org/art/collection/search/543920?sortB y=Relevance&ft=opening+of+the+mouth&pg=1&am						

tomb no.		undisturbed		56	1764 1
owner	unknown	1 30 1			
dating	Sixth Dynasty (?)	1.1.2			
context	unknown				
find. no.	Jd'E 28417, Cat. No. 1764				
psškf	no	5. 1 5			
vessels	no vessels				
bibliography	Borchardt, 1964: 183, Bl. 10	)1			March 19

tomb no.		undisturbed		58	
owner	unknown				134L
dating	Sixth Dynasty (?)				and the second
context	unknown				
find. no.	Jd'E 28417, Cat. No. 1768				
psškf	no	tablet	yes		
vessels	no vessels				
bibliography	Borchardt, 1964: 187				

tomb no.		undisturbed			60	
owner	unknown					
dating	Sixth Dynasty (?)					110
context	unknown					
find. no.	К 414 Н					
psškf	yes, "light flint"	tablet	yes			RL L
wagala	2 beakers (quartz), 2 jars and	d 2 beakers (	"dark	nard rock'	'), 2	
vessels	blades (schist)		-			
bibliography	Müller 1964: 55					

dating	Fifth Dynasty or Sixth Dyna	asty			
context	unknown				
find. no.	PM 4826a-f				
psškf	no	tablet	no		
vessels	1 jar (basalt), 1 jar (quartz), (quartz), 1 beaker (limeston)		anodio	orite), 1 bea	ıker
bibliography	Martin-Pardey 1991: 114–1	15			
	· · · · · ·				ľ
tomb no.		undisturbed			69
		•	•		

tomb no. owner

unknown



65

tomb no.		undisturbed			69		七十万日前子名四十
owner	unknown						XAPX
dating	Fifth to Sixth Dynasty						
context	unknown						-
find. no.	E.2674						
psškf	yes	tablet	yes	limestone	e		A   A >>
vessels	2 beakers (basalt ?), 2 beake	rs (rock cryst	al ?), 1	l blade (?)		]	
bibliography	http://www.globalegyptiann	nuseum.org/de	etail.a	spx?id=42	6	]	ARE DOLL

undisturbed

tomb no.		undisturbed			70	
owner	unknown					
dating	Fifth Dynasty (?)					
context	unknown					
find. no.	private collection, Barcelon	a, Spain, ac	quired i	in the 1980	S	
psškf	yes, flint	tablet	no			
vessels	no vessels					
bibliography	http://www.alaintruong.com	n/archives/20	017/01/	/17/348174	52.html	

tomb no.		undisturbed			71	
owner	unknown					
dating	Sixth Dynasty (?)					the second second
context	unknown					6 that
find. no.						
psškf	yes	tablet	no			
vessels	no vessels					
1:11:	https://www.abc.es/espana/	/catalunya/ba	rcelon	a/abci-muse	eo-egipcio-	
bibliography	barcelona-como-faraon-sar	ndalias-nueva	s-2019	03160111	noticia.html	

tomb no.		undisturbed			74
owner	unknown				
dating	Fourth Dynasty (?)				
context	unknown				
find. no.	Jd'E 47925				
psškf	yes, travertine	tablet	no		
vessels	no vessels				
bibliography	http://giza.fas.harvard	.edu/objects/6131	3/full/		

## 12. Bibliography

ABDEL-RAZIQ, Abdalla 2016 "An ointment tablet from Deir el-Gebrawi", Zeitschrift für ägyptische Sprache und Altertumskunde 143/2, 129–150.

ADAMS, Barbara – CIAŁOWICZ, Krzysztof 1997 *Protodynastic Egypt*, Aylesbury.

AKSAMIT, Joanna

2001 "Stone vessels from Edfu in the National Museum in Warsaw", *Bulletin du Musée National de Varsovie 42*, 14–25.

ALEXANIAN, Nicole

1999 Dahschur II. Das Grab des Prinzen Netjer-aperef. Die Mastaba II/1 in Dahschur, Mainz.

2016 *Die provinziellen Mastabagräber und Friedhöfe im Alten Reich*, unpublished dissertation thesis, Faculty of Philosophy, Heidelberg University.

ALLEN, James P.

2005 The ancient Egyptian pyramid texts, Atlanta.

ALLEN, Susan

2006 "Miniature and model vessels in Ancient Egypt", in: Bárta, M. (ed.), *The Old Kingdom art and archaeology. Proceedings of the konference held in Prague, May 31 – June 4, 2004*, Prague, 19–24.

ALLIOT, Maurice

1933 Rapport sur les fouilles de Tell Edfou (1932), Le Caire.

ALTENMÜLLER, Hartwig

1998 Die Wanddarstellungen im Grab des Mehu in Saqqara, Mainz.

2008 "Family, Ancestor Cult and Some Observations on the Chronology of the Late Fifth Dynasty", in: Vymazalová, H. – Bárta, M. (eds.), *Chronology and Archaeology in Ancient Egypt (the Third Millennium B.C.)*, Prague, 144–161.

AMÉLINEAU, Émile Clément

1899 Les nouvelles fouilles d'Abydos, I, 1895–1896, Paris.

1902 Les nouvelles fouilles d'Abydos, II, 1896-1897, Paris.

1904 Les nouvelles fouilles d'Abydos, III/1, 1897–1898, Paris. 1905 Les nouvelles fouilles d'Abydos, III/2, 1897–1898, Paris.

## ARIAS KYTNAROVÁ, Katarína

2011 "Abusir South 2007. The Tomb of Inpunefer and the Anonymous Tomb AS 47", *Památky Archaologické CII*, 117–158.

2014 "Ceramic finds", in: Krejčí, J. – Arias Kytnarová, K. et al., *Mastaba of Werkaure I (Old Kingdom strata)*, Prague, 71–259.

2015 "Morphological origins of the so-called miniature cups. Functionalist simplification in the ceramics?", unpublished talk, International congress of Egyptologists XI, Florence, Italy 23–30 August 2015.

2018 "Transformation in cultic perception. Beer jars versus miniaturised beer jars", in: Kahlbacher, A. – Priglinger, E. (eds.), *Tradition and transformation in Ancient Egypt. Proceedings of the Fifth international congress for young Egyptologists, 15–19 September,* 2015, Vienna, Vienna, 31–43.

in press "The early Old Kingdom in the cemetery of high officials at Abusir South. Several remarks on selected ceramic types", in: Rzeuska, T. I. – Wodzińska, A. (eds.), *Studies on Old Kingdom Pottery. Volume 2*, Warsaw.

ARIAS KYTNAROVÁ, Katarína – JIRÁSKOVÁ, Lucie

2015 "Ritual tradition and transfer between shape and meaning – model beer jars in stone and pottery", *Prague Egyptological studies XV*, 59–68.

ARIAS KYTNAROVÁ, Katarína – JIRÁSKOVÁ, Lucie – ODLER, Martin

2018 "Old Kingdom model and miniature vessels from Giza", in: Kahlbacher, A. – Priglinger,
E. (eds.), *Tradition and Transformation in Ancient Egypt. Proceedings of the Fifth International Congress for Young Egyptologists 15–19 September, 2015, Vienna*, Vienna, 21–35.

ARIAS KYTNAROVÁ, Katarína – HAVELKOVÁ, Petra – JIRÁSKOVÁ, Lucie – SŮVOVÁ, Zdeňka – BÁRTA Miroslav 2013 "Záhady hrobky AS 67. Jedna hrobka pro dvě generace?", *Pražské egyptologické studie X*, 80–94.

ARNOLD, Dieter 1976 Gräber des Alten und Mittleren Reiches in El-Tarif, Mainz am Rhein. ARNOLD, Dorothea (ed.)

1999 Egyptian Art in the Age of the Pyramids, New York.

ARNOLD, Dorothea – PISCHIKOVA, Elena 1999 "Stone vessels. Luxury items with manifold implications", in: Arnold, D. (ed.). *Egyptian Art in the Age of the Pyramids*, New York, 121–131.

ASFOUR, M. A. M.

1979 "From One of my Old Diaries: Deir–en–Nawahid", in: Ruffle, J. – Gaballa, G. A. – Kitchen, K. A. (eds.), *Glimpses of ancient Egypt: Studies in honour of H. W. Fairman*, Warminster.

ASTON, Barbara G.

1994 Ancient Egyptian stone vessels. Materials and forms, Heidelberg.

BAER, K.

1960 Rank and title in the Old Kingdom: the structure of the Egyptian administration in the Fifth and Sixth Dynasties, Chicago.

BĄK-PRYC, Grzegorz

2014 "Some miniature stone vessels from deposits of Western Kom at Tell el-Farkha", in: Jucha, M. A. – Dębowska-Ludwin, J. – Kołodziejczyk, P. (eds.), *Aegyptus est imago caeli*. *Studies presented to Krzysztof M. Ciałowicz on his 60<sup>th</sup> birthday*, Kraków, 179–185.

BAKR, Mohamed I.

1992 Tell Basta: the area of the so-called Western cemetery I, Tombs and burial customs at Bubastis, Zagazig.

BALCZ, Heinrich

1933 "Die Gefassdarstullungen des Alten Reiches", *Mitteilungen des Deutschen Archaologischen Instituts, Abteilung Kairo 4*, 18–36, 207–227.

1934 "Die Gefassdarstullungen des Alten Reiches", *Mitteilungen des Deutschen Archaologischen Instituts, Abteilung Kairo 5*, 45–94.

BARTA, Winfried

1963 Die altägyptische Opferliste von der Frühzeit bis zur griechisch-römischen Epoche, Berlin.

BÁRTA, Miroslav

1995 "Pottery Inventory and the Beginning of the IVth Dynasty", *Göttinger Miscellen 149*, 15–24.

2001 Abusir V. The cemeteries at Abusir South I, Praha.

2005a "Architectural Innovations in the Development of the Non-Royal Tomb During the Reign of Nyuserra", in: Jánosi, P. (ed.), *Structure and Significance: Thoughts on Ancient Egyptian Architecture*. Vienna, 105–130.

2005b "The transitional type of tomb at Saqqara North and Abusir South", in: Seidlmayer, S. J. (ed.), *Texte und Denkmäler des ägyptischen Alten Reiches*, Berlin, 69–89.

2009 Tomb complex of the vizier Qar, his sons Qar Junior and Sedjemib, and Iykai, Prague. 2009–2010 "Filling the chambers, rising the status: Sixth Dynasty context for the decline of the Old Kingdom", *Cahiers de Rrecherches de l'Institut de Papyrologie et d'Égyptologie de Lille 28*, 1–11.

2010 "An Abusir mastaba from the reign of Huni", in: Callender, V. G. – Bareš, L. – Bárta, M. – Janák, J. – Krejčí, J. (eds.), *Times, signs and Pyramids. Studies in Honour of Miroslav Verner on the Occasion of His Seventieth Birthday*, Prague, 41–50.

2011 "A new Old Kingdom rock-cut tomb from Abusir and its Abusir-Saqqara context", in: Strudwick, N. – Strudwick, H. (eds.), *Old Kingdom, New Perspectives. Egyptian Art and Archaeology 2750–2150 BC*, Oxford – Oakville, 9–21.

2013 "Kings, viziers and courtiers: executive power in the third millennium BC", in: Moreno Garcia, J.C. (ed.), *Ancient Egyptian administration*, Leiden, 153–175.

2014 "Objev pohřební komory hodnostáře Nefera", *Pražské egyptologické studie XIII*, 3–6. 2015 "Ancient Egyptian History as an Example of Punctuated Equilibrium: An Outline", in: Manuelian, P. Der – Schneider, T. (eds.), *Towards a New History for the Egyptian Old Kingdom*, Leiden, 1–17.

2019 "Set of stone receptacles for cosmetics", in: Bárta, M. – Bareš, L. – Krejčí, J. – Megahed, M. – Varadzinová, L. (eds.), *Created for Eternity: greatest discoveries of Czech Egyptology*, Prague, 190–191.

BÁRTA, Miroslav – COPPENS, Filip – VYMAZALOVÁ, Hana *et al.* 2010 *Tomb of Hetepi (AS 20), tombs AS 33–35, and AS 50–53*, Prague 2010.

BÁRTA, Miroslav – VACHALA, Břetislav *et al.* In preparation *The tomb of Inty (AS 22)*.

BÁRTA, Miroslav et al.2009 Tomb complex of the vizier Qar, his sons Qar Junior and Sedjemib, and Iykai, Prague.

2014 The Tomb of the sun priest Neferinpu (AS 37), Prague.

BÁRTA, Miroslav – JIRÁSKOVÁ, Lucie – KREJČÍ, Jaromír – ODLER, Martin – BRŮNA, Vladimír – BRUKNER HAVELKOVÁ, Petra – SŮVOVÁ, Zdeňka 2020 "Tomb of Kairsu discovered in Abusir (AC 33)", *Prague Egyptological Studies XXV*, 35–58.

BENEŠOVSKÁ, Hana – VLČKOVÁ, Petra (eds.)

2006 Abúsír – tajemství pouště a pyramid / Secrets of the desert and the Pyramids, Praha.

BERMAN, Lawrence M.

1999 Catalogue of Egyptian Art. The Cleveland Museum of Art, Cleveland.

BEVAN, Andrew 2007 *Stone vessels and values in the Bronze Age Mediterranean*, Cambridge.

BISSON DE LA ROQUE, F. M.

1924 Rapport sur les fouilles d'Abou-Roasch (1922-1923), Cairo. 1925 Rapport sur les fouilles d'Abou-Roasch (1923-1924), Cairo.

BLACKMAN, Aylward M. – APTED, Michael R.

1953 The rock tombs of Meir. Part V. The tomb-chapels A, No. 1 (that of Ni-'ankh-Pepi the Black), A, No. 2 (that of Pepi'onkh with the 'Good name' of Heny the Black), A, No. 4 (that of Hepi the Black), D, No. 1 (that of Pepi), and E, Nos. 1-4 (those of Meniu, Nenki, Pepi'onkh and Tjetu), London.

BLOXAM, Elizabeth - STOREMYR, Per

2002 "Old Kingdom basalt quarrying activities at Widan el-Faras, Northern Faiyum Desert", *Journal of Egyptian Archaeology* 88, 23–36.

BOLSHAKOV, Andrey

1992 "Addenda to Málek's list of ointment-slabs", Göttinger Miscellen 131, 21-23.

BONNET, Hans 1928 Ein frühgeschichtliches Gräberfeld bei Abusir, Leipzig.

BORCHARDT, Ludwig 1907 Das Grabdenkmal des Königs Ne-user-re<sup>c</sup>, Leipzig. 1910 Das Grabdenkamal des Königs S'aȝḥu-Re<sup>c</sup>. Band I: Der Bau, Leipzig. 1964 Catalogue général des Antiquités Égyptiennes du Musée du Caire Nos 1295–1808. Denkmäler des Alten Reiches (ausser den Statuen) im Museum von Kairo, II, Le Caire.

BROVARSKI, Edward

2000 The Senedjemib comples. Part I. The mastabas of Senedjemib Inti (G 2370), Khnumenti (G 2374), and Senedjemib Mehi (G 2378), Boston.

2013 "Overseers of Upper Egypt in the Old to Middle Kingdoms", *Zeitschrift für ägyptische Sprache und Altertumskunde 140/2*, 91–111.

2018 Naga ed-Dêr in the First Intermediate Period, Atlanta – Georgia.

## BRUNTON, Guy

1927 Qau and Badari I, London.

1937 Mostagedda and the Tasian culture, London.

1940 "Objects from Fifth Dynasty burials at Gebelein", *Annales du Service des Antiquités de l'Égypte XL*, 521–531.

1948 Matmar, London.

BRUYÈRE, Bernard – MANTEUFFEL, J. – MICHAŁOWSKI, Kazimierz – SAINTE FARE GARNOT, Jean

1937 Fouilles Franco-Polonaises. Rapports I. Tell Edfou 1937, Le Caire.

CASTEL, Georges – PANTALACCI, Laure – DZIERZYKRAY-ROGALSKI, Tadeusz – SHAABAN, Moheb – MARCHAND, Sylvie 2005 Les cimetières est et ouest du mastaba de Khentika: Oasis de Dakhla. Le Caire.

CASTEL, Georges – PANTALACCI, Laure – CHERPION, Nadine 2001 Le mastaba de Khentika: tombeau d'un gouverneur de l'Oasis a la fin de l'Ancien Empire I-II, Le Caire.

CATON-THOMPSON, Gertrude – GARDNER, Elinor Wight 1934 *The desert Fayum, I–II*, London 1934.

CHABÂN, Mohammed Effendi

1910 "Monuments recueillis pendant mes inspections", *Annales du Service des Antiquités de l'Égypte X*, 28–30.

COLLOMBERT, Philippe

2015 "Une nouvelle version de l'autobiographie d'Ouni", in: R. Legros (ed.), 50 ans d'éternité. Jubilé de la Mission archéologique française de Saqqâra (1963-2013), Le Caire, 145–157.

D'AMICONE, Elvira – POZZI BATTAGLIA, Massimiliana 2009 Egitto Mai Visto La montagna dei morti: Assiut quattromila anni fa, Trento.

DAVIES, N. de G.

1901 The rock tombs of Sheikh Saïd, London.1902 The rock tombs of Deir el Gebrâwi I-II, London.

DAVIES, Sue

2006 The sacred animal necropolis at North Saqqara. The mother of Apis and baboon catacombs. The archaeological report, London.

DERRY, E.

1947 "The bones of prince Ptah-shepses", Annales du Service des Antiquités de l'Égypt XLVII, 139–143.

DE MORGAN, Jacques 1903 Fouilles a Dahchour en 1894–1895, Vienne.

DESROCHES NOBLECOURT, Christiane – VERCOUTTER, Jean 1981 *Un siècle de fouilles françaises en Égypte 1880–1980*, Le Caire.

DÍAZ HERNÁNDEZ, Roberto A.

2014–2015 "Zum Altägyptischen Konzept des "Sammelns" anhand der Tempelinventare des Alten Reichs (ca. 2700–2100 v. Chr.), *Curiositas 14–15*, 27–58.

DOBREV, Vassil – LAVILLE, Diane – ONÉZIME, Olivier 2015 "Nouvelle découverte à Tabbet el-Guech (Saqqâra-sud). Deux tombes de prêtres égyptiens de la VI<sup>e</sup> dynastie, *Bulletin de l'Institut Français d'Archéologie Orientale 115*, 111–144.

DONADONI ROVERI, Anna Maria – D'AMICONE, Elvira – LEOSPO, Enrichetta 1994 Gebelein. Il villaggio e la necropoli, Torino.

DREYER, Günter

1998 Umm el-Qaab I. Das prädynastische Königsgrab U-j und seine frühen Schriftzeugnisse, Mainz.

DRIOTON, Étienne - LAUER, Jean-Philippe

1958 "Un groupe de tombes a Saqqarah: Icheti, Nefer-Khouou-Ptah, Sébek-em-Khent et Ankhi", *Annales du Service des Antiquités de l'Égypte LV*, 207–251.

DULÍKOVÁ, Veronika

2016 The Reign of King Nyuserre and Its Impact on the Development of the Egyptian State. A Multiplier Effect Period during the Old Kingdom, unpublished dissertation thesis, Faculty of Arts, Charles University.

2017 "Ptahšepses, vezír a králův zeť, v kontextu společnosti Staré říše", *Prague Egyptological Studies XVIII*, 64–71.

2019 "Calcite head-rest from Setib's burial chambre", in: Bárta, M. – Bareš, L. – Krejčí, J. – Megahed, M. – Varadzinová, L. (eds.), *Created for Eternity: greatest discoveries of Czech Egyptology*, Prague, 172–173.

DULÍKOVÁ, Veronika – BÁRTA, Miroslav – ODLER, Martin – PETERKOVÁ HLOUCHOVÁ, Marie – SŮVOVÁ, Zdeňka

2018 "Tomb at Abusir South from a time of change belonging to Ankhires, inspector of haidressers of the Great House (AS 98), *Prague Egyptological Studies XXI*, 3–33.

DULÍKOVÁ, Veronika – JIRÁSKOVÁ, Lucie – ODLER, Martin In press "Ptahshepses, vizier and king's son-in-law as reflected in his unpublished tomb equipment", in: M. Bárta – F. Coppens – J. Krejčí (eds.), *Abusir and Saqqara in the year* 2020, Prague.

DULÍKOVÁ, Veronika – JIRÁSKOVÁ, Lucie – VYMAZALOVÁ, Hana – ARIAS KYTNAROVÁ, Katarína – HAVELKOVÁ, Petra 2017 "The tombs of Kaisebi (AS 76) and Ptahwer (AS 76b) at Abusir South", *Prague Egyptological Studies XIX*, 3–26.

DUNHAM, Dows 1978 Zawiyet el-Aryan. The Cemeteries adjacent to The Layer Pyramid, Boston.

EDEL, Elmar 2008 Die Felsgräbernekropole der Qubbet el-Hawa bei Assuan. I–III, Paderborn.

EICHLER, Eckhard

1993 Untersuchungen zum Expeditionswesen des ägyptischen Alten Reiches, Wiesbaden.

EJSMOND, Wojciech 2016 Gebelein: An overview, Warsaw.

EL-KHOULI, Ali A. R. H.

1978 Egyptian stone vessels. Predynastic Period to Dynasty III, I-III, Mainz am Rhein.

EL-KHOULI, A. – KANAWATI, N.

1989 *Quseir El-Amarna: The tombs of Pepy-Ankh and Khewen-Wekh*, Sydney. 1990 *The Old Kingdom Tombs of El-Hammamiya*, Sydney.

EL-SAWI, Ahmad

1979 Excavations at Tell Basta: report of seasons 1967-1971 and catalogue of finds, Prague.

EMERY, Walter B.

1938 Excavations at Saqqara. The tomb of Hemaka, Cairo.

1939 Excavations at Saqqara 1937-1938. Hor-Aha, Cairo.

1949 Excavations at Saqqara. Great tombs of the First Dynasty, I, Cairo.

1954 Excavations at Saqqara. Great tombs of the First Dynasty, II, Cairo.

1958 Excavations at Saqqara. Great tombs of the First Dynasty, III, Cairo.

EYRE, C. J.

1994 "Weni's Career and Old Kingdom Historiography", in: Eyre, C. – Leahy, A. – Leahy, L. M. (eds.), *The Unbroken Reed. Studies in the culture and heritage of Ancient Egypt in honour of A.F. Shore*, London, 107–124.

FALTINGS, Dina

1998 Die Keramik der Lebensmittelproduktion im Alten Reich. Ikonographie und Archäologie eines Gebrauchsartikels, Heidelberg.

FIORE MAROCHETTI, Elisa

2013 "Gebelein", in: Wendrich, W. (ed.), *UCLA Encyclopedia of Egyptology*, Los Angeles, 1–20.

FIORE MAROCHETTI, Elisa – CURTI, Alessandra – DEMICHELIS, Sara – JANOT,
Francis – CESARINI, Federico – GRILLETTO, Renato
2003 "Le "paquet": Sépolture anonyme de la IV<sup>e</sup> dynastie provenant de Gébélein, *Bulletin de l'Institut Français d'Archéologie Orientale 103*, 235–256.

FIRTH, Cecil M. – GUNN, Battiscombe 1926 Teti pyramid cemeteries I. Text, Le Caire.

FISCHER, Henry George

1968 Dendera in the Third Millennium B.C. down to the Theban domination of Upper Egypt, New York.

FLENTYE, Laurel

2002 "The Development of Art in the Fourth Dynasty: The Eastern and GIS Cemeteries at Giza", in: Eldmaty, M. – Trad, M. (eds.), *Egyptian Museum Collections Around the World:* Studies for the Centennial of the Egyptian Museum, Cairo, Cairo, 385–396.
2007 "The Development of Art in the Eastern and GIS Cemeteries at Giza during the Fourth

Dynasty: Iconography and Style", in: Goyon, J.-C. – Cardin, Ch. (eds.), *Proceedings of the Ninth International Congress of Egyptologists, Grenoble, 6-12 septembre 2004, vol. I*, Leuven, 721–735.

FRANKFORT, H.

1930 "The cemeteries of Abydos: work of the season 1925–26", *Journal of Egyptian* Archaeology 16, 213–219.

FRIEDMAN, Renée. F.

2011 "Hierakonpolis", in: Teeter, E. (ed.), *Before the Pyramids. The origins of Egyptian civilization*, Chicago, 33–44.

GARSTANG, John

1903 Maḥâsna and Bêt Khallâf, London.1904 The Tombs of the Third Egyptian Dynasty at Reqâqnah and Bêt Khallâf, Westminster.

GONEIM, Mohammed Z.

1957 Excavations at Saqqara. Horus Sekhemkhet. The unfinished step pyramid at Saqqara, Le Caire.

GRIFFITH, F. L. – NEWBERRY, Percy E. 1894 *El Bersheh*, I–II, London.

GUNDACKER, Roman 2006 Untersuchungen zur Chronologie der Herrschaft Snofrus, Wien.

HANNIG, Rainer

2003 Ägyptisches Wörterbuch I. Altes Reich und Erste Zwischenzeit, Mainz am Rhein.

HANSEN, Donald P.

1965 "Mendes 1964", Journal of the American Research Center in Egypt 4, 31–37.

1967 "The excavations at Tell el-Rub'a", *Journal of the American Research Center in Egypt* 6, 5–16.

HARRELL, James A.

1990 "The misuse of the term "Alabaster" in Egyptology, Göttinger Miscellen 119, 37-42.

HASSAN, Selim

1932 Excavations at Giza II. 1929-1930, Oxford.

1936 Excavations at Giza II. 1930-1931, Cairo.

1941 Excavations at Giza III. 1931-1932, Cairo.

1943 Excavations at Giza IV. 1933-1934, Cairo.

1944 Excavations at Giza V. 1933-1934, Cairo.

1948 Excavations at Giza VI. 1934-1935. Part 2. The offering list in the Old Kingdom, Cairo.

1950 Excavations at Giza VI. 1934-1935. Part 3. Mastabas of the Sixth Season and their Description, Cairo.

1953 Excavations at Giza VII. 1935–1936. The mastabas of the seventh season and their description, Cairo.

1960 Excavations at Giza IX. 1936–37–38. The mastabas of the eighth season and their description, Cairo.

1975 Excavations at Saqqara 1937–1938, II, Mastabas of Ny-ankh-Pepy and others, Cairo.

HELCK, Wolfgang

1967 "Einige Bemerkungen zum Mundöffnungsritual", *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo 22*, 27–41.

HELDAL, Tom – STOREMYR, Per – BLOXAM, Elizabeth – SHAW, Ian

2016 "Gneiss for the Pharaoh: Geology of the Third Millennium BCE Chepren's Quarries in Southern Egypt", *Geoscience Canada 43*, 63–78.

HELDAL, Tom – BLOXAM, Elizabeth G. – DEGRYSE, Patrick – STOREMYR, Per – KELANY, Adel

2009 "Gypsum quarries in the northern Faiyum quarry landscape, Egypt: a geo-archaeological case study", in: Abu-Jaber, N. – Bloxam, E. G – Degryse, P. – Heldal, T. (eds.),

*QuarryScapes: ancient stone quarry landscapes in the Eastern Mediterranean*, Trondheim, 51–66.

HENDRICKX, Stan

2011 "Craft and craft specialization", in: Teeter, E. (ed.), *Before the pyramids. The origins of Egyptian civilization*, Chicago, 93–103.

HENDRICKX, Stan – EYCKERMAN, Merel

2009 "Les vases en pierre", in: Derriks, C. – Delvaux, L. (eds.), Antiquités Égyptiennes au Musée Royal de Mariemont, Mariemont, 299–457.

HILL, James, N. – EVANS, Richard, K.
1972 "A model for classification and typology", in: Clarke, D. L. (ed.), *Models in archaeology*, London, 231–273.

HOFFMAN, Michael A.

1979 Egypt before the pharaohs. The prehistoric foundations of Egyptian civilization, New York.

HUYGE, Dirk

2003 "An enigmatic Third Dynasty mastaba at Elkab", Egyptian Archaeology 22, 29-30.

JACQUET-GORDON, Helen

1962 Les noms des domaines funéraires sous l'ancien empire égyptien, Le Caire.

JÁNOSI, Peter 2005 *Giza in der 4. Dynastie*, Wien.

JÁNOSI, Peter - VYMAZALOVÁ, Hana

2018 "The decorated burial chamber of *Ppy-'nh Stw* at South Saqqara. Some preliminary observations", in: Jánosi, P. – Vymazalová, H. (eds.), *The art of describing. Studies in Honour of Yvonne harpur*, Prague.

## JÉQUIER, Gustave

1929 Tombeaux de particuliers contemporains de Pepi II, Le Caire.
1933 Les pyramides des reines Neit et Apouit, Le Caire.
1934 "Vases de pierre de la VI<sup>e</sup> dynastie", Annales du Service des Antiquités de l'Égypte XXXIV, 97–113.

JIRÁSKOVÁ, Lucie

2011 "Stone vessels of AS 54 at Abusir South. A preliminary report", in: Bárta, M. -

Coppens, F. – Krejčí, J. (eds.), *Abusir and Saqqara in the year of 2010, vol. II*, Prague, 447–464.

2013 "Stone tables of the Early Dynastic Period and the Old Kingdom reconsidered", *Archiv Orientální 81/3*, 1–24.

2014 "Kanopy v době Staré říše", Pražské egyptologické studie XIII, 49-55.

2015 "Damage and repair of the Old Kingdom canopic jars – the case at Abusir", *Prague Egyptological studies XV*, 76–85.

2016 "The Old Kingdom "kohl-pot" and its reinterpretation", *Prague Egyptological studies XVII*, 47–51.

2017a "Abusir miniature and model stone vessels of the Old Kingdom", in: Gillen, T. (ed.), *(Re)productive Traditions in Ancient Egypt. Proceedings of the conference held at the University of Liège, 6<sup>th</sup> – 8<sup>th</sup> February 2013, Liège 2017, Liège, 425–443.* 

2017b "Model stone vessels of the Old Kingdom. Typology and chronology", in: Bárta, M. – Coppens, F. – Krejčí, J. (eds.), *Abusir and Saqqara in the year 2015*, Prague, 145–156.

2019a "Tool marks on Old Kingdom limestone vessels from Abusir – production of canopic jars and model vessels", in: Squitieri, A. – Eitam, D. (eds.), *Stone Tools in the Ancient Near East and Egypt. Ground Stone Tools, Rock-cut Installations and Stone Vessels from Prehistory to Late Antiquity*, Oxford, 113–120.

2019b "Stone bowl with name of King Huni", in: Bárta, M. – Bareš, L. – Krejčí, J. – Megahed, M. – Varadzinová, L. (eds.), *Created for Eternity: greatest discoveries of Czech Egyptology*, Prague, 108–109.

In preparation "Stone vessels from the burial complex of Queen Khentkaus II at Abusir"

JONES, Dilwyn

2000 An Index of Ancient Egyptian Titles, Epithets and Phrases of the Old Kingdom, I–II, Oxford.

JUNKER, Hermann

1927 Vorläufiger Bericht über die vierte Grabung bei den Pyramiden von Gizeh, Vienna.
1929 Giza I. Die Mastabas der IV. Dynastie auf dem Westfriedhof, Wien – Leipzig.
1938 Giza III. Die Mastabas der vorgeschrittenen V. Dynastie auf dem Westfriedhof, Wien – Leipzig.

1941 Giza V. Die Mastaba des Śnb (Seneb) und die umliegenden Gräber, Wien – Leipzig.

1943 Giza VI. Die Mastabas des Nfr (Nefer), Kdfjj (Kedfi), K3hjf (Kahjef) und die westlich anschliessenden Grabanlagen, Wien – Leipzig.

1944 Giza VII. Ostabschnitt des Westfriedhofs, I, Wien-Leipzig.

1947 Giza VIII. Ostabschnitt des Westfriedhofs, II, Wien-Leipzig.

1950 Giza IX. Das Mittelfeld des Westfriedhofs, Wien: Rudolf M. Rohrer.

1951 Giza X. Der Friedhof südlich von Cheopspyramide, Wien.

1953 Giza XI. Der Friedhof südlich von Cheopspyramide. Ostteil, Wien.

KAISER, Werner - ARNOLD, Felix - BOMMAS, Martin - HIKADE, Thomas -

HOFFMANN, Friedhelm - JARITZ, Horst - KOPP, Peter - NIEDERBERGER, Walter -

PAETZNICK, Jean-Pierre - VON PILGRIM, Beatrice - VON PILGRIM, Cornelius -

RAUE, Dietrich – RZEUSKA, Teodozja – SCHATEN, Sofia – SEILER, Anne – STALDER,

Laurent - ZIERMANN, Martin

1999 "Stadt und Tempel von Elephantine: 25./26./27. Grabungsbericht", *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 55, 63–236.

#### KANAWATI, Naguib

1977 The Egyptian administration in the Old Kingdom: evidence of its economic decline. Warminster.

1980 The rock tombs of el-Hawawish. The cemetery of Akhmin, I, Sydney.

1981 The rock tombs of el-Hawawish. The cemetery of Akhmin, II, Sydney.

1982 The rock tombs of el-Hawawish. The cemetery of Akhmin, III, Sydney.

1983 The rock tombs of el-Hawawish. The cemetery of Akhmin, IV, Sydney.

1985 The rock tombs of el-Hawawish. The cemetery of Akhmin, V, Sydney.

1986 The rock tombs of el-Hawawish. The cemetery of Akhmin, VI, Sydney.

1987 The rock tombs of el-Hawawish. The cemetery of Akhmin, VII, Sydney.

1988 The rock tombs of el-Hawawish. The cemetery of Akhmin, VIII, Sydney.

1989 The rock tombs of el-Hawawish. The cemetery of Akhmin, IX, Sydney.

1992a The rock tombs of el-Hawawish. The cemetery of Akhmin, X, Sydney.

1992b Akhmim in the Old Kingdom. Part I: Chronology and Administration, Sydney.

1993a The tombs of El-Hagarsa I, Sydney.

1993b The tombs of El-Hagarsa II, Sydney.

1995 The tombs of El-Hagarsa III, Sydney.

2005 Deir el-Gebrawi I. The northern cliff, Oxford.

2007 Deir el-Gebrawi II. The southern cliff, Oxford.

2006 The Teti cemetery at Saqqara VIII. The tomb of Inumin, Oxford.
2011 The cemetery of Meir I. The tomb of Pepyankh the Middle, Oxford.
2013 Deir el-Gebrawi III. The southern cliff. The tomb of Djau/Shemai and Djau, Oxford.
2014 The cemetery of Meir II. The tomb of Pepyankh the Black, Oxford.
2015 The cemetery of Meir III. The tomb of Niankhpepy the Black, Oxford.
2017 The cemetery of Meir IV. The tombs of Senbi I and Wekhhotep, Oxford.

KANAWATI, Naguib - ABDER-RAZIQ, M.

1999 The Teti cemetery at Saqqara, Vol. V – The Tomb of Hesi. Warminster.
2000 The Teti cemetery at Saqqara, Volume VI – The Tomb of Nikauisesi, Warminster.
2001 The Teti cemetery at Saqqara, Vol. VII – The tombs of Shepsipuptah, Mereri (Merinebti), Hefi and others, Warminster.

KANAWATI, N. – HASSAN, A.

1996 *The Teti Cemetery at Saqqara, Vol. I – The Tombs of Nedjet-em-pet, Ka-aper and Others*, Sydney.

1997 The Teti Cemetery at Saqqara, Vol. II – The Tomb of Ankhmahor, Warminster.

KANAWATI, N. – MCFARLANE, A. – CHAROUBIM, N. – SALAMA, A. – VICTOR, N. 1993 Deshasha: the tombs of Inti, Shedu and others, Sydney.

KANAWATI, Naguib – SWINTON, Joyce 2018 Egypt in the Sixth Dynasty. Challenges and responses, Wallasey.

KANAWATI, N. – WOODS, A. – SHAFIK, S. – ALEXAKIS, E. 2010 *The tomb of Mereruka. Part III. Mereruka and his family*, Oxford.

KHALED, Mohamed Ismail

2020 The Funerary Domains in the Pyramid Complex of Sahura: An Aspect of the Economy in the Late Third Millennium BCE, Prague.

KLEMM, Rosemarie – KLEMM, Dietrich D.
2008 Stones and quarries in ancient Egypt, London.
2010 The stones of the pyramids: provenance of the building stones of the Old Kingdom pyramids of Egypt, Berlin.

KOBUSIEWICZ, Michal

2015 *The production, use and importance of flint tools in the Archaic period and the Old Kingdom of Egypt*, Oxford.

#### KOPP, Peter

2007 "Prä- und frühdynastische Steingefäße – Chronologie und soziale Divergenz", *Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo* 62, 193–210.

KORMYSHEVA, Eleonora – MALYKH, Svetlana – LEBEDEV, Maksim – VETOKHOV, Sergey

2018 Tombs of Perseneb, Ipy, and anonymous tombs GE 23, GE 40, GE 56, GE 57, and GE 58, Moscow.

#### KÖHLER, Christiana E.

2014 Helwan III. Excavations in Operation 4, Tombs 1-50, Rahden/Westf.

#### KÖSTER, Tina

2012 "Calcite-Alabaster as grave goods: Terminology and sources", in: Pfälzner, P. (ed.), (*Re-*)Constructing funerary rituals in the ancient Near East, Wiesbaden, 221–233.

#### KOURA, Basma

1999 Die "7-Heiligen Öle" und andere Öl- und Fettnamen: eine lexikographische Untersuchung zu den Bezeichnungen von Ölen, Fetten und Salben bei den Alten Ägypter von der Frühzeit bis zum Anfang der Ptolemäerzeit (von 3000 v.Chr. – ca. 305 v.Chr.), Aachen.

## KREJČÍ, Jaromír

2016 "Archaeological excavation of tomb AC 31 in Abusir Centre. A preliminary report", *Prague Egyptological Studies XVII*, 12–23.

KREJČÍ, Jaromír – ARIAS KYTNAROVÁ, Katarína – ODLER, Martin 2015 "Archaeological excavation of the mastaba of Queen Khentkaus III (tomb AC 30)", *Prague Egyptological Studies XV*, 28–42.

KREJČÍ, Jaromír – CALLENDER, Vivienne G. – VERNER, Miroslav 2008 Minor tombs in the royal necropolis I (The mastabas of Nebtyemneferes and Nakhtsare, pyramid complex Lepsius no. 24 and tomb complex Lepsius no. 25, Prague.

#### LABROUSSE, Audran

1996 L'Architecture des pyramides à textes I – Saqqara Nord. Vol. 1–2, Le Caire.

#### LACOVARA, Peter

1992 "Set of eighty model vessels", in: D'Auria, S. – Lacovara, P. – Roehrig, C. H. (eds.), *Mummies and magic: The funerary arts of ancient Egypt*, Boston, 77–78.

LACAU, Pierre Lucien - LAUER, Jean-Philippe

1959 La pyramide a degrés. T. 4., Inscriptions gravées sur les vases, I, Le Caire.

1961 La pyramide a degrés. T. 4., Inscripitons gravées sur les vases, II, Le Caire.

1965 La pyramide a degrés. T. 5., Inscriptions a l'encre sur les vases, Le Caire.

LEHNER, Mark

1985 "The Development of the Giza Necropolis. The Khufu Project", *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo 41*, 109–143.

LILYQUIST, Christine

1995 Egyptian stone vessels: Khian through Tuthmosis IV, New York.

LLOYD, A. B. – SPENCER, A. J. – EL-KHOULI, A. 1990 Saqqara tombs II. The mastabas of Meru, Semdenti, Khui and others, London.

LOAT, W. Leonard S.

1923 "A Sixth Dynasty cemetery at Abydos", Journal of Egyptian Archaeology IX, 161–163.

LUCAS, A.

1930 "Egyptian Predynastic stone vessels", Journal of Egyptian Archaeology XVI, 200-212.

LYTHGOE, Albert M.

1965 The Predynastic cemetery N 7000: Naga-ed-Der IV, Berkeley.

MACE Arthur C. 1909 The Early Dynastic cemeteries of Naga-ed-Dêr. Part II, Leipzig.

MACKAY, Ernest – HARDING, Lankester – PETRIE, Flinders 1929 *Bahrein and Hemamieh*, London.

MACY ROTH, Ann

1992 "The *psš-kf* and the 'Opening of the mouth' ceremony: A ritual of birth and rebirth", *Journal of Egyptian archaeology* 78, 113–147.

1993 "Fingers, stars, and the 'Opening of the mouth': Nature and function of the *ntrwj*-blades", *Journal of Egyptian archaeology* 79, 57–79.

1995 A Cemetery of Palace Attendants, Boston.

MACRAMALLAH, Rizkallah

1936 "Vases en pierre dure trouvés sous la pyramide à degrés", *Annales du Service des Antiquités de l'Égypte XXXVI*, 29–32.

MÁLEK, Jaromír

1979 "An ointment slab of Sekhemptah", Göttinger Miscellen 33, 35-47.

MALLORY, Leanne May

2000 *Predynastic and First dynasty Egyptian basalt vessels*, unpublished dissertation thesis, Department of Near and Middle Eastern civilisations, University of Toronto.

MALLORY-GREENOUGH, Leanne May

2002 "The geographical, spacial, and temporal distribution of Predynastic and First Dynasty basalt vessels", *Journal of Egyptian archaeology* 88, 67–93.

MANUELIAN, Peter Der

2010 "A Dig Divided: The Giza Mastaba of Heti, G 5480 (Giza Archives Gleaning IV)", in: Hawass, Z. –Manuelian, P. Der – Hussein, R. (eds.), *Perspectives on Ancient Egypt. Studies in Honor of Edward Brovarski*, Cairo, 235–272.

MARIETTE, August

1885 Les mastaba de l'Ancient Empire, Paris.

MARTIN, Geoffrey Thorndike

1981 The sacred animal necropolis at North Saqqara. The southern dependencies of the main temple comples, London.

MARTIN-PARDEY, Eva

1980 Eingeweidegefässe, Mainz am Rhein.1991 Grabbeigaben, Nachträge und Ergänzungen, Mainz am Rhein.

MARTINET, Émilie

2011 Le Nomarque sous l'Ancient Empire, Paris.2019 L'Administration provinciale sous l'Ancien Empire égyptien, I–II, Leiden – Boston.

MIDANT-REYNES, Beatrix 2003 *Aux Origines de L'Égypte*, Fayard.

MICHAŁOWSKI, K. – DESROCHES-NOBLECOURT, Ch, – DE LINAGE, J. 1950 *Tell Edfou 1939*, Cairo.

MINAULT-GOUT, Anne

2019 La vaisselle en pierre des reines de Pépy I<sup>er</sup>, Le Caire.

MINAULT-GOUT, Anne – BALLET, Pascale –WUTTMANN, Michel 1992 Le mastaba d'Ima-Pepi (mastaba II) – fin de l'Ancien Empire, Le Caire.

## MORENO GARCÍA, Juan Carlos

1997 Études sur l'administration, le pouvoir et l'idéologie en Égypte, de l'Ancien au Moyen Empire, Liège.

MORENO GARCÍA, Juan Carlos (ed.) 2013 Ancient Egyptian administration. Leiden.

MOUSSA, Ahmed M. – ALTENMÜLLER, Hartwig 1977 Das Grab des Nianchchnum und Chnumhotep, Mainz am Rhein.

MÜLLER, Hans Wofgang 1964 Ägyptische Kunstwerke, Kleinfunde und Glas in der Sammlung E. und M. Kofler-Truniger Luzern, Berlin.

MURRAY, Margaret Alice 1905 Saqqara mastabas. London.

MYŚLIWIEC, Karol (ed.) 2013 Saqqara V. Old Kingdom structures between the Step pyramid complex and the dry moat, Part 2, Varsovie.

NAVILLE, Edouard 1914 The cemeteries of Abydos. Part I. 1909–1910. The mixed cemetery and Umm el-Ga'ab,

NICHOLSON, Paul T. – SHAW, Ian 2000 Ancient Egyptian Materials and Technology, Cambridge.

ODLER, Martin

London.

2017 "For the temples, for the burial chambers. Sixth Dynasty copper vessel assemblages", in: Bárta, M. – Coppens, F. – Krejčí, J. (eds.), *Abusir and Saqqara in the year 2015*, Prague, 293–315.

2019 "Copper altar and set of miniaturised and model vessels from the burial chamber of Inti Pepyankh", in: Bárta, M. – Bareš, L. – Krejčí, J. – Megahed, M. – Varadzinová, L. (eds.), *Created for Eternity: greatest discoveries of Czech Egyptology*, Prague, 186–187.

ODLER, Martin – PETERKOVÁ HLOUCHOVÁ, Marie – HAVELKOVÁ, Petra – SŮVOVÁ, Zdeňka – ARIAS KYTNAROVÁ, Katarína – JIRÁSKOVÁ, Lucie – BRŮNA, Vladimír 2019 "A new tomb of transitional type from Abusir South: mastaba of Nyankhseshat (AS 104)", *Prague Egyptological Studies XXIII*, 49–82.

ODLER, Martin *et al.* 2016 Old Kingdom Copper Tools and Model Tools, Oxford.

OTTO, Eberhard

1960 Das ägyptische Mundöffnungsritual, I-II, Wiesbaden.

PAPAZIAN, Hratch

2012 Domain of pharaoh. The structure and components of the economy of Old Kingdom Egypt, Hildesheim.

PEET, T. Eric

1914 The cemeteries of Abydos. Part II. 1911–1912, London.

PEET, T. Eric – LOAT, W. L. S. 1913 *The cemeteries of Abydos. Part III. 1912-1913*, London.

PETRIE, W. M. Flinders

1898 Deshasheh, London.

1900 Dendereh, London.

1901 The royal tombs of the earliest dynasties, II, London.

1902 Abydos, I, London.

1907 Gizeh and Rifeh, London.

1920 Prehistoric Egypt. London.

1937 The funeral furniture of Egypt. London.

PETRIE, W. M. Flinders – MACE, Arthur C.

1901 Diospolis Parva. The cemeteries of Abadiyeh and Hu 1898-9, London.

PETRIE, W. M. Flinders – QUIBELL, J. E.

1896 Naqada and Ballas, London.

PETRIE, W. M. Flinders – BRUNTON, Guy – MURRAY, M. A. 1923 Lahun II, London.

PETRIE, W. M. Flinders – MACKAY, Ernest – WAINWRIGHT, Gerald A. 1910 *Meydum and Memphis III*, London.

PIACENTINI, Patrizia

1993 Zawiet el-Mayetin nel III millenio A.C., Pisa.

PORTER, Bertha – MOSS, Rosalind Louisa Beaufort – MÁLEK, Jaromír 1979 Topographical bibliography of ancient Egyptian hieroglyphic texts, reliefs, and paintings, III. Memphis, Part 2. Saqqâra to Dahshûr, Oxford.

POSENER-KRIÉGER, Paul

1976 Les archives du temple funéraire de Néferirkarê-Kakaï (Les papyrus d'Abousir). Traduction et commentaire, I–II, Le Caire.

POSENER-KRIÉGER, Paul – VERNER, Miroslav – VYMAZALOVÁ, Hana 2006 *The pyramid complex of Raneferef. The papyrus archive*, Prague.

PRYC, Grzegorz

2012 "Stone vessels" in: Chłodnicki, M. – Ciałowicz, K. M. – Mączyńska, A. (eds.), *Tell el-Farkha I. Excavations 1998–2011*, Poznań – Kraków, 297–314.

QUIBELL, James E.

1898 El Kab, London.

1913 The tomb of Hesy, Le Caire.

1923 Archaic mastabas, Le Caire.

RADWAN, Ali

1983 Die Kupfer- und Bronzgefässe Ägyptens: von den Anfängen bis zum Beginn der Spätzeit, München.

REISER-HASLAUER, Elfriede 1989 *Die Kanopen, Teil II*, Mainz am Rhein.

REISNER, Georg A. 1908 The Early Dynastic cemeteries of Naga-ed-Dêr. Part I, Leipzig. 1931 Mycerinus. The temples of the third pyramid at Giza, Cambridge.
1932 A provincial cemetery of the pyramid age: Naga-ed-Dêr. Part III, Berkeley.
1942 A History of the Giza Necropolis. Vol. I, Cambridge.

## REISNER Georg A. – SMITH, William S.

1955 A history of the Giza necropolis II. The tomb of Hetepheres the mother or Cheops, Cambridge.

## RICHARDS, Janet

2002 "Text and Context in late Old Kingdom Egypt: The Archaeology and historiography of Weni the Elder", *Journal of the American Research Center in Egypt 39*, 75–102.
2003 "The Abydos Cemeteries in Late Old Kingdom", in: Hawass, Z. (ed.), *Egyptology at the Dawn of the Twenty-first century. Proceedings of the Eighth International Congress of Egyptologists Cairo, 2000. Volume 1. Archaeology*, Cairo – New York, 400–407.

## ROCHHOLZ, Matthias

1996 "Zu den Paletten für die 7 Salböle", in: Schade-Busch, M. (ed.), Wege öffnen. Festschrift für Rolf Gudlach zum 65. Geburtstag, Wiesbaden, 223–231.

### RZEUSKA, Theodozja Izabela

2002 "The Necropolis at West Saqqara: The Late Old Kingdom Shafts with no Burial Chamber. Were they False, Dummy, Unfinished or Intentional?", *Archiv Orientální 70/3*, 377–402.

SALEH, Mohamed

1977 Three Old-Kingdom Tombs at Thebes, Mainz am Rhein.

#### SÄVE-SÖDERBERGH, Torgny,

1994 The Old Kingdom cemetery at Hamra Dom (El-Qasr wa es-Saiyad), Stockholm.

#### SEIDLMAYER, Stephan Johannes

1990 Gräberfelder aus dem Übergang vom Alten zum Mittleren Reich. Studien zur Archäologie der Ersten Zwischenzeit, Heidelberg.

SHAW, Ian

2010 Hatnub: Quarrying Travertine in Ancient Egypt, London.

SIMPSON, William Kelly

1978 The mastabas of Kawab, Khafkhufu I and II, Boston.

1980 Mastabas of the Western cemetery. Part I, Boston.

SOWADA, Karin N.

2010 "Forgotten Cemetery F at Abydos and Burial Practices of the Late Old Kingdom", in: Woods, A. – McFarlane, A. (eds.), *Egyptian Culture and society. Studies in Honour of Naguib Kanawati*, II, Cairo, 219–232.

SPARKS, Rachel Thyrza 2007 *Stone vessels in the Levant*, Leeds.

SPENCER, Alan Jeffrey

1980 Catalogue of Egyptian antiquities in the British Museum, 5. Early dynastic objects. London.

STEVENSON, Alice

2011 "Material culture of the Predynastic period", in: Teeter, E. (ed.), *Before the pyramids*. *The origins of Egyptian civilization*, Chicago, 65–74.

STOCKS, Denys A.

2003 *Experiments in Egyptian archaeology. Stoneworking technology in Ancient Egypt*, London – New York.

STOREMYR, Per – HELDAL, Tom – BLOXAM, Elizabeth – HARRELL, James A. 2003 *Widan el-Faras ancient quarry landscape. Northern Faiyum Desert, Egypt: Site description, historical significance and current destruction*, Report for the Expert center for conservation of monuments and sites, Zurich.

STRUDWICK, Nigel C.

1985 *The administration of Egypt in the Old Kingdom: the highest titles and their holders*, London.

2005 Texts from the pyramid age, Atlanta.

SWAIN, Sally

1995 "The Use of Model Objects as Predynastic Egyptian Grave Goods: An Ancient Origin for a Dynastic Tradition", in: Campbell, S. – Green, A. (eds.), *The archaeology of death in ancient Near East*, Oxford, 35–37.

ŠTĚPÁNOVÁ, Věra

2011 *Kamenné sarkofágy v Egyptě ve 3. tisíciletí před Kristem*, unpublished diploma thesis, Faculty of Arts, Charles University in Prague.

TALLET, Pierre

2018 La zone minière pharaonique su Sud-Sinaï – III., Les expéditions égyptiennes dans la zone minière pharaonique su Sud-Sinaï du prédynastique à la fin de la XX<sup>e</sup> dynastie, Le Caire.

TAWFIK, Sayed

1978 "Die Alabasterpaletten für die Sieben Salböle im Alten Reich", *Göttinger Miscellen 30*, 77–87.

TEETER, Emily (ed.) 2011b *Before the pyramids. The origins of Egyptian civilization*, Chicago.

THOMPSON, Elisabeth

2014 *The Old Kingdom cemetery at Tehna I. The tombs of Nikaiankh I, Nikaiankh II and Kaihep*, Oxford.

VACHALA, Břetislav

1981 "Neue Salbölpaletten aus Abusîr", Zeitschrift für ägyptische Sprache und Altertumskunde 108, 61–67.

1982 "Neue Salbölpaletten aus Abusîr – Addendum", Zeitschrift für ägyptische Sprache und Altertumskunde 109, 171.

2004 "Salbölpaletten aus Abusir-Süd", Göttinger Miscellen 199, 89-94.

VALLOGGIA, Michel

1986 Balat I. Le mastaba de Medou-Nefer, I–II, Le Caire.
1998 Le monument funéraire d'Ima-Pepy/Ima-Meryre, I–II, Le Caire.
2011 Abou Rawash I. Le complexe funéraire royal de Rêdjedef, Le Caire.

VAN WALSEM, R.

1978–1979 "The psš-kf. An investigation of an ancient Egyptian funerary instrument", *Oudheidkundige Mededelingen LIX–LX*, 193–249.

VARILLE, Alexandre 1938 *La tombe de Ni-ankh-Pepi a Zaouyet el-Mayetin*, Le Caire.

VERNER, Miroslav

1977 Abusir. The mastaba of Ptahshepses. Reliefs, Prague.
2001 The pyramids. Their archaeology and history, London.
2017 "Tajemství Ptahšepsesovy rodiny", Prague Egyptological Studies XVIII, 42–51.

VERNER, Miroslav et al.

2006 The pyramid complex of Raneferef. The archaeology, Prague.

VERNER, Miroslav – CALLENDER, Vivienne G. 2002 *Djedkare's family cemetery*, Prague.

VEREECKEN, Stefanie – DE MEYER, Marleen – DUPRAS, Tosha – WILLIAMS, Lana 2009 "An Old Kingdom funerary assemblage at Dayr Al-Barsha", in: Rzeuska, T. I. – Wodzińska, A. (eds.), *Studies on Old Kingdom Pottery*, Warsaw, 187–207, Pl. XVI.

VLČKOVÁ, Petra

2002 "Royal canopic jars from Abusir", Archiv Orientální 70/2, 147–162.2006 Stone vessels from the mortuary complex of Raneferef at Abusir, Prague.

WEILL, Raymond

1913 Catalogue des antiquités égyptiennes exposées au Musée des Arts Décoratifs et provenant de l'expédition de M. R. Weill (Campagne de 1913), Paris.
1958 Dara. Campagnes de 1946–1948, Le Caire.

WENGROW, David

2006 The archaeology of Early Egypt. Social transformation in North-East Africa, 10,000 to 2650 BC, New York.

WENKE, Robert J.

2009 The Ancient Egyptian State. The origins of Egyptian culture (c. 8000–2000 BC), New York.

WILLEMS, Harco – VEREECKEN, Stefanie – KUIJPER, Lucia *et al.* 2009 "An industrial site at al-Shaykh Sa<sup>C</sup>íd / Wádí Zabayda", Ägypten und Levante / Egypt and the Levant 19, 293–331.

WILKINSON, Toby H. A. 1999 *Early dynastic Egypt*, London – New York.

ZIEGLER, Christiane (ed.)

2007 Fouilles du Louvre a Saqqara I. Le mastaba d'Akhethetep, Louvain – Paris.

## **Internet resources:**

www.gizapyramids.org

http://giza.fas.harvard.edu/

- www.giza-projekt.org
- www.quarryscapes.no

https://manualzz.com/doc/36152359/tell-edfu

https://www.hierakonpolis-online.org/

https://www.ees.ac.uk/hatnub

https://archaeologydataservice.ac.uk/archives/view/oee\_ahrc\_2006/