Puzzling Fragments

Intentional Fragmentation of Stone Vessels in Context of Early Dynastic Burial Practices (Egypt)

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In memoriam of one of my supervisor Stan Hendrickx, whom I learned to know as a warm-hearted person. Not only his personal interest in the practice of fragmentation, but also his fundamental archaeological experience and kind support were a great inspiration to me.

Abstract

This paper focuses on the re-evaluation of stone vessel fragments from Early Dynastic tombs in the necropolis of Helwan, Operation 4. Repeatedly detected within undisturbed or well-preserved burials, some significant accumulations of stone vessel fragments can be argued as the result of ritual performances and therefore as intentional depositions. Thus, this case study challenges the traditional view of fragments as mere remnants of incidental taphonomic processes during the deterioration of the tombs. The research underlines the concept of burials as actively designed spaces, embodying culturally immanent ideas and serving as stages for human-thing interrelations. In this context, the fragmented vessels are not just static witnesses of funerary culture but active participants in ephemeral rituals. By integrating archaeological analysis with ritual studies, this paper argues that these artefacts provide insights into a practice of Early Egyptian funerary culture that has received little scholarly attention in the past.

Emphasizing some ritualistic aspects, the study draws on the idea that rituals are characterized by regulated, repetitive patterns which influence the placement of the grave inventory and are therefore traceable in archaeological records. In addition, a brief cultural-historical comparison is carried out with regard to the question of whether the destructive manipulation of objects, categorised today as small finds, was a common practice in the ancient Egyptian culture.

The paper concludes that the study of rituals in archaeology is not merely a theoretical addition but a methodological tool. By adopting a ritualistic lens, seemingly ordinary fragments are reinterpreted as extraordinary elements of ritual practices, thus offering a more nuanced understanding of ancient Egyptian cultural and funerary rituals.

1 Introduction

In his book 'Fragmentation in Archaeology', John Chapman points to a general issue in archaeological research by saying that most ancient artefacts are found broken, and that this breakage is commonly considered by archaeologists to be accidental.¹ This is all the more true for the

¹ Chapman 2000: i.

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category of so-called small finds, whose sheer quantity ties up many resources in their analysis and reconstruction. There is no doubt that heterogeneous archaeological material requires experts with the necessary expertise to process it properly. The process is often repetitive and timeconsuming, with attention focused solely on documentation. And even more often, these finds are perceived as so common and 'ordinary' that their potential for deeper historical insight is easily underestimated. However, previous conferences, such as "Excavating the Extra-Ordinary 1" and its successor, have demonstrated the need and the commitment to use interdisciplinary approaches in order to gain fresh perspectives on the material culture of the past.²

In this context, this paper deals with the re-evaluation of Early Dynastic stone vessels, or more precisely a specific group of fragmented vessels found in the tombs of the necropolis of Helwan, Operation 4 (Op. 4). These fragments occur repeatedly as remarkable accumulations in undisturbed or well-preserved burials. Consequently, and regarding their archaeological context, they cannot be interpreted as accidental, but as deliberate deposits.

Based on an understanding of burials as being actively designed and structured according to culturally immanent ideas, these deposits are not only to be seen as static 'witnesses' of a specific funerary culture, but rather as actants of reciprocal human-thing interrelations. The given funerary context makes it possible to combine the interpretation of the archaeological record with theoretical aspects of ritual studies. Within this interdisciplinary approach, rituals are considered as a multi-faceted cultural phenomenon and as mechanisms of social behaviour used for cultural-immanent communication. Rituals are therefore characterised by regulated, repetitive patterns that allow the attending group of participants to identify the specific meaning of the performed ritual.³ As a result, and in the author's opinion, these invariant repetitions are reflected in the constitutive design of ritual space and thus, depending on the degree of preservation, are also preserved within archaeological features.

As necropolis and the individual tombs are considered ritual spaces per se, the deposits of deliberately fragmented vessels can be discussed as such remaining characteristics and therefore as part or even more the result of ephemeral rituals.

In the past of archaeological disciplines, fragments have been widely accepted as the result of taphonomic processes and consequently as a 'typical' and accidental state of preservation that needed to be corrected by physical or graphical restauration. But in regard to their respective contexts, these distinct vessel fragments are more than just parts of a larger, and former complete vessel to which they are traditionally reconstructed.

Although it is an essential part of archaeological work, a significant amount of information is lost by limiting our attention to the aspect of reconstruction. It is only within their find context that the fragments reveal an informative potential that allows conclusions to be drawn about human interactions in the sense of current cultural and ritual studies via material culture.

² I wish to thank all the organisers, supporters and participants for this extraordinary conference, the fruitful exchange, and the opportunity to present my dissertation here. The dissertation was realised within the FWF-funded project "Helwan – A Necropolis of Ancient Memphis" under the supervision of E. C. Köhler, who I would also like to thank.

³ Michaels 2003; Krieger/Belliger 1998.



Fig. 1: Stone vessel fragments placed in an upright position in tomb N 559 at Naga ed-Deîr (Reisner 1932: pl. 7c)

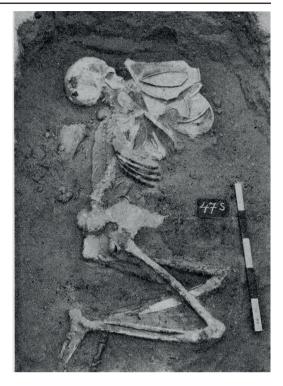


Fig. 2: Stone vessel fragments placed in front of the deceased in tomb M 47 at Macramallah's Rectangle (Macramalla 1940: pl. XVI)

The aim of this case study on selected tombs from Helwan, Op. 4, is to combine archaeological observations with concepts from ritual studies. To find practical applications for theoretical considerations, an attempt will be made to bridge an observed divergence in research literature between theoretical and practical (archaeological) reports. The archaeological documentation of Helwan, Op. 4 provides evidence to analyse similarities and repetitions concerning the deposition of vessel fragments. These are, e.g., the specific position of the fragments or their stratigraphical position in the tomb pit, or a certain orientation in front of the deceased. These three possible placements of fragmented vessels are striking and can be observed repeatedly in 36 tombs in Helwan, and in eight other cemeteries of the Early Dynastic Period (Figs 1–2).⁴

A comparative cultural-historical overview, focusing on the ritual of 'breaking the red pots'⁵, will show that there is evidence of deliberately broken objects in most periods of ancient Egyptian history. Destructive performances can thus be understood as a habit and part of social behaviour. So, this paper follows the bits and pieces of a history of fragmentation in perspective of Archaeology and Egyptology using ritual studies as a methodological tool, to discuss seemingly ordinary fragments as extraordinary parts of Early Dynastic funerary rituals.

⁴ Recently summarised in Kuch 2023 with focus on some examples from Helwan, Macramallah's Rectangle and Naga ed-Deîr.

⁵ Summarised by Hertel 2019.

2 Bits and Pieces on a History of Fragmentation

To illustrate the potential of small finds, especially sherds of stone vessels, a brief overview of the perception of fragments within archaeological research is given in the following. In the historical sciences, fragmentation is widely acknowledged as a challenging everyday problem, especially when it comes to the state of conservation and reconstruction.⁶ Over recent years, an interdisciplinary field of research has opened in which Archaeology, Heritage Conservation, Art and Literary Studies deal with this alleged problem in very different ways.⁷ In this interdisciplinary approach, Malcher et al. describe 'fragmentarity' in terms of three aspects: Fragments are considered as unusable (functional aspect), destroyed or incomplete (formal aspect), or unfinished (temporal aspect).

Fragments are reminiscent of the former original object they belonged to. Based on their inherent diagnostic features the fragments point to the object's former typology and primary function, which is, so to speak the initial purpose for which they had been manufactured. Following Malcher, 'fragmentarity' can therefore only be understood through the absence of completeness, but, at the same time, can only be identified if the original primary form is already known and is recognisable from the diagnostic features of the individual piece. As such, and spoken from an archaeological perspective, fragments are remnants of something that was once complete but has been damaged by external factors. Therefore, 'fragment' or 'fragmentary' refers to the external, incomplete form of things. Fragmentation suggests the absence of completeness and is usually perceived as a negative flaw.⁸

From an archaeological point of view, fragments, and especially diagnostic ones, point to initial conditions and allow the identification of typological developments in material culture. As such, fragments are to be understood as constituent parts, that refer to the former complete object and its materiality. Through their form-specific materiality, fragments allow conclusions to be drawn about the original object, its previous form and function, which are no longer available due to their fragmentary character. As a result, the object-specific or graphical reconstruction of objects has become a focus of archaeological work. But this merely permits the documentation of the objects' previous form, which is strongly connected to its former primary function.⁹ Consequently, archaeological artefacts, as stone vessels, can at least theoretically be restored to their typological form, which can be determined from the diagnostic fragments. On this basis, the primary function of the vessel is usually assumed to be a container used for food service or storage. A possible reuse is only partially evident from physical alterations on fragments, and a secondary re-use can hardly be uncovered by a solely object-related reconstruction. As a consequence, archaeological reconstruction projects complete, intact objects, regardless of how they are actually preserved. Archaeological research is thereby (mis-)directed towards a supposed

⁶ Verbovsek 2013: 86–87.

⁷ Malcher et al. 2013: 10.

⁸ Malcher et al. 2013: 11.

⁹ Malcher et al. 2013: 13; Chapman 2000: 7–26; Schreiber 2013: 65.

physical integrity of material culture, which is vice versa reproduced through the reconstruction of the excavated fragmentary material. Still, technical or graphical reconstruction is an essential part of archaeological research regarding typology or chronology of material culture. However, it also tempts us to stop asking about the fragments' origins. Our archaeological field experience allows us to interpret fragmentation all too quickly as a by-product of taphonomy and contextual genesis – and thus as coincidence. But, to evaluate fragments resulting from deliberate actions, it is worth looking at the 'object biography' of the pieces.¹⁰ The aim here is not to identify the individual steps of production, use, re-use, and disposal in a presumed 'life' of a vessel or its fragments. These stations are hardly archaeologically traceable and lead to a generalisation of the use-life (Gebrauchsleben) of Early Dynastic stone vessels.¹¹ Stone vessels are generally assumed to be intended for a use as containers, commonly ascribed the function of storage, provisioning or serving, and which is therefore regarded as the primary function and reason for production. Accidental fragmentation occurs towards the end of the object's 'life', in the time span between the objects' deposition and their archaeological rediscovery. In this sense, archaeological reconstruction jumps straight back from the discovery of fragments at the end of the vessels' biography to its starting point as a complete primary object.

In contrast, some undisturbed tombs found in Helwan, Op. 4, display some vessels that had been physically manipulated or completely fragmented clearly before their deposition. The intended primary function is now no longer available, and it is reasonable to assume a new object-biographical phase. Consequently, the act of fragmentation must be emphasised as a deliberate change within the vessels' biographies. Fragmentation is therefore the result of a deliberate act and not the end of the biography, but rather an essential part of it. The broken stone vessels do not necessarily become unusable or functionless but are given a further, new function and presumably also a different connotation.

2.1 The Egyptological Approach to Intentional Fragmentation

The observation of such deposits of deliberately fragmented stone vessels is not particularly new. To the authors' knowledge, the earliest mention of deliberate vessel fragmentation concerning ancient Egypt dates from 1897 by Jacques Jean Marie De Morgan.¹² In the context of his discoveries in the so-called 'Royal Tomb' or 'Tomb of Menes' at Naqada, De Morgan mentioned the discovery of scattered fragments as the result of an intentional distribution. In his proposed interpretation, De Morgan referred to the then already known phenomenon of fragmentary hieroglyphs, e.g. the dismemberment of the sign of the snake.¹³ De Morgan also drew parallels to similar practices, such as the bending of weapons in the tombs of Bronze and Iron Age Europe, and interprets the fragmentation of the vessels as a deliberate act of required ritual

¹⁰ Samida 2010: 90.

¹¹ Assmann 2007: 33; Sommer 2012: 20.

¹² De Morgan 1897: 150.

¹³ Kahl 2000: 125–129.

killing to transfer the objects to the hereafter.¹⁴ Although the comparative cultural approach seems very forward-looking for that time, the explanations are nevertheless open to criticism, because culture-specific practices from different eras are mixed together without question and are summarised into a single generalised ritual.¹⁵

Another example of examining the aspect of deliberate fragmentation can be found in Dow Covington's report on the so-called 'Covington's Tomb'. The tomb was excavated during the 'Mastaba Mount Excavations' in Giza in 1902–03. In one corridor, Covington noticed a particular distribution of fragments that looked as if they had been thrown there intentionally.¹⁶

Concerning excavations at Naga ed-Deîr by Arthur Mace and later by George Reisner, an intentional fragmentation prior to the closure of the tombs was discussed briefly in their publications. Especially Mace stressed the discrepancy of fragmented vessels in intact contexts in more detail and considered a ritual component, but also a destruction as protection against looting.¹⁷

In 1936, Rizkallah Macramalla described a find situation of intentional fragment deposition in tomb 4 of the M tombs near Saqqara. Particularly striking is that he mentioned the intact state of the burial. In contrast, the pieces of a broken vessel were found to the east and west of the feet of the burial, and Macramallah concluded that they had been deliberately broken before the tomb was sealed. Relating to the aforementioned excavators, Macramallah also believed the vessels were being made unusable as protection against grave robbery.¹⁸

More references could be cited, but with the publication by Kurth Sethe on deliberately destroyed pottery vessels inscribed with execration texts,¹⁹ the discussion about meaningful fragmentation shifts to a more philological approach. Together with the ritual of 'breaking the red pots', the act of fragmentation was then associated with and generalised to the ritual killing of enemies, and archaeological evidence was often interpreted in this way till today.

Finally, more recent archaeological observations add new impetus to the debate. Besides the actual analysis of the tombs at Helwan by Christiana Köhler, some further insights are discussed, e.g. by Stan Hendrickx, who recently re-evaluated an intentional fragmentation of pottery vessels found in tomb 77 at Elkab.²⁰ Furthermore, Pablo Barba was able to trace intentional breakage of pottery back to 4th millennium BCE. And concerning stone vessels, Lisa Mawdsley presented several intentionally destroyed examples from the necropolis at Tarkhan stressing a fragmentation prior to a seemingly orchestrated deposition.²¹ But in order to highlight the destructive performance in the context of funerary culture, the focus will be on the Helwan necropolis, Operation 4.

¹⁴ De Morgan 1897: 150.

¹⁵ This is also true for the later work by Leslie V. Grinsell in 1961 and 1973, often quoted in Egyptological research.

¹⁶ Covington 1905: 217.

¹⁷ Reisner 1932: 235; Mace 1909: 36.

¹⁸ Macramallah 1940: 11, 23 with footnote 2 and pl. V; this tomb contained the burial of a man on his left side with his head orientated to the north.

¹⁹ Sethe 1926.

²⁰ Hendrickx 2020: 174–175.

²¹ Barba 2021: 17–20; Mawdsley 2020: 165–87.

3 The necropolis of Helwan, Operation 4 as ritual space

The Helwan necropolis is situated 21 km south of Cairo on the east bank of the Nile. Despite some earlier investigations, it was not until 1942–54 that extensive excavations were carried out by Saki Zaad, resulting in the discovery of 10,000 tombs. So far, Helwan is the largest known necropolis of the Early Dynastic Period. Adjacent to Memphis, the former centre of ancient Egypt at that time, the material culture of the tombs allows a glimpse into a broad cross-section of the social demography of the inhabitants of ancient Memphis and their private funerary culture.

Since 1997, an undisturbed part of the site, referred to as Operation 4 (Op. 4), has been investigated under the direction of Christiana Köhler. The total of 218 discovered tombs date from the late 1st to early 4th Dynasty (Date Groups IIIC-IV), with a high point of occupation during the 2nd and 3rd Dynasties.²² The area of Operation 4 has not been the subject to archaeological investigation in the past, making it a suitable starting point for investigation according to modern archaeological research methods. This area is well defined, and its documentation provides detailed access to the small finds discovered in the Early Dynastic tombs.

In terms of ritual studies, there is no doubt that tombs and necropolises are culturally immanent and ritually defined spaces. And the same is true of the actions performed in these contexts. Space, and especially burial space, is therefore no longer regarded as a parameter to which people and things act independently and without reference. Spatial structures or 'spatial determinations' actively result from social dynamics of human interactions and are thus an expression of typical historical socialisation.²³ Therefore, burials can be understood as a direct result of dynamic processes and as expressions of social practices. Cultural immanent beliefs are manifested in the architecture and equipment of tombs as well as in the treatment of the deceased and became a constitutive reality. Through the transmission of these practices and especially their repetitions, they became tradition and finally a part of cultural memory. Tombs and burial rituals thereby have both a preserving and a formative function.

However, the idea of a ritualised distribution of grave goods is not new and was already postulated e.g. by Petrie. In more recent research, statistical analyses have also been conducted on this subject, e.g. by Alice Stevenson for El-Gerzeh or Barbora Janulíková. With a focus on the M tombs from Macramallah's Rectangle, Turah and also Helwan, Janulíková used statistical analyses of cemetery data comparing specific funerary parameters in order to analyse the complexity of Early Dynastic society.²⁴ But statistics often display fluctuations that are interpreted as supposed deviations and which are usually explained by the problem of sheer quantity or, on

²² Compare Köhler 2005; Köhler 2014; Köhler 2017; in detail see Köhler 2008: 113–114.

²³ Löw/Sturm 2005: 34.

²⁴ Stevenson 2009: 130 with reference to Petrie 1939: 35; Janulíková 2018, cf. 167 and fig. 5.14; Janulíková 2018, 274 with fig. 8.2.

the contrary, the lack of available data. However, it is rarely considered that human behaviour does not necessarily follow such exact patterns.

In this respect, Janulíková's work is essential, as she defined an 'ideal burial' and deviations are not understood as statistical flaws, but as deliberate variations: the tomb and the burial equipment are based on a principal scheme, which could be modified depending on the resources available. As an absolute minimum, the deceased must be protected in a tomb structure, additionally by a mat or coffin, and provided with some parts of an offering meal. Ritually necessary vessels for oil can be a lower priority addition, and personal belongings have the lowest priority (comp. Fig. 5). Variations from such a basic configuration and their prioritisation can be made depending on the available resources and on the social possibilities of the acting group or community. Consequently, such variations are reflected in the archaeological contexts and are not statistical inaccuracies but rather the outcome of human behaviour.

But even in these investigations little distinction is made between intact and fragmented objects. Instead, it is suggested that all objects found are part of the supplies and equipment for the deceased. Based on the evidence from Helwan, the author suggests that the depots of fragmented vessels may not have been part of standardised funerary equipment. Perhaps they are not meant for the dead to use in the afterlife, but rather as an aspect of communal rituals that relate more to the living. In this sense, burial sites are institutionalised spaces of a community. As communal spaces, they frame concepts of death or memory, but they also reflect interpersonal hierarchies and relations, and some aspects of culture- or group-specific habitualised manifestations are to a certain degree preserved in the burials and remain in the archaeological features.

3.1 Depositions of Stone Vessels Fragments in Helwan, Op. 4

To provide evidence for the aforementioned claim, let us finally take a closer look at the archaeological records in Helwan, Op. 4.²⁵ Especially in undisturbed or well-preserved contexts, the position of some stone vessel fragments does not appear erratic. It is necessary to identify characteristics that can explain such distributions and thus distinguish them from accidental taphonomic context genesis. For this, the following considerations can be made:

- 1. object-inherent evidence: distinct cut marks on the fragments indicate deliberate destruction by tools.
- 2. contextual indications: as briefly mentioned above, fragments of some stone vessels are found in a position that cannot be explained as the result of taphonomic disturbances. Especially in undisturbed contexts, these are fragments that are stuck in the ground in an upright position, or piled on top of each other, or placed next to each other. Also, there are matching fragments that lie at a considerable distance to each other or at different

²⁵ Köhler 2014: 18.

stratigraphical levels. The position of the fragments can therefore be seen as a deliberate placement that can only be realised if the vessels have already been fragmented before.

The best examples to highlight the described indicators of intentional fragmentation or deliberate deposition of fragmented vessels occur in the simple pit tomb 4/190 and the subterranean chamber tomb 4/94, that will be briefly illustrated in the following:

The intact simple pit tomb 4/190 (date group Naqada IIIC/D)²⁶ contained the burial of a mature adult woman and two deposits of deliberately fragmented stone vessels. At a higher level above the coffin the siltstone bowl S09-23 was found,²⁷ divided into two halves. The reconstruction of the bowl reveals a prominent cut mark in the centre of the base, a sign of deliberate fragmentation by a tool. But even more interesting is the position of the two halves, east and west of the coffin: in an undisturbed tomb, with no evidence of taphonomic interferences, this specific distance between the fragments can only be explained by a deliberate placement. Similarly, the cylindrical calcite vessel S09-22 was found at the bottom of the pit. The fragments were placed one after the other and parallel to the eastern coffin wall. This was only possible if the jar was deliberately destroyed prior to the rearrangement of the fragments. Further, the stratigraphic documentation of the fragments allows a reconstruction of their position in relation to the coffin: the specific distance and the deposition of fragments on different stratigraphic levels was only possible during the process of backfilling of the burial pit (Fig. 3).

Tomb 4/94 (date group Naqada III D3) is a subterranean chamber tomb characterised by a massive substructure and a steep descent leading to an underground burial chamber.²⁸ The burial chamber was enclosed by a mud-brick wall and protected by a massive stone portcullis. However, the upper third of the portcullis was damaged by grave robbers and the fragments were randomly scattered within the descent. As a result, the underlying archaeological features were protected and could be documented in situ. A total of seven stone vessels were found here, scattered in multiple and very small fragments.²⁹ Interestingly, several fragments of the same vessel were detected in the entrance as well as in the undisturbed context under the portcullis. Apparently, the sherds were deposited after the deceased had been placed in the main chamber, but before the chamber was sealed and the portcullis was lowered, indicating their deposition as a ritual performance marking the closure of the tomb.

Furthermore, the mainly calcite fragments could be fully reconstructed into jars and bowls, and some of them are of above average size: bowl S05-155 has a maximum diameter of 68 cm, a height of approximately 14 cm and a total weight of 11 kg. The cylindrical jar S05-157 has a height of 62.5 cm and the jar S05-158 measures 50.5 cm with a total weight of 21 kg.

Similarly, the mentioned indicators of intentional destruction or at least an intentional deposition of prior fragmented vessels could be identified in 36 of the 218 tombs at Helwan, Op. 4. Due to their state of preservation, an evaluation of the archaeological context was only

²⁶ Tomb 4/190 at Helwan, Op. 4 has already been discussed in more detail in Kuch 2021: 397–398, fig. 1a–b, and Kuch 2023.

²⁷ Köhler 2016: 30, fig. 5.

²⁸ Köhler 2017: 36-37, 363-380.

²⁹ Köhler 2017: pl. 56-57.

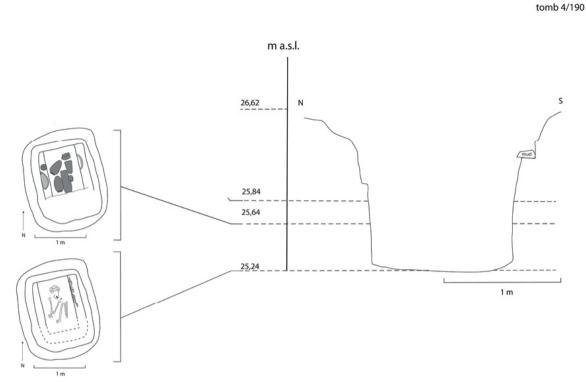


Fig. 3: Sketch of tomb 4/190 to visualise the different stratigraphical levels of the fragment deposits indicating a sequence of their placement during the backfilling of the pit. Graph © Helwan Project, adapted by N. Kuch

possible in 29 of them. Interestingly, the fragments found in the deposits of these 29 tombs could be reconstructed to a great extent resulting in 101 complete vessels.³⁰

In search of more information, possible connections were investigated by analysing the fragmented vessels, the tomb construction and its inventory, as well as the age and biological sex of the deceased resulting in the following observations:

Out of the 29 contexts, 19 deposits are located in simple oval or rectangular pit tombs, and eight of these burials were discovered intact and considered as primary contexts, that offer the best evidence.³¹ Another 7 pit tombs are considered to be good features, while 4 are problematic because of looting and destruction.³² 10 deposits of vessel fragments occur in subterranean chamber tombs but are much more difficult to evaluate due to repeated looting and disturbances of the archaeological features.³³

In the 29 tombs, 34 individuals were uncovered, and 25 of these could be anthropologically determined: 16 are biologically male (47%), and 9 female (26%), ranging in their age between

³⁰ Kuch 2023.

³¹ These are the tombs: 4/14, 4/51a, 4/87,4/102, 4/120, 4/151, 4/177, 4/190.

³² Slightly altered examples, but with still good contexts are tombs 4/8, 4/55, 4/114, 4/136, 4/29, 4/134, 4/140. Showing more disturbances, but with some preserved parts, the tombs 4/73, 4/85, 4/87, 4/117 are considered as problematic contexts.

³³ Tombs 4/94 and 4/116 revealed significant evidence in the well-preserved entrance area. Tombs 4/123, 4/153, 4/206 and tombs 4/46, 4/69, 4/90, 4/96, 4/139 are problematic.

infant (0–3 years) to mature adult (>46 years), with a peak on 13 middle-adult (36–46 years) individuals (38%).³⁴ Most of the deceased had been buried lying on their left side with the head to the north and facing east, but there are also variations possible.

So far, the examined aspects do hardly present any similarities that would allow to decide to whom and why such a specific aspect of burial practice is given. However, there are two distinctive elements that were repeatedly observed: in subterranean chamber tombs, the fragments are deposited at the lower end of the descent and directly in front to the burial chamber. In contrast, in simple pit tombs that do not have such a distinct entrance, the stone vessel fragments are located mainly in the narrow peripheral areas between the coffin and the walls of the burial pits. Matching fragments can also be placed at different stratigraphical levels, and sometimes a fragment is deposited in an additional depot of pottery vessels. As a result, these are specific, repetitive features of possible ritual performances that have been preserved within archaeological features, and which will be discussed as aspects of ritual performances in the following.

4 Fragments of a Ritual

Assuming that the deposition of deliberately destroyed stone vessels represents a ritual act, or the result of such a practice, their aforementioned characteristics need to be analysed.

Rituals are regarded as symbolic actions that can be found in almost all fields of cultural life and are closely linked to social interaction and identity. Essentially, rituals serve to convey specific ideas and are therefore a tool for communication in a wide variety of contexts. Thus, ritual can be defined as a specific type of social behaviour that can be learned, understood and inherited. As such, ritual behaviour is part of a socialisation process within a culture- or group-specific habitus. In this sense, rituals have a twofold function, as they communicate meaning and reflect social aspects through performance. Simultaneously, these aspects are received, shared and passed on in a meaningful way through the acceptance and participation of a community.³⁵ After Alex Michaelis and Jan Platvoet, rituals are consequently regulated actions that fulfil certain criteria, which, depending on the context and dynamics, can be prioritised differently and are therefore polythetic. Such criteria or characteristics are key symbols, performance, localisation, and formality.³⁶ They are used to structure ritual actions in order to distinguish them from other actions. Further, these actions are specific and characteristic,

³⁴ Overview given in Marshall 2021; in detail see also Köhler 2014; Köhler 2017; Köhler 2021. However, it should be noted that these data derived from 29 of the 218 tombs that were located in the artificially selected excavation area. In contrast to the 10,000 only marginally investigated tombs at Helwan this can hardly be considered statistically significant. None-theless, it is apparent that the practice was not exclusively restricted to men. Cf. Kuch 2023.

³⁵ Krieger/Belliger 1998: 7; Michaels 2003: 3-5.

³⁶ Michaels 2003: 4f.; Platvoet 1998: 187.

and are therefore recognisable and perceivable as typical for a specific ritual.³⁷ This means that rituals are sequences of actions that are standardised and mandatory to a certain extent, while other aspects can be varied as long as the basic features of the ritual are still recognisable.³⁸ This will be discussed and demonstrated on the basis of the mentioned aspects of rituals: key symbols, performances, localisation and formality.

4.1 Stone vessels as key symbols in context of transformation and performances

Regarding their shape and material, in other words, their materiality, the specific fragmented vessels are no different from other vessels found within the mentioned tombs.

Most of the vessels are simple bowls (72 pcs.; 71%), cylindrical (20 pcs.; 19,8%) or ovoid vessels (9 pcs.; 8,91%). Chosen materials are calcite (72 pcs.), limestone (20 pcs.) or siltstone (7 pcs.) and gneiss (2 pcs.).³⁹ As these are the most common materials and forms concerning stone vessels during the Early Dynastic Period, it can be assumed that the chosen vessels only have undergone a change in meaning or connotation through their use in ritual contexts. And the new function as ritual objects thus becomes part of their object biography as well as the act of fragmentation.

The object biography starts with the manufacture of an item and is produced according to an intended purpose which can be considered its main or primary function.⁴⁰ The Early Dynastic stone vessels are generally assumed to have a purpose as containers used for storing or serving in the funerary context, and which is therefore the primary function and reason for their production. However, certain vessels are given a complete fragmentation, whereby this primary function is no longer available, and things can be used in other ways according to the user's intention. Such a transformation or reinterpretation of these specific vessels is achieved through a specific treatment of the object, which is preceded by a change in the ascribed meaning. So, because of the performative act of fragmentation, these vessels are initially recognisable as characteristic key symbols within the burial contexts. Accordingly, key symbols experience an appropriation of meaning that can be expressed via an operational dimension.⁴¹ The meaning of the vessels is therefore not inherent to the object, but changes according to how they are used and in what context. The vessels thus become carriers of meanings that are projected onto the object. In other words: It is only through human attribution that things become active

³⁷ This means that specified objects, texts or gestures are to be used for a particular ritual. These clarify which ritual is intended and may not be changed in the interests of general recognition: imagine the potential confusion of dyeing eggs for Christmas.

³⁸ Humphrey/Laidlaw 1998: 148.

³⁹ Kuch 2023: 139.

⁴⁰ Schreiber 2013: 65–66.

⁴¹ Meier/Zotter 2013: 137, 139.

carriers and mediators of meaning, and the stone vessels are transformed into active actors of communication.⁴²

Nevertheless, only some vessels revealed destruction through the deliberate use of tools. The destructive act itself is considered a dramaturgical moment, but that is only implied by recognisable cut marks, and of course by the fragments and splinters. However, the broken pieces only indirectly refer to the performative act of destruction. And the fragments as such only have limited informative potential. Only in an archaeological context do the fragments reveal more information and it can be decided whether the fragmentation was accidental or deliberate. The performative act of destruction, however, is ephemeral and not archaeologically recognisable. So, we must focus on another aspect of performance, that is preserved in the archaeological features: the position of the vessel fragments and their spacial relation to the deceased.

In the notion of performance as a conscious and multimedial presentation of key symbols, the process of deposition becomes an essential moment of the ritual act. This is particularly the case, as archaeological evidence has shown, when the fragments were located in specific places within the tombs and even at different levels in the tomb's stratigraphy.

As mentioned above, the subterranean chamber tombs provide evidence that fragmented vessels were deposited in the entrance area and in the context of the closure of the tomb. Pit tombs, in contrast, lack such a prominent entrance area. Still, the performative aspect of the deposition within the pits can be emphasised by the documented stratigraphy. The deposits of fragmented vessels mentioned in tomb 4/190 were situated at the bottom of the pit and in an upper layer above the coffin (comp. Fig. 3). This stratigraphical difference can only be achieved if the deposits were placed during the backfilling of the pit. A similar situation can also be observed in some other pit tombs and allows for the reconstruction of a complex of performative action: at first, the deceased was buried in the centre of the pit, often in a coffin and sometimes accompanied by some grave goods. Regarding their proximity to the deceased, these grave goods are usually considered personal belongings. Further, the intentionally fragmented vessels were orchestrated along the sides of the coffin. In some cases, matching pieces are placed at higher levels of the tomb during the backfilling and therefore the closure of the tomb. The act of fragmentation and the deposition afterwards can therefore be emphasised as a dynamic process through which meaning or meaningful content is represented and can thus be regarded as constitutive action.⁴³

Performances are often non-verbal or expressed through the use of facial expressions, gestures, clothing, or music etc. And such key symbols must be symbolically connoted so that the participants in the ritual can still recognise and understand their meaning.⁴⁴ Even if these expressions and meanings are ephemeral by nature and long gone, the deposits visible in the archaeological features can still be seen as direct results of these ritual actions.

⁴² Philipp Stockhammer argues for the term 'effectancy' to emphasise that things do not literally 'act', but rather have an effect on people based on the ascribed connotation. Cf. Stockhammer 2016: 336; Keßeler 2016: 344–345.

⁴³ Krieger/Belliger 1998: 9–10

⁴⁴ Harth/Michaels 2004: 10, 17; Tambiah 1998: 230. Concerning Early Dynastic burial practice, such aspects are hardly traceable or preserved within the archaeological sources.

4.2 Localisation and formality of fragment depositions

The examination of the fragments within their find context allows further conclusions to be drawn about two other important characteristics of ritual practices: localisation and formality. According to both Michaels and Platvoet, localisation corresponds to a specific place and time of a ritual. This means not only a certain point in time for the performance of the entire act, but also certain moments within the ritual process that highlight and frame specific actions.⁴⁵

Concerning the fragmented vessels, their object biographies provide a relative chronological localisation within the context of the burial. As mentioned above, the specific deposits contained all the fragments and even the smallest chips, so that the vessels could be almost completely reassembled, indicating that their destruction took place directly at the tomb. The stratigraphy of their deposition show that the broken vessels were placed during the closure of the tomb. Consequently, the act of fragmentation and the performative deposition constitute a sequence of funerary practices that take place between the interment of the body and closure of the tomb.

Within this framework, it is the formalised arrangement of the fragments that emerges as a repetitive element in the tombs. Formality, as a ritualised characteristic, refers to the standardised, repetitive, and thus recognisable and meaningful sequences of ritual behaviour.

The ritual acts are communicated non-verbally or through codified verbalisations. Adhering to a form is necessary so that the participants can recognise a certain aspect of the ritual and respond accordingly. In other words, there is a need for determined key symbols and regulated processes which, as essential features of ritual behaviour, are not allowed to be changed. And it is eventually these same formal fixations that are reflected in the archaeological features.

As the deposits of vessel fragments only concentrate in the entrance of subterranean chamber tombs, these formalities can be followed best in the intact or well-preserved pit tombs. Where possible, deposits of vessel fragments are separated from other grave goods. And the fragments were mainly to be found in the side areas between the coffin and the walls of the burial pit. Moreover, there seems to be a connection between the placement of the fragments and the orientation of the deceased, as the deposition was often organised in front of them. If the burial was oriented towards the east, the fragments were also found lying along the eastern side of the tomb. If the orientation of the burial differed, e.g. the head was oriented towards the south and the face towards the east or west, then the fragments were also adapted to the respective orientation (Fig. 4).

Although fragments of a vessel may have been placed at varying levels, the side in front of the deceased was selected for the initial deposition. Subsequently, further deposits were made on the other sides of the pit, and at different levels. However, it should be noted that such depositions were also found on all sides around the coffins. The choice of their placement is therefore less formalised, and variations are possible. Nonetheless, the observed tendency to position the fragments in front of the deceased is striking, even if the meaning of this may be lost.

⁴⁵ Michaels 2003: 4, Platvoet 1998: 175–182.

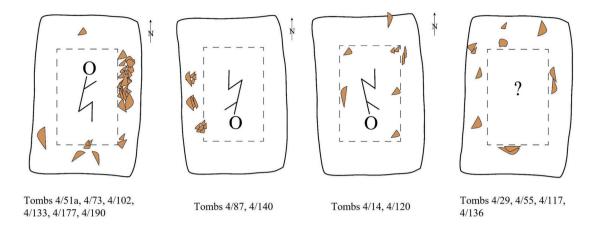


Fig. 4: Scheme illustrating the distribution of deliberately placed vessel fragments in relation to the orientation of the deceased, Helwan, Op. 4 (by N. Kuch)

Based on these observations, it is possible to discern a spatial structure and organisation of the space within the burial pit: in the interpretation of burial goods, a generalised differentiation is typically made between personal belongings and general tools and supplies. Adornments such as bracelets, necklaces, or toiletries, for example, are located close to the deceased and are therefore considered as personal belongings. In contrast, equipment and storage jars that are meant as supplies in the hereafter, are located in side areas of the burial pit or in additional storage chambers. The fragment deposits are located in the immediate vicinity of the coffin, in the side areas of the pit tombs or in the entrance area of the subterranean tombs. So, it seems plausible that the spatial arrangement of the grave goods indicates a separation based on their function, and that the fragmented vessels do not seem to belong to either of these two categories. Probably, they might be neither part of the personal belongings placed close to the body, nor of the supplies and equipment to ensure continued existence in the afterlife. As a result, and in the author's opinion, the burial space is not only to be organised in two but rather three areas: An inner area, as a sphere of direct mortuary treatment and equipment. In reference to Janulíková this is also the minimum of an ideal burial. In a second, outer sphere, there can be additional equipment and supplies as well as conducting final ritual acts at the tomb. Also, these may take place after a certain time or be repeated regularly and relate to maintenance of the funerary practice by the family or community.⁴⁶ This reveals a ritual structure where fragment deposits occupy an intermediate position, not only through their location in the side areas but also between these two spheres. The deposits are regarded as visual markers and create a third, more ephemeral sphere between the two mentioned, and in which fragmentation and deposition play an essential role as part of culturally immanent practices for the living.

⁴⁶ Comparable aspects during the Old Kingdom are discussed by Fitzenreiter 2006: espc. 75–106.

4.3 Preliminary conclusions on a ritual of fragmentation

Based on the observed patterns, which were considered characteristic aspects of ritual performances, it was possible to identify further comparative depositions of vessel fragments in Early Dynastic cemeteries in Northern and Southern Egypt. Looking for these characteristics, they can even be recognised in photographs of older archaeological publications from the 20th century. And even if the stratigraphic information is lacking, it is possible to detect noticeable accumulations of fragments in direct vicinity to the deceased and mainly at the ground of pit tombs.

In total, over 100 tombs could be identified in 9 cemeteries including Helwan, Op. 4 (36 tombs), Macramallah's Rectangle (34 tombs) and Naga ed-Deîr (27 tombs, areas N 500, N 600, N 3500, N 3000). In the author's opinion, there are also occasional examples to be found in Elkab and Abydos, or in the Delta, e.g. in Abu Roash and Turah, or Tell el-Farkha and Tell el-Murra.⁴⁷

Regarding the aforementioned observations, there are significant similarities, which will be summarised in regard to the observations made in Helwan. Depending on the published information, the deposits of vessel fragments were analysed in question of a possible relationship to the burial type, the age and biological sex of the deceased, as well as relation to other grave goods.

As a first summary, these deposits occur in burials of men, women, and children of different ages. There are also differences in the construction of the tomb and the composition of the grave goods. So far, no common feature has been identified to indicate for whom such a ritual deposit was or was not made.

A comparison of the grave inventory, especially of undisturbed tombs, shows that fragment deposits can also occur in tombs with few or no grave goods. This suggests a certain prioritisation of such deposits. Especially when it comes to the absence of grave goods of a certain priority according to Janulíková, the fragments are even given a higher significance compared to the postulated ideal burial equipment. Furthermore, a certain correlation between the increase in the size of the tomb and the quantity of grave goods is apparent. This can be an increase number of depositions for one burial, and even in an increase in the quantity or size of the fragmented vessels.

However, the number of well-documented burials is too small to draw any reliable conclusions, and it has become clear that there are significantly more tombs without such deposits in all the cemeteries analysed. Nonetheless, the previously made observations imply that fragment deposits might hold more significance compared to other grave goods: and if such deposits are present, they could constitute a part of a grave inventory with higher priority (Fig. 5).

⁴⁷ Summarised in Kuch 2023; for Elkab compare tombs 5, 39, 64, cf. Hendrickx 1994. The plan of the Abydenian Tomb M 18 by Petrie reveals some incidence about the position of a broken vessel, cf. Petrie 1902: 16–18, pl. xliv, xlviii. For Abur Roash compare tombs 926, 365, M21 in Klasens 1958 and Klasens 1960. In Turah, possible evidence can be found in the tombs 12p3, 19m5, 18k3, 15h15, see description and plates in Junker 1912. Possible deposits derive in tombs 63 and 126 of Tell el-Farkha, cf. Czarnowicz 2018: 99–106, pl. XV.1; Dębowska-Ludwin 2018: 23. For the confirmation of comparable deposits in tombs 2 and 7 in Tell el-Murra, my special thanks go to Grzegorz Bąk-Pryc and Mariuz Jucha, cf. Jucha et al. 2014: 143–145 with figs. 2, 3, 5; Jucha et al. 2015: 204–205, fig. 9.

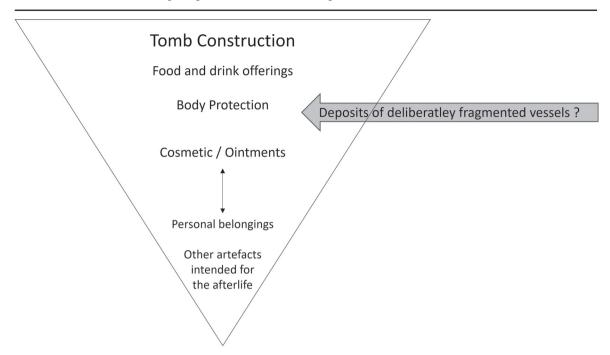


Fig. 5: Possible prioritisation of a ritualised fragmented and deposited stone vessels based on the observations made in Helwan, Op. 4 compared to an ideal burial equipment by Janulíková 2018: 274, fig. 8.2 (adapted by N. Kuch)

These variations, and in particular the fact that not every tomb possessed fragment deposits, indicate that such depositions cannot be an formalised integral part of a required funerary ritual. The reasons for such depositions are more likely to be found outside the funerary context and may be linked to other social or communal factors. Nevertheless, when depositions of fragments do occur, they follow certain formalities, which are expressed in the spatial organisation of the grave goods and can be recorded in well-preserved and adequately documented archaeological finds.

5 A broader perspective on intentional fragmentation as a cultural habit

In the context of the above study, the question arises whether the deposition of deliberately fragmented stone vessels is a unique Early Dynastic phenomenon. In other words, are there similar instances of destruction observed in other categories of so called small finds, so we can consider the practice of deliberate destruction as embedded in ancient Egyptian culture?

In this respect, predynastic fishtail knives and ripple-flaked knives represent the oldest group of such objects dating to Naqada I-II, and decreasing in number until the End of Naqada III. For the fishtail knives, only vague and general comments on intentional fragmentation can be

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found, e.g. fishtail knife E11250, probably from Abydos, display a distinct hole.⁴⁸ However, the aspect of a possible deliberate manipulation or destruction remains behind the detailed discussion about a possible ritual use of the knives.⁴⁹ More explicitly, Stevenson discussed the deliberate fragmentation and orchestrated deposition of the fragments of some ripple-flaked knives found at el-Gerzeh.⁵⁰ There is also an illustration of a ripple-flaked knife in Petrie's publication on el-Gerzeh, which shows a distinct cut mark.⁵¹ Of particular note, though, is tomb 25 (Naqada IIC-IID1), which was found intact by Petrie. Referring to Petrie's documentation, Stevenson noted a fragmented ripple-flaked knife next to a granite vessel, and both were found in halves. Confirmation of this information requires further evidence, however, the discovery of a deliberately broken stone vessel next to a potentially treated knife is noteworthy.⁵² Similar incidences are mentioned for Naga ed-Deîr, e.g. tomb 7454,⁵³ or Abusir el-Meleq. For the latter, the excavators reported that all the splinters from the knives were found and suspected that the pieces were deliberately broken and ritually killed.⁵⁴

Concerning the time of the Old Kingdom, several incidences of destructive manipulations are discussed in Egyptology. One of them is the object group of the so-called 'reserve heads' found in shaft tombs of the 4th and 5th Dynasties. The destructive elements are broken noses and ears, as well as fine incisions on the neck or forehead. Intentional fragmentation or manipulation is thus given limited attention or ignored entirely, revealing once again the importance of a noteworthy awareness of intentional destructive behaviour. However, when the destruction is noted, it is interpreted as being intentional and discussed in the context of a variety of ritual practices, including ritual killing.⁵⁵

Also, for this period, Lucie Jirásková described noticeable damage on several canopic jars found at Abusir South that were considered to be cut marks. Furthermore, some effort was put into their repair, by filling a mortar-like substance into the holes and their surface was subsequently smoothed.⁵⁶

Furthermore, intentional fragmentation is the subject of Gianluca Miniaci's study of the group of faience figurines from the Middle Kingdom. Likewise, for the group of execration figurines of this time.⁵⁷ The evidence from the Mirgissa Deposit⁵⁸ and the aforementioned execration texts published by Sethe also belong to this context. For the New Kingdom, deliberate fragmentation is discussed in relation to certain objects placed in temple deposits. In 2014,

⁴⁸ Hikade 2011: 220, fig. 78, Nr. OIM E11250.

⁴⁹ Stevenson 2011: 72; Ciałowicz 1985: 162–163. Interestingly, the inventory lists of Pap. Abusir contain references to the repair of such fishtail knives (psš-kf). However, fragmentation can only be implied here, and it is unclear whether the pieces broke accidentally and through long-term use. See Graves-Brown 2011: 209.

⁵⁰ Stevenson 2009: 113.

⁵¹ Petrie 1912: pl. VII, no. 12.

⁵² Stevenson 2009: 113.

⁵³ Dunham 1965: 278–279, figs. 124a–b, fig. 125c.

⁵⁴ Scharff 1926: 46, pl. 29.

⁵⁵ A summary and further bibliography can be found in Mendoza 2017.

⁵⁶ Jirásková 2015.

⁵⁷ Miniaci 2017; Kühne-Wespi 2023.

⁵⁸ Vila 1963: 142–147, figs. 6–8.

such a depot was found in the Ptah Temple area at Karnak, and its detailed archaeological documentation was used to create a 3D model that allows to trace a ritual deposition process of the previously fragmented objects.⁵⁹

There are numerous other examples of intentionally fragmented objects in most periods of ancient Egyptian culture. Although it is important not to interpret these as a linear evolution of an universal ritual practice, but rather to evaluate these individual cases in their respective setting. Nonetheless, the aspect of destructive manipulation and ritual transformation of objects in certain situations seems to be a common practice in ancient Egypt.

5.1 The breaking of the red pots: an epilogue?

The most essential destructive ritual known from ancient Egypt, and which can also be traced over a long period of time, is the so called 'ritual of breaking the red pots' (sd dšr.wt). Even if no direct connection should be made to the deliberate destruction of Early Dynastic stone vessels, some interesting similarities concerning ritual formalisation can be identified.

Attested in archaeological contexts as well as inscriptions and pictorial sources, this performative act was first mentioned by Aylward Blackman in 1924 and is extensively discussed in Egyptology since then.⁶⁰ One of the best-known examples of this ritualised performance of breaking red polished pottery vessels is displayed on reliefs in the tomb of Horemhab in Saqqara dating to the New Kingdom. In the scenery of a funeral procession and in front of a pavilion-like structure, the reliefs depict broken pots lying on the ground. However, the ritual of breaking the red pots already appears in much older sources of Old Kingdom burial rites. The oldest written reference can be found as a ritual instruction to Pyramid Text 244, and Blackman established a link between the act of breaking and the funerary offering rites. He also suggested that the fragmentation was carried out during the closure of the tomb.⁶¹ This somehow resonates with the previous observation regarding the formal localisation of vessel fragments deposited in Early Dynastic burial. But further evidence can be found within the late Old Kingdom offering lists.

Defined as 'Type C' by Winfried Barta, these standardised offering lists are part of the funerary decoration programme. They accompany the so-called 'offering scene', which depicts the deceased in front of a richly laid table of offerings to secure the dead's provision in the afterlife. Additionally, these lists contain a wide range of objects, foods and beverages, and clothing. As such, they constitute a transposition or replacement of the physical grave goods and transfer their representation to the decoration of the tomb. Furthermore, these categories can be extended by ritual instructions, for example burning of incense, libations, the ritual of erasing the footprints, and the breaking of the red pots. The offering lists thus illustrate a

⁵⁹ Charloux et al. 2017.

⁶⁰ Recently by Hertel 2019 with further literature.

⁶¹ Blackman 1924: 50–51.

formal structure and organisation of grave goods as well as ritual performances, similar to the one found in the ritual spaces of Early Dynastic burials.

In the author's opinion, there seems to be a continuation of ritual formalisations, but with an adaptation, as they are now translated into writing and continued in the medium of funerary decoration as a complement or even a substitute for ritual practices.⁶² Nevertheless, there is a time hiatus and especially due to the lack of data from the transition of the Early Dynastic Period to the Old Kingdom, it remains unclear, if the destructive ritual came to an end or was changed, and further research needs to be done here.

The fundamental principles of destructive practice cannot be reconstructed from the historical sources available so far, but economic reasons could be a possible explanation for an end or a modification of this specific ritual action. Towards the end of the Early Dynastic Period, a gradual decrease in the stone vessel production is noticeable. The number of stone vessels found in the archaeological context declined, and the variety of forms and the materials used is hardly achieved again in the following epochs. This decrease is believed to be due to economic changes, and such external factors can also have potential pressure on ritual acts.

In fact, the destructive ritual requires large quantities of material and useful mass products, as stone vessels, that were withdrawn from the economic cycle. It is possible that this extensive consumption of resources was no longer economically sustainable. The required quantity or quality of key symbols, for example, is no longer affordable. Thus, mundane factors can also have an explicit impact on the formalised ritual traditions and may bring them to end or massive change. It is therefore conceivable that the ritual destruction of stone vessels also came to an end at the transition to the Old Kingdom. Alternatively, it is possible that the ritual was adapted to the economic changes and continued with pottery vessels. But these are other fragments of social history that would be interesting to follow another time.

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⁶² Comparison for the Old Kingdom cf. Fitzenreiter 2006.

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