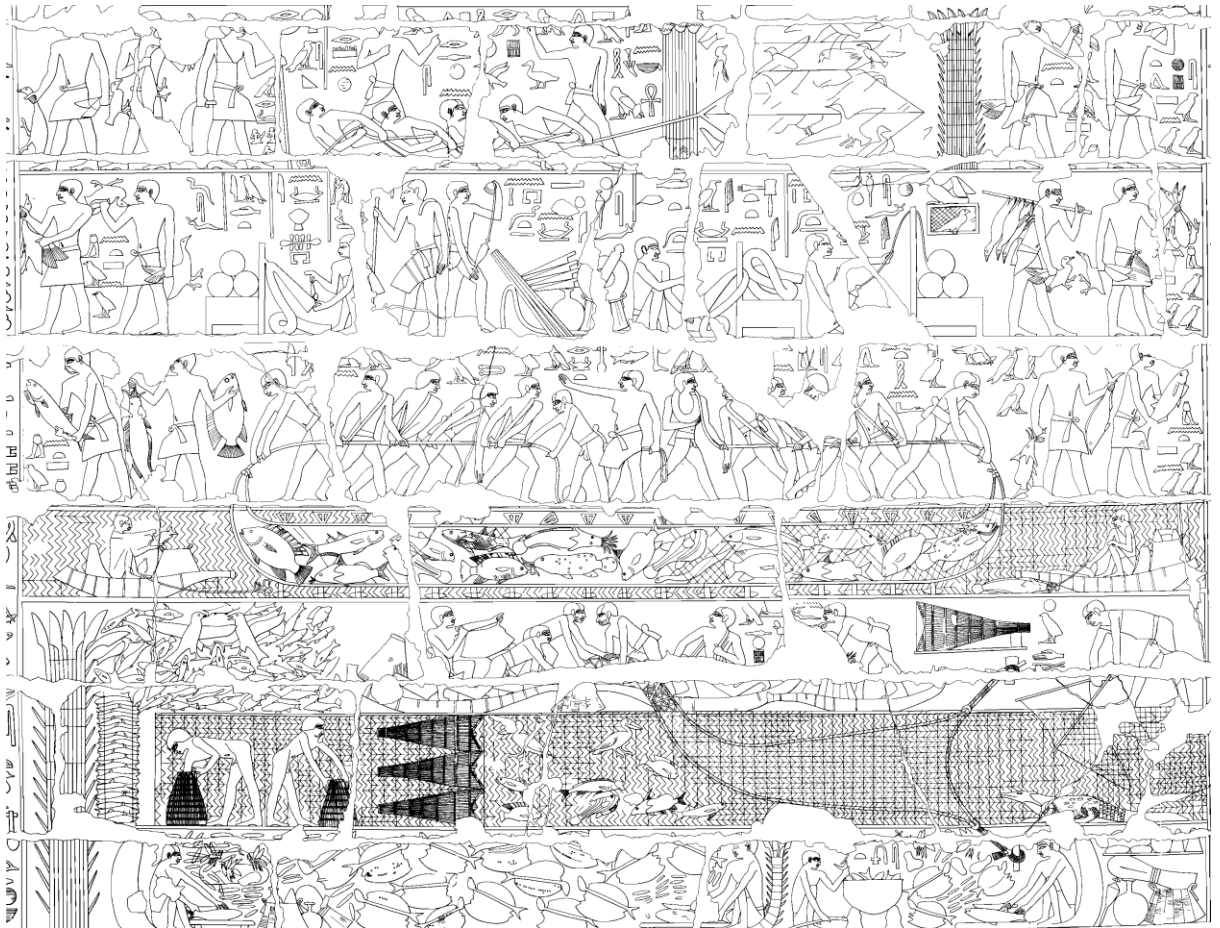


Fish and Fishing in Old Kingdom Tomb Wall Scenes

A comparative analysis of fish and fishing related scenes from the Memphite and provincial regions.

Volume 1: Text



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A thesis submitted for the degree of Doctor of Philosophy

Macquarie University – Sydney

For my daughter Isabelle

'Shoot for the moon. Even if you miss, you'll land amongst the stars'

Norman Vincent Peale

Declaration

Declaration

I certify that my thesis entitled: “Fish and Fishing in Old Kingdom Tomb Wall Scenes” has not been submitted for a higher degree to any other university or institution other than Macquarie University.

The research within is my own work and the contributions of others is duly acknowledged where it has been used.

Dated this 13 day of April 2017.

Michelle Keith

Abstract

The aim of the present study is to examine all fish, fishing, and associated scenes within the art of Old Kingdom elite tombs. These associated scenes either have fish represented, depict equipment, or activities related to fish and fishing. The scenes included in this text are marsh scenes with a water band, fishing themes such as dragnetting, lare net fishing and spearfishing, as well as activities such as gutting, bearing and papyrus boat construction. A comparative analysis of these scenes has been conducted to fulfil three aims. The primary aim of this study is to identify standards within each individual theme and pinpoint the conception of these standards and any variations. The second, is to determine both the artistic movement of these themes within tomb art and to identify a cemetery which was the source of standardization and/or influence in the Old Kingdom. Finally, to identify instances of artistic influence between tombs at the same site, sites in close proximity, and across the Memphite and provincial regions. These aims are fulfilled by a comparative analysis of one hundred and sixty-five tombs and fragments, a total of over four hundred individual scenes.

Based on this analysis, this study has been able to follow the development of sixteen individual themes through their minor details; identifying standards and variations. In addition, select details, which have been tabulated, may assist as dating criteria. It has also revealed the probable epicentre for artistic development and innovation. This study has highlighted incidents of influence between the tombs, identifying three dominate factors; the artist(s), political and administrative policies and familial or community ties.

Acknowledgments

A lifelong dream has now been fulfilled. On my first day of primary education I was introduced to the Ancient Egyptians, a day that has forever changed my life. My original plan was to go into palaeontology, however after my introduction to Ancient Egypt, I switched fossilized dinosaur bones for mummies and tombs. The passion I have for this culture has only grown with each passing day culminating in the undertaking of a doctorate in Egyptology. It has been a journey of many hardships, yet I have found that the hard work and struggles are their own rewards. I have become a new person, able to work through problems with fierce determination and see the lighter side to life.

I must thank my husband Andrew. I am eternally indebted for all the support, the laughter, and the endless hours of listening to both the issues I faced and the exciting theories and conclusions I prattled on about. I thank my daughter, Isabelle, for understanding that mummy had important 'school work' to do and for being the 'best helper ever'. My parents Yvonne, Terry, and John for grounding me and supporting me always.

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Part One

Chapter 1: Introduction

The context

The Nile River was the essential component in the daily life of ancient Egyptians. The waters provided a means of travel, trade and conveyance of goods, a source of water both for crops and domesticated animals, for fishing and for the upper echelon of society the enjoyment of leisure activities such as pleasure cruising or sport hunting. The great river was central to a wide range of activities that feature massively in the tomb decoration of the powerful officials of the Old Kingdom. The dominance of these themes reveals to us the reverence, pleasure and importance that Egyptians held for the Nile River and its 'gifts'.

This enjoyment of marshland recreation spanned the history of ancient Egypt and is well noted in later sources. For example, an Eighteenth Dynasty text states:¹

"A happy day when we go down to the marsh that we may snare birds ... (and catch) many fish in the two waters. Let the fowler, fisherman and harpooner come to us that we may draw in the nets."

Indeed, the love and excitement of the marshes was so profound that some had to be warned to resist its charms:²

"Do not long for the marsh thicket. Turn your back on the throw stick and chase. By day write with your fingers; recite by night."

The river played a large part in the daily life of the Egyptians with most working on or near the marshlands or in connection with activities performed at these locations. The depiction of the many fishing methods and associated scenes in the tombs across the expanse of ancient Egyptian history is evidence that fishing was an activity that held great importance for the ancient Egyptian.³ With the flexibility of offering a sport to be enjoyed by the elite, a way of providing food for the entire population and its links to the economy, it is of little wonder that these Nile-related scenes were represented in tombs where the owner displayed his/her prowess and wealth for all visitors. Certain scholars believe⁴ that the scenes also served the purpose of providing the tomb owner with the

¹ Parkinson, *Voices from Ancient Egypt*, 83-84; Caminos, *Literary Fragments*, 14-16, pl. 3.

² Lichtheim, *Ancient Egyptian Literature*, II, 168-175.

³ The scenes of fishing and related activities are attested from the Old Kingdom through to the New Kingdom and beyond, Brewer- Freidman, *Fish and Fishing*, 5ff.

⁴ For Example: Smith, 'A Judge Goes Fishing' in *BMFA*, 53; Radcliffe, *Fishing from the Earliest Times*, 303.

essential provisions for the afterlife, so that these fishing scenes also provided wealth, food, and sport to the tomb owners, which they might enjoy in the next life.

Fishing was well established long before the invention of the written word or the beautiful art that graced the tombs of the elite. Paleolithic and neolithic Egypt provides evidence of fish remains, especially those of the catfish (*Clarias sp.*), the *Lates* and the *Tilapia sp.* in substantial quantities, which suggest that effective fishing methods were in use at the time.⁵ Yet being a fisherman by profession was not considered a desirable occupation as this Egyptian text suggests:⁶

*"I'll speak of fishermen also,
His is the worst of jobs;
He labors on the river,
Mingling with crocodiles.
When the time of reckoning comes,
He is full of lamentations..."*

Another text warned young students about the daily danger facing the fisherman:⁷

*"I tell you that the Fisherman suffers more than any other. Consider, is he not
toiling on the river? He is mixed up with the crocodiles; should the clumps of
papyrus give way then he shouts for help".*

Furthermore, Egyptian fathers of the official class encouraged their sons to study hard and not to consider the job of a fisherman for it was "... more difficult than any other calling!"⁸

The profession of a fisherman was not held in high regard in other areas of the ancient world either. Evidence from both Greek⁹ and Roman periods suggests this.¹⁰ However, even though the writers of the time spoke of the fishermen being poor and destitute, evidence suggests that the life of a fisherman could be rewarding and full of opportunities with the sale of good quality produce.¹¹

⁵ De Moor, 'In The Beginning There Was Fish' in *Fish: Food from the Waters*, 84 ff.

⁶ De Moor, 'In The Beginning There Was Fish', 85.

⁷ Text: 'The Scribe on the Praise of Learning' (in) Maspero, *Le Genre epistolaire chez les Égyptiens*, 48.

⁸ Phillips, 'Fish Tales and Fancies' in *The Metropolitan Museum of Art Bulletin*, New Series, Vol. 2, No. 6 (Feb., 1944), 184-189, 184.

⁹ Moschus, 169

¹⁰ Plautus, *Rudens* (290-315).

¹¹ Corcoran, 'Roman Fishermen' in *The Classical World*, Vol. 56, No. 4 (Jan., 1963), 97-100 +102, 97.

The representation of marshlands and the River Nile in Old Kingdom tombs

In her discussion of Old Kingdom tomb decoration Harpur identifies 23 themes specifically linked to marsh pursuits.¹² These include fishing methods and scenes which incorporate clap net hunting, poultry processing, lotus gathering, fighting boatmen, cattle fording and the construction of fishing equipment and boats. The present study uses *any* scene representing fish, fishing methods or an associated activity. In general water bands or fish may be represented in 14 of these 23 themes.¹³ Themes which are associated with fish or fishing account for three more scenes.¹⁴ In addition to Harpur's themes, this study separates the fishing methods classified as hand netting with lave net fishing and weirs. Hand held traps are further divided into round basket trapping and funnel traps. Other themes which are incorporated into this text are the drying and storage of fishing equipment, registration of fish, market scenes with fish present, and preparing fish for consumption.

The location of the 'marshlands' which are often represented in tomb art is difficult to pinpoint. Woods uses inscriptions from four tombs to help narrow the locations as well as the titles of officials in the Old Kingdom.¹⁵ Three terms are used in captions relating to marsh pursuits or titles: *šš.w* 'lotus pools', the *sš.w* 'bird pools' and *pḥw.w* 'marshlands'.¹⁶ Woods concludes satisfactorily that there were two types of areas in which the royal and elite persons could hunt: the naturally occurring marsh areas or *pḥw.w* of the Delta and Upper Egypt, or artificially created areas possibly referred to as *sš.w* or bird pools.

The purpose of tomb wall scenes

The significance of tomb wall decoration is controversial, and has not been resolved to the complete satisfaction of the academic community. There are typically two theories: the first suggests that the

¹² Harpur, *Decoration*, 176.

¹³ Themes include: Spearfishing, Fowling, *Zšš wzd* 'Papyrus pulling', Pleasure cruise, Hippopotami hunting, Angling, Lave net Fishing, Round Basket Traps, Funnel Traps, Bearers, Gutting/Dehydration, Cattle fording. Fighting/Returning Fishermen.

¹⁴ Papyrus gatherers (in association with boat building), spinning cord/ net making, and papyrus boat construction.

¹⁵ **Fetekta** [25] *iwi.t m hdi r sšš wzd ḥw.t-ḥr nfr.t*; Coming downstream to pull papyrus for the perfect Hathor; and *iwi.t m ḥsf.wt m-ḥ.t sšš wzd ḥw.t-ḥr nfr.t nb.t nh.t*, Coming upstream after pulling papyrus for the perfect Hathor, Mistress of the Sycamore; **Seankhuipah** [106] *ḥns sš.w pḥw.w sh.wt nb.(w)t nfr.(w)t n.t t3-mḥ.w*, Traversing all the beautiful bird pools, marshlands and the marsh fields of the Delta; **Idu/ Seneni** [138], *{ḥns} pḥw.w sš.w šš.w n.w t3-mḥ.w*, {Traversing} the marshlands, bird pools and lotus pools of the Delta; and **Pepyankh/ Henykem** [146] *sti.t mḥy.t ʿ3-wr.t m sš.w n.w šmʿ.w t3-mḥ.w*, Spearing fish in great quantities in the bird pools of Upper and Lower Egypt. Woods, *A Day in the Marshes*, 3.

¹⁶ Woods, *A Day in the Marshes*, 2; Hannig, *Ägyptisches Wörterbuch I*: 468-469, 1243-1244, 1281-128.

images represent the daily life and memories of the deceased¹⁷ and the second states that the images are used for the provision of items and to ensure a certain lifestyle in the afterlife, after invocation by priests and family.¹⁸ The following discussion investigates these two lines of thought.

René van Walsem assigned terminologies to the two theories, referring to the first theory as 'Sehbild', which suggests that the image is literal, and to the second as 'Sinnbild', which states that the image is not only literal but also metaphorical.¹⁹ He concluded that not all scenes hold a literal *and* a metaphorical meaning. The application of either of these theories is ultimately made by the observer of the image, factoring in the scenes' constituents.²⁰ This is a primarily subjective and personal review of the scenes' purpose by the academic or visitor.

Vischak stressed that an agency-based view would assist in further categorising the purpose of the scenes, as the persons (the artists and the tomb owner) and their motives would be taken into consideration. An example of this is the use of a certain style and themes within the tomb which, when used, create a link for the deceased to the upper class of society.²¹ Understanding the persons behind the imagery could assist in deciphering the meaning and the inclusions or omissions of themes and details.

This thesis concurs with the viewpoint of Kanawati, McFarlane, Latifa-Mourad and others, who suggested that scenes most likely depict events, status and memories of life, as well as aiming to ensure that the tomb owners had a carefree and prosperous afterlife.²² This was considered to be

¹⁷ Bolshakov, 'The Old Kingdom Representations of Funeral Procession', *GM*, 121 (1991), 31–54; Dodson-Ikram, *The Tomb*, 51; Alexanian, 'Tomb and social status. The textual evidence', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31–June 4*, (Prague, 2006), 3; Brier-Hobbs, *Daily life*, 181; Lashien, 'Narrative in Wall Scenes: Progress Through Time and Space', 104; Watson, *Egyptian Pyramids and Mastaba Tombs*, 45.

¹⁸ Shirai, 'Ideal and Reality in Old Kingdom Private Funerary Cults', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31–June 4*, (Prague, 2006), 327; Robins, *Egyptian Painting and Relief*, 7; Smith, 'A Judge Goes Fishing' in *BMFA*, 53; Radcliffe, *Fishing from the Earliest Times*, 303; Allen, 'Some aspects of the non-royal afterlife in the Old Kingdom', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31–June 4*, (Prague, 2006), 10; Aldred, *Egyptian Art*, 87; Wilkinson, *Reading Egyptian Art*, 9–10; Wilkinson, *Symbol and Magic*, 27–28, 44; Malek, *Egyptian Art*, 129; Dodson-Ikram, *The Tomb*, 15, 77–81; Wilson, *Food and Drink*, 7; Amenta, 'The Egyptian Tomb' *Egyptological Studies on Status and Society*, 25, 26; Brewer-Teeter, *Egypt and the Egyptians*, 189, 206; Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*, 168–169.

¹⁹ van Walsem, *Iconography*, 71–83.

²⁰ van Walsem, *Iconography*, 81–83. For example, a scene may be captioned to relate to a real event which excludes the possibility of a metaphorical conclusion.

²¹ Vischak, 'Identity in/of Elephantine', 446.

²² Kanawati, *The Tomb and Beyond*, 115; McFarlane-Latifa-Mourad, 'Introduction' in (eds.) A. McFarlane, A. Latifa-Mourad, *Behind the scenes: daily life in Old Kingdom Egypt*, 1; Hodel-Hoenes, *Life and Death in Ancient Egypt: Scenes from Private Tombs in New Kingdom Thebes.*, 22–24; van Walsem, *Iconography*, 34–39; Robins, *Women in Ancient Egypt*, 187–189; Bolshakov, 'Hinting', *GM*, 25; Brewer-Freidman, *Fish and Fishing*, 12.

guaranteed by the representation of ideal locations, food acquisition/provision and the funerary cult.

Kanawati highlighted the contradictory and complex nature of the scene by stating that, generally, the Egyptians believed that the spoken or written word/scene, or even a statue, could be converted into reality through the appropriate magical formulae.²³ Thus, perhaps, other mechanisms within the tomb, including the false door and offering slab, the stela, the *kꜣ* statue and inscribed offering formulae, were intended for better provision of food and other items for the afterlife.²⁴ Then, the question arises, did the scenes serve as a fail-safe system for comfort in the afterlife, or did the religious and metaphorical connotations only apply to certain scenes, such as offering scenes?²⁵ The portrayal of daily life scenes, in which the tomb owner watches over the activity portrayed or, indeed, is an active participant, as in spearfishing and fowling scenes, are likely to represent moments of the tomb owners' life, their achievements and even a selection of their most enjoyed activities.²⁶ Thus, the scene is a place where the visiting *kꜣ* would be able to look over its life and memories. Kanawati and Lashien proposed that some scenes may recount specific events or narrate a story.²⁷ Conversely, if these daily life scenes were purely literal, it is difficult to explain why there are examples of hieroglyphic signs being mutilated,²⁸ names and people being erased and animals that were deemed dangerous being rendered inert under the water or being controlled.²⁹

The context of these images, the tomb, must also be considered. The physical mudbrick, limestone or rock-cut structure was a tangible place to rest and preserve the physical form of the deceased.³⁰ The tomb for the Egyptian was also his house of eternity.³¹ It was the place where the tomb owner could demonstrate his wealth and the achievements of his life, and where visitors could carry out

²³ Kanawati, *The Tomb and Beyond*, 115.

²⁴ Kanawati, *The Tomb and Beyond*, 115.

²⁵ Staring, 'Fixed rules or personal choice? On the composition and arrangements of daily life scenes in Old Kingdom elite tombs', in (eds.) N. Strudwick, H. Strudwick, *Old Kingdom, New Perspectives: Egyptian Art and Archeology 2750–2150 BC*, (Oxford, 2011), 259. Staring suggests that one of the only consistent themes included in a sound decorative program is the offering scene. This suggests that it was an essential theme in relation to the afterlife.

²⁶ Kanawati, *The Tomb and Beyond*, 115; Staring, 'Fixed rules or personal choice?', 258, 269.

²⁷ Kanawati, 'Specificity in Old Kingdom tomb scenes' in *Annales du Service des Antiquités de l'Égypte*, 83 (2009), 261–278; Lashien, 'Narrative wall scenes: progress through time and space' in *BACE* 22, 122. For further study and opposed views see Gaballa, G.A., *Narrative in Egyptian Art*, (Mainz, 1976) and Groenewegen-Frankfort, *Arrest and Movement: An Essay on Space and Time in the Representational Art of the Near East*, (New York, 1972).

²⁸ Kanawati, *The Tomb and Beyond*, 115.

²⁹ See Chapter 3: Crocodile, Hippopotami, and other animals, for the various ways Crocodiles and Hippopotami were rendered inert or controlled within the scene.

³⁰ Kanawati, *The Tomb and its Significance*, 19; Dodson-Ikram, *The Tomb*, 13.

³¹ Kanawati, *The Tomb and its Significance*, 19; Dodson-Ikram, *The Tomb*, 14–15.

the funerary practices after death.³² Thus, this structure served its owner in the physical, memorial and spiritual senses. Given the multifaceted purpose of the tomb, it stands to reason that the scenes also served multiple purposes.

There is no definitive conclusion that can be drawn from the current debate. Scholars do not have the ability to infiltrate the mind of the ancient Egyptian to understand the symbolism and nuances of the art. However, the continual research into and interpretations of different aspects of the art and the discovery of more evidence, from both artistic and archaeological standpoints, can add to our understanding and, perhaps, one day, bring us closer to understanding the true purpose of these scenes.

Previous Studies

The importance of tomb scenes depicting fish and fishing is well documented in the earlier scholarly literature dedicated to the examination of fish and fishing in ancient Egypt. Bates' states that documentary evidence of fish and fishing is so minimal that without the funerary scenes of the Old Kingdom a reconstruction of these methods would not be possible.³³ This was echoed by Radcliffe who states that the scenes grow in importance especially in the Old Kingdom and beyond as the archaeological remains 'dwindle'.³⁴ Brewer and Freidman agree that the scenes become a large part of our understanding of fish and fishing, yet also comment on the archaeological evidence of fish remains, stating that the fish bones in general are difficult to identify at a taxonomic level.³⁵ In addition, they express concern at the amount of viable evidence with only a few fishing implements surviving and the delicate nature of the fish bones.³⁶ Indeed, the surviving skeletal remains of fish decrease during the dynastic periods due to two contributing factors: the change of subsistence patterns for the ancient Egyptian and the focus on other areas of research such as art, architecture and religion, thus denying thorough observance or documentation of fish remains.³⁷

With the rise in interest and discussion of tomb art come the many varied approaches and the significance applied to it.³⁸ Marsh scenes have been interpreted in many ways; two of the most

³² Kanawati, *The Tomb and its Significance*, 20.

³³ Bates, *Ancient Egyptian Fishing*, 199; for documentary evidences see Helck, *Materialien zur Wirtschaftsgeschichte des Neuen Reiches*. Pt 5. 816-828; Caminos, *Literary Fragments*.

³⁴ Radcliffe, *Fishing from the Earliest Times*, 307.

³⁵ Brewer- Freidman, *Fish and Fishing*, 1, 2.

³⁶ Brewer-Friedman, *Fish and Fishing*, 1.

³⁷ Brewer-Friedman, *Fish and Fishing*, 2.

³⁸ Robins, 'Problems in Interpreting Egyptian Art', *DE* 17 (1990), 45-58; van Walsem, *Iconography*, 71-80.

prevalent being as scenes of daily life,³⁹ and as provision for the afterlife.⁴⁰ Other scholars have sought to combine the two using both the 'material' and 'immaterial' aspects to gain a better understanding of the art.⁴¹ Other interpretations regarding the marsh scenes, spearfishing and fowling in particular, focus on the possibilities that the scenes represent the suppression of disorder and chaos and the emergence of order and Ma'at,⁴² securing the rebirth of the tomb owner in the afterlife.⁴³

The inclusion of features within marsh scenes has also been used to establish criteria that would aid in the dating of scenes and fragments,⁴⁴ to classify fish⁴⁵ and the behavioural traits of animals found within the scenes.⁴⁶ There are also works which identify the various methods of fishing and associated scenes,⁴⁷ and discussions on the economic system.⁴⁸ Marsh scene captions are extensively examined in Monet's *Scenes de la Vie Privee*.⁴⁹

³⁹ van Walsem, *Iconography*, 34-39; Kanawati, *Tomb and Beyond*, 92-96; Brier-Hobbs, *Daily life*, 181; Lashien, 'Narrative in Wall Scenes: Progress Through Time and Space', 104; Watson, *Egyptian Pyramids and Mastaba Tombs*, 45.

⁴⁰ Wilkinson, *Reading Egyptian Art*, 71, 97, 105, 111, 123, 137; Wilkinson, *Symbol and Magic*, 27-28, 44; Malek, *Egyptian Art*, 129; Dodson-Ikram, *The Tomb*, 15, 77-81; Wilson, *Food and Drink*, 7; Amenta, 'The Egyptian Tomb' *Egyptological Studies on Status and Society*, 25, 26; Brewer-Teeter, *Egypt and the Egyptians*, 189, 206; Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*, 168-69.

⁴¹ van Walsem, *Iconography*, 34-39; Robins, *Women in Ancient Egypt*, 187-189; Hodel-Hoernes, *Life and Death in Ancient Egypt*, 23; Bolshakov, 'Hinting', *GM*, 25: Merzeban views the scenes of 'daily life' from the perspective of the minor figures and their attitudes towards work. In summary, the scenes are not to be taken as actual occurrences or memories of 'laziness' on the part of the figure but as a 'lesson highlighted' and that this human condition was not ignored but used in scenes as a tool for humour and to create an expressive scene. Merzeban, 'Tired Workers in the Old Kingdom daily life scenes?' *MDAIK* 61, 225-246.

⁴² Wildung, 'Feindsymbolik', 146-148. Aldred, *Egyptian Art*, 12-13, Evans, *Animal Behaviour*, 275; Dodson-Ikram, *The Tomb*, 77.

⁴³ Robins, 'Problems in Interpreting Egyptian Art', *DE* 17 (1990), 50; Hodel-Hoernes, *Life and Death in Ancient Egypt*, 23, 39; Handoussa, 'Fish Offering in the Old Kingdom' *MDAIK* (1988), 109; Gamer-Wallart, *Fische*, 21; Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*, 168-69; Brewer-Teeter, *Egypt and the Egyptians*, 189.

⁴⁴ Swinton, *Dating Tombs of the OK*, 281-291 [criterion 101-112], see also Cherpion, *Mastabas et hypogées*, 59, 182 [criterion 33]; Woods, *A Day in the Marshes*, Appendix 3.

⁴⁵ Gaillard, 'Recherches sur les poissons représentés dans quelques tom beaux égyptiens de l'Ancien Empire', *MIFAO* 51 (1923); Driesch, *Fische im Alten Ägypten. Eine osteoarchäologische Untersuchung*, (1986); Boessneck, *Die Tierwelt des alten Ägypten* (1988); Brewer-Friedman, *Fish and Fishing*, 47-81; Gamer-Wallart, *Fische*, 3-14, 1643, 47-53; Sahrhage, *Fischfang*, 57-77.

⁴⁶ Houlihan, *The Birds of Ancient Egypt*, 1-139; Houlihan, *The Animal World of the Pharaoh*, 113-167; Houlihan, 'A guide to the Wildlife Represented in the Great Swamp Land Scene in the Offering-Chaple of Ti (No.60) at Saqqara' *GM* (1996), 19-53; Brewer – Friedman, *Fish and Fishing*, 47-91; Evans, *Animal Behavior*, 70-91, 110-112, 129-132, 149-151, 162-166, 184-190, 197-204, 214-217, 221-223, 227-228, 230-233, 258-261, 271-277, 289-290.

⁴⁷ Sahrhage, *Fischfang*, 87-115; van Elsbergen, *Fischerei*, 9-60; Brewer – Friedman, *Fish and Fishing*, 21-46; Gamer-Wallart, *Fische* 60-68; Vandier, *Manual V*, 472-473, 495-496, 510-511, 533-561, 636-637. Harpur, *Decoration*, 176-204, Table 7; Lundbeck- Sahrhage, *A History of Fishing*, 37-42.

⁴⁸ Van Elsbergen, *Fischerei*, 87-125.

⁴⁹ Monet, *Scenes de la Vie Privee*, 1-81.

Identification of fish species and spearfishing scenes receive the most attention in the literature. A focus on the Ichthyological aspects of the fish species is prevalent with both earlier and later literature recording scientific data or the religious connotations attached to certain fish.⁵⁰ They do not include a substantial discussion on the individual attestations of the fish with exception of the *Tilapia sp.* and *Lates* due to their perceived significance⁵¹ within tomb art.⁵² This lack of information about the attestation of the individual species of fish within tomb art is what led to the cataloguing of their chronological representation within the Old Kingdom presented here in Chapter 3.⁵³

The frequent attestations of spearfishing imply the importance for its portrayal.⁵⁴ The majority of the literature addresses the iconography and religious connotation of the theme and its constituents.⁵⁵ Others suggest that the scene was a way of ensuring that the deceased was able to enjoy leisure activities⁵⁶ and have sustenance in the afterlife.⁵⁷ This idea of the provision of food would extend to the other methods of fishing, gutting and other activities associated with fish, to ensure that there was a plentiful supply.⁵⁸ Woods and Harpur have recently discussed the scene at length identifying

⁵⁰ Phillips, 'Fish Tales and Fancies.' 184-89; Wilkinson, *Reading Egyptian Art*, 105, 111; Gamer-Wallart, *Fische*, 6--132

⁵¹ **Lates**: Brewer, 'Fish', *OEAE I* (2001), 53; Gamer-Wallart, *Fische*, 128-130; Gamer-Wallart, 'Fische, religiös', *LÄ II* (1977), 230. **Tilapia sp.**: Gamer-Wallart, *Fische*, 110-111; Dambach – Wallert, 'Das Tilapia-Motiv in der altägyptischen Kunst', *CdÉ 41* [81] (1966), 283-294; Sahrhage, *Fischfang*, 89-94, 137-138; Wilkinson, *Reading Egyptian Art*, 111; Robins, 'Problems in Interpreting Egyptian Art', *DE 17* (1990), 50-52; Brewer, 'Fish', *OEAE I* (2001), 533; Brewer – Friedman, *Fish and Fishing*, 77; Gamer-Wallart, 'Fische, religiös', *LÄ II* (1977), 232-233. The significance of the two fish is discussed in Binder, 'The Tomb Owner Fishing and Fowling' in: Donovan – McCorquodale (eds.), *Egyptian Art*, 116.

⁵² Boulenger, *The Fishes of the Nile*, 1-517; Gamer-wallart, *Fische*, 3-14, 52-53, 57-72, 73-76; Brewer-Friedman, *Fish and Fishing*, 49-81; Gaillard, 'Recherches sur les poissons représentés dans quelques tombeaux égyptiens de l'Ancien Empire', *MIFAO 51* (1923); Driesch, *Fische im Alten Ägypten. Eine osteoarchäologische Untersuchung*; Boessneck, *Die Tierwelt des alten Ägypten*.

⁵³ Chapter 3: Fish; Volume 2: Table 3: Fish Distribution; also, Volume 2: Table 1: List of Scenes that Include Fish.

⁵⁴ See Chapter 11: Tables 11.1, 2, and 3 for a list of Occurrences.

⁵⁵ The mound of water is discussed in Schäfer, *Principles*, 147, 166, 240-244; Junker, *Giza*, IV, 28-32; The appearance of family on the boat as the securing lineage Robins, 'Problems in Interpreting Egyptian Art', *DE 17* (1990), 50; Hodel-Hones, *Life and Death in Ancient Egypt*, 39; Religious and afterlife symbolism of rebirth for the papyrus thicket; Robins, *Women in Ancient Egypt*, 187-189; Germond – Livet, *An Egyptian Bestiary*, 99-10; The wooden deck Dawson, 'Note on the Egyptian Papyrus Boat', *The Journal of Egyptian Archaeology*, 10(1), 46-46; See also Brewer-Friedman, *Fish and Fishing*, 21-25; Sahrhage, *Fischfang*, 88-94; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Dodson-Ikram, *The Tomb*, 86-87; Radcliffe, *Fishing from the Earliest Times*, 307-312.

⁵⁶ Davies, *Deir el-Gebrâwi*, I, 12; Harpur, *Decoration*, 181, n. 131; Decker, *Sport and Games in Ancient Egypt*, 158-167; Kanawati, *The Tomb and Beyond*, 92-94.

⁵⁷ Brovarski, *Senedjemib Complex*, I, 38, n. 25; Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*, 168-69; Malek, *Egyptian Art*, 129:

⁵⁸ Dodson and Ikram also suggest that these other fishing methods are an extension of the religious ideal of order over chaos. Dodson-Ikram, *The Tomb*, 90-91.

the development of some criteria which mainly relate to the major figures within the scene and the main constituents such as the fishing equipment and general composition.⁵⁹

The 'minor fishing themes' examined in this study do not receive the same amount of attention, often only being identified in tomb reports or afforded a generalized description in the literature discussing fish or fishing. As mentioned earlier there is some literature which defines and catalogues the occurrence of the theme;⁶⁰ however, there is often little investigation into the minor details of the scene, and certainly not to the extent applied to the spearfishing theme. Discussions on angling note the appearance of the theme and often remark the archaeological evidence of hooks⁶¹ and the specificity of the fish being caught.⁶² Dragnetting, arguably one of the most attested fishing scenes, is most often discussed in a general manner with studies indicating the inclusions onto wall scenes⁶³ or specializing on a component of the net such as the weights,⁶⁴ floats,⁶⁵ and the haulers.⁶⁶ Religious connotations for this theme are discussed, such as the Coffin Texts of the Middle Kingdom mentioning the need for protection against the nets of the underworld demons.⁶⁷

⁵⁹ Harpur, *Decoration*, 176-204, Table 7; Woods, *A Day in the Marshes*, Chapter 4-9, Appendix 3.

⁶⁰ See ft 47.

⁶¹ Brewer-Friedman, *Fish and Fishing*, 26-30; Sahrhage, *Fischfang*, 94-100; Van Elsbergen, *Fischerei*, 49-57; Bates, *Ancient Egyptian Fishing* 245-249; Radcliffe, *Fishing from the Earliest Times*, 312-316; Wilkinson, *Manners and Customs* 2, 116; Vandier, *Manual* V, 533-54; Harpur, *Decoration*, 176-204, Table 7.

⁶² Sahrhage, *Fischfang* 100; Brewer-Friedman, *Fish and Fishing*, 36; Daumas, 'Quelques remarques sur les représentations de pêche à la ligne sous l'Ancien Empire', *Bulletin de l'Institut Français d'Archéologie Orientale* 62, 67-85.

⁶³ Brewer-Freidman, *Fish and Fishing*, 42-46; Sahrhage, *Fischfang*, 104-112; Van Elsbergen, *Fischerei*, 9-23; Bates, *Ancient Egyptian Fishing*, 245-266; Radcliffe, *Fishing from the earliest times*, 316-318; Vandier, *Manual* V, 559-600; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Harpur, *Decoration*, 176-204, Table 7.

⁶⁴ Brewer-Freidman, *Fish and Fishing*, 44; Sahrhage, *Fischfang*, 106-107; 13-14; Debono-Mortensen, *El Omari: A Neolithic Settlement and Other Sites in the Vicinity of Wadi Hof, Helwan*.4-7; Jarmuzek, 'Loom-weights or net-weights?', *GM* 17-21, fig 1-5; Van Elsbergen, *Fischerei*, 13-14.

⁶⁵ Veldmeijer, 'Fishing from Berenike (Egyptian Red Sea Coast)' (in) *Paper on Ancient Egypt 3* (2004), 103-4. See also Brewer-Freidman, *Fish and Fishing*. 45 fig. 2.39; Sahrhage, *Fischfang*, 106-108; Brewer-Freidman, *Fish and Fishing*, 44.

⁶⁶ Van Elsbergen, *Fischerei*, 17-19; Harpur, *Decoration*, 145-148, 175-221.

⁶⁷ Bidoli, 'Die Sprüche der Fangnetze Alägyptischen Sargtexten', in *Abhandlungen des Deutschen Archäologischen Instituts Kairo* 9, 473-480.

The more infrequently featured themes of lade net fishing⁶⁸, weir fishing⁶⁹, or round⁷⁰ and funnel trap fishing⁷¹ are noticeably lacking from the literature outside studies that aim solely to identify the method. This is also the case with many of the themes associated with fish or fishing such as drying of equipment, and spinning cord.⁷² Some are available for gutting⁷³, transport⁷⁴ and the construction of papyrus boats⁷⁵, yet the most discussed theme is the consumption of fish; not for its occurrence within a tomb, which is noted when necessary⁷⁶, but for the theory that the consumption of fish was taboo.⁷⁷ Examples of themes such as registering the catch, transport and market scenes are also the subject of discussions surrounding the economy.⁷⁸

The most striking feature in the literature, across all the themes, is that the discussions draw on scene occurrence and archaeological evidence from the Old, Middle and New Kingdoms. There is minimal specific documentation which highlights artistic details within the Old Kingdom. This leads to an overview of the theme, glossing over the intricacies of the art and its development. Given their

⁶⁸ Bates, *Ancient Egyptian Fishing*, 254-255; Van Elsbergen, *Fischerei*, 41-48; Sahrhage, *Fischfang*, 104-112; Vandier, *Manual V*, 541-547; Brewer-Friedman, *Fish and Fishing*, 38-40; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Harpur, *Decoration*, 176-204, Table 7.

⁶⁹ Bates, *Ancient Egyptian Fishing*, 249-254; Van Elsbergen, *Fischerei*, 31-36; Brewer-Friedman, *Fish and Fishing*, 31-37; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Sahrhage, *Fischfang*, 101-103; Harpur, *Decoration*, 176-204, Table 7.

⁷⁰ Van Elsbergen, *Fischerei*, 37-39; Vandier, *Manual V*, 547-551; Brewer-Friedman, *Fish and Fishing*, 37-38; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Sahrhage, *Fischfang*, 87-88; Harpur, *Decoration*, 176-204, Table 7.

⁷¹ Bates, *Ancient Egyptian Fishing*, 249-254; Van Elsbergen, *Fischerei*, 25-29; Vandier, *Manual V*, 551-559; Brewer-Friedman, *Fish and Fishing*, 31-37; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Sahrhage, *Fischfang*, 101-103; Harpur, *Decoration*, 176-204, Table 7.

⁷² Forbes, *Studies in Ancient Technology*, 154-174; Crowfoot, *Methods of Hand Spinning in Egypt and the Sudan*, (1931); Vandier, *Manual V*, 479-484; Petrie, *Kahun, Gurob and Hawara*, 27-28 [49-51]; Teeter, 'Rope making' in *JEA* 73 (1987) 71-77; Sahrhage, *Fischfang*, 104-112; Vandier, *Manual V*, 457-492; Lucas, *Ancient Egyptian materials and industries*, 160-161; Ryan - Hansen, 'A study of ancient Egyptian cordage in the British Museum'. *British Museum Occasional Paper* 62. (1987); Veldmeijer, 'Cordage Production'. In Willeke Wendrich (ed.), *UCLA Encyclopedia of Egyptology* (2009) <https://escholarship.org/uc/item/1w90v76c> (accessed April 2015); Dodson-Ikram, *The Tomb*, 110; Harpur, *Decoration*, 176-204, Table 7.

⁷³ Van Elsbergen, *Fischerei*, 75-85; Dodson-Ikram, *The Tomb*, 96-97; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Sahrhage, *Fischfang*, 124-129; Harpur, *Decoration*, 176-204, Table 7; Saffirio, 'Food and Dietary Habits in Ancient Egypt', *Journal of Human Evolution Volume 1, Issue 3*, May 1972, 301-302.

⁷⁴ Van Elsbergen, *Fischerei*, 61-73; Handoussa investigates the theory of fish offering to the Tomb Owner concluding that offerings were made to the owner in the Old Kingdom; Handoussa, 'Fish offering in the Old Kingdom', *MDAIK* 44, 105-109; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Harpur, *Decoration*, 176-204, Table 7.

⁷⁵ Sahrhage, *Fischfang*, 117-120; Dodson-Ikram, *The Tomb*, 110; Partridge, *Transport in Ancient Egypt*, 13-23; Jones, *Boats*, 43-45, 66-69; Harpur, *Decoration*, 176-204, Table 7.

⁷⁶ Sahrhage, *Fischfang*, 129-131; Van Elsbergen, *Fischerei*, 75-85.

⁷⁷ Shaw-Nicholson, *Dictionary*, 281; Ikram, *Choice Cuts*, 36; Wilson, *Food and Drink*, 35-6; Chlodnicki-Makowiecki, *Tell el Farkha*, 136; De Moor, 'In the Beginning', 89; Radcliffe, *Fishing from the Earliest Times*, 319-326; Gamer-Wallart, *Fische*, 62-74; Sahrhage, 'Fishing in Ancient Egypt', 922-927; Dodson-Ikram, *The Tomb*, 96-97; Handoussa, 'Fish offering in the Old Kingdom', *MDAIK* 44, 105-109.

⁷⁸ Van Elsbergen, *Fischerei*, 87-105; Sahrhage, *Fischfang*, 131-132;

importance to the interpretation of archaeological and literary evidence, to the establishment of artistic standards and the formation of a strong foundation for Old Kingdom art, this oversight has led to the present study of a detailed investigation into the developments of the minor themes via pertinent minor details.

Old Kingdom tomb art in general is also a topic of much study, primarily focused on the composition and development of the representations. The terms 'influence' and 'copied' are used in many studies that highlight the occurrence of motifs between several tombs.⁷⁹ Explanations for this repetition are often based on several factors such as the date and location of said tombs,⁸⁰ familial relationships,⁸¹ artists working in or around the same locations⁸² influence from tombs in close proximity⁸³ or the existence of a 'copy' book or guide containing themes available for use within an Old Kingdom tomb.⁸⁴ This notion has been rejected by some who emphasize that there is little archaeological evidence for its existence.⁸⁵ Yet there must have been some criteria to be met for the decoration of one's tomb.⁸⁶ The artists who executed the work within the tombs remain somewhat of a mystery to the modern scholar.⁸⁷ A recent study conducted by Kanawati and Woods aimed to highlight that, even though the artist is largely anonymous, with the exception of a few Upper Egyptian signatures,⁸⁸ it was not considered lowly employment; artists enjoyed high social standing and were connected to the palace.⁸⁹ The organization of craftsmen and artisans is also explored by several studies.⁹⁰

⁷⁹ Junker, *Gîza*, III, 71-76; Baer, *Rank*, 96-97; Harpur, *Decoration*, 26-27; Kanawati, *Giza*, II, 36; Bolshakov, 'Arrangement of Murals as a Principle of Old Kingdom Tomb Decoration' in: Fitzenreiter – Herb (eds.), *Dekorierete Grabanlagen*, 39-43; Smith, *HESPOK*, 362-365.

⁸⁰ Smith, *HESPOK*, 351-352.

⁸¹ Harpur, *Decoration*, 22-29.

⁸² Harpur, *Decoration*, 31.

⁸³ Harpur, *Decoration*, 31.

⁸⁴ Müller, 'Musterbuch', *LÄ* IV, (1982), 244-246; van Walsem, *Iconography*, 51; Hartwig, *Tomb Painting and Identity in Ancient Thebes*, 19, 28.

⁸⁵ Kanawati-Woods, *Artists in the OK*, 41; Eyre, 'Work in the Old Kingdom' in: Powell (ed.), *Labor in the Ancient Near East*, 24.

⁸⁶ Weeks in: Weeks (ed) *Egyptology and the Social Sciences*, 60-62; Shafer, *Principles*, 12, 17-18; Kanawati-Woods, *Artists in the OK*, 41.

⁸⁷ Smith, *HESPOK*, 351-365; Kanawati, *El-Hawawish*, I, 19, fig. 8; Vischak, 'Agency in Old Kingdom Elite Tomb Programs: Traditions, Locations and Variable Meanings' in: Fitzenreiter – Herb (eds.), *Dekorierete Grabanlagen*, 269-27; Eaton-Krauss, 'Artists and Artisans', *OEA I* (2001), 138.

⁸⁸ Kanawati-Woods, *Artists in the OK*, 9-14.

⁸⁹ Kanawati-Woods, *Artists in the OK*, 1.

⁹⁰ Eyre, 'Work in the Old Kingdom' in: Powell (ed.), *Labor in the Ancient Near East*, 13-15, 20-32; Hartwig, *Tomb Painting and Identity in Ancient Thebes*, 22-36; Peck, 'Craftsman and Artist' in: Turner (ed.), *The Dictionary of Art*, 789-791; Drenkhahn, 'Artists and Artisans in Pharaonic Egypt', in Baines (trans), *Civilisations of the Ancient Near East*, I, (1995), 331-343; Kanawati-Woods, *Artist in the OK*, 1-28.

The appearance of different 'styles' is also often mentioned within the literature. Robins highlights the changes from the pre-dynastic to the New Kingdom stating that the 'classic proportions' of figures was developed in the Fifth and Sixth Dynasties. Smith examines the stylistic changes from low to high, bold relief between the Fourth and Fifth Dynasties, in addition to noting that a period of stability occurred in the late Fifth and early Sixth Dynasties which showed no influence via the political changes of the dynasty.⁹¹ A 'second style' is identified by Russmann,⁹² Brovanski,⁹³ Smith⁹⁴ and Wolf.⁹⁵ Swinton warns against the hasty classification of the provincial style, denoting the decline of prosperity, and administration. Some examples which show characteristics of the 'provincial style' are indeed securely dated to the reign of Pepy I (V.2), thus there may have been other factors or developments at play.⁹⁶

The possibility that one can trace development and individual motifs back to the original scenes or location is interesting and has been suggested for further study by a number of academics.⁹⁷ This suggestion has served as the foundation of the second and third aims of this study. The comparison of individual scenes within their own theme has the ability to show the original attestation of a detail and trace its movement via influence and transference to other tombs. In a broader view the connections between tombs may be highlighted by comparative analysis showing multiple features across several themes. In order to keep the large volume of scenes and details manageable, key features which were common to all themes such as, equipment, fish species, and figures, were used to provide a stable framework.

Three related publications on fish and fishing in Egypt

There are three studies that directly relate to the topics of fish, fishing and associated scenes in Old Kingdom tombs: *Fish and Fishing in Ancient Egypt* by Brewer and Friedman; *Fischfang und Fischult im alten Ägypten* by Sahrhage; and *Fischerei im Alten Ägypten: Untersuchungen zu den fischfangdarstellungen in den gräbern der 4. Bis 6. Dynastie*, written by van Elsbergen. Each text approaches the subject from a different angle, as will be outlined below.

⁹¹ Smith, *The Art and Architecture of AE*, 63-78, 74.

⁹² Russmann, 'A Second Style in Egyptian Art of the Old Kingdom' *MDAIK* 51, 274 ft [49].

⁹³ Brovanski, 'A Second Style in Egyptian Relief of the Old Kingdom', in Thompson-Der Manuelian (eds) *Egypt and Beyond*. 49-90.

⁹⁴ Smith, 'A Judge Goes Fishing', *BMFA*, 62.

⁹⁵ Wolf, *Die Kunst Aegyptens*, 190.

⁹⁶ Swinton, *Dating Tombs of the OK*, 4 ft [24].

⁹⁷ Simpson, *Sekhem-ankh-ptah*, 3; Cherpion, 'The Human Image in Old Kingdom Non-Royal Reliefs' in: *Egyptian Art in the Age of the Pyramids*, 112; Kanawati, *The Tomb and Beyond*, 75; Woods, *A Day in the Marshes*, 246.

Brewer and Friedman's (1989) informative *Fish and Fishing in Ancient Egypt* approached the topic of fish and fishing from a scientific and archaeological point of view. The authors highlighted the fishing methods used by the Egyptians, as well as documenting the habitats, characteristics and behaviours of the fish found in the Nile River. The book is composed of three parts. First, it briefly outlined the history of fish and their representation in Egypt; commencing with the prehistoric period.⁹⁸ Second, it discussed the various methods of fishing and the evidence on fishing equipment found in Egypt,⁹⁹ and the authors use fishing imagery to assist our comprehension of the fishing methods. Third, the book outlined fourteen genera and twenty species of fish that are found within the Nile.¹⁰⁰ The information presented in these three parts is accessible to all readers and provides a comprehensive understanding of the topic. The brief discussion of the history of fish and fishing in parts one and two is informative, but the third part of this study is of most value to the current thesis because it assists in identifying and classifying the representations of fish found, not only in fishing scenes, but also in associated themes, such as market and cooking scenes. This third section provided information about the fish, including their habitat, behaviours and characteristics, that can be difficult to source. In addition, the authors discussed the relationship of fish to the art and to the Egyptian way of life, which adds depth to the information presented. However, one limitation, which arises from covering the entire history of Egypt in a short chapter, is that the authors are not able to provide a detailed history and the more subtle or short-lived changes are not represented. Therefore, the aim of the current thesis is to focus purely on the Old Kingdom period and to provide a deeper, more thorough discussion, which includes such finer detail, of the changes in both fish and fishing representations in tomb wall scenes.

Fischfang und Fischkult im alten Ägypten by Dietrich Sahrhage (1998) is another well-structured and comprehensive text on the topics of fish and fishing. This text, written in German, focused more on the pictorial evidence and development than did Brewer and Friedman (1989), but it also took into account other sources, including written materials, artefacts and fish remains. Sahrhage's text has seven chapters. The first focused on the Nile and the habitat it provided and presented a very brief overview of the history of fish and fishing from the prehistoric periods to the late periods in Egyptian history.¹⁰¹ Each period is allocated only one to two pages, which does not allow for a detailed summary. The second chapter highlighted the sources of the pictorial evidence that Sahrhage

⁹⁸ Brewer-Friedman, *Fish and Fishing*, 5–19.

⁹⁹ Brewer-Friedman, *Fish and Fishing*, 20–46.

¹⁰⁰ Brewer-Friedman, *Fish and Fishing*, 47–81.

¹⁰¹ Sahrhage, *Fischfang*, 13–28.

used.¹⁰² He investigated sites from both Upper and Lower Egypt in Saqqara, Thebes, Luxor and Aswan. He also discussed images found in temples and objects of significance found in museums. The next two chapters focused on the fish and fishing methods used by the Egyptians.¹⁰³ A small subsection described each fish, including its appearance and representation in the art. Sahrhage indicated some of the characteristics and behaviours of the fish, but provided less detail than did Brewer and Friedman (1989).¹⁰⁴ However, Sahrhage does discuss other animals, including the crocodile, hippopotamus and turtle, along with various shellfish and saltwater fish found in representations of later periods. Fishing methods are also discussed, with a focus on the equipment and boats,¹⁰⁵ and their appearance in the archaeological and pictorial record. In contrast to Brewer and Friedman (1989), Sahrhage examined the role of the fisherman and associated scenes, that is, gutting, dehydration and markets in the fifth and sixth chapter respectively.¹⁰⁶ His concluding chapter outlined the religious connotations applied to certain fish, including the *Tilapia sp.*, *Schilbe* and the eel.¹⁰⁷ The sections, ranging from the Nile River to the religious connotations of the fish and their representation, provide a good introduction to these topics and a broad understanding of the multi-layered world of the Egyptian. The large bibliography provided is useful as a starting point for further reading. However, as with Brewer and Friedman (1989), the limitation of Sahrhage's book is the restrictive amount of data that can be discussed when examining the entire history of fish and fishing. Focusing on fish and fishing in the Old Kingdom alone, as this thesis aims to do, allows for a much more detailed examination of the representation and development of the fish and the associated themes during this formative period.

The third relevant text, van Elsbergen's *Fischerei im Alten Ägypten: Untersuchungen zu den fischfangdarstellungen in den gräbern der 4. Bis 6. Dynastie* (1997), focused on the Old Kingdom alone and approached the topic of fish and fishing from an artistic and economic viewpoint. van Elsbergen investigated archaeological and written evidence and fish remains to gain a better understanding of the topic. All the fishing methods found in Old Kingdom tombs are discussed in the first chapter of the text. Each method is described in detail: how it was performed, what material the equipment was made of and where and when it appeared in the scenes of the Old Kingdom.¹⁰⁸ For example, the first method of dragnets was broken down into separate components, including how

¹⁰² Sahrhage, *Fischfang*, 29–51.

¹⁰³ Sahrhage, *Fischfang*, 57–113.

¹⁰⁴ Brewer-Friedman, *Fish and Fishing*, 47–81.

¹⁰⁵ Sahrhage, *Fischfang*, 117ff.

¹⁰⁶ Sahrhage, *Fischfang*, 120–132.

¹⁰⁷ Sahrhage, *Fischfang*, 135–148.

¹⁰⁸ van Elsbergen, *Fischerei*, 9–60.

the nets were used, the knots tied in the nets, the floats and sinkers used and the drying and storage of the nets. This level of detail was also provided for the other methods of fishing, especially for angling. Handling and transportation of fish is discussed in the second chapter, in which van Elsbergen identified multiple methods.¹⁰⁹ Chapters Three and Four focused on the gutting and preserving of fish that have been caught, extracting the fish roe and cooking.¹¹⁰ The following four chapters comprise a detailed thesis put forth by van Elsbergen regarding the *pr- ḏ.t*, its administration, organisation and importance to the economy for the ancient Egyptian.¹¹¹ van Elsbergen included both market and registration scenes as evidence for the *pr- ḏ.t*'s trade and the issuing of wages. The book concluded with a detailed prosopography of the tombs used in the study, which provides a useful basis for further research.¹¹² Overall, this text is a major source of information, with the author investigating the fishing industry of the Old Kingdom in great depth. The bibliography and prolific referencing indicate that the work has been well researched and will greatly aid any future research on these topics. This study highlights the types of information that can be extracted by focusing on a single time period and van Elsbergen should be considered essential reading for any study of Old Kingdom fishing and fish-related scenes. The aim of the current thesis is to provide a more detailed analysis of the fishing and associated scenes to not only identify standards and variations in fishing scenes, as van Elsbergen has partially done, but also to examine fish processing and sales after the fish are caught from an artistic point of view.

¹⁰⁹ van Elsbergen, *Fischerei*, 75–77.

¹¹⁰ van Elsbergen, *Fischerei*, 78–82, 82–83.

¹¹¹ van Elsbergen, *Fischerei*, 87–96, 97–109, 110–114, and 115–124.

¹¹² van Elsbergen, *Fischerei*, 130–307.

Chapter 2: Aims and Methods

Aims and Methods

Overall Aim and Scope

The aim of the present study is to examine all fish, fishing, and associated scenes within the art of Old Kingdom tombs. These associated scenes either have fish represented and represent equipment or activities related to fish. A comparative analysis of these themes and scenes has been conducted to fulfil three aims set out below. This corpus of scenes only includes the private elite tombs from Dynasty Three to Dynasty Eight. Royal examples are recognized in the text where appropriate. Within this study both the tombs from Upper Egyptian provinces and the Memphite region are considered equally.

Definitions

The definitions of the major terms used through the thesis are as follows:

Standards:

The standard of a scene is an element which is frequently depicted in the same way across the majority of tombs. This detail then becomes a basis of comparison. A standard may change from one dynasty to the next. An example of a standard is the shape of the dragnet.¹¹³ The net is represented in the majority of tombs across the entire Old Kingdom as rectangular.¹¹⁴ There are in almost all cases variations to the standard.

Variations:

Details which are labelled as 'variations' are the exceptions to the Standard. They present a unique or uncommon divergence from the basis of comparison. An example is the crescent shaped dragnet found in Ibi [130] or the dragnet shown with a fish altering the shape of the net in Djau [141].¹¹⁵

Minor Themes:

This term is used to define the fishing themes of angling, lave net fishing, funnel traps, round basket traps, weirs, unique scenes and dragnet scenes. This also applies to the associated scenes of registering the catch, gutting and dehydration, market, transport, preparing fish for consumption, papyrus boat construction, drying and storage of equipment and spinning cord/ net repair. These

¹¹³ See Chapter 4 Dragnet: Shape of the net; also, Appendix 2: Dragnet Detail Table B.

¹¹⁴ See Chapter 4 Dragnet: Shape of the net; also, Appendix 2: Dragnet Detail Table B.

¹¹⁵ See Chapter 4 Dragnet: Shape of the net; also, Appendix 2: Dragnet Detail Table B.

themes do not occur as frequently nor do they occupy the same amount of wall space as other 'major themes' such as spearfishing and fowling scenes. Therefore, they are defined as minor.

Minor Details:

Minor details refer to the intricate details within each scene. For example, 'minor details' of dragnets include but are not limited to the rope ends and their representation, the floats and sinkers, shape of the net and the individual characteristics of the haulers and their positions.¹¹⁶

Objectives

This study has three objectives which are investigated using a method of comparative analysis. These are:

- 1) To identify standards within each individual theme and pinpoint the conception of these standards. It is also the aim to identify any major variations and innovations within each theme.
- 2) To determine both the artistic movement of these themes within tomb art and to identify (if any) a cemetery which was the source of standardization and/or influence in the Old Kingdom.
- 3) To trace instances for artistic influence of themes and minor details between tombs at the same site, sites in close proximity and across the Memphite and provincial regions. To investigate the leading factors which may cause this influence of details/ themes.

Method

In order to fulfil the aims stated above over 450 individual scenes from 165 Old Kingdom tombs have been collated and analysed. This includes all currently known published scenes, and fragments from both the Memphite and provincial regions. Each scene or fragment has been registered under the name of the tomb owner, or in the case of unattached fragments under their catalogue/museum number. Each tomb owner or fragment has been assigned a number for this study which correlates directly to the prosopography; each entry includes pertinent information.

Once all the relevant scenes and fragments had been collected, they were then further divided into themes. In regard to fish depictions all images were collected and ordered in chronological sequence

¹¹⁶ See Chapter 4 Dragnet: also Appendix 2: Dragnet Detail Table B-O.

in order to achieve the first and last attestation of the fish in all regions. This technique was also applied to each theme that is considered in this text.

A sound relative chronology is most beneficial to this study as it provides a suitable framework for the development of the art over a long period.¹¹⁷ As listed in the prosopography, most tombs have multiple date ranges applied by various scholars. These dates were taken into consideration and a date range applied based on current scholarly opinion as well as factors including scene content, orientation, tomb architecture, the location of the tomb, and the tomb owner in his personal and professional context.

Once the chronological order for each theme had been assessed, the investigation into the composition of the scene could take place. This was primarily conducted as a comparative study through an analysis of scenes of the same nature. This resulted in several hundred details being identified and those that were of most benefit to this study entered into tables presented in Appendix 2. Several main elements were focused on:

- Occurrence of the theme
- Main equipment for theme
- Key attributes/ other equipment used in theme
- Fish species represented in the theme
- Minor figures engaged in the theme:
 - Limb Positions
 - Individual Characteristics
 - Clothing
- Captions for the theme.

Not all of these key areas applied to all themes; however, there is significant commonality in their composition to utilize the framework across all themes. The above deconstruction of the scene allowed for the first and primary aim of this study to be fulfilled. The tables of minor details allowed for the author to determine the first and last attestation of each detail, and to clearly highlight the standards of each feature as well as any change or development over the Old Kingdom.

¹¹⁷ see Hornung – Krauss – Warburton (eds.), *Ancient Egyptian Chronology*, 19-51; Woods, *A Day in the Marshes*, 19.

The second aim was also fulfilled via the detail tables. The data that had been entered into the tables provided an unbiased view of the locations of both the themes and the minor details that had been identified. This allowed the author to ascertain the change in the location of the theme/ detail.

The final aim was to track any form of artistic transference or influence that might occur within the examined themes and motifs. The term 'copy' is not frequently used in this study as Harpur, rightly so, suggests that the term implies a deliberate and blind imitation of the feature. Rather, 'influence' denotes an exchange of ideas and the use of the feature in a similar fashion.¹¹⁸

To achieve this aim the data tables were used to identify any features which had been represented in multiple tombs. When one feature had been confirmed to be the similar to two or more examples, other features were then compared within the same themes to show any further possible influence.

The scenes thus went through a two-part process:

1. The examples were compared to the first known attestation of the feature. Other factors considered during this comparison were the representations of other fishing/ or associated themes as well as the general composition of the theme and those shown adjacent.
2. The example was then compared to those close in date to the example. Other factors referred to above were also considered.

The reason for this process was to determine if the feature or scene was inspired by the earlier scenes or by those contemporary to it.

Factors of influence were considered on a broad scale for all Egyptian funerary art. This investigation yielded three major factors which applied to this study. These were political and administrative factors, familial and other relationships between tomb owners, and the artist himself and his abilities.

In addition to the factors described above, the comparison of the scenes provided a well-rounded picture of the examples allowing the author to track influence between tombs in both the Memphite and provincial regions. Some features can be shown to extend influence across both regions.

¹¹⁸ Harpur, *Decoration*, 22

Chronology

The chronology used in this study follows that of Hornung-Krauss-Warburton in *Ancient Egyptian Chronology* and can be viewed in Volume 2.¹¹⁹ The Old Kingdom is here defined from the Third Dynasty with the tomb of Hesy-re [1] which incorporates a cattle fording scene with the depiction of a crocodile, up to the Eighth Dynasty to include the end of the date range with such tombs as Ankhtyfy [148], Baketi I [163] and others.¹²⁰

Harpur notes that there are only minor issues with the dating of Old Kingdom tombs at present.¹²¹ However as noted by Swinton the assigning of a tomb, scene, or fragment to the first or second half of a dynasty or to a dynasty in general is not sufficient for a study that examines change and development in tomb scenes, as it is too broad.¹²² Woods also came to these conclusions when issues arose from the broad dating of some tombs, particularly Kaiemankh [57], which could have had both the first and last attestation of a certain feature.¹²³ Following in Woods' footsteps, accepted dates proposed by Strudwick, Harpur, Kanawati, Baud, Cherpion, Woods and Swinton have been followed.

Prosopography

The prosopography for this study can be found in Volume 2. Each tomb has been listed in chronological order and assigned a number in the same fashion. This number is denoted in the main body of the text with straight brackets [X] and refers the reader to the prosopography where all the pertinent information about the tomb, scene or fragment will be found:

NAME: Tomb owner's name with assigned number;

SITE/CEMETRY: Location of the tomb or fragment in a cemetery or province;

DATE: A list of dates has been provided with an assigned date that is used in this study;

TYPE OF MARSH SCENE: Identifies the type of scene depicted in the tomb;

ROOM/WALL: The number of the Room and Wall on which the scene is depicted;

¹¹⁹ Hornung-Krauss- Warburton (eds), *Ancient Egyptian Chronology*, 117-158; Beckernath, *Chronologie des Pharonischen Ägypten*, 148-163; Woods, *A Day in the Marshes*, Vol 2, 3; see Volume 2, 37.

¹²⁰ See Appendix 1: List of Tombs used in the Study.

¹²¹ Harpur, *Decoration*, 2.

¹²² Swinton, *Dating Tombs of the OK*, 2.

¹²³ Woods, *A Day in the Marshes*, 19, Appendix 5.

IMAGE REFERENCE: The image provided in the plates. Where an image is unpublished, the known reference and written description of the scene is provided;

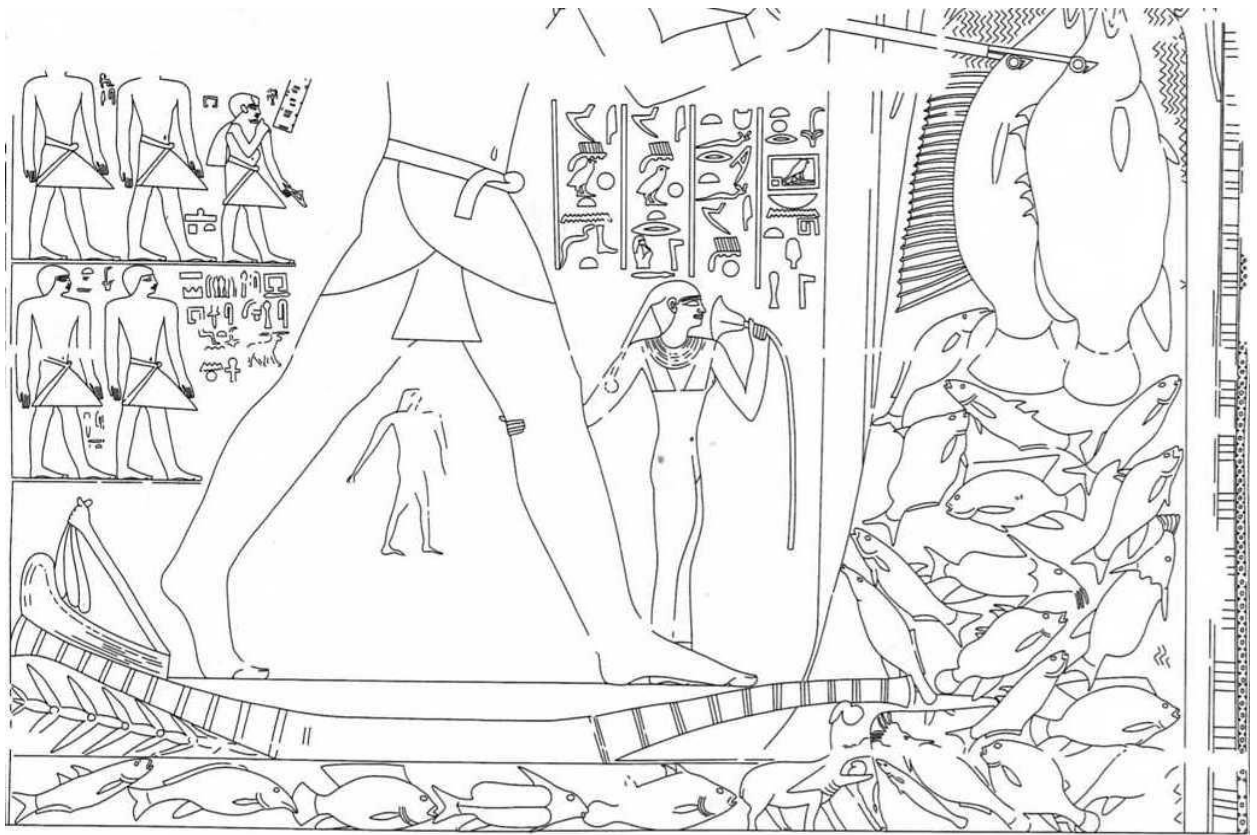
PLATE REFERENCE NUMBER: A full-size image in Volume 2. Scenes are arranged per tomb number;

PM REFERENCE: B. Porter and R. Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Statues, Reliefs and Paintings*, reference number.

Part Two

Chapter 3: Fish

Fish and Other Aquatic Life in Old Kingdom Tomb Wall Scenes.



Inumin [111]

Introduction

Fish and other aquatic animals occur in some of the earliest scenes of the Old Kingdom. One of the first known cases is in the now unpreserved cattle fording scene of the Third Dynasty tomb of Hesy-Re [1], which has been interpreted with a crocodile in its waters.¹²⁴ Representations of fish are later attested in Fourth Dynasty tombs, their variety and characteristics increasing as the Old Kingdom progressed. This chapter thus focusses on attestations of fish based on their chronology and context.¹²⁵ It documents their appearance and investigates any standards or variations in their use over time and/or location. Unusual representations and the depiction of behavioural elements are also discussed.

The number of scenes that include fish and other aquatic animals is extensive, with over four hundred analysed in this study alone. The themes that are particularly relevant feature fishing with spears, dragnets, lade nets, angling, weirs, funnel traps and round basket traps. Other marsh scenes often depict fish within a water band at the bottom of the scene, such as in motifs of fowling, cattle fording, and hippopotami hunting. Aquatic animals are also portrayed in scenes without a water band, such as those of offering bearers, gutting and cooking, as well as market scenes.

Brewer and Friedman identify 20 genera of fish in wall scenes of Egyptian tombs, but not all date to the Old Kingdom. Instead, 18 genera can be observed in Old Kingdom scenes (Table 3.1).¹²⁶ Some fish genus are further divided into species that are clearly identifiable by their artistic details. In some cases, fish are represented at odd angles or with emphasised characteristics. The *S. batensoda*, for instance, is typically portrayed upside down, the *Clarias* sp. is always shown from the top instead of in profile, and the puffer fish is depicted with an inflated, and immediately recognisable, body. In Egyptian art, this principle of *characteristic or visually satisfying aspects*¹²⁷ was employed to ensure that a scene or item could be identified with ease. In some circumstances, the representation is not an accurate portrayal, but a symbolic one that effectively conveyed the necessary information to its viewer.¹²⁸ Although artistic and textual evidence can corroborate the identification of particular scenic elements, some attestations either render fish with minimal details or are affected by poor

¹²⁴ Smith, *HESPOK*, 139-40; Harpur, *Decoration*, 177.

¹²⁵ Note that this chapter does not count each individual representation of fish; it rather marks the first and general overview of subsequent occurrences of fish species within the tomb scenes. A more detailed account of fish is available in the following chapters in reference to specific themes. It must also be noted that the evidence and its analysis is limited by the imperfect and incomplete nature of scenes and tombs of the Old Kingdom.

¹²⁶ For a comprehensive discussion on each species, please refer to Appendix 3: Fish Profiles.

¹²⁷ Kanawati-Woods, *Artists in the OK*, 29-30.

¹²⁸ Kanawati-Woods, *Artists in the OK*, 29-30.

Chapter 3: Fish

preservation. Consequently, they may appear to have characteristics of multiple types of fish, and so their identification remains tenuous.

Scientific Name	Common Name/s	Comments
<i>Petrocephalus</i>	Arminya; Glumaya; Anooma	
<i>Gnathonemus</i>	Anooma; Om-shifefa	
<i>Mormyrus</i>	Boueza	The Genus has three species that can be distinguished in the scenes: <i>Mormyrus Kannume</i> ; <i>Mormyrus Caschive</i> ; and to a lesser extent <i>Mormyrus Niloticus</i>
<i>Hyperopisus</i>	Sawiya; Galmier	
<i>Hydrocynus</i>	Kelb el-bahr; Tiger fish	Referred to as tiger fish or <i>Hydrocynus</i>
<i>Alestes</i>	Sardina; Kelb el-bahr; Raya	
<i>Citharinus</i>	Amara; Gamer; Moon fish	Referred to as <i>Citharinus</i> or Moon Fish
<i>Labeo</i>	Lebis; Debs	
<i>Barbus bynni</i>	Bynni	
<i>Clarias sp.</i>	Armoot; Garmoot; Hoot; Catfish	Referred to as <i>Clarias</i> or catfish
<i>Schilbe sp.</i>	Schibla	
<i>Synodontis</i>	Schall; Garoor	This genus has two Identifiable species: <i>Synodontis schall</i> <i>Synodontis batensoda</i>
<i>Malapterurus</i>	Ra'ad; Ra'ash; Electric Catfish	Referred to in this study by species <i>M. electricus</i> or electric catfish
<i>Anguilla</i>	Taban; Samak; Eel	Referred to in this study as <i>A. vulgaris</i> or eel
<i>Mugil sp.</i>	Bourie; Tobar; Garan; Mullet	
<i>Lates</i>	Isher bayad; Samoos; Laffash; Perch	Referred to in this study as <i>Lates Niloticus</i> or <i>Lates</i>
<i>Tilapia sp.</i>	Bolti	
<i>Tetraodon</i>	Tambera; Fahaka	Referred to in this study as <i>Tetraodon fahaka</i> or puffer fish.

Table 3.1: Fish Identification

Occurrence of Fish

Fourth Dynasty

The first known artistic representation of fish in Old Kingdom tomb art is found in the early Fourth Dynasty tomb of Nefermaat [2]¹²⁹, wherein two fish are encapsulated within a dragnet in the water band. The two are incomplete and thus difficult to identify, but one may be either a *Petrocephalus* or a *Hyperopisus* of the *Mormyridae*, elephant snout fish family. Among these fish's many characteristics,¹³⁰ they have a small dorsal fin located near a forked tail, thin long anal fins, an elongated lip and rounded heads.¹³¹ In the photographic records provided by Gamer-Wallert¹³² these fish appear to have more characteristics which have not been depicted in their representations. This does not only occur with these particular species but found to be common with fish representation in the tomb art. The second fish represented in the dragnet is possibly a *Mugil sp.* or a mullet,¹³³ the only fish depicted with a streamlined body, a forked tail and two dorsal fins. Although two types of mullet are commonly found in the Nile River, they are evidently not differentiated in their representations, and are thus generally assigned to *Mugil sp.*¹³⁴ Their dorsal fins, however, can be depicted in two main ways: either separated or touching.¹³⁵ The *Mugil sp.* is represented in two other Fourth Dynasty tombs also at Maidum: the tomb of Nefer...w [4], which is partially damaged; and the tomb of Rahotep [5].

The dragnet scene in Rahotep [5] features the earliest recorded cases of two other species of fish. The first is the *Barbus Bynni*, identified by its high spine-like dorsal fin, a small anal fin and a pectoral fin on its globular shaped body.¹³⁶ It is also typically illustrated in a concave shape between the head and dorsal fin.¹³⁷ The high dorsal fin distinguishes it from other species of the *Barbus* genus known to inhabit the waters of the Nile.¹³⁸ The second fish is the *Mormyrus Caschive* with a long trunk-like snout tapering towards the tip. Its body is usually depicted as concave and elongated despite the fact that, in reality, it has a more streamlined body with a concave shape at the top of the head only. This species is also defined by a long dorsal fin which begins at the back of the head and extends to

¹²⁹ This is the first example of fish, the representation in Hesy-Re [1] of the Third Dynasty was a crocodile.

¹³⁰ Gamer-Wallert, *Fische*, Tafel III.

¹³¹ Friedman-Brewer, *Fish and Fishing*, 49, 53.

¹³² Gamer-Wallert, *Fische*, Tafel VI.

¹³³ Harpur also identifies this fish as a *Mugil sp.* Harpur, *Maidum*, 63.

¹³⁴ Brewer-Friedman, *Fish and Fishing*, 72-3; Gamer-Wallert, *Fische*, Tafel VI.

¹³⁵ These, however, cannot be used to identify the different types of mullet, as both have two separate dorsal fins situated approximately the same distance apart. Brewer-Friedman, *Fish and Fishing*, 72-3.

¹³⁶ Brewer-Friedman, *Fish and Fishing*, 59; Gamer-Wallert, *Fische*, Tafel IV.

¹³⁷ See Appendix 3: Fish Profile: *Barbus Bynni*.

¹³⁸ Brewer-Friedman, *Fish and Fishing*, 59.

the caudal fin; however, this is not always shown in its representations.¹³⁹ In a fish bearing scene from the same tomb is a very clearly detailed *Lates Niloticus* with a large ovoid body, a dorsal fin set further back towards the end of the body, and a caudal fin which, when spread, forms a rounded fan shape. Other characteristics, such as a set of dorsal spines in front of the dorsal fin, and large anal and pectorals fins,¹⁴⁰ are also portrayed. The *Lates Niloticus* is most commonly represented alongside the *Tilapia sp.* in spearfishing scenes pierced by the main figure's spear.¹⁴¹ It is also commonly found in late Fifth and Sixth Dynasty water bands.¹⁴²

Although extremely fragmentary, a scene from the tomb of Debehen [7] at Giza preserves two fish. One of these is likely a *Mormyrus Kannume*, with a slightly elongated head and snout on a long convex body. Belonging to the same family, the *Mormyrus Caschive* is also characterised by very similar features; however, the *M. Kannume* in reality, and to some degree in the artistic record, has a thicker snout and a shorter dorsal fin.¹⁴³

The late Fourth Dynasty tomb of Nebemakhet [8] at Giza features two, possibly three, new identifiable species of fish. The first of these is a *Tilapia sp.*. Carried by an offering-bearer, it has a large oval-shaped body, large pectoral and anal fins, a fanned caudal fin with a straight line along its tip, and a characteristically large dorsal fin extending from the back of its head to the tail. Three different species of *Tilapia* are found in the Nile. Grouped as the *Tilapia sp.*,¹⁴⁴ they are usually distinguishable by their scales' colours and patterns which, in most cases, are not replicated or preserved in tomb scenes. The second type of fish in Nebemakhet's tomb [8] is the catfish or *Clarias sp.*, a species that is often illustrated with a long eel-like body, a rounded caudal fin and barbells protruding from its mouth.¹⁴⁵ It is also repeatedly shown with an ossified spine shaped as a 'crown' that protrudes backwards from its neck. At least two species of *Clarias* and two types of the catfish *Heterobranchus*, are native to Nile waters;¹⁴⁶ yet, the artistic repertoire is not sufficiently detailed to individually identify each species, and so they are collated under the *Clarias sp.*¹⁴⁷

¹³⁹ Brewer-Friedman, *Fish and Fishing*, 51-2; Gamer-Wallert, *Fische*, Tafel III.

¹⁴⁰ Brewer-Friedman, *Fish and Fishing*, 51-2; Gamer-Walletr, *Fische*, Tafel VI.

¹⁴¹ See Chapter 11: Spearfishing: Fish Species.

¹⁴² See Volume 2: Table 3 Fish Distribution.

¹⁴³ Brewer-Friedman, *Fish and Fishing*, 51-2; Gamer-Wallert, *Fische*, Tafel III.

¹⁴⁴ Brewer-Friedman, *Fish and Fishing*, 76-9.

¹⁴⁵ Brewer-Friedman, *Fish and Fishing*, 59-62; Gamer-Wallert, *Fische*, Tafel IV.

¹⁴⁶ Gamer-Wallert, *Fische*, Tafel IV; Brewer-Freidman, *Fish and Fishing*, 59-62.

¹⁴⁷ Brewer- Freidman, *Fish and Fishing*, 59-62.

Fifth Dynasty

New types of fish species are attested in Fifth Dynasty tombs, five of which are depicted in Ka-Aper [10]. These include the *Citharinus* or moon fish, *Tetraodon fahaka*, *Hyperopisus*, *Gnathonemus* and *Schilbe*. The moon fish is easily identified by its distinctive circular body, a high dorsal fin, a smaller second dorsal fin, a long anal fin and a forked tail.¹⁴⁸ Two known species likely inhabited the Nile in the Old Kingdom, yet their differences are not clear in artistic representations and all are consequently identified here as *Citharinus sp.*¹⁴⁹ The poisonous puffer fish or *Tetraodon fahaka* is always represented with an inflated body, and can be typically found with a fanned caudal fin, high and long anal and dorsal fins, a small mouth, and a small eye at the very top of its head.¹⁵⁰ Distinctive striped lines along the torso are also preserved in some examples.¹⁵¹ Of the *Mormyridae* family are the *Hyperopisus* and *Gnathonemus* fish, both of which are very similar in appearance and confused with the *Petrocephalus*. The *Hyperopisus* is usually portrayed with a shorter dorsal fin and a rounded head, while the *Gnathonemus* is characterised by a protruding bottom lip with anal and dorsal fins extending from the lower torso to the tail.¹⁵² The *Schilbe* is commonly represented with a concave curvature to its body and a forked tail. The front half of the fish is wider than its tail, with two spiny protrusions situated in place of the dorsal and lower pectoral fins.¹⁵³ Although the fish also has a long anal fin along its lower body, the feature is not portrayed in tomb depictions.¹⁵⁴ Two species of the *Schilbe* are known to have inhabited the Nile River, each with a different geographical distribution, but unfortunately they are not differentiated in the artistic record and are thus classified together as *Schilbe sp.*¹⁵⁵

The mid-Fifth Dynasty tomb of Tepemankh (II) [17] contains the first identifiable representation of *Synodontis schall* in its market scene. The second *Synodontis* species, the *batensoda*, is found in the slightly later tomb of Nefer and Kahay [18].¹⁵⁶ Both *Synodontis* species have large forked tails, anal

¹⁴⁸ Brewer-Friedman, *Fish and Fishing*, 56; Gamer-Wallert, *Fische*, Tafel IV.

¹⁴⁹ These fish were abundant in the past, but are rarely attested now in the Nile River. Brewer-Friedman, *Fish and Fishing*, 56.

¹⁵⁰ Brewer-Friedman, *Fish and Fishing*, 80-1; Gamer-Wallert, *Fische*, Tafel VI.

¹⁵¹ Examples include those in Niankhkhnum and Khnumhotep's [27] dragnet scene, Ty's [35] dragnet scene, and Djau's [141] angling and dragnet scenes. See also Gamer-Wallet, *Fische*, Tafel VI.

¹⁵² This can be observed in Nefermaat [2], as the body was not preserved enough in Ka-Aper [10] to make this determination.

¹⁵³ Brewer-Friedman, *Fish and Fishing*, 64-5; Gamer-Wallert, *Fische*, Tafel IV.

¹⁵⁴ Gamer-Wallert, *Fische*, Tafel IV.

¹⁵⁵ One species, the *S. uranoscopus*, has a southern distribution and is mostly limited to the Upper Nile region. The *S. mystus* mainly occupies the Lower Nile region. Brewer-Friedman, *Fish and Fishing*, 64.

¹⁵⁶ In Nefer and Kahay [18], the two *Synodontis* have been identified as *S. Schall* (Moussa- Altenmüller, *The Tomb of Nefer and Kahay*, 20-1). However, the second vertical catfish is more likely a *S. batensoda* as its body shape is clearly different from the first catfish, and its rear dorsal fin closely resembles that of a *batensoda*.

and pectoral fins, as well as distinctive high dorsal spines and a dorsal fin; but the *S. batensoda* is poisonous while the *S. schall* is not.¹⁵⁷ The two also have different body proportions and, in some cases, varying heights and lengths of the dorsal fin at the rear.¹⁵⁸ Such distinguishing details are not typically portrayed; however, the *S. batensoda* is peculiarly depicted as inverted or upside down.¹⁵⁹ This behaviour likely reflects the fish's eating habits, as the *Synodontis schall* is a benthos eater (ground eater) while the *Synodontis batensoda* feeds on plankton, surface insects and algae.¹⁶⁰ The fish are therefore forced to orientate themselves appropriately in order to gain easy access to their food source.

Another fish attested in the mid-Fifth Dynasty is the eel, which occurs in the tomb of Innofret [19]. The eel or *Anguilla vulgaris* is the most distinctive fish with its long tubular body, as well as dorsal and anal fins that extend along the length of the body, converging at the tip of the tail.¹⁶¹ Only one species of eel is found in the Nile River, most commonly in the Lower Nile and Delta regions.¹⁶² The eel becomes a frequent addition to the water band in Memphite tombs of the mid-Fifth to Sixth Dynasties, with limited provincial examples.¹⁶³

The electric catfish or *Malopterurus electricus* is first attested in the tomb of Iymery [20] at Giza. This species has a long slender body, a fan shaped caudal fin, small anal and pectoral fins, and large barbells.¹⁶⁴ As its common name suggests, the catfish is able to administer an electric charge as both a defence mechanism and a method to capture its prey.¹⁶⁵ Reaching a length of 120 centimetres, it can discharge a 350V shock at only 55 centimetres in length. Although not lethal to humans, this can yield quite a nasty jolt.¹⁶⁶

The tomb of Iymery [20] may also depict the first example of a *Mormyrus Niloticus*. This species, like the *M. Kannume* and *M. Caschive*, is part of the *Mormyridae* family and shares some features with the other two species, such as a long body and a slightly elongated head and snout. The defining difference is the shape of its mouth, which is straight compared to the concave curvature of the others.¹⁶⁷

¹⁵⁷ Robins, et al., 'World fishes important to North Americans', 243.

¹⁵⁸ Gamer-Wallert, *Fische*, Tafel V.

¹⁵⁹ Brewer-Friedman, *Fish and Fishing*, 67-9.

¹⁶⁰ Green, 'Haematology and habits in catfish of the genus *Synodontis*'. *Journal of Zoology*, 182: 39–50.

¹⁶¹ Brewer-Friedman, *Fish and Fishing*, 71; Gamer-Wallert, *Fische*, Tafel V.

¹⁶² Brewer-Friedman, *Fish and Fishing*, 71.

¹⁶³ See Volume 2: Table 3: Fish Distribution, and Table 2: Fish in Techniques.

¹⁶⁴ Brewer-Friedman, *Fish and Fishing*, 70; Gamer-Wallert, *Fische*, Tafel V.

¹⁶⁵ Roberts, 'A review of the African Electric Catfish' 1-15.

¹⁶⁶ Roberts, 'A Review of the African Electric Catfish', 1-15.

¹⁶⁷ Brewer-Friedman, *Fish and Fishing*, 52.

The tomb of Ty [35] features the only confirmed representation of a *Labeo Niloticus*. Difficult to identify due to its resemblance to a *Barbus Bynni*, the tomb portrays this species of fish with its distinctive longitudinal line markings along its body.¹⁶⁸ It additionally has a small and slender body which ends in a forked tail, a large dorsal fin, a significant anal fin and small pectoral fins.¹⁶⁹

The abovementioned fish species remain continuously represented in tomb art through to the end of the Sixth Dynasty and the scope of this thesis. Most Fourth and Fifth Dynasty cases are located in the Memphite region as the majority of the evidence stems from this area; yet, examples in provincial tombs occur from the mid-Fifth Dynasty onwards. For instance, Inti [45] depicts representations of the *Mormyrus Kannume*, *Clarias sp.* and *Lates*, whereas Serfka [49] includes a puffer fish and a possible representation of the *Synodontis schall*. At El-Hawawish, the late Fifth Dynasty tomb of Hesimin (M22) [56] portrays the *Mormyrus Niloticus*, while Hem-Min (M43) [61] depicts the only surviving provincial representation of the eel from this dynasty and the first of the *Tilapia sp.* Scenes from Khunes [67] illustrate a possible *Gnathonemus* and a *Mugil sp.*, whereas the Sheikh Said tomb of Werirni [70] portrays the first provincial attestations of the *M. Caschive*, *Barbus bynni*, *Schilbe sp.*, and *Synodontis batensoda*.

Sixth Dynasty

Depictions of fish species in provincial tombs continue into the Sixth Dynasty, with a significant increase from the mid-Sixth Dynasty onwards. At Deshasha, the tomb of Iteti/Shedu [97] includes a possible representation of a *Petrocephalus* and *Citharinus sp.* Henqu/ Iy...f II [120] from Deir el-Gebrawi also features a *M. Kannume* from the elephant snout fish family. Ibi [130] and Pepyankh Heri-Ib/Neferka/Heny [131] introduce the *Hyperopisus* and *M. electricus*, whereas the tomb of Kahep/Tjeti-Iker [140] possibly depicts a *Labeo Niloticus*.

The late Sixth to early Eighth Dynasty tomb of Ankhtyfy [148] is the only known tomb to illustrate two species unattested elsewhere: the *Hydocyon forskalii* or tiger fish, and the *Alestes dentex*.¹⁷⁰ The tiger fish is depicted on a large scale, mimicking sightings of fish measuring up to 78 centimetres in length. A predatory fish known to cannibalise its own species, it congregates in schools and is often found near the surface of the water.¹⁷¹ The most impressive part of this fish is its large teeth, which can

¹⁶⁸ Brewer-Friedman, *Fish and Fishing*, 57. This identification is based on the surviving painted characteristics found on the body of this representation. Without these, the identification of this species is difficult.

¹⁶⁹ Gamer-Wallert, *Fische*, Tafel IV.

¹⁷⁰ Vandier, *Mo`alla*, pl. XL, XIII, Fig. 66, 73.

¹⁷¹ Pauly-Schaefer, 'Alestidae', 347-411.

clearly be seen in artistic representations.¹⁷² The *Alestes dentex* is typically a small fish with a thin streamlined body, a high dorsal fin, a forked tail, and small pectoral and anal fins or spines. Found in the Nile River, it can reach lengths of 55 centimetres.¹⁷³

Distribution of Fish

Tomb Art

Limited representations from the Third and Fourth Dynasties adversely affect the analysis of the distribution of fish in the early Old Kingdom. It is clear, however, that the evidence is Memphite in origin and can be directly related to funerary sites and complexes established by kings. Thus, Fourth Dynasty attestations are mostly found at Maidum, with three recorded cases at Giza. Fifth Dynasty cases mostly stem from the Memphite areas of Saqqara and Giza, yet a few surface in provincial cemeteries, coinciding with the appointment of officials to nomes.¹⁷⁴ A distinct increase in the amount and species of fish can be observed between scenes of the Fourth and Fifth Dynasties. Some species, such as the mullet, were also commonly portrayed multiple times in the one scene.¹⁷⁵ This shift may be a response to, and an emulation of, the addition of marsh pursuits and agricultural scenes in royal temples and monuments, such as those of Userkaf, Sahure or Niuserre.¹⁷⁶ The increase in size and space on tomb walls may also be a key factor,¹⁷⁷ with more room likely emerging for tomb decoration.¹⁷⁸ Therefore, the increased size of water bands could accommodate numerous fish of different species,¹⁷⁹ whereas the additional space could allow for extra motifs such as weir fishing (Ptahshepses [41]), lave net fishing (Niankhkhnum and Khnumhotep [27]),¹⁸⁰ gutting or fish bearing.

This increase in frequency in the depiction of all fish species continues into the Sixth Dynasty, with the *Tilapia*, *Lates*, *Mugil sp.*, *S. schall* and *Citharinus* becoming particularly common. Representations are

¹⁷² Pauly-Schaefer, 'Alestidae', 347-411.

¹⁷³ Paugy, 'Characidae.', 195-236.

¹⁷⁴ Kanawati-McFarlane, *Akhmim in OK*, 23. Compared to other themes such as fowling, music or dance, fishing is not as well represented in early Fifth Dynasty provincial tomb art.

¹⁷⁵ Other fish include the *Tilapia sp.*, *S. schall*, *Clarias sp.* and puffer fish. It is unclear at this stage why these fish were more popular than others. Perhaps they were more common in the Nile, more frequently caught, or more typically consumed. It is also possible that they held special religious or cultural significance.

¹⁷⁶ Harpur, *Decoration*, 184.

¹⁷⁷ Harpur, *Decoration*, 195ff.

¹⁷⁸ This directly relates to the internal structure of the tomb, with the development of multiple rooms and pillared halls. Kanawati-Woods, *Artists of the OK*, 38.

¹⁷⁹ Harpur, *Decoration*, 196.

¹⁸⁰ Although the causeway of Unis's mortuary complex is described as having some of the most beautiful marsh scenes, no new motifs or scenes are depicted. Harpur, however, suggests that the possible reconstruction of the causeway may have led to the loss of other scenes; Harpur, *Decoration*, 197.

not restricted to the Memphite regions as popular fish are also portrayed in similar numbers in provincial tombs, especially towards the late Sixth Dynasty.¹⁸¹

The Natural Habitat

The depiction and distribution of fish species may correlate with their known natural habitat. The majority, however, were commonly seen and caught along the length of the Nile and its lakes, and thus little to no geographical restrictions were placed on artists.¹⁸² Nevertheless, a few species were naturally confined to specific areas of the Nile River.

The *Gnathonemus* of the *Mormyridae* family prefers the Lower Nile in the Memphite region and the Delta.¹⁸³ This geographical range is somewhat reflected by collected attestations,¹⁸⁴ as only a few provincial tombs possibly portray this fish. The number of depictions evidently declines in the Sixth Dynasty, especially in its second half, as provincial evidence becomes more abundant. While this could be related to the distribution of the fish itself, it may also be due to the misidentification of the fish with its other family members, the *Petrocephalus* and *Hyperopisus*, which share many of its characteristics. Yet, all of these species markedly decline in number in the latter half of the Sixth Dynasty,¹⁸⁵ despite the wider habitat of the *Petrocephalus* and *Hyperopisus*.¹⁸⁶ Therefore, the natural habitat of the *Gnathonemus* was not the sole reason for the geographical distribution of its representations. Instead, its selection was more likely due to artistic choice.

Like the *Gnathonemus*, the eel is mostly restricted to the Lower Nile in the Memphite region and the Delta. Rarely observed in Upper Egypt,¹⁸⁷ the range of its habitat coincides with its distribution in tomb scenes.¹⁸⁸ A small number of mostly singular attestations are known from provincial tombs at, for instance, El-Hawawish, Quseir el-Amarna, Zawyet el-Maiyetin and Meir.¹⁸⁹ As all these provincial examples date between the late Fifth to early Sixth Dynasties, it is possible that they were completed by artists trained at Memphis with knowledge of this predominantly Lower Egyptian fish.

¹⁸¹ See Volume 2 Table 3: Fish Distribution.

¹⁸² Such genus/species include: *Petrocephalus*, *Hyperopisus*, *Hydrocynus*, *Citharinus* sp., *Labeo*, *Barbus Bynni*, *Clarias*, *Synodontis*, *M. electricus*, *Mugil* sp., *Lates*, *Tilapia* sp. and *Tetraodon fahaka*.

¹⁸³ Brewer-Friedman, *Fish and Fishing*, 50.

¹⁸⁴ See Volume 2: Table 3: Table of Fish Distribution.

¹⁸⁵ See Volume 2: Table 3: Table of Fish Distribution.

¹⁸⁶ Brewer-Friedman, *Fish and Fishing*, 48-53.

¹⁸⁷ Brewer-Friedman, *Fish and Fishing*, 71.

¹⁸⁸ See Volume 2: Table 3: Fish Distribution.

¹⁸⁹ Hesimin (M22) [56], Khewen-wekh/Tjetji [122], Niankhpepy/Khnumhotep/Heti [123], Pepyankh/Heri-Ib/Neferka/Heny [131] and Pepyankh/Henykem [146].

Unique to the tomb of Ankhtyfy [148] are the *Hydrocynus spp.* and *Alestes*.¹⁹⁰ Despite their habitat range along the entire length of the Nile River, they do not appear in any Memphite, or indeed any other, tomb.¹⁹¹ Thus, it seems that artists collectively chose not to represent these fish. Perhaps they were infrequently seen or caught, or had limited commercial or dietary use. It is also probable that they had an attached stigma that made them undesirable for portrayal in tombs.

The collected attestations for another species, the electric catfish or *Malapterurus electricus*, additionally reflect a unique distribution. Although they are found along the Nile River, the fish become less common in the latter half of the Sixth Dynasty, especially in the provinces.¹⁹² This reduced frequency thus appears to reflect an artistic choice rather than a geographical restriction.¹⁹³

Representations of Fish Behaviour

Artists appear to have had some freedom to include modified or embellished details in fishing scenes. On the rare occasion, some fish behaviours were depicted. The addition of these motifs not only enriches scenes, but also indicates a sound awareness of the Egyptian natural environment.

Schooling

Schooling behaviour is uniquely attested in the tomb of Hesi [110] at Saqqara. Here, a school of *Tilapia sp.* and *Mugil sp.* is represented by overlaying three to four fish, which add a perspective of depth and synchronisation. Indeed, such schooling behaviour is known to be exhibited by both these genera.¹⁹⁴

The schooling behaviour of fish is a common trait, with over 80% practicing it at some stage in their life cycle.¹⁹⁵ There are three main reasons why fish would school. The first (1) is to seek protection. The large mass could intimidate predators to likely reconsider feeding on these particular fish. The

¹⁹⁰ The *Alestes* is identified by Vandier in the scenes from Ankhtyfy [148]; however, Brewer and Friedman suggest that the fish is not represented in the Old Kingdom, with its first clear representation found at the Temple Complex of Medinet Habu. Vandier, *Mo'alla*, 66, 73; Brewer-Friedman, *Fish and Fishing*, 55.

¹⁹¹ Vandier's identification of the *Hydrocynus forskalii* in Ankhtyfy [148] has a habitat range of the entire Nile River. The two other species of tigerfish have restricted habitats, with the *H. brevis* found only at Luxor and the Lower Nile while the *H. lineatus* is at Lake Nasser only. The three species are not distinguishable in their representations and therefore are classified here as *Hydrocynus spp.* Brewer-Friedman, *Fish and Fishing*, 54, 55; Vandier, *Mo'alla*, 66, 73.

¹⁹² Roberts, 'A review of the African Electric Catfish' 1-15.

¹⁹³ An alternative view on the reduction of representations for the species from the Mormyridae family and the electric catfish may be the result of some change in climatic conditions over the Old Kingdom from which they were adversely affected. See Bárta, M, 'Long term or short term? Climate Change and the demise of the Old Kingdom. In Kerner, Dann and Bangsgaard (eds) *Climate and Ancient Societies*, (Copenhagen, 2015), 177-196. Furthermore, it may be a possibility that they were overfished, reducing their numbers significantly. These theories require further investigation in order to substantiate their validity.

¹⁹⁴ Evans, *Animal Behaviour*, 70.

¹⁹⁵ 'Sea Grant: Rhode Island Fact Sheet: Schooling' P.K. Stout, (Accessed 5/10/2014).

continual movement of fish in this mass may be due to individuals vying for a position in the middle of the school which reduces their likelihood of being caught.¹⁹⁶ Constant movement also deflects light, creating unusual patterns and shapes that can confuse the predator.¹⁹⁷ A study completed on this behaviour as an anti-predation tactic suggests that the tendency for a species to school depends on its habitat.¹⁹⁸ In environments with low predation, fish would primarily school for reasons such as reproduction and feeding. In those of high predation, fish would largely school for protection.¹⁹⁹ Such behaviour may also help prevent individual fish from being swept downstream in strong and dangerous currents.²⁰⁰ Unfortunately, this safety behaviour could be exploited by fishermen as a means to net large yields.

The second (2) main purpose for schooling is for reproduction.²⁰¹ Some fish species, like the *Tilapia sp.*,²⁰² would school but separate to hold territories, with the strongest male attracting females to withdraw from their school. Other species remain in schools during the breeding process.²⁰³ Fish would also school for spawning, with species like the *Mugil sp.* moving in schools to nesting or spawning grounds.²⁰⁴ Schooling for this purpose may accumulate significantly less numbers of fish in comparison to schooling for safety. The *Mugil sp.*, for example, has been observed in a school of five fish consisting of four males and one female during reproduction.²⁰⁵ It is possible that examples of schooling found in Hesi [110] are a result of mating, as there are other examples of aquatic animals mating within the same tomb.²⁰⁶

The third (3) main reason for schooling behaviour is to gain access to food sources.²⁰⁷ It has been suggested that fish would school when it is apparent that food is in the vicinity, with one fish alerting

¹⁹⁶ Keeling, *Social Behaviour in Farm Animals*, 297.

¹⁹⁷ Keeling, *Social Behaviour*, 279.

¹⁹⁸ Seghers, 'Schooling Behaviour' 486.

¹⁹⁹ Seghers, 'Schooling Behaviour', 486.

²⁰⁰ Marshal, *The life of fishes*, 204.

²⁰¹ Marshal, *The life of fishes*, 204-8.

²⁰² Popma -Masser, 'Southern regional Aquiculture centre: Tilapia Life History and Biology'

²⁰³ Keenleyside, 'Some aspects of Schooling Fish Behaviour' *Behaviour*_Vol.8 No. 2/3 1955, 239.

²⁰⁴ 'Mulletts: Mugiliformes - Behaviour and Reproduction', *Animal life Resource*.

²⁰⁵ Harrison, 'Mugilidae. Lisas'. 1293-1298.

²⁰⁶ There are examples of turtles as well as crocodiles mating in Hesi [110].

²⁰⁷ Marshal, *The life of fishes*, 204-8.

others to converge.²⁰⁸ Some predatory fish, like the *Lates* or tiger fish, would hunt in schools in order to search for, chase, and consume prey that could not be easily captured individually.²⁰⁹

Feeding habits of the *Synodontis*

The feeding habits of the *Synodontis* family have been mentioned previously in regards to the characteristics of identification for the individual species of *Synodontis schall* and *batensoda*. As a surface feeder, the *batensoda* must temporarily invert itself to feed, but could reposition its body if startled or if the food on the surface is depleted.²¹⁰ The differentiation of these two different taxa suggests that the Egyptian artist(s) may have been aware of the individual species and their varying behaviours.

Jumping Fish

The tombs of Ihy r/u Seshseshet/Idut [72] and Mereruka [103] feature examples of fish leaping from nets that have been hauled out of the water.²¹¹ The genus attested in Ihy r/u Seshseshet/Idut [72] is the *Mugil* sp. while those in the lave net scene of Mereruka [103] are *Synodontis* fish. Their behaviour is thought to be natural instinct for fish seeking to escape a predator, and can be also observed in the open ocean where fish jump to avoid such dangers as sharks.²¹²

Predation of Fish

While not a behaviour, fish are also shown being eaten by other animals in marsh scenes. The most frequent animal depicted performing this action is the crocodile which is further discussed in the next section. However, a mongoose is also shown consuming a mullet in scenes from Mereruka [103] and Hesi [110].

Crocodiles, Hippopotami, and Other Aquatic Animals

Fish are not the only aquatic creatures found in the depths of the Nile. Others, such as the crocodile or hippopotamus, were active participants in the natural world of the ancient Egyptians. These

²⁰⁸ While this would suggest that the schooling behaviour is only seen when food is present, the experiment notes that, while fish are well feed or not hungry, they would maintain the school. Only when starved would they disengage and seek food, as the wider the dispersal, the more fish are engaged in the seeking of food. Keenleyside, 'Aspects of Schooling Behaviour', 234.

²⁰⁹ Keenleyside, 'Aspects of Schooling Behaviour', 234.

²¹⁰ Brewer-Friedman, *Fish and Fishing*, 68-9.

²¹¹ Ankhtyfy [148] may also include jumping fish, as fish are shown on top of the depiction of the lave net.

²¹² Peterson, 'Cruising Speed During Migration of the Stripped Mullet', 395.

creatures were also portrayed in the water band of tomb scenes and are therefore mentioned briefly here as they display some interactions with fish and the fishing process.

Crocodiles

One of the largest predators, the Nile crocodile or *Crocodylus niloticus* has a reputation which causes fear in both ancient and modern man.²¹³ This reptile is one of the largest species of the crocodile family and inhabited the length of the Nile in ancient times.²¹⁴ The threat of attack was high as its habitat coincides with all populated areas along the Nile, thus making encounters frequent and deadly.²¹⁵ Within tombs, crocodiles are portrayed with a distinctive and typical body shape, their positioning and details varying from scene to scene. Depending on their state of preservation, some representations, as in Ankhmahor [102] or Mehu [121], show them with a bony 'mask' on their head; while others, as in Ty [35], depict a less detailed head. Scales, painted or carved, were often applied to the body and can be observed in Ty [35], Kagemni [94] and Seankhuptah [106]. The colouring for this animal is typically a dark olive green with some artists using a lighter colour for its neck and underside.²¹⁶

Five known types of crocodile behaviours are shown in tombs: (1) passivity; (2) aggressiveness; (3) the crocodile consuming fish; (4) embracing crocodiles; and (5) the representation of the crocodile laying eggs.²¹⁷

The passive crocodile (1) is classified as an animal at rest, head elevated or resting, on the baseline of a water band. It is clearly not in a threatening poise nor interacting extensively with its environment.²¹⁸ The Third Dynasty tomb of Hesy-re [1] includes a possible cattle fording scene

²¹³ Musambachime, 'The Fate of the Nile Crocodile in African Waterways' in *African Affairs*, Vol. 86, No. 343 (Apr., 1987), 197.

²¹⁴ Buffetaut, 'Evolution and Biology: Evolution' (in) Ross, C.A.(ed) '*Crocodiles and Alligators*', 40-41.

²¹⁵ *Crocodylus Niloticus*: Nile Crocodile, *National Geographic*.

²¹⁶ Berlin Fragment 2/70 [89].

²¹⁷ The behavior of a crocodile eating a new born hippopotamus calf is discussed in the following section on hippopotami and crocodile interactive behaviors.

²¹⁸ Hesy-Re [1], Iynofret [19], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Irukaptah/Khenu [44], Kaemrehu [47], Khuwiwer [50], Senedjem-Ib/ Inti [59], Nimaatre [60], Nebet [62], Iynofert/ Shanef [63], Khunes [67], Khenut [68], Methethi [69], Ihy r/u Seshseshet/ Idut [72], Akhmerutnesut [82], Cairo fragment 5.11.24.17 [86], Berlin Fragment 2/70 [89], Paris Louvre E.26092 [92], CG 1782/ 1786 [95], In- Snefru-Ishtef [96], Ankhmahor [102], Mereruka [103] Seankhuptah [106], Hemre/ Isi I [107], Remni/ Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Wernu [114], Nekhebu [119], Mehu [121], Khewen-wekh/ Tjetji [122], Ibi [130], Djau [141], Pepyankh/Henykem [146] and Shepsipumin/Kheni [147].

featuring a crocodile observing the herd.²¹⁹ Such a passive representation is similarly found in scenes of spearfishing, fowling and dragnet fishing.²²⁰

The aggressive crocodile (2) is known from six Old Kingdom tombs.²²¹ The late Fifth Dynasty tomb of Seshemnofer IV [77] depicts a crocodile in a water band with its mouth open, perhaps a representation of its vocalising to intimidate a perceived threat. Scenes in Khuwiler [50] and Senedjem-Ib/Mehi [76] illustrate two crocodiles facing each other. The absence of any prey suggests that they are not stalking or hunting, but rather that the aggression is directed between the two crocodiles themselves. A rather morbid scene is attested in the tomb of Niankhpepy/Khnumhotep/Heti [123] in which a boatman has been attacked by a crocodile, his foot shown within the animal's jaws.

Crocodiles consuming fish (3) would have been readily observed along the Niles' banks. The first occurrence of the behaviour may be attributed to a scene in the provincial tomb of Hesimin (M22) [56], wherein an incomplete body of a crocodile is in close proximity to an incomplete fish. Such a depiction bears resemblance to later attestations of the motif, as in the Sixth Dynasty tombs of Kagemni [94], Khnumenti [98], Mereri [108] and Mehu [121]. In these examples, the fish are typically swallowed head first, as their tails, and associated spines or other defence mechanisms, might harm the crocodiles' throats if swallowed first.²²² Examples of the fish swallowed incorrectly are rare and are attested in Kagemni [94] and Mehu [121].

Depictions of two crocodiles embracing (4) have been interpreted as acts of copulation.²²³ While this is a valid conclusion, other explanations are possible. Evans suggests that the crocodiles could be in (a) a rare venter-to-venter mating position, (b) engaged in the rolling behaviour that occurs during mating, or (c) engaged in the death roll, fighting, which can be exhibited by males during breeding

²¹⁹ Smith, *HESPOK*, 139-40; Harpur, *Decoration*, 355 ff. Table 2.

²²⁰ Hesy-Re [1], Iynofret [19], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Irukaptah/Khenu [44], Kaemrehu [47], Khuwiler [50], Senedjem-Ib-In/Inti [59], Nimaatre [60], Nebet [62], Iynofret/ Shanef [63], Khunes [67], Khenut [68], Methethi [69], Ihy r/u Seshseshet/ Idut [72], Akhmerutnesut [82], Cairo fragment 5.11.24.17 [86], Berlin Fragment 2/70 [89], Paris Louvre E.26092 [92], CG 1782/ 1786 [95], In- Snefru-Ishtef [96], Ankhmahor [102], Mereruka [103] Seankhuipah [106], Hemre/ Isi I [107], Remni/ Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Wernu [114], Nekhebu [119], Mehu [121], Khewen-wekh/ Tjetji [122], Ibi [130], Djau [141], Pepyankh/Henykem [146] and Shepsipumin/Kheni [147].

²²¹ Seshemnofer IV [77], Akhmerutnesut [82], Kagemni [94], Hesi [110], Niankhpepy/Khnumhotep/Heti [123] and Pepyankh/Henykem [146].

²²² Pooley, 'Behaviour and Environment: Food and Feeding habits', 8.

²²³ Kagemni [94], Hesi [110] and Mehu [121].

season.²²⁴ Indeed, high levels of aggression are typically displayed by males when breeding,²²⁵ leading to ferocious displays of rolling and hissing crocodiles that would have gained the attention of all Egyptians. The representation's relation to copulation is, however, quite rarely displayed by crocodiles. It has thus been proposed that the venter-to-venter pose copies human sexual behaviour to symbolically represent the crocodiles mating.²²⁶ In reality, crocodiles copulate underwater, limiting the observation of the mating behaviour and perhaps forcing the artist to apply human reproductive behaviours to communicate the actions of the animals.²²⁷ Conversely, one representation in the tomb of Mehu [121] shows the correct mounted position of crocodile mating.

The representation of a crocodile placed near the base of the water band, its head and tail vertical, appears to represent the reptile in the process of laying eggs (5). The first depiction of this behaviour occurs in the late Fifth Dynasty tomb of Kairer [66] at Saqqara. The well-preserved scene displays the crocodile laying four eggs resting under its cloacae. A second possible occurrence may be found in the late Sixth Dynasty tomb of Pepyankh/ Henykem [146] at Meir. Although damaged, a crocodile under the fowling scene appears to be in a similar position to that of Kairer [66]. Despite the preserved border, hind legs and tail of the crocodile, eggs are curiously not depicted under its cloacae nor in the general area behind its hind quarters.

Hippopotami

The habitat of the hippopotamus or *hippopotamus amphibious* encompasses all areas of Upper and Lower Egypt. Easily observed from all locations along the Nile,²²⁸ this animal is considered extremely dangerous and aggressive within its habitat and, until this day, is considered a serious threat in all areas of sub-Saharan Africa.²²⁹

Hippopotami are easily identifiable in tomb art. They are usually portrayed with large bodies, sturdy legs and an anatomically correct head with ears, mouth and teeth in the right proportions.²³⁰ Gender distinction is also represented, as bulls are commonly shown with large tusks. This detail is most frequently attested in hippopotamus hunting scenes or in those depicting the aggressiveness of

²²⁴ Evans, *Animal Behaviour*, 258-259.

²²⁵ Magnusson, et al., 'Behaviour and Environment: Reproduction' (in) Ross C.A.(ed) *Crocodiles and Alligators*, 129-31.

²²⁶ Evans, *Animal Behaviour*, 259.

²²⁷ The mating behaviour of crocodiles may have been observed in the sacred pools of the Temple of Sobek, where they housed the animals; however, such behaviour may not have been common knowledge across Egypt. Shaw, *Oxford History of Ancient Egypt*, 273.

²²⁸ 'Hippopotamus': *Smithsonian National Zoological Park*.

²²⁹ 'Hippopotamus': *Smithsonian National Zoological Park*.

²³⁰ These smaller details can be left out depending on the amount of detail completed in the scene.

hippopotami, as when attacking a crocodile.²³¹ Remnants of colour additionally paint hippopotami in various colours, including a reddish brown to grey.²³² A more complex colour scheme is attested in Ankhtyfy [148], wherein the animal illustrated with an underside of dark to light grey colour.

Hippopotami are a common addition to many water bands, occurring in greater numbers than crocodiles, particularly in hunting scenes.²³³ Their representations can be categorised into two main behavioural expressions: (1) passive; and (2) aggressive.²³⁴

Passive behaviours (1) include depictions of the animal standing or seated, mouth closed, within a water band.²³⁵ First identified in the early Fifth Dynasty tomb of Iteti [12], representations of passive hippopotami continue throughout the Fifth Dynasty, decreasing in number in the Sixth Dynasty.²³⁶ Notably, few passive hippopotami are attested at the beginning of the Sixth Dynasty, particularly during the reign of Teti (VI.1), during which the appearance of aggressive crocodiles increases.²³⁷ This may be explained by a greater artistic focus on the interaction of animals with each other and with their environment.²³⁸ Passive behaviours typically portray groups or herds of hippopotami, mirroring the natural behaviour of the animals. Such herds occur in the tombs of Itisen [24], Seshemnofer IV [77], Pepyankh/ Henykem [146] and Iteti [12], the latter of which also distinguishes between groups of adult hippopotami and calves.

Aggressive hippopotami (2) are represented as seated or standing, their mouths open either to threaten or vocalise dominance over particular threats. Some images additionally show hippopotami rearing onto their hind legs in an effort to enlarge their presence and attack effectively. The first

²³¹ Debehen [7], Iynofret [19], Akhethotep (Louvre) [31], Ty [35], Kayemnofret II [43], Nebet [62], Iynofert/ Shanef [63], Werirni [70], Ihy r/u Sesheshet/ Idut [72], Senedjem-Ib/ Mehi [76], Berlin Fragment 2/70 [89], Paris Louvre E.26092 [92], Kagemni [94], Mereruka [103], Seankhuptah [106], Hemre/ Isi I [107], Mehu [121], Ihy [137], Khentika [124], Djau [141], Pepyankh/Henykem [146], Cairo Fragment 6.12.24.5 [152] and Khuwi/ Tjetji-Iker [157].

²³² Akhethotep (Louvre) [31], Ty [35], Berlin Fragment 2/70 [89] and Khentika [124].

²³³ See Volume 2: Table 5: Hippopotamus Attestation and Behaviors for individual numbers per behavior/ tomb.

²³⁴ See Volume 2 Table 5: Hippopotamus Attestations and Behaviors for individual numbers per behavior/ tomb.

²³⁵ Iteti [12], Iynofret [19], Nikauhathor [23], Itisen [24], Nimaatre [60], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Khuwiwer [50], Kaiemankh [57], Senedjem-Ib/ Inti [59], Nimaatre [60], Khunes [67], Khenut [68], Ptahhotep/ Thefu [75], Seshemnofer IV [77], Paris Louvre E. 26092 [92], Kagemni [94], Ankhamahor [102], Hesi [110], Wernu [114], Mehu [121], Khewen-wekh/ Tjetji [122], Ibi [130], Meryrenefer/ Qar [133], Kahep/ Tjetji-Iker [140], Djau [141], Pepyankh/Henykem [146], Ankhtyfy [148] and Khuwi/ Tjetji-Iker [157].

²³⁶ See Volume 2: Table 5 Hippopotamus Attestations and Behaviors for individual numbers per behavior/ tomb.

²³⁷ See Volume 2: Table 6 Crocodile Attestations and Behaviors for individual numbers per behavior/ tomb.

²³⁸ See Volume 2: Table 5 Hippopotamus Attestations and Behaviors for individual numbers per behavior/ tomb.

known representation of aggressive behaviour is from the Fourth Dynasty tomb of Debehen [7] at Giza,²³⁹ its attestations becoming more frequent and consistent throughout the dynasties.²⁴⁰ A large number of such representations occur in hippopotamus hunting scenes, which usually show multiple animals reacting aggressively towards the men in the hunting party.²⁴¹ Other instances depict aggravated hippopotami under boats without a clear threat.²⁴² The majority only portray male hippopotami actively engaging in the hunt and/or defending the herd. This may suggest that bulls were perhaps the targets of the Egyptians as they were the protectors of their groups and the first to engage the human threat. Their aggression also made them a more dangerous force that realistically, artistically and idealistically had to be controlled to ensure the safety of the tomb owner.²⁴³

Crocodile-Hippopotamus Interactions

The Saqqara tomb of Ty [35] depicts the first attestation of a hippopotamus attacking a crocodile. The crocodile is lifted above the water band with its tail in the air, perhaps, as Evans suggests, conveying a 'shaking motion' being performed by the hippopotamus.²⁴⁴ This motif is expressed infrequently in the Old Kingdom, with three known attestations from the Fifth Dynasty and 11 from the Sixth Dynasty.²⁴⁵ Variations either show the soft underbelly of the crocodile positioned inside the mouth of the hippopotamus, as in Inumin [111], Khentika [124] and Mereruka [103], or the hard armoured back in the mouth.²⁴⁶ The hippopotamus is always the victor, reflecting the natural

²³⁹ Although poorly preserved, the animal is seated on the base line of the water band with its mouth wide open.

²⁴⁰ Iynofret [19], Nimaatre [60], Ty [35], Khnumhotep Fragment [38], Kayemnofret II [43], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Nebet [62], Khenut [68], Werirni [70], Ihy r/u Seshseshet/ Idut [72], Ptahhotep/ Thefu [75], Senedjem-Ib/ Mehi [76], Berlin Fragment 2/70 [89], Paris Louvre E. 26092 [92], Kagemni [94], CG 1782/ 1786 [95], In-Snefru-Ishtef [96], Mereruka [103], Seankhuptah [106], Hemre/ Isi I [107], Remni/ Merwi [109], Bawi (G126) [113], Niankhpepy/Khnumhotep/Heti [123], Ibi [130], Ihy [137], Djau [141], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Cairo Fragment 6.12.24.5 [152] and Khuwi/ Tjetji-Iker [157].

²⁴¹ Debehen [7], Akhetotep (Louvre) [31], Ty [35], Khnumhotep Fragment [38], Kayemnofret II [43], Rashepses [46], Senedjem-Ib/ Inti [59], Ihy r/u Seshseshet/ Idut [72], Ptahhotep/ Thefu [75], Senedjem-Ib/ Mehi [76], Berlin Fragment 2/70 [89], Kagemni [94], Mereruka [103], Seankhuptah [106], Hemre/ Isi I [107] and Khentika [124].

²⁴² Iynofret [19], Hesimin (M22) [56], Nebet [62], Iynofert/ Shanef [63], Khenut [68], Werirni [70], Ihy r/u Seshseshet/ Idut [72], Paris Louvre E.26092 [92], CG 1782/ 1786 [95], In-Snefru-Ishtef [96], Remni/ Merwi [109], Bawi (G126) [113], Niankhpepy/Khnumhotep/Heti [123], Ibi [130], Ihy [137], Djau [141], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Cairo Fragment 6.12.24.5 [152] and Khuwi/ Tjetji-Iker [157].

²⁴³ Evans, *Animal Behaviour*, 275.

²⁴⁴ Evans, *Animal Behaviour*, 227-228.

²⁴⁵ Nebkauhor/ Idu [73], Akhmerutnesut [82], Kagemni [94], In-Snefru-Ishtef [96], Mereruka [103], Mehu [121], Khentika [124], Pepyankh/Heri-Ib/Neferka/ Heny [131] and Idu/ Seneni [138].

²⁴⁶ Ty [35], Mehu [121].

progression of such interactions and the overarching strength of hippopotami.²⁴⁷ While the aforementioned attacking posture is typical of the Old Kingdom, a few scenes display unique features. The crocodile in that of Akhmerutnesut [82] is surrounded by two hippopotami, one holds its tail while the other possibly attacks its head. One scene in Kagemni [94] shows a hippopotamus attacking the hind quarters of a crocodile, which in turn is threatening a calving female hippopotamus. Another in the same tomb portrays a hippopotamus enveloping the jaws of a crocodile within its own, effectively suffocating the animal to death.

A crocodile can also be represented awaiting a calving female hippopotamus to deliver her calf. The female hippopotamus is typically secluded from the herd while giving birth,²⁴⁸ reflecting the natural birth process for this animal.²⁴⁹ She enters a trance-like state in order to complete the birthing process, leaving her exhausted and distracted.²⁵⁰ Such behaviour presents the perfect opportunity for a crocodile to catch a quick and easy meal and, indeed, a study has presented evidence of a one day old hippopotami calf found within the stomach of a crocodile.²⁵¹ This motif is first attested in the tomb of Ihy r/u Seshseshet/ Idut [72], its key identifier representing a crocodile directly behind a hippopotamus, its snout either touching or close to the hippopotamus's hind quarters. The scene shows the female expressing agitation or discomfort with her jaws open, perhaps bellowing as she is giving birth to a calf. A poorly preserved scene from the tomb of Senedjem-Ib/ Mehi [76] depicts the typical arrangement of the crocodile behind a hippopotamus with jaws open; however, no calf appears to be emerging from the adult hippopotamus. Other Sixth Dynasty tombs with the motif include those of G 2360 [87], Kagemni [94], Iteti/Shedu [97], Mereruka [103], Ankhmahor [102], Hemre/Isi I [107] and Mereri [108]. Rare scenes in Kagemni [94] and Seankhuiptah [106] depict the hippopotamus giving birth without the threat of the crocodile.

Small crocodiles are found in scenes from Kagemni [94] and Mehu [121], their size perhaps reflective of their youth, smaller stature or reduced power in comparison to nearby hippopotami. Artists may have also rendered smaller crocodiles to keep their bodies below the water's surface as a precaution and safety measure for tomb owners.²⁵² The depiction of a crocodile partly above the water's surface is not unprecedented and can be observed in Ty [35], Mereruka [103] and Idu/ Seneni [138];

²⁴⁷ Pooley, 'Behaviour and Environment: Food and Feeding habits', 99.

²⁴⁸ Evans, *Animal Behaviour*, 227-228.

²⁴⁹ Evans, *Animal Behaviour*, 227-228.

²⁵⁰ Evans, *Animal Behaviour*, 227-228.

²⁵¹ Guggisberg, *Crocodiles: Their Natural History, Folklore and Conservation*, 91.

²⁵² For more on the idea of water animals becoming less powerful or inert if portrayed completely under water, see Evans, *Animal Behavior*, 275.

yet, no other aquatic animal (other than caught fish) was evidently portrayed above the surface of the water band.

While all abovementioned interactions occur within the water band, both the crocodile and hippopotamus emerge onto the shore as well.²⁵³ Crocodiles typically lay eggs on shore, burying them for incubation and protection against predators.²⁵⁴ They also consume their prey out of the water, or at the water's surface, in order to reposition and swallow the fish in a safe manner.²⁵⁵ Fish, in many cases, have a defence mechanism with which to make themselves unappetising to predators. In fact, some species, like the *Tilapia*, are commonly illustrated in the mouths of crocodiles. If swallowed tail first, their dorsal spines may become lodged or tear into the throats of the reptiles. Evans suggests that scenes depicting this behaviour represent a series of events of the crocodile catching, repositioning and eating the fish.²⁵⁶ This theory can also be applied to the laying of eggs and, in some cases, aggressive confrontations between crocodiles and hippopotami.

Marshes were a vibrant habitat for many animals. The following section discusses those that inhabited the water or spent the majority of their time within it.²⁵⁷

The Turtle

The species of turtle most likely represented in tomb wall scenes is the Nile soft-shelled turtle (*Trionyx triunguis*). Known to inhabit the Nile River and many areas of the Mediterranean and Africa,²⁵⁸ the turtle is archaeologically represented throughout Egyptian pharaonic history.²⁵⁹ In art,

²⁵³ *Crocodylus Niloticus*: Nile Crocodile, *National Geographic Website* (Accessed 4/10/2012).

²⁵⁴ Magnusson, et al. 'Behaviour and Environment: Reproduction' (in) Ross. (ed) '*Crocodiles and Alligators*', 129-31.

²⁵⁵ Pooley, 'Behaviour and Environment: Food and Feeding habits', 88.

²⁵⁶ Evans, *Animal Behaviour*, 162. The concept of a series of events can also apply to most scenes in general. Lashien, 'Narrative in the Old Kingdom Wall Scenes: The Progression Through Space and Time', in *BACE* 22 (2011) 101-115. For studies against this theory see Gaballa, *Narrative in Egyptian Art* (Mainz, 1976); Groenwegen-Frankfort, *Arrest and Movement: An Essay on Space and Time in the Representational Art of the Ancient Near East* (New York, 1972).

²⁵⁷ Other animals include the grasshopper, butterfly, various water birds and the mongoose. For more, see Harpur, *Decoration*. 355 ff., Table 2; Evans, L., 'Fighting Kites: Behaviour as a Key to Species Identity in Wall Scenes', *The Journal of Egyptian Archaeology* Vol. 93 (2007), 245-247; Haynes, D., *The symbolism and significance of the butterfly in ancient Egypt*. Diss. Stellenbosch: Stellenbosch University, 2013; Wassell, B.A., *Ancient Egyptian Fauna: a lexicographical study*. Diss. University of Durham, 1991; Arnold, *An Egyptian Bestiary*, 1+7-64.

²⁵⁸ Pritchard, *Living Turtles of the World*, 125.

²⁵⁹ Arnold, *An Egyptian Bestiary*, 355 ff; Petrie Museum online catalogue: Petrie Museum No. UC 15780, UC 34154-6, UC 34279.

it can be identified by the shape of its head and schnorkel, characteristics that indeed define the *Trionychidae* family to which *Trionyx triunquius* belongs.²⁶⁰

In the Old Kingdom, the turtle is first attested in the Saqqara tomb of Hesi [110]. This tomb represents the reptile three times. One instance shows two turtles copulating in the typical position for the species, one mounting the other from behind.²⁶¹ In another, the animal is depicted swimming from a top-view perspective, its shell portrayed with flippers extended but, unfortunately, no head is preserved. This same perspective is replicated in the tomb of Mehu [121], wherein two turtles swim independently in the water band, their shell, flippers and head preserved.

Currently, there are no known depictions of turtles in provincial tombs. The lack of attestations may be due to habitat restrictions, as the species may not have been found in the south of the river system.²⁶² It is also possible that the depiction of this species was not prevalent enough to be used in provincial art, regardless of influence from Memphite artists.

The Frog/Toad

The amphibian is found within 14 scenes dated from the mid-Fifth Dynasty to the reign of Pepy I.²⁶³ Occasionally depicted among weeds under papyrus boats, it may be identified as either: (1) *Rana (Ptychadena) mascarenlareniensis*, the Mascarene ridged frog; (2) *Bufo regularis*,²⁶⁴ the Egyptian toad; or (3) the Nile Delta Toad or *Amietophrynus kassasi*, which was restricted to the Lower Nile and Delta in ancient times.²⁶⁵ Due to the lack of defining characteristics in artistic representations, it is difficult to certain of the species.

The majority of examples of the amphibian are attested in Memphite tombs, with one case surviving in the late Fifth Dynasty tomb of Hesimin (M22) [56] at El-Hawawish. It rarely appears in pleasure

²⁶⁰ Pritchard, *Living Turtles of the World*, 209; Arnold, *An Egyptian Bestiary*, 355: Sahrhage, *Fishfang*, 76-7.

²⁶¹ Pritchard, *Living Turtles of the World*, 239.

²⁶² Orenstein, *Survivors in Armor: Turtles, Tortoises and Terrapins*, 73.

²⁶³ Iynofret [19], Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Seshemnofer IV [77], Kaiemankh [57], Hesimin (M22) [56], Paris Louvre E.26092 [92], Berlin Fragment 14103 [88], Kagemni [94], In-Snefru-Ishtef [96], Mereri [108], Mereruka [103], Mehu [121], Rashepses [46] and Djau [141].

²⁶⁴ Synonym for. *Amietophrynus regularis*. IUCN SSC Amphibian Specialist Group. 2014. *Amietophrynus regularis*. The IUCN Red List of Threatened Species 2014: <http://dx.doi.org/10.2305/IUCN.UK.2014-3.RLTS.T54747A18368590.en> The IUCN Red List of Threatened Species 2014.

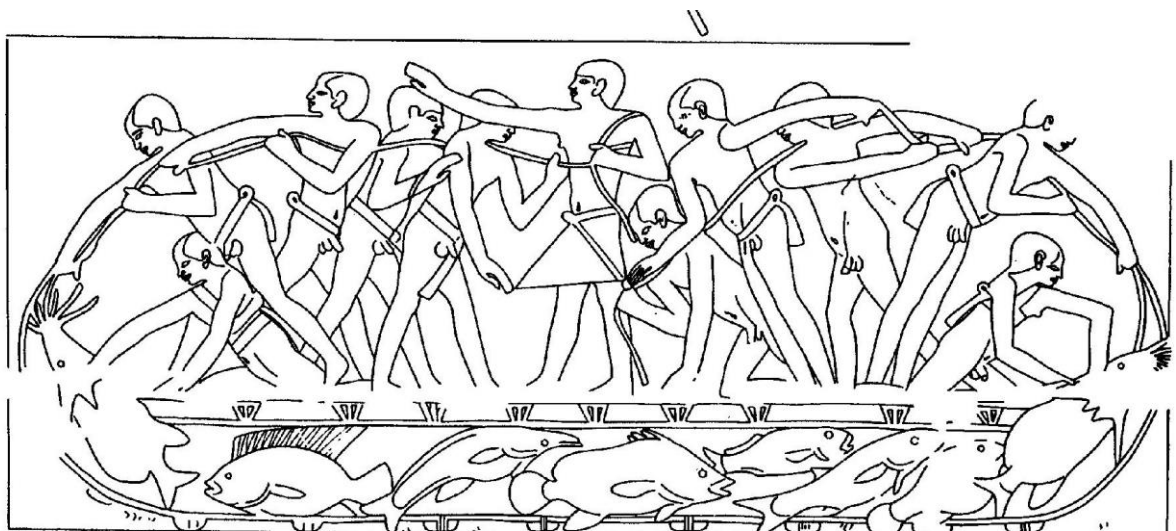
²⁶⁵ There are several other species which have been observed in Egypt; however, their appearance has only been recorded in more recent years, after the damming of the Nile. *Hyla savignyi* or Lemon-Yellow Tree frog was not recorded to be present in Egypt until the 1990s. Other species include: *Ptychadena schillukorum*, *Pelophylax bedriagae*, *Pelophylax saharicus*, *Amietophrynus dodsoni* and *Bufotes boulengeri*. Tandy- Baha El Din, *Amietophrynus kassasi*. The IUCN Red List of Threatened Species 2004.; Kuzmin, et al., *Hyla savignyi*. The IUCN Red List of Threatened Species 2009.

cruise scenes and is usually confined to popular themes such as spearfishing or fowling. Such themes have been suggested to have taken place in a specific area utilised or developed in the naturally occurring marshlands of the Delta and/or perhaps other locations closer to the capital and further south in Upper Egypt.²⁶⁶ The natural water cycles of the Nile River would have created marshlands and natural pools that could last from one flood to the next.²⁶⁷ These may have been exploited for use by the royal and elite, providing semi-stagnant water suitable for the habitation and breeding of amphibians. While this may explain why these animals are only shown in such environments, their infrequent depiction suggests that they were not a common detail and therefore simply not reproduced in the decoration of provincial tombs. The one known occurrence in the tomb of Hesimin (M22) [56] may be explained by its early date and the possibility that its artist(s) had prior experience in illustrating amphibians in the capital.

²⁶⁶ The naturally occurring marshlands or pools could change location and size from year to year depending on environmental variables, which may explain the lack of information from ancient sources on their exact location. It is also possible that the Egyptians chose different sites for the development of these areas, which could also lead to the elusiveness of their location. See discussion in Chapter 1: Introduction: The Representation of the marshlands and the Rive Nile in Old Kingdom tombs.

²⁶⁷ Peters, 'Mesolithic fishing along the Central Sudanese Nile and the lower Atbara.' *Sahara* (1991): 33-40.

Chapter 4: Dragnets



Nikauisesi [101]

Introduction

Dragnet fishing is the most frequently attested fishing theme in Old Kingdom tomb art. Typically, it comprises of a large net that is cast into the water and then hauled to shore by two teams of men. It is first attested in some of the earliest surviving wall paintings from the Fourth Dynasty tombs of Maidum, and continues to appear until the very end of the Old Kingdom in tombs of the late Sixth to Eighth Dynasties. This chapter investigates the appearance and distribution of this theme, and discusses the spatial and chronological developments of standards and variations in its minor details.

Occurrence of Scene

Fourth Dynasty

Tomb	Location	Date
Nefermaat [2]	Maidum	IV.1E
Nefer...w [4]	Maidum	IV.1-2
Rahotep [5]	Maidum	IV. 2
Kawab [6]	Giza	IV.2L-3L
Akhethotep (G7650) [14]	Giza	IV.2-4
Debehen [7]	Giza	IV.5

Table 4.1 Fourth Dynasty Attestations

The dragnet scene is first attested in the early Fourth Dynasty tomb of Nefermaat [2] at Maidum. Its surviving details depict a minimum of five men attending a rectangular net filled with fish. Following Nefermaat's [2] example, two further tombs at Maidum illustrate this theme, as seen in Nefer...w [4] and Rahotep [5]. Three further Fourth Dynasty occurrences are found at Giza in the tombs of Kawab [6], Akhethotep (G7650) [14] and Debehen [7]; however, only a small portion of the net is visible in each.

Fifth Dynasty

Tomb	Location	Date
Persen [9]	Giza	V.1-2
Ka-Aper [10]	Saqqara	V.1-2
Kaseuza (F7) [11]	Abu Rawash	V.1-2
Iteti [12]	Giza	V. E-M
Sekhemkare [13]	Giza	V.2
Werirniptah [16]	Saqqara	V.3-5
Nefer and Kahay [18]	Saqqara	V.6
Iynofret [19]	Giza	V.6
Iymery [20]	Giza	V.6
Khufukhaef II [21]	Giza	V.6

Tomb	Location	Date
Irenkaptah [22]	Saqqara	V.6
Nikauhathor [23]	Giza	V.6
Fetekta [25]	Abusir	V.6-?
Rakhaefankh [26]	Giza	V.6?
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Nimaatre [29]	Giza	V.6-7
Kapi [30]	Giza	V.6-8E
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Pehenuika [32]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
Kayemnofret II [43]	Giza	V.6-VI
Tepemankh [39]	Abusir	V.6-9
Sopedhotep (D15) [40]	Saqqara	V.6L-8
Ptahshepses [41]	Abusir	V.6L-9
Irukaptah/ Khenu [44]	Saqqara	V.7-8
Inti [45]	Deshasha	V.8
Kaemrehu [47]	Saqqara	V.8
Sekhemka [48]	Giza	V.8-L
Serfka [49]	Sheikh Said	V.8-9E
Khuwiwer [50]	Giza	V.8-9M
Kayemnofret (D23) [51]	Giza	V.8-9
Neferirtenef [52]	Saqqara	V.8-9
Hesimin (M22) [56]	El-Hawawish	V.8L-9E
Iynofert/ Shanef [63]	Saqqara	V.9
Nikauhor [64]	Saqqara	V.9
Ankhmare [65]	Giza	V.9
Kairer [66]	Saqqara	V.9
Khenut [68]	Saqqara	V.9
Khunes [67]	Zawyet el-Maiyetin	V.9
Werirni [70]	Sheikh Said	V.9
Senedjem-Ib/ Mehi [76]	Giza	V.9L
Seshemnofer IV [77]	Giza	V.9-VI.1
Ptahhotep/ Iyniankh [80]	Saqqara	V.9-VI.1
Hetepka [81]	Saqqara	V.9-VI.1
Akhmerutnesut [82]	Giza	V.9-VI.1
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1
CG 1720 [83]	Saqqara	V.9- VI. 1-2
Kaiemheset [84]	Saqqara	V.L
Turin Museo Egizio Sup. 1854 [85]	Giza	V.?

Table 4.2 Fifth Dynasty Attestations

Two main cemeteries, Giza and Saqqara, feature dragnet scenes in Fifth Dynasty tombs. The theme is popular at Giza in the first half of the dynasty, becoming more frequently attested at Saqqara, followed by Giza and Abusir, in the second half. It additionally appears in provincial cemeteries towards the end

Chapter 4: Dragnets

of the dynasty,²⁶⁸ as seen in the tombs of Serfka [49], Hesimin (M22) [56], Khunes [67] and Werirni [70]. Earlier illustrations from Giza are mostly fragmentary,²⁶⁹ yet the remaining scenes suggest that the same or similar developments occurred across Egypt, including Giza, during this period of time.

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Dahshur	VI.1
Niankhnesut [99]	Saqqara	VI.1-2
Nikauisesi [101]	Saqqara	VI.1M
Mereruka [103]	Saqqara	VI.1M-L
Watetkhet-Hor/ Seshseshet [104]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Inumin [111]	Saqqara	VI.1L-2E
Meru/ Tetiseneb [115]	Saqqara	VI.1L-2
Merefnebef [117]	Saqqara	VI.1L-2L
Heri/ Meru [118]	Saqqara	VI.2E
Henqu/ Iy...f II [120]	Deir el-Gebrawi	VI.2
Mehu [121]	Saqqara	VI.2
Niankhpepy/ Khnumhotep/ Heti [123]	Zawyet el-Maiyetin	VI.2
Idu 1 [128]	Dendera	VI.3-4 E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	Meir	VI.3-4E
Khenty [132]	El-Khokha	VI.3-4M
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	Meir	VI.4E-M
London British Museum No. 994 [135]	Giza	VI.4?
Kahif [139]	Giza	VI.4
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M
Djau [141]	Deir el-Gebrawi	VI.4M
Gehesa/ Nebi [145]	El-Hawawish	VI.4L
Pepyankh/ Henykem [146]	Meir	VI.4L
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L
Ankhtyfy [148]	Mo'alla	VI. 4I-VIII.E
Unisankh [150]	El-Khokha	VI.L?
Tjemerery [159]	Naga el-Deir	VI-FIP
Twau [160]	Naga el-Deir	VI- VIII
Mery Aa [158]	El-Hagarsa	VI.L-VIII E
Tjeti Aa [161]	El-Hawawish	VIII

Table 4.3 Sixth Dynasty Attestations

Dragnet scenes are mostly concentrated at the Teti Cemetery, Saqqara, during the reign of Teti (VI.1). This corresponds with the king's policy to have officials buried in close proximity to his pyramid.²⁷⁰

²⁶⁸ Kanawati, *Governmental Reforms*, 5.

²⁶⁹ Iteti [12], Sekhemkare [13], Iymery [20], Khufukhaef II [21], Nimaatre [29], Kapi [30] and Kayemnofret II [43].

²⁷⁰ Kanawati, *Governmental Reforms*, 24-5.

Following Teti's reign, more scenes are attested in provincial cemeteries, with a significant number from provincial tombs dating to and after the reign of Pepy I.²⁷¹

Distribution

The frequency and wide distribution of dragnet scenes suggest that it was an essential addition to tomb decoration programmes in comparison to other fishing themes. It first occurs in the cemetery of Maidum, and appears to follow the establishment of royal cemeteries until the reign of Pepy I, in whose reign the important officials were mostly buried in the provinces. The popularity and long date range of the dragnet theme may be explained by a number of observations. Firstly, fishing with the dragnet was likely practiced or officiated by officials in everyday life as an important means to further the wellbeing and economy of their town or province. Secondly, in terms of funerary significance, the depiction of copious amounts of fish hauled from the river would symbolically ensure that the tomb owner had abundant offerings for the afterlife.²⁷² Geographically, dragnet fishing can be performed in most riverine environments. As demonstrated in some scenes, the net could be manipulated from a boat as well as from the shore,²⁷³ and so it could be used in small channels, gently sloping river banks as well as areas of deeper water. As such, scenes of dragnet fishing are truly multifunctional, reflecting a common method of fishing and a popular funerary artistic tradition that represented a well-provisioned afterlife.

The Minor Details

Dragnets: Hauling method

Fishing with a dragnet typically comprises the casting of a net into the water, with its bottom rope sinking and its top floating along the river's surface. The fish are then ensnared by two teams of men, each pulling an end of the rope to form a semi-circular trap. Other fishermen could possibly create a decoy to manoeuvre the fish in the direction of the net, causing more fish to rush into the trap.²⁷⁴ The teams can be portrayed in one of three situations: (1) both teams are on shore; (2) one team is located on a boat while the other is on shore; and (3) both teams are depicted on a boat(s).

²⁷¹ Kanawati, *Governmental Reforms*, 28-9.

²⁷² Brewer-Teeter, *Egypt and the Egyptians*, 206-7.

²⁷³ See Khufukhaef II [21], Inti [45], Kaiemheset [84], Djau [141] and the fragment from the London British Museum No. 994 [135].

²⁷⁴ Brewer-Friedman, *Fish and Fishing*, 46.

The dragnet is typically represented being cast by two teams of haulers situated on the banks of the Nile. This is first attested in Nefermaat [2], with the last known example occurring in Mery Aa [158].²⁷⁵ Two cases, found in the tombs of Pepyankh/ Henykem [146] and Twau [160], depict haulers both in the water as well as on shore. One such hauler in Pepyankh/ Henykem [146] lifts the end of the net from the water, helping his comrade. Those in Twau [160], however, pull the end of the net themselves while standing in the water. Both scenes also possibly show fishermen leading fish into the net while helping their teammates haul it in.

A select group of scenes possibly position the net in deeper water, the artist(s) thereby adding fishing equipment to supplement the theme. The tombs of Khufukhaef II [21], Inti [45], and Kaiemheset [84] appear to have one team of haulers retrieving one half of the net from a boat. Khufukhaef II [21] depicts at least one hauler with a harness, bracing his foot against the edge of a boat to gain leverage to lift the heavy net.²⁷⁶ All include figures which are actively engaged in the process as either haulers, oarsmen or supervisors. The absence of any familial connection between the tomb owners and the fact that these scenes are located in various cemeteries suggest a likely link between the artistic school or artists that were commissioned to decorate all three tombs. Due to their striking similarities, the elements in the scenes of Inti [45] and Kaiemheset [84] indicate further artistic influences.²⁷⁷

Two scenes present unique hauling methods. The fragment London British Museum No. 994 [135] depicts a dragnet cast and hauled from at least one boat without an oarsman. Instead, an additional figure is supervising the activity, similar to that in Khufukhaef II [21]. The tomb of Djau [141] illustrates the entire dragnet cast from a single boat, with two teams of men hauling it in as though they are located on shore.

²⁷⁵ Nefermaat [2], Nefer..w [4], Rahotep [5], Akhethotep (G7650) [14], Persen [9], Ka-Aper [10], Sekhemkare [13], Werirniptah [16], Nefer and Kahay [18], Iynofret [19], Iymery [20], Irenkaptah [22], Nikauhathor [23], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Ptahshepses [41], Irukaptah/ Khenu [44], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Kayemnofret (D23) [51], Neferirteneb [52], Hesimin (M22) [56], Iynofert/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Merefnebef [117], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], Kahif [139], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Kahep/ Tjeti-Iker [140], Pepyankh/ Henykem [146], Shepsipumin/ Kheni [147], Ankhtyfy [148], Twau [160] and Mery Aa [158].

²⁷⁶ The figure on the far right appears to be operating a lave net.

²⁷⁷ For instance, both share a similar composition of the dragnet hauling method and both depict oars and boats of the same shape. There is much debate over the date of Kaiemheset [84], with scholars assigning it to the Fourth, Fifth and even the early Sixth dynasty. Based on the dragnet scene alone, the tomb may date to the same period as that of Inti [45]. For further discussions on the date of Kaiemheset [84], see McFarlane, *Mastabas at Saqqara*, 118-224; Harpur, *Decoration*, 359; Strudwick, *Administration*, 150-1.

The Boat

A boat is only represented in five scenes: Khufukhaef II [21], Inti [45], Kaiemheset [84], London British Museum No. 994 [135] and Djau [141].²⁷⁸ The boats included in this theme are shown with Type A (Horizontal ends) and B (Vertical ends) structures only. The types of detailing that are applied to the hull include Type A (Lashing and Reed), B (Lashing only) and C (Nil Details).²⁷⁹

Four of the five scenes include a boat with a Type A structure. These are attested in Inti [45], Kaiemheset [84], London British Museum No. 944 [135] and Djau [141]. The boat in Khufukhaef II [21] bears a Type B structure. Khufukhaef II [21], Inti [45] and London British Museum No. 994 [135] all depict Type C detailing whereas Djau [141] has Type A detailing. Kaiemheset [84] atypically portrays a boat with a horizontal line representing reeds and is thus a rare variant of Type B detailing.

Dragnets: Shape

The shape of a dragnet is determined by the manner in which its top and bottom ropes are depicted within the water band.²⁸⁰ The most typical shape is a rectangular dragnet, with each end curved upright, thereby forming the edges of the net (i.e. the 'tips'). The net is then streamlined into a single rope that the fishermen pull to haul the catch.

The earliest representation of the rectangular dragnet is found in the early Fourth Dynasty tomb of Nefermaat [2], after which it becomes the standard.²⁸¹ This shape allows for the artist to use the majority of the water band for the representation of fish and, occasionally, other inclusions such as vegetation.²⁸² There are only two major variations of this style of net, both in the Sixth Dynasty tombs of Ibi [130] and Djau [141] at Deir el-Gebrawi. The dragnet from Ibi's [130] tomb is shaped as an exaggerated crescent moon occupying two registers. The net itself is situated above a water band of

²⁷⁸ See Appendix 2: Dragnet Detail Table G.

²⁷⁹ See Appendix 4: Typology: Boat structure and Detailing for full details on each type.

²⁸⁰ See Appendix 2: Dragnet Detail Table B.

²⁸¹ Nefermaat [2], Nefer...w [4], Rahotep [5], Ka-Aper [10], Persen [9], Werirniptah [16], Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Nikauhathor [23], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Irukaptah/ Khenu [44], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Neferirtenef [52], Nikauhor [64], Iynofert/ Shanef [63], Khenut [68], Khunes [67], Werirni [70], Kairer [66], Senedjem-Ib/ Mehi [76], Ptahhotep/ Iyniankh [80], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kaiemheset [84], Kagemni [94], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Heri/ Meru [118], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Pepyankh Heri-Ib/Neferka/Heny [131], Khenty [132], London British Museum No. 994 [135], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Kahif [139], Kahep/ Tjetiker [140], Pepyankh/ Henykem [146], Shepsipumin/ Kheni [147], Ankhtyfy [148], Tjemerery [159] and Twau [160].

²⁸² Nefer...w [4], Henqu/Iy...f II [120], Ibi [130] and Djau [141].

another fishing scene to its left,²⁸³ dwarfing the minor figures. Still, it remains connected to the water band by the inclusion of a *Mugil sp.* and vegetation underneath the net. The example from Djau [141] illustrates a *Tilapia sp.* swimming against a rectangular dragnet, causing the bottom rope to protrude lower into the water band, thus creating a somewhat irregular shape.

Dragnets: 'Tips'

The end points or tips of the dragnet can be represented in two ways, either (A) under the surface of the water band, or (B) protruding from the water band.²⁸⁴

Approximately 70% of attested scenes show the tips protruding from the surface of the water (Type A).²⁸⁵ The earliest occurs in the Fourth Dynasty tomb of Nefer...w [4] at Maidum, the type appearing in other early Fifth Dynasty scenes²⁸⁶ but becoming more frequent in the late Fifth Dynasty.²⁸⁷ It is more commonly found at Saqqara.



Hesi [110]

Each dragnet scene in the tombs of Senedjem-Ib/ Mehi [76] and Ibi [130] depicts a minor figure placing his foot on an exposed Type A tip in an effort to retrieve the net. Such placement of body parts is highly unusual and, although probably practiced in reality, its rarity indicates that it was not a mandatory detail in dragnet scenes. As the two tombs are evidently not in close proximity, their owners not related, the appearance of this detail was either due to artistic influence or perhaps coincidental, an expression of artistic individualism.

²⁸³ A lave net fishing scene with a water band is situated to the left.

²⁸⁴ See Appendix 2: Dragnet Detail Table C.

²⁸⁵ Nefer...w [4], Ka-Aper [10], Werirniptah [16], Khufukhaef II [21], Nikauhathor [23], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Neferirtenef [52], Nikauhor [64], Iynofert/ Shanef [63], Kairer [66], Ptahhotep/ Iyniankh [80], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kaiemheset [84], Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Merefnebef [117], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135] and Niankhpepy/ Sobekhotep/ Hepi-Kem [136].

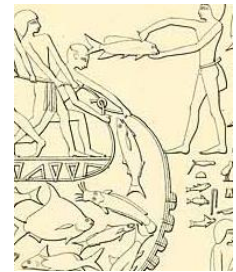
²⁸⁶ Ka-Aper [10] and Werirniptah [16].

²⁸⁷ Khufukhaef II [21], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Neferirtenef [52], Iynofert/ Shanef [63], Khunes [67], Khenut [68], Kairer [66], Ptahhotep/ Iyniankh [80], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kaiemheset [84], Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep / Heti [123], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135] and Niankhpepy/ Sobekhotep/ Hepi-Kem [136].

Type B tips are less frequent than Type A. They are represented in two tombs of the Fourth Dynasty at Maidum (Nefermaat [2] and Rahotep [5]),²⁸⁸ four of the Fifth Dynasty²⁸⁹ and seven of the Sixth Dynasty.²⁹⁰

Fish in the 'tips'

The representation of fish within Type A dragnet tips is attested in 16 scenes dating from the mid-Fifth to the late Sixth Dynasty,²⁹¹ first occurring in a *Mugil* sp. in Pehenuika [32]. Other examples are found at Saqqara and the provincial sites of Zawyet el-Maiyetin, Sheikh Said, Meir and Deir el-Gebrawi.²⁹² Their inclusion in the almost contemporary Fifth Dynasty tombs of Pehenuika [32] and Serfka [49] at Sheikh Said could point to an initial experimentation phase that didn't gain popularity. However, Serfka's [49] example may also be



Pehenuika [32]

explained as an artistic necessity, wherein the *Tetraodon fahaka* was illustrated in the tips to accommodate the oar of a boat. In either case, the Sheikh Said attestations are the only representations dating to the second half of the Fifth Dynasty from outside the Saqqara necropolis, indicating possible artistic influences between the tombs.²⁹³ Sixth Dynasty attestations are similarly also predominantly at Saqqara with only a few provincial tombs exhibiting fish in dragnet tips.²⁹⁴ Those in Nikauisesi [101], Niankhpepy/ Khnumhotep/ Heti [123] and Ibi [130] uniquely show a *Synodontis*

²⁸⁸ Harpur suggests a familial connection between Nefermaat [2] and Rahotep [5], the tombs of whom are close in date and location, perhaps accounting for the similarity. The tomb of Nefer...w [4] is located in the South Cemetery, while Nefermaat [2] and Rahotep [5] are in the North Cemetery. Harpur, *Decoration*, 10 and Harpur, *Maidum*, 27.

²⁸⁹ Persen [9], Nefer and Kahay [18], Iynofret [19] and Iymery [20].

²⁹⁰ In-Snefru-Ishtef [96], Niankhnesut [99], Kahif [139], Kahep/ Tjeti-Iker [140], Pepyankh/ Henykem [146], Shepsipumin/ Kheni [147] and Mery Aa [158].

²⁹¹ Pehenuika [32], Ty [35], Serfka [49], Werirni [70], Nikauhor [64], Kairer [66], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

²⁹² Serfka [49], Werirni [70], Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

²⁹³ The tomb owners both held titles that indicate strong connections with the capital. Serfka [49], for instance, was 'priest of Userkaef and Khufu' and 'superintendent of the Middle Provinces of Upper Egypt' These titles, amongst others, would have provided a close relationship to the King and the Memphite region, thus granting access to the resources befitting his station for the building and decoration of his tomb, including artists of the royal workshop. Serfka's son, Werirni [70], built his tomb in close proximity to that of his father,²⁹³ facilitating any transference of details between the tombs and artists. Werirni [70] also held key titles such as 'priest of Ne-user-re', 'wab-priest', 'leader of the land' and 'superintendent of the new town', which would have also provided him access to the capital's resources. Davies, *Sheikh Said*, 11-15; Kanawati, *Governmental Reforms*, 4; Harpur, *Decoration*, Table 2.6, 287.

²⁹⁴ Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110] and Mehu [121]. Provincial: Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

Schall, a *Mormyrus Caschive*²⁹⁵ and a *Schilbe* respectively. The appearance of fish in this manner outside Saqqara can be linked to the Sixth Dynasty movement of officials and wealth to the provinces.²⁹⁶

Most fish portrayed within dragnet tips appear to be restrained due to the clinching of the net where they are positioned. Such fish were evidently carefully selected to preserve the integrity and aesthetics of the scene. The most frequently depicted species is *Mugil sp.*, a long, streamlined fish that neatly fits within the smaller space. Other possible reasons for this species' depiction include its general frequency in other fishing scenes,²⁹⁷ and its actual capture in this position in reality. The tombs of Ty [35] and Nikauisesi [101] depict two large *Synodontis*, with minor figures retrieving fish illustrated atop the dragnet's outline.²⁹⁸ The depiction of restrained animals outside or overlapping a trap similarly occurs in clap-net scenes.²⁹⁹ Interestingly, this particular genus is shown carried by offering bearers before tomb owners in a number of dragnet scenes.³⁰⁰

Sinkers

Sinkers are attached to the bottom rope of a dragnet. They are first attested in the tomb of Nefermaat [2] and are frequently represented until the end of the Old Kingdom. They can be portrayed in one of three shapes: (A) spherical; (B) oval; and (C) rectangular.³⁰¹



Rakhaefankh [26]
Spherical Sinker

The earliest sinkers are spherical in shape (Type A), mostly occurring in Fourth Dynasty tombs at Maidum such as those of Nefermaat [2], Nefer...w [4] and Rahotep [5]. Oval sinkers (Type B) are first recorded in the Fifth Dynasty tomb of Nefer and Kahay [18] and, until the reign of Niuserre (V.6), appear to be favoured over Type A.³⁰² Rectangular sinkers (Type C) surface in the tomb of Iymery [20], after which both oval and rectangular sinkers were illustrated. Type C then gains



Nefer and Kahay
[18] Oval Sinker

²⁹⁵ The fish can be identified by its long body, forked caudal fin and elongated snout which appears to be thin and straight. See Appendix 3: Fish Profiles: *Mormyrus*.

²⁹⁶ Refer to Chapter 20: Introduction; for a full discussion on this topic. See also Kanawati, *Government Reforms*, 5 and Kanawati-Woods, *Artists in the OK*, 11, 14, 19.

²⁹⁷ The *Mugil sp.* is the most common fish species in the majority of fishing scenes. For the frequency and distribution of the *Mugil sp.* within dragnet scenes, see Volume 2: Table 2 Fish in Fishing Techniques.

²⁹⁸ Only a few examples of fish are shown with fins or other parts covering the outlines of the net. See the tombs of Nikauisesi [101], Nefer and Kahay [18], Mereruka [103], Niankhkhnum and Khnumhotep [27], Iynofert/ Shanef [63], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Henqu/Iy...f II [120] and Kahif [139].

²⁹⁹ See Nefer and Kahay [18].

³⁰⁰ Pehenuika [32], Senedjem-Ib/ Mehi [76], Sekhemka [48], Nefer and Kahay [18] and Iymery [20].

³⁰¹ See Appendix 2: Dragnet Detail Table D.

³⁰² Nefer and Kahay [18], Iynofret [19]. Type A sinkers are found in Persen [9] and Rahaefankh [26].

popularity in the first half of the Sixth Dynasty, becoming the most typical type of sinker until the end of the Old Kingdom.³⁰³

Type C is slightly more common in the Giza cemeteries,³⁰⁴ with only one known attestation of Type B in the early Fifth Dynasty tomb of Iynofret [19]. This may reflect a Giza origin for Type C sinkers as Fifth Dynasty examples from Saqqara are mostly of Type B form.³⁰⁵ The latter sinkers, particularly those of late Fifth Dynasty Neferirteneb [52] and Hetepka [81], may have influenced the portrayal of the older Type B sinkers in the neighbouring Sixth Dynasty tombs of Kagemni [94] and Nikauisesi [101]. Close in date to these tombs, the scene in the tomb of Mereruka [103] instead depicts Type C, which became the standard type from this period onwards.



**Pehenuika [32]
Rectangular Sinker**

Atypical examples of sinkers are also attested. The tomb of Nikauhor [64] (V.9), for instance, evidently depicts two different types of sinkers within the same scene. A single Type C sinker is visible; however other sinkers to the right are triangular, mimicking the shape of floats.³⁰⁶ The Sixth Dynasty dragnet scene of Kahif [139] at Giza illustrates sinkers as semi-circular objects attached to the net. Also of the Sixth Dynasty, the sinkers in Djau [141] resemble the early Giza Type A sinkers of Rakhaefankh [26], with a spherical shape lashed to the bottom rope by means of a thin strap or cord.

Tethering played an important role in the representation of sinkers, appearing in the majority of dragnet scenes.³⁰⁷ It can be represented in three different ways: (1) as a thick strap, rope or cord that is positioned around a sinker suspended from a rope, as shown in Rahotep [5] (possibly), Persen [9], Rakhaefankh [26] and Niankhkhnum and Khnumhotep [27]; (2) as one thick cord depicted around both the sinker and the rope, as seen in Hetepka [81] and In-Snefru-Ishtef [96]; and (3) as two or three individual cords encircling the sinker and rope, as illustrated in Nefer..w [4], followed by eleven other

³⁰³ Oval: Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Sopedhotep (D15) [40], Kaemrehu [47], Neferirteneb [52], Hetepka [81], CG 1720 [83], Kagemni [94], Niankhnesut [99], Nikauisesi [101], Merefnabef [117], and Djau [141]. Rectangular: Pehenuika [32], Kapi [30], Ty [35], Sekhemka [48], Werirni [70], Kaiemheset [84], In-Snefru-Ishtef [96], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Henqu/Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123] and Ibi [130].

³⁰⁴ Iymery [20], Kapi [30] and Sekhemka [48].

³⁰⁵ Nefer and Kahay [18], Niankhkhnum and Khnumhotep [27], Sobekhotep (D15) [40], Neferirteneb [52], Hetepka [81] and Kagemni [94].

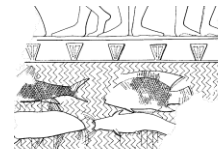
³⁰⁶ See following section on Floats.

³⁰⁷ See Appendix 2: Dragnet Detail Table D.

examples dating between the Fifth and late Sixth Dynasty.³⁰⁸ Evidently, the latter form is the most frequent representation of sinker tethering.

Floats

The frequent inclusion of floats suggests that they are a standard feature of dragnet scenes.³⁰⁹ They could be made of wood, cork or any other material that was able to carry the weight of heavy ropes.³¹⁰ The shape of floats mostly resembles lotus buds, their triangular form imitating the petals of the flowers in



Iymery [20]

their immature state. There are several possible interpretations of such a design. The lotus flower was an important symbol in Egyptian religion; it was primarily indicative of the river god Nefertem who was linked to resurrection, it was often used as an offering to Osiris,³¹¹ and it played a pivotal role in the rebirth of the sun in some creation myths.³¹² In dragnet scenes, it could therefore represent an offering to Nefertem or Osiris in exchange for a good catch and/or protection against unfavourable circumstances such as hippopotami or crocodile attacks. Lotus-shaped floats could also have a practical application; the Egyptian having recognised that this shape helps disguise the net as well as attract fish to what appears as vegetation (safety) or a possible food source. Furthermore, the lotus shape is structurally advantageous. Resembling a boat, the buoyancy in its bottom half is less than that at the top, allowing for the dragnet's rope to marginally submerge.

Floats are first attested in the tomb of Nefer...w [4]. Typically, they are triangular or lotiform, with only a few exceptions depicting rectangular floats reminiscent of Type C sinkers, as in Neferirtenef [52], Inumin [111] and Niankhpepy/ Khnumhotep/ Heti [123], or semi-circular floats, as in Senedjem-Ib/ Mehi [76].

Small elements associated with floats can vary. The majority of scenes, for example, depict a float detailed with two small triangles inside its outline.³¹³ Such detailing is not common until the end of the Fifth Dynasty, diminishing in frequency in the late Sixth Dynasty. Floats without internal detailing

³⁰⁸ Pehenuika [32], Sopedhotep (D15) [40], Sekhemka [48], Neferirtenef [52], Kagemni [94], Nikauisesi [101], Watetkhet-Hor/Seshseshet [104], Hesi [110], Mehu [121], Mereruka [103] and Ibi [130].

³⁰⁹ See Appendix 2: Dragnet Detail Table E.

³¹⁰ Veldmeijer states that, in Roman times, floats were usually of cork or pumice. Veldmeijer, 'Fishing from Berenike' 103-4. See also Brewer-Freidman, *Fish and Fishing*. 45 fig. 2.39.

³¹¹ Täckholm, "Ancient Egypt, landscape, flora and agriculture." In *The Nile, Biology of an Ancient River*, 51.

³¹² Shaw-Nicholson, *Dictionary of AE*, 164-5.

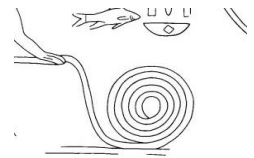
³¹³ Nefer...w [4], Nefer and Kahay [18], Iymery [20], Niankhkhnum and Khnumhotep [27], Ty [35], Sopedhotep (D15) [40], Ptahshepses [41], Kayemnofret II [43], Kaemrehu [47], Sekhemka [48], Nikauhor [64], Khunes [67], Ptahhotep/ Iyniankh [80], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Mehu [121], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Kahif [139].

are illustrated with either a thick or thin outline.³¹⁴ Some, however, could be portrayed with small rectangular additions to their base, perhaps stabilisers of added weight that could help slightly submerge the floats.³¹⁵

Unusual representations can be found in Niankhkhnum and Khnumhotep [27], Pehenuika [32] and Nikauhor [64], which illustrate numerous floats on their side. The depiction of floats in this position may reflect their movement on the water's surface while the dragnet is in use. Upside down floats first occur at Saqqara in the tombs of Akhethotep (Louvre) [31], Ty [35] and Kaemrehu [47], and at Giza in Sekhemka [48]. The rarity of this positioning, as well as the tombs' close proximity and date, imply that the same artist(s) or artistic school was executing the works.³¹⁶ Indeed, all tombs are dated between V.6-V8, which suggests that the same group of artists produced the scenes. Such artists would have also been able to easily access the tombs at Saqqara for artistic inspiration. The occurrence of the detail at Giza indicates either that other sites could have been similarly visited for inspiration, or that the artists were commissioned to work at multiple sites.

Hauling rope ends

Rope ends are usually depicted in the centre of the two teams hauling the dragnet. There is no clear standard to their representation; however, they are shown in one of four ways: (A) coiled; (B) loose; (C) tangled; or (D) interactive.



The first representation of rope ends appears in the tomb of Rahotep [5] at Maidum as a spherical roll (Type A) positioned near the feet of fishermen at the base of a register. This develops into a larger stylised roll of coiled rope in Fifth and Sixth Dynasty tombs.³¹⁷ Some examples of Type A only have one or two coils, as in Rahotep [5], Rakhaefankh [26], Ptahshepses [41] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131]. The rope is also most frequently

Sekhemka [48] Coiled Ends



Nefer and Kahay [18] Tangled Ends

³¹⁴ Kawab [6], Ka-Aper [10], Kaseuza (F7) [11], Werirniptah [16], Fetekta [25], Rakhaefankh [26], Akhethotep (Louvre) [31], Pehenuika [32], Serfka [49], Neferirtenef [52], Werirni [70], Senedjem-Ib/ Mehi [76], Nebkauhor/ Idu [73], Kaiemheset [84], Inumin [111], Merefnebef [117], Henqu/ Iy...f II [120], Idu 1 [128] and Ankhtyfy [148].

³¹⁵ These are found in the examples from Nefer and Kahay [18], Rakhaefankh [26], Ptahshepses [41], Sekhemka [48], Ihy r/u Seshseshet/ Idut [72] and Kagemni [94].

³¹⁶ Harpur, *Decoration*, 31, Woods, *A Day in the Marshes*, 235-7.

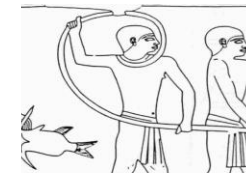
³¹⁷ Nikauhathor [23], Kayemnofret II [43], Nimaatre [29], Pehenuika [32], Sekhemka [48], Khunes [67], Senedjem-Ib/ Mehi [76], Seshemnofret IV [77], Ptahhotep/ Iyniankh [80], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111] and Djau [141].

shown falling vertically from the hauler's hand,³¹⁸ although three examples (Nikauhathor [23], CG 1720 [83] and Mereruka [103]) illustrate ropes falling in an inverted 'V' before reaching the base of the register and ending in a coil.



Ka-Aper [10] Loose ends

Rope ends could also be depicted as suspended from the hands of minor figures, their ends either loose (Type B) or tangled (Type C). Type B is first attested in Ka-Aper [10] (see image right) whereas the earliest example of Type C occurs in Nefer and Kahay [18] (see image previous). The former, however, is significantly more frequent than the latter.³¹⁹



Akhethotep (Louvre) [31] Interactive

Harpur states that, as a general rule, coiled ropes (Type A) are used in the majority of Old Kingdom dragnet scenes.³²⁰ The collected attestations, however, indicate that while Type A was favoured in the Memphite region, there is a significant number of scenes with Types B and C non-coiled ends, signalling that coils were not a standard or rule in Old Kingdom dragnet representations.³²¹ Type A rope ends are typically depicted in mid-Fifth to mid-Sixth Dynasty tombs. Dragnet scenes at Giza demonstrate a definite preference for Type A, while those at Saqqara show only a slight preference for coiled rope ends in comparison to Type B.³²² In provincial tombs, Type B is overall the most frequent type of rope ends, evidently favoured over Type C.³²³

While Types A, B and C typically hang from the hands of haulers, rope ends could also be variously manipulated by fishermen (Type D). Minor figures could be shown looping/wrapping them around their head/neck, as in Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31] and Sekhemka [48], the similarities between the last two suggesting direct influence or copying.³²⁴ In such scenes, the fishermen could be resting or winding the ropes so that their hands are free to haul the nets, the

³¹⁸ Rakhaefankh [26], Akhethotep (Louvre) [31], Niankhkhnum and Khnumhotep [27], Nimaatre [29], Ty [35], Pehenuika [32], Ptahshepses [41], Kaemrehu [47], Sekhemka [48], Khuwiwer [50], Neferirtenef [52], Khunes [67], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73], Hesi [110], Inumin [111], Henqu/Iy...f II [120], Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Djau [141].

³¹⁹ Type B: Irukaptah/ Khenu [44], Inti [45], Senedjem-Ib/ Mehi [76], Kaiemheset [84], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Meru/ Tetiseneb [115], Merefnebef [117], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], London British Museum No. 994 [135], Pepyankh/ Henykem [146] and Ankhtyfy [148]. Type C: Iynofret [19], Hotepherakhti [34], Werirni [70] (?) and Kahep/ Tjeti-Iker [140].

³²⁰ Harpur, *Decoration*, 145.

³²¹ It is also possible that coils were a standard in Giza cemeteries due to their frequency and the lack of loose end representations. See Appendix 2: Dragnet Detail Table F.

³²² See Appendix 2: Dragnet Detail Table F.

³²³ See Appendix 2: Dragnet Detail Table F.

³²⁴ Harpur, *Decoration*, 145.

action also preventing unwanted tangling.³²⁵ A Type D variation is illustrated in Pepyankh/ Henykem [146], which portrays rope ends over the shoulders of the last two haulers, hanging along their backs. Similarly, the scenes from Pehenuika [32] and Ty [35] each depicts a minor figure with a rope resting over the shoulder, while that of Nikauisesi [101] shows a supervisor with a looped rope over his shoulder. Type D is not confined to dragnet scenes, and is found in other themes such as clap-net fowling³²⁶ and sailing scenes.³²⁷

Fish Species³²⁸

Fish depicted in the tips of dragnets were covered in a previous section of this chapter. The following provides further discussion on such fish as well as those found in the main body of dragnets. While uncommon, a number of tombs evidently do not illustrate fish in their dragnet scenes.³²⁹

Fourth Dynasty dragnet scenes do not depict large volumes of fish. Such species as *Mugil sp.* and *Mormyrus Caschive* are portrayed in all five recorded scenes, in Nefermaat [2], Nefer...w [4], Rahotep [5], Kawab [6] and Debehen [7]. The *Barbus bynni* is also represented in the tomb of Rahotep [5].

The most frequent species in Fifth Dynasty scenes is the *Mugil sp.* followed by the *Tilapia sp.* and *Synodontis Schall.* Puffer fish (*Tetraodon Fahaka*), *Clarias sp.* and eels (*A. vulgaris*) are also attested. Fish belonging to the *Mormyridae* family occur in greater numbers than those in Fourth Dynasty scenes, with approximately 52 known representations. The moon fish and *Barbus bynni* are also frequently pictured while other fish species are shown in lesser numbers. As the total of unknown species (62) is very high, the popularity of a particular species remains inconclusive.

Dragnet scenes from the Sixth Dynasty and later continue to bear *Mugil sp.* as the most frequent type of fish with 76 attestations.³³⁰ Also common are puffer fish (*Tetraodon Fahaka*), *Synodontis Schall*, *Lates* and eels (*A. vulgaris*). Other species are attested in similar numbers to those of the Fifth Dynasty with fish belonging to the *Mormyridae* family overall decreasing in frequency.

Studying the number of attestations for each species can help identify patterns in the frequency or popularity of species during a particular period. The *Mugil sp.* remained popular in dragnet scenes

³²⁵ Harpur, *Decoration*, 145.

³²⁶ See Ty [35] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

³²⁷ See Akhethotep (Louvre) [31].

³²⁸ Please refer to Appendix 2: Dragnet Detail Table P; See also Volume 2. Table 2: Fish in Techniques.

³²⁹ Persen [9] evidently shows an empty net with no sign of fish preserved. Other examples occur in Inti [45], Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147].

³³⁰ Examples are found in Ankhtyfy [148], Tjemerery [159], Twau [160], Mery Aa [158] and Tjeti Aa [161]. Please refer Volume 2: Table 2: Fish in Techniques.

across the Old Kingdom, the *Tilapia sp.* and the *Synodontis* (especially the *Synodontis schall*) also common. Attestations of the *Barbus bynni* and moon fish remained stable throughout the dynasties, while the *Lates* increased slightly in number in the Sixth Dynasty. Although frequently represented in the Fifth Dynasty, the *Mormyridae* family evidently became less popular in the Sixth Dynasty. The least common fish species across the Fifth and Sixth Dynasty were the *Schilbe*, *Labeo Niloticus* and the *M. electricus*.

Minor Figures

Haulers

From the collected corpus of scenes, dragnetting evidently requires two teams of men to complete the hauling of the net, their number varying across tombs and time.

It is difficult to determine a specific trend in the increase or decrease of the number of figures in dragnet scenes as there are many that are fragmentary. It is evident that there were significantly more haulers portrayed in the beginning of the Sixth Dynasty, especially in the tomb of Mereruka [103] and his wife Watetkhet-Hor/ Seshseshet [104]. In three individual dragnet scenes from this tomb, there were 18, 23 and 29 figures illustrated. In comparison, Fourth, Fifth and other Sixth Dynasty scenes show an average of nine to 10 haulers.³³¹ Later Sixth Dynasty attestations, specifically after VI.4, show a slight decrease in the number of figures.³³²

Body Positions

Figures involved in the hauling of a dragnet can be depicted holding one of four body positions:³³³

- A. *Upright position*;
- B. *Bent position*;
- C. *Leaning position*; and
- D. *Lunge position*.

³³¹ See Appendix 2: Dragnets Detail Table H.

³³² The tombs show a maximum of seven haulers or less, as seen in Idu 1 [128], Ibi [130], Khenty [132], London British Museum No. 994 [135], Kahif [139], Kahep/ Tjeti-Iker [140], Djau [141], Gehesa/ Nebi [145], Shepsipumin/ Kheni [147], Ankhtyfy [148], Unisankh [150], Mery Aa [158], Tjemerery [159], Twau [160] and Tjeti Aa [161]. Exceptions can be seen in Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Niankhpepy/ Sobekhotep/ Hepi-Kem [136] and Pepyankh/ Henykem [146].

³³³ See Appendix 4: Typology: Body Positions Dragnet Haulers for full explanation of type. See Also Appendix 2: Dragnet Detail Table I, N.

Fourth Dynasty scenes represent figures in Types A and B only. Nefermaat [2] illustrates all haulers in position B, with a very slight bend at the waist of approximately 170°. The placement of all figures in this manner gives the impression of rigidity and a high level of standardisation. Type B is also attested in Rahotep [5], however the angle is slightly more obvious at approximately 140°. Nefer...w [4] possibly depicts two positions: the figures in the middle of the teams are shown in Type A while that towards the right end of the rope is represented in a Type B position. The damage to the edges of this scene prevent any definite identification of a third position, however remaining details of a leg at the far right suggest that a hauler may be in a lunge, Type D, position. Akhethotep (G7650) [14] appears to show both A and B in a similar way to Nefer...w [4].

Artists in the beginning of the Fifth Dynasty continue to frequently portray Types A and B. Position A occurs in Ka-Aper [10], Sekhemkare [13], and the fragmentary scenes of Kawab [6], and Iteti [12]. Type B is exclusively depicted in Persen [9] and in combination with position A in the tombs of Ka-Aper [10], Sekhemkare [13], and Iteti [12]. In the last three scenes, Type B is primarily associated with haulers at the tips of the net as they are reaching down to retrieve it.

Type A is the most frequent position in dragnet scenes of the Sixth Dynasty to the end of the Old Kingdom.³³⁴ It is often paired with Type B, which again is mostly illustrated for those men at the front of the teams, closest to the tips of the net.³³⁵

Types C and D are both first attested in the mid-Fifth Dynasty tomb of Nefer and Kahay [18]. Here, two figures at the ends of the net are lunging (Type D) while, unusually, a figure at the centre of the teams is also in lunge position. To the right, a hauler leans back on his heels (Type C). Such a leaning position

³³⁴ Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Nikauhathor [23], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Ptahshepses [41], Irukaptah/ Khenu [44], Inti [45], Sekhemka [48], Serfka [49], Khuwiwer [50], Kayemnofret (D23) [51], Neferirteneb [52], Iynofret/ Shanef [63], Nikauhor [64], Khenut [68], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], CG 1720 [83], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73], Kaiemheset [84], Kagemni [94], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Sesheshtet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefneneb [117], Heri/ Meru [118], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], London British Museum No. 994 [135], Djau [141], Gehesa/ Nebi [145], Pepyankh/ Henykem [146], Ankhtyfy [148], Twau [160] and Tjeti Aa [161].

³³⁵ Nefer and Kahay [18], Nikauhathor [23], Fetekta [25], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Kayemnofret (D23) [51], Neferirteneb [52], Nikauhor [64], Khunes [67], Werirni [70], Seshemnofer IV [77], CG 1720 [83], Ptahhotep/ Iyniankh [80], Kagemni [94], In-Snefru-Ishtef [96], Mereruka [103], Watetkhet-Hor/ Sesheshtet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefneneb [117], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], London British Museum No. 994 [135], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Kahep/ Tjeti-Iker [140], Gehesa/ Nebi [145], Pepyankh/ Henykem [146], Shepsipumin/ Kheni [147], Tjemerery [159] and Twau [160].

is sporadically attested in the Fifth Dynasty, with a further 12 recorded examples.³³⁶ In the Sixth Dynasty, there are only 10 known representations, the majority occurring during the reign of Teti (VI.1) as seen in Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104] and Inumin [111].³³⁷ Type D is slightly more common than Type C, especially in the Fifth Dynasty for which 14 examples.³³⁸ Only seven Type D figures date to the Sixth Dynasty, the majority again from the reign of Teti (VI.1). These occur in Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Merefnebef [117], Ibi [130] and the fragment from London British Museum No. 994 [135]. Positions C and D are mainly confined to the Memphite region, perhaps due to artistic influence or the same artists working on all examples.

Scenes with a supervisor or head fisherman illustrate him in an upright position (Type A).³³⁹ One exception surfaces in the tomb of Ty [35] which shows a supervisor in an upright position but with his back slightly hunched, perhaps indicating his advanced age or a medical condition. A second supervisor or head fisherman in the scene is in a kneeling lunge position with the torso upright and over the bent front leg.

Arm Positions

The arms of haulers can be shown in three different positions:³⁴⁰

DA.A - Forwards: both arms are in front of the body;

DA.B- Either side: the arms are shown on either side of the body; and

DA.C- Behind: both arms are shown crossing the chest and holding the rope behind the torso.

³³⁶ Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Inti [45], Kaemrehu [47], Sekhemka [48], Neferirtenef [52], Werirni [70], Senedjem-Ib/ Mehi [76], CG 1720 [83], Nebkauhor/ Idu [73] and Kaiemheset [84].

³³⁷ Those after Teti (VI.1) are found in Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Kahif [139], Pepyankh/ Henykem [146] and Mery Aa [158].

³³⁸ Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Pehenuika [32], Hotepherakhti [34], Ty [35], Neferirtenef [52], Iynofert/ Shanef [63], Nikauhor [64], Werirni [70], Senedjem-Ib/ Mehi [76], Ptahhotep/ Iyniankh [80] and CG 1720 [83].

³³⁹ Sekhemkare [13], Nefer and Kahay [18], Iymery [20], Khufukhaef II [21], Fetekta [25], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Inti [45], Sekhemka [48], Neferirtenef [52], Iynofert/ Shanef [63], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ptahhotep/ Iyniankh [80], CG 1720 [83], Nebkauhor/ Idu [73], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Pepyankh/ Heri-Ib/ Neferka/ Heti [123], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum No. 994 [135], Pepyankh/ Henykem [146] and Shepsipumin/ Kheni [147].

³⁴⁰ See Appendix 4: Typology: Arm Positions Dragnet Haulers.

The most common arm position is Type DA.A.³⁴¹ Not only is this forward position the most logical to use in such fishing circumstances, it is also the easiest to artistically compose. In fact, only three scenes in the corpus of this study do not depict figures in a Type DA.A position (Kaiemheset [84], Ankhtyfy [148] and Tjeti Aa [161]).³⁴² It first occurs in the Fourth Dynasty tombs of Nefermaat [2], Nefer...w [4] and Rahotep [5].

Nefer...w [4] also depicts Type DA.B which complements the upright and frontal position of the body in this example. This type is attested in early Fifth Dynasty tombs,³⁴³ however the position is extremely popular between the reigns of Niuserre and Djedkare (V.6-8),³⁴⁴ remaining as one of the standard positions of Sixth Dynasty dragnet scenes.³⁴⁵ Types DA.A and DA.B arm positions complement the common body position Types A and B.

Type DA.C is first attested in the tomb of Rakhaefankh [26] dating to the reign of Niuserre (V.6) at Giza. The scene depicts a figure pulling the rope with both hands behind his torso as his body moves in a forward direction. Type DA.C is sporadically attested in the remaining dragnet attestations of the Old Kingdom.³⁴⁶

One variant arm position is known from three cases. A figure in the scene from Iymery [20] leans forward with one hand grasping the rope at the side of the torso (at the hip), the other hanging vertically in front of the body, perhaps for balance. This position is also attested in Niankhkhnum and Khnumhotep [27] and Nikauisesi [101].

Supervisors can be depicted performing a variety of actions with their arms. The most common shows the supervisor leaning against a staff with one hand holding its tip at his shoulder level, the other placed in line with the staff holding it at its middle. Such a position is first represented in the mid-Fifth

³⁴¹ See Appendix 2: Dragnets Detail Table J, N.

³⁴² Ankhtyfy [148] and Tjeti Aa [161] are fragmentary; however, the surviving details do not coincide with Type DA.A.

³⁴³ Ka-Aper [10] and Sekhemkare [13].

³⁴⁴ Nefer and Kahay [18], Khufukhaef II [21], Irenkaptah [22], Nikauhathor [23], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Ptahshepses [41], Sekhemka [48], Khuwiwer [50], Kayemnofret (D23) [51], Neferirteneb [52], Iynofert/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], CG 1720 [83], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73] and Kaiemheset [84].

³⁴⁵ Kagemni [94], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Heri/ Meru [118], Mehu [121], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], London British museum no. 944 [121], Kahif [139], Djau [141], Pepyankh/ Henykem [146], Ankhtyfy [148], Tjemerery [159], Twau [160], Mery Aa [158] and Tjeti Aa [161].

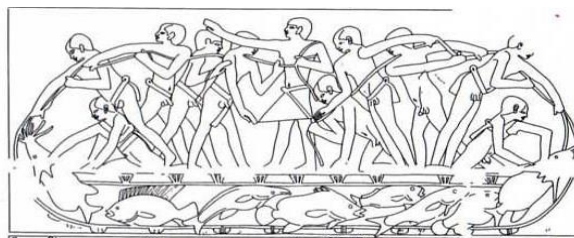
³⁴⁶ Occurring in the tombs of Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ty [35], Kayemnofret II [43], Werirni [70], Nikauisesi [101], Heri/ Meru [118] and Twau [160].

Dynasty tomb of Khufukhaef II [21], steadily increasing in frequency towards the end of the dynasty.³⁴⁷ All supervisors portrayed in Sixth Dynasty scenes are depicted in this position,³⁴⁸ with only one exception in Nikauisesi [101] shown gesturing. That in Ty [35] is illustrated with one hand at the tip of the staff, while the other is crossed over the chest and tucked into the bent elbow, effectively crossing his arms over his chest.

The gesturing position portrays the supervisor with one arm raised, the hand pointing in a specific direction. The earliest recorded example is in the early Fifth Dynasty scene of Sekhemkare [13]. Four other cases are known from the tombs of Niankhkhnum and Khnumhotep [27], Inti [45], Iynofert/Shanef [63] and Nikauisesi [101]. A slight variation in Inti [45] depicts the supervisor, possibly a dwarf, gesturing to the haulers while raising a club above his head in a threatening manner. Others are shown holding or presenting a captured fish, as attested in Nefer and Kahay [18], Akhethotep (Louvre) [31], Ty [35], Sekhemka [48], and Senedjem-Ib/ Mehi [76]. A unique position is found in Akhethotep (Louvre) [31], in which the supervisor has one hand placed on the opposite shoulder while the other is by his side, holding a whip.

Leg Positions

Leg positions for dragnet haulers are different to those observed in scenes of other fishing techniques. This is due to the large range of movement attributed to the haulers, especially in scenes of the Fifth and Sixth Dynasties. The following types are identified:³⁴⁹



Nikauisesi [101]

- A- *Open stance*;
- B- *Stride*;
- C- *Leaning stance*;
- G- *Lunge stance*.

³⁴⁷ Rakhaefankh [26], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Neferirtenef [52], CG 1720 [83] and Nebkauhor/ Idu [73].

³⁴⁸ In-Snefru-Ishtef [96], Mereruka [103], Watetkhet-Hor /Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum no. 944 [135], Pepyankh/ Henykem [146] and Shepsipumin/ Kheni [147].

³⁴⁹ Please see Appendix 4: Typology: Basic Leg Positions for a full explanation of each type. See Appendix 2: Dragnets Detail Table J, N.

Open stance (Type A) and stride (Type B) positions are represented equally in the Fourth Dynasty, Open stance is first depicted in the tomb of Nefermaat [2] and stride position in Nefer...w [4]. The two are also illustrated in Fifth Dynasty scenes, Type A occurring more frequently with 121 attestations compared to 82 stride (Type B) examples.³⁵⁰ The former occurs in lesser numbers in the Sixth Dynasty, with only 83 recorded representations.³⁵¹ Stride position (Type B) is also attested in this dynasty, although 48 of its examples are portrayed in the tomb of Mereruka [103] and Watetkhet-Hor/Seshseshet [104].³⁵²

The first recognisable leaning stance (Type C) and lunge (Type G) are found in the mid-Fifth Dynasty tomb of Nefer and Kahay [18], however a figure in the earlier tomb of Nefer...w [4] may be in a lunge position (Type G). Both types are infrequently attested until the end of the Fifth Dynasty, at which time a slight increase in both, especially the lunge position (Type G), is apparent.³⁵³ They remain common in the Sixth Dynasty,³⁵⁴ leaning (Type C) being the most popular leg position in the first half of the dynasty, particularly in Mereruka [103] and Watetkhet-Hor/Seshseshet [104]. Type G examples are occasionally portrayed in scenes dating until the end of the reign of Pepy II (VI.4).

³⁵⁰ Type A: Persen [9], Ka-Aper [10], Sekhemkare [13], Nefer and Kahay [18], Iymery [20], Khufukhaef II [21], Nikauhathor [23], Fetekta [25], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Ptahshepses [41], Irukaptah/ Khenu [44], Sekhemka [48], Serfka [49], Khuwiwer [50], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Ihy r/u Seshseshet/ Idut [72], Kaiemheset [84]. Type B: Iteti [12], Nefer and Kahay [18], Iynofret [19], Iymery [20], Irenkaptah [22], Nikauhathor [23], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ty [35], Kayemnofret II [43], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Hesimin (M22) [56], Iynofert/ Shanef [63], Nikauhor [64], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ptahhotep/ Iyniankh [80], CG 1720 [83], Nebkauhor/ Idu [73], Ihy r/u Seshseshet/ Idut [72] and Turin Museo Egizio Sup. 1954 [85].

³⁵¹ In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Meru/ Tetiseneb [115], Heri/ Meru [118], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Ibi [130], Khenty [132], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Kahep/ Tjeti-Iker [140], Djau [141], Gehesa/ Nebi [145], Pepyankh/ Henykem [146], Shepsipumin/ Kheni [147], Ankhtyfy [148], Tjemerery [159], Mery Aa [158] and Tjeti Aa [161].

³⁵² Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Merefnabef [117], Henqu/ Iy...f II [120], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135] and Kahif [139].

³⁵³ Type C: Akhethotep (Louvre) [31], Ty [35], Inti [45], Kaemrehu [47], Sekhemka [48], Neferirteneb [52], Werirni [70], Senedjem-Ib/ Mehi [76], Ptahhotep/ Iyniankh [80], CG 1720 [83], Ihy r/u Seshseshet/ Idut [72] and Kaiemheset [84]. Type G: Iynofret [19], Khufukhaef II [21], Pehenuika [32], Hotepherakhti [34], Ty [35], Neferirteneb [52], Iynofert/ Shanef [63], Nikauhor [64], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ptahhotep/ Iyniankh [80], CG 1720 [83] and Nebkauhor/ Idu [73].

³⁵⁴ Type C: Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Inumin [111], Merefnabef [117], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Kahif [139], Pepyankh/ Henykem [146], Mery Aa [158]. Type G: Kagemni [94], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnabef [117], Mehu [121], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135], Kahif [139], Djau [141] and Gehesa/ Nebi [145].

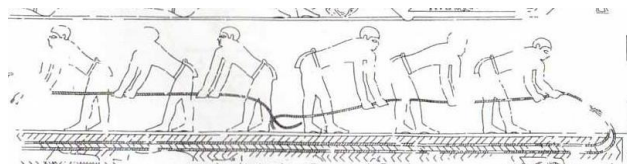
The leaning position (Type C) has many variations in terms of foot placement. Typically, the feet are placed next to or very close to each other, both either raised to the balls or heels.³⁵⁵ Some representations show one-foot flat on the base while the other is on its ball or heel.³⁵⁶ In rare cases, the leg is completely raised, its foot resting on the calf or thigh of a figure.³⁵⁷

Further atypical positions are associated with haulers at the end of the dragnet's rope. That in Khufukhaef II's [21] dragnet scene, for instance, has his foot placed upon the prow of a boat, forcing him into a lunge position. The end hauler in Senedjem-Ib/ Mehi [76] places his foot on the curve of the incoming net, which is also attested in the later Sixth Dynasty tomb of Ibi [130], while a figure in Werirni [70] is on his knees reaching for the net. The latter position is similarly portrayed three times in the Sixth Dynasty dragnet scene of Nikauisesi [101].³⁵⁸

Supervisors are primarily shown in an open stance position (Type A).³⁵⁹ However, those in Rakhaefankh [26], Mereruka [103], Mehu [121] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131] illustrate the figure leaning on his staff, both feet close together with one-foot flat on the base line and the other slightly raised forward. A unique example occurs in Ty [35], which depicts a second supervisor in a kneeling lunge position holding a fish.

Direction of Minor Figures in Dragnet Teams

Haulers in dragnet teams can be shown either all facing the same direction or with some entirely facing the opposite direction. The majority of scenes exhibit the latter, with at least one or two figures facing the opposite direction.³⁶⁰ Such a



Kahep/ Tjeti-Iker [140]

³⁵⁵ Nefer and Kahay [18], Akhethotep (Louvre) [31], Inti [45], Kaemrehu [47], Sekhemka [48], Serfka [49], Neferirtenef [52], Senedjem-Ib/ Mehi [76], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Inumin [111], Merefnabef [117], Pepyankh/ Henykem [146] and Mery Aa [158].

³⁵⁶ Ty [35], Werirni [70], Senedjem-Ib/ Mehi [76], Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Kahif [139].

³⁵⁷ Ptahhotep/ Iyniankh [80], Kagemni [94], Mereruka [103], Watetkhet-Hor/ Seshseshet [104] and Inumin [111].

³⁵⁸ This is likely not purposeful repetition but rather the expression of artistic individuality.

³⁵⁹ Sekhemkare [13], Nefer and Kahay [18], Iymery [20], Khufukhaef II [21], Fetekta [25], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Inti [45], Sekhemka [48], Neferirtenef [52], Iynofert/ Shanef [63], Senedjem-Ib/ Mehi [76], Seshemnofet IV [77], Ptahhotep/ Iyniankh [80], CG 1720 [83], Nebkauhor/ Idu [73], In-Snefru-Ishtef [96], Nikauisesi [101], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Henqu/ Iy...f II [120], Niankhpepy/ Khnumhotep/ Heti [123], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum No. 994 [135], Pepyankh/ Henykem [146] and Shepsipumin/ Kheni [147].

³⁶⁰ See Appendix 2: Dragnets Detail Table I.

representation effectively communicates to the observer the utmost physical and tactical effort necessitated to complete the task. The frequency of this detail thus makes it a standard of dragnet scenes, although a few exceptions are attested.

Dragnet scenes with haulers facing the opposite direction to their teammates are completely absent in the Fourth Dynasty. From the Fifth Dynasty, each team's end hauler faces outwards, with only two known cases suggesting otherwise. Pehenuika [32] features one end hauler facing out and the other turned towards the centre, whereas Ankhtyfy [148] depicts both end haulers facing the centre of the scene. The stance of other haulers in each team points to no discernible pattern in the direction which they face. Instead, their placement was likely at the discretion of the artist and perhaps the space requirement within each individual scene.³⁶¹ Similar to Fourth Dynasty dragnet teams, a number of Fifth and Sixth Dynasty provincial scenes portray all figures of a respective team facing the same direction.³⁶² Yet, these generally lack the positional flexibility identified in more complex scenes such as those in Ty [35], Mereruka [103] and others.³⁶³

Clothing

Haulers are often depicted wearing more than one type of the following four main categories of clothing.³⁶⁴

A. *Naked*

B. *Belt/Loincloth*

C. *Kilt*; and

D. *Apron/Tunic*³⁶⁵

³⁶¹ Persen [9], Ka-Aper [10], Sekhemkare [13], Iteti [12], Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Nikauhathor [23], Fetekta [25], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Ptahshepses [41], Irukaptah/ Khenu [44], Kaemrehu [47], Sekhemka [48], Serfka [49], Khuwiwer [50], Kayemnofret (D23) [51], Neferirtenef [52], Iynofert/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], CG 1720 [83], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73], Kaiemheset [84], Kagemni [94], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Henqu/ Iy...f II [120], Mehu [121], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135], Kahif [139], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Djau [141], Gehesa/ Nebi [145], Pepyankh/ Henykem [146], Twau [160] and Mery Aa [158].

³⁶² Akhethotep (Louvre) [31], Hotepherakhti [34], Inti [45], Khenut [68], Heri/ Meru [118], Niankhpepy/ Khnumhotep/ Heti [123], Idu 1 [128], Khenty [132], Kahep/ Tjeti-Iker [140], Shepsipumin/ Kheni [147], Ankhtyfy [148], Tjemerery [159] and Tjeti Aa [161].

³⁶³ Other examples include Kagemni [94], Akhethotep (Louvre) [31] and Hesi [110].

³⁶⁴ Please see Appendix 4: Typology; Individual Characteristics and Clothing for explanation of each type. See Appendix 2: Dragnet Detail Table K, N.

³⁶⁵ A rare type of clothing is found in the tombs of Ty [35] and Ankhtyfy [148]. A variation of Type D, it comprises a length of material that wraps around a figure's torso and shoulder. That in Ankhtyfy [148] may be a harness (see more on harnesses in this chapter).

In the Fourth Dynasty, Types A, B and C are attested, Type A being most frequent.³⁶⁶ Type C is only portrayed once as a wrap-around kilt in Rahotep [5], which also shows two other figures in loincloths (Type B).

In the first half of the Fifth Dynasty, Type B is the most typical form of clothing.³⁶⁷ It could be worn in three ways: (1) a loincloth with two to five modesty flaps of strips or fabric over the front of the genitals,³⁶⁸ (2) a loincloth turned around so that the flaps are over the rear of the hauler, leaving the genital area exposed,³⁶⁹ and (3) a loincloth pushed up on the torso as seen in the tombs of Nefer and Kahay [18], Niankhkhnum and Khnumhotep [27], and possibly Ty [35]. Type B is usually restricted to the end haulers, perhaps as it provided extra mobility and would not get easily wet or dirty. Other types of clothing portrayed in Fifth Dynasty scenes include Type A, which was consistently depicted for the duration of this dynasty,³⁷⁰ and Type C, which is attested once in the first half of the Fifth Dynasty in Ty [35] (V.6) and in five further tombs dating to the second half of the dynasty.³⁷¹

Only two forms of clothing were evidently illustrated in tombs ascribed to the reign of Teti (VI.1): Types B³⁷² and C.³⁷³ Unlike the majority of haulers With Type B, those in Nikauisesi [101] and Hesi [110] wear a loincloth high on the torso, suggesting possible artistic influences between the tombs. After Teti's reign, the most common category of clothing is Type C.³⁷⁴ Type B is only attested in Mehu [121] until

³⁶⁶ Type A: Nefermaat [2] and Nefer...w [4]. Type B: Rahotep [5] and Kawab [6].

³⁶⁷ Sekhemkare [13] (?), Nefer and Kahay [18], Iynofret [19], Khufukhaef II [21], Irenkaptah/Khenu [44], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ptahshepses [41], Irukaptah/ Khenu [44], Kaemrehu [47], Sekhemka [48], Neferirteneft [52], Iynofert/ Shanef [63], Ptahhotep/ Iyniankh [80] and Turin Museo Egizio Sup. 1854 [85].

³⁶⁸ The loincloths may appear to be pleated; however, it is more likely that strips of fabric were attached as they can be shown separated (Rakhaefankh [26]) or together (Iynofret [19]). See also Nefer and Kahay [18], Iynofret [19], Akhethotep (Louvre) [31], Pehenuika [32], Ptahshepses [41], Sekhemka [48] and Neferirteneft [52].

³⁶⁹ Nefer and Kahay [18], Khufukhaef II [21], Irenkaptah/Khenu [44], Niankhkhnum and Khnumhotep [27], Sekhemka [48], Iynofert/ Shanef [63] and Ptahhotep/ Iyniankh [80].

³⁷⁰ Ka-Aper [10], Sekhemkare [13], Iymery [20], Nikauhathor [23], Fetekta [25], Rakhaefankh [26], Ty [35], Kayemnofret II [43], Ptahshepses [41], Irukaptah/ Khenu [44], Kaemrehu [47], Khuwiwer [50], Nikauhor [64], Khenut [68], Khunes [67], Werirni [70], Seshemnofer IV [77] and Kaiemheset [84].

³⁷¹ Inti [45], Kayemnofret (D23) [51], Iynofert/ Shanef [63], Senedjem-Ib/ Mehi [76] and Nebkauhor/ Idu [73].

³⁷² Kagemni [94], Nikauisesi [101], Mereruka [103], Hesi [110], Inumin [111], Meru/ Tetiseneb [115] and Heri/ Meru [118].

³⁷³ Type C occurs in the tombs of In-Snefru-Ishtef [96], Niankhnesut [99], Mereruka [103], Watetkhet-Hor/ Sesheshtet [104], Hesi [110] and Merefnebef [117].

³⁷⁴ Henqu/ Iy...f II [120], Mehu [121], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Gehesa/ Nebi [145], Pepyankh/ Henykem [146] and Tjeti Aa [161].

the reign of Pepy II (VI.4),³⁷⁵ whereas Type A is first recorded in Niankhpepy/ Khnumhotep/ Heti [123] and later appears only in provincial tombs.³⁷⁶

The dragnet scene from Pehenuika [32] uniquely depicts a figure to the right of the net wearing a loincloth turned 180° around the hip.³⁷⁷ Another rare example in Ankhtyfy [148] portrays a naked figure in the middle of the net, similar to the surrounding naked haulers.

Supervisors are typically clothed in kilts (Type C) but can also be portrayed in loincloths (Type B), their genitalia never depicted. Their Type C garments can be shown as wrap-around kilts, pointed kilt, or kilts with fringed aprons. Wrap-around kilts in the early Fifth Dynasty dragnet scenes of Persen [9] and Sekhemkare [13] reach slightly above the knee, and are sporadically attested throughout the Old Kingdom as portrayed in Iymery [20], Akhethotep (Louvre) [31], Serfka [49], Nebkauhor/ Idu [73] and Inumin [111]. Pointed kilts are commonly at knee-length, the base projecting in front of the knee. First attested in the Giza tombs of Khufukhaef II [21] and Rakhaefankh [26] (V.6), they become the most frequent form of kilts, particularly in Sixth Dynasty tombs at Saqqara and provincial sites.³⁷⁸ Wrap-around kilts with a downward drop are less common, evidently restricted to Saqqara tombs³⁷⁹ except for one known portrayal in the tomb of Pepyankh/ Heri-Ib/ Neferka/ Heny [131] at Meir. Kilts with fringed aprons are known from the mid-late Fifth Dynasty tombs of Ty [35], Sekhemka [48], Neferirtenef [52], CG 1720 [83] and Ptahhotep/ Iyniankh [80]. The near exact replication of this style of kilt in Ty [35] at Saqqara and Sekhemka [48] at Giza suggests the work of the same workshop or artist.

Genitalia in dragnet scenes are first represented in the tomb of Nefer and Kahay [18], in which the end haulers have their loincloths pushed up onto their torso. Other early Fifth Dynasty scenes depicting genitals are found in Niankhkhnum and Khnumhotep [27], with end haulers also wearing loincloths pushed up high on their torso, and Rakhaefankh [26], in which the haulers are naked. In the second half of the Fifth Dynasty, further examples are attested in Ty [35], Ptahshepses [41], Kaemrehu [47] and Werirni [70]. Those in Ty [35] are associated with haulers in Type C short kilts as well as Type A, while the other tombs show naked figures showing their genitalia. A marked increase in the

³⁷⁵ Kahif [139], Kahep/ Tjeti-Iker [140], Gehesa/ Nebi [145] and Shepsipumin/ Kheni [147].

³⁷⁶ Idu 1 [128], Khenty [132], Djau [141], Ankhtyfy [148], Twau [160] and Mery Aa [158].

³⁷⁷ An earlier scene from Fetekta [25] may show a kilt that either is pleated or a longer loincloth that is shaped like a kilt.

³⁷⁸ Irukaptah/ Khenu [44], Iynofert/ Shanef [63], Seshemnofer IV [77], In-Snefru-Ishtef [96], Nikauisesi [101], Watetkhet-Hor/ Seshseshet [104], Meru/ Tetiseneb [115], Niankhpepy/ Khnumhotep/ Heti [123], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Pepyankh/ Henykem [146] and Shepsipumin/ Kheni [147].

³⁷⁹ Such as Niankhkhnum and Khnumhotep [27], Neferirtenef [52], Ptahhotep/ Iyniankh [80], Mereruka [103], Hesi [110] and Mehu [121].

depiction of genitals is observed in the early Sixth Dynasty, especially during the reigns of Teti and Pepy I (VI.1-2).³⁸⁰ Indeed, as the haulers in Sixth Dynasty dragnet scenes are all clothed,³⁸¹ their garments were evidently carefully situated in order to accommodate the additional body parts. Only two scenes dating to the late Sixth Dynasty depict men with genitalia, both within provincial cemeteries.³⁸²

Harness

Some dragnet scenes illustrate fishermen using aids, or harnesses, to help retrieve the nets. The harness is a flat piece of material that is attached to the dragnet by knotting a piece of material around the rope. It would then catch along the bight of the net rope and was held in place when weight was placed on it.³⁸³ Harnesses effectively offered haulers more leverage and a wider range of movement when retrieving dragnets.

The harness is a standard element in dragnet scenes of the Old Kingdom,³⁸⁴ its earliest representation occurring in the mid-Fifth Dynasty tomb of Nefer and Kahay [18]. After the reign of Pepy II, fewer scenes apparently include this feature.³⁸⁵ Both Memphite and provincial dragnet representations portray harnesses; however, as the majority of scenes are at Saqqara,³⁸⁶ a greater number of attestations are found in mid-Fifth to early Sixth Dynasty Saqqara tombs. Unique portrayals can be found in Mereruka [103] and Hesi [110], in which haulers grip harnesses while pulling the dragnets to shore.

Individual Characteristics

Although several figures in dragnet scenes are damaged, it is possible to deduce two main body types for haulers:³⁸⁷

³⁸⁰ Niankhnesut [99], Nikauisesi [101], Mereruka [103], Hesi [110], Inumin [111] and Niankhpepy/Khnumhotep/ Heti [123].

³⁸¹ See previous section as well as Appendix 2: Dragnet Detail Table K, N.

³⁸² Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Twau [160].

³⁸³ Brewer-Friedman, *Fish and Fishing*, 42.

³⁸⁴ Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Kaemrehu [47], Sekhemka [48], Neferirtenef [52], Iynofert/ Shanef [63], Werirni [70], Senedjem-Ib/ Mehi [76], CG 1720 [83], Nebkauhor/ Idu [73], Kagemni [94], In-Snefru-Ishtef [96], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Henqu/ Iy...f II [120], Mehu [121], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], London British Museum No. 994 [135], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], Pepyankh/ Henykem [146], Ankhtyfy [148] and Twau [160]. See also Harpur, *Decoration*, 189.

³⁸⁵ See Appendix 2: Dragnet Detail Table L.

³⁸⁶ Harpur, *Decoration*, 191-2, 197.

³⁸⁷ Please see Appendix 4: Typology; Body Position for Dragnet Haulers for full explanation of type.

- A. *An athletic body; and*
- B. *A non-athletic body.*

The remaining evidence also shows that haulers were portrayed with either:³⁸⁸

- A. *A full head of hair; or*
- B. *A receding hairline.*

The majority of haulers are represented with an athletic body (Type A), a type observed for approximately 450 figures.³⁸⁹ Type B is attested significantly less, with only 21 surviving depictions.³⁹⁰ Fourth to early Fifth Dynasty scenes only portray figures with a Type A body, with Type B first recorded in Niankhkhnum and Khnumhotep [27].³⁹¹ In the second half of the Fifth Dynasty, Ty [35] shows 78% of dragnet haulers with a Type B body, the largest number of non-athletic haulers in dragnet scenes. Between the Fifth and Sixth Dynasties, both Types A and B are represented in similar frequency.³⁹² However, the large numbers of haulers in the tomb of Mereruka [103] and Watetkhet-Hor/ Seshseshet [104] slightly skew the data, as approximately 70 Type A haulers are portrayed. A variation to the body types is found in Henqu/Iy...f II [120], in which a hauler is portrayed with a hernia bulging from his stomach.

³⁸⁸ Please see Appendix 4: Typology; Individual Characteristics and Clothing for full explanation of type.

³⁸⁹ Nefermaat [2], Nefer...w [4], Rahotep [5], Kawab [6], Akhethotep (G7650) [14], Persen [9], Ka-Aper [10], Iteti [12], Sekhemkare [13], Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Nikauhathor [23], Fetekta [25], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Kayemnofret II [43], Ptahshepses [41], Irukaptah/ Khenu [44], Inti [45], Sekhemka [48], Serfka [49], Khuwiwer [50], Neferirtenef [52], Iynofret/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Seshemnofer IV [77], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73], Kaiemheset [84], Turin Museo Egizio Sup. 1854 [85], Kagemni [94], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Heri/ Meru [118], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum No. 994 [135], Kahif [139], Kahep/ Tjeti-Iker [140], Djau [141], Gehesa/ Nebi [145], Pepyankh/ Henykem [146], Shepsipumin/ Khenu [147], Ankhtyfy [148], Tjemerery [159], Twau [160], Mery Aa [158] and Tjeti Aa [161]. Appendix 2: Dragnet Detail Table H for the number of figures per tomb.

³⁹⁰ Niankhkhnum and Khnumhotep [27], Ty [35], Irukaptah/ Khenu [44], Werirni [70], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Mehu [121] and London British Museum No. 994 [135].

³⁹¹ Type A: Nefermaat [2], Nefer...w [4], Rahotep [5], Kawab [6], Akhethotep (G7650) [14], Persen [9], Ka-Aper [10], Iteti [12], Sekhemkare [13], Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Nikauhathor [23], Fetekta [25], Rakhaefankh [26] and Niankhkhnum and Khnumhotep [27].

³⁹² See Appendix 2: Dragnet Detail Table M, N.

The hair type of haulers is typically Type A. Figures with a full head of hair are known from 231 cases in the Fifth Dynasty, and 152 in the Sixth Dynasty.³⁹³ In comparison, only 72 haulers bear a receding hairline, with the majority occurring in Fifth Dynasty tombs.³⁹⁴ One unique example in the tomb of Ty [35] represents two haulers with a beard.

Supervisors are more frequently represented with Type A bodies (22 figures) compared to Type B (10 figures).³⁹⁵ Most are also shown with a full head of hair (Type A), with five known examples observed in the Fifth Dynasty and seven in the Sixth Dynasty.³⁹⁶ Supervisors with Type B hair are recorded four times in Fifth Dynasty scenes and once in the Sixth Dynasty.³⁹⁷ A couple of variations are known: Inumin's [111] supervisor wears a papyrus hat, which is also worn by other haulers in the scene; and one of the supervisors in Ty [35] has a beard.

Other minor figures in dragnet scenes have Type A bodies. For instance, paddlers in Inti [45] and Kaiemheset [84] are all athletically built; yet, as their figures are damaged, no comment can be made about their hair type. Type A bodies are also represented for two figures positioned on a boat in Khufukhaef II [21], one of which has a full head of hair (Type A).

³⁹³ Nefer..w [4], Rahotep [5], Ka-Aper [10], Sekhemkare [13], Nefer and Kahay [18], Iynofret [19], Iymery [20], Khufukhaef II [21], Irenkaptah [22], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Irukaptah/ Khenu [44], Inti [45], Sekhemka [48], Khuwiwer [50], Neferirteneb [52], Iynofert/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Senedjem-Ib/ Mehi [76], Nebkauhor/ Idu [73], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Meru/ Tetiseneb [115], Merefnebef [117], Heri/ Meru [118], Henqu/ Iy...f II [120], Mehu [121], Niankhpepy/ Khnumhotep/ Heti [123], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khenty [132], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum No. 994 [135], Kahep/ Tjeti-Iker [140], Djau [141], Pepyankh/ Henykem [146], Ankhtyfy [148], Unisankh [150] and Twau [160].

³⁹⁴ Nefer and Kahay [18], Nikauhathor [23], Niankhkhnum and Khnumhotep [27], Ty [35], Irukaptah/ Khenu [44], Neferirteneb [52], Nikauhor [64], In-Snefru-Ishtef [96], Niankhnesut [99], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Meru/ Tetiseneb [115], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Djau [141], and Pepyankh/ Henykem [146]. See also Appendix 2: Dragnet Detail Table M, N.

³⁹⁵ Type A: Sekhemkare [13], Nefer and Kahay [18], Khufukhaef II [21], Rakhaefankh [26], Akhethotep (Louvre) [31], Hotepherakhti [34], Sekhemka [48], Neferirteneb [52], Iynofert/ Shanef [63], Senedjem-Ib/ Mehi [76], CG 1720 [83], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Niankhpepy/ Khnumhotep/ Heti [123], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Niankhpepy/ Sobekhotep/ Hepi-Kem [136], London British Museum No. 944 [135], Pepyankh/ Henykem [146] and Shepsipumin/ Kheni [147]. Type B: Fetekta [25], Niankhkhnum and Khnumhotep [27], Ty [35], Irukaptah/ Khenu [44], Nebkauhor/ Idu [73], In-Snefru-Ishtef [96], Inumin [111], Meru/ Tetiseneb [115] and Mehu [121].

³⁹⁶ Sekhemkare [13], Nefer and Kahay [18], Khufukhaef II [21], Rakhaefankh [26], Akhethotep (Louvre) [31], Irukaptah/ Khenu [44], Iynofert/ Shanef [63], Senedjem-Ib/ Mehi [76], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/ Seshseshet [104], Hesi [110], Inumin [111], Niankhpepy/ Khnumhotep/ Heti [123], Pepyankh/ Henykem [146]. See Appendix 2: Dragnet Detail Table N.

³⁹⁷ Niankhkhnum and Khnumhotep [27], Ty [35], Sekhemka [48] and Mehu [121]. See Appendix 2: Dragnets Detail Table N for Numbers per tomb.

Captions

There are a total of 21 scenes which include a caption.³⁹⁸ These are known to occur in tombs dating to the mid Fifth Dynasty until the late Sixth Dynasty and beyond in the tomb of Ankhtyfy [148].

It appears that the captions are used to infer the success of the catch. The text from ten captions all mention the success of the catch using exclamations such as *ḥꜣm p[w] i*, *ḥb p[w] i* or simply including *ḥb nfr*.³⁹⁹ Some scenes have more captions; usually instructions between minor figures to haul in the net as seen in Hotepherakhti [34], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Pepyankh/ Henykem [146]. The majority of the other captions are identifying persons of interest such as the overseers of the fisherman⁴⁰⁰, or individuals as seen in Watetkhet-Hor/ Seshseshet [104]. Although the inscriptions are not all identical, the general themes of the captions are similar. The emphasis of the good catch begins in the mid to late Fifth Dynasty with *ḥb nfr*, which then slightly changes in the Sixth Dynasty to euphemisms such as *ḥ[ꜣ]m mḥty wr.t* or *wdnt wr.t* as seen in Mehu [121] and *Is mḥ.yt* in Pepyankh/ Henykem [146]; yet *ḥb nfr* is still known to occur in Kagemni [94], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Pepyankh/ Henykem [146]. More infrequent themes are found in Hotepherakhti [34] and Ty [35] which speak of the deboning of a *Synododntis*; and an observation recalled by a minor figure about a bird which has captured a fish near them is Pepyankh/ Henykem [146].

As mentioned there is a general trend and similarity between the emphasize on the success of the catch and the action of hauling or retrieving the net from the water. However, the remaining captions are all individualized for each scene. Whether it be the naming of persons or declaring the catch for an official as seen in Pepyankh/ Henykem [146]; or the more specific instructions as seen in Ty [35], Neferirtenef [52], Pepyankh/Heri-Ib/ Neferka/ Heny [131], and Pepyankh/ Henykem [146].

Summary

Dragnetting scenes are one of the most common themes known in Old Kingdom tomb decoration programs. Their distribution allows for a wide scale analysis of the theme from both Upper and Lower Egypt and for the period of the majority of the Old Kingdom. As seen in this chapter there is a great deal of standardization to the essential elements such as the shape of the net, from where the net is

³⁹⁸ See Appendix 2: Dragnet detail Table O.

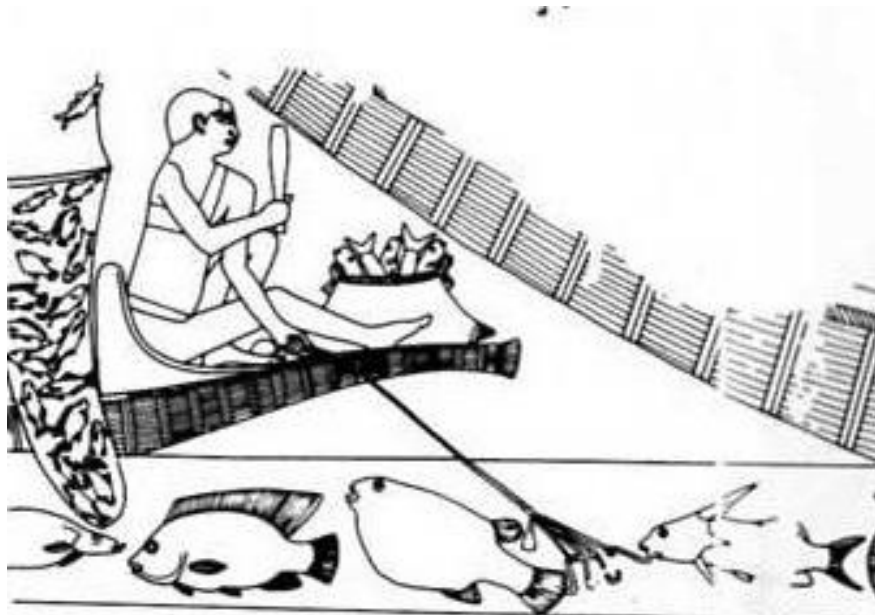
³⁹⁹ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ty [35], Sekhemka [48], Neferirtenef [52], Ptahhotep/ Iyniankh [80], Kagemni [94], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Pepyankh/ Henykem [146].

⁴⁰⁰ Ty [35], Hesi [110], Mehu [121], Pepyankh/Heri-Ib/ Neferka/ Heny [131], London British Museum Number 994 [135], Pepyankh/ Henykem [146].

hauled from, the use of sinkers and floats, as well as the positions held by the haulers. There is also the ability to trace the development of the scenes and the details within it. Examples of this are the change in the shape of the floats; the haulers becoming less ridged after the Fourth Dynasty, only to return to this style in the late Sixth Dynasty. There is also a great deal of innovations and variations to the less essential details which truly make the scenes more vivid and individualized. The inclusions of fish in the exposed tips and the placement of the *Synodontis* instead of the *Mugil sp.* within them. Others include the hauling of dragnets from boats, floats on their sides and upside down, the manipulations of rope ends interacting with figures and much more. The largest details that have these variations are the arm and leg positions of the haulers. Although they can be classified into general positions. Each scene is able to manipulate these limbs in order to emphasize movement and reflect the natural movements within it. The repetition of some of the more unusual details infers the influence between certain tombs and with the clarification of the first occurrence and final known example, create dating criteria for use in conjunction with other dating methods.⁴⁰¹

⁴⁰¹ See Volume 2: Dragnet Selected Details Date Range Table.

Chapter 5: Angling



Ihy r/u Seshseshet/Idut [72]

Introduction

Angling is defined as the ‘*act or art of fishing with a hook and line, usually attached to a rod*’.⁴⁰² In Egyptian tomb scenes, anglers are represented as male figures angling from boats in marshes. They are attested between the mid-Fifth and late Sixth Dynasty in both Upper Egypt and Memphite tombs. The following chapter examines 29 angling scenes, discussing their chronology, stages of development and details.

Occurrence of Scene

Fifth Dynasty

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8
Hotepherakhti [34]	Saqqara	V.6-8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Hesimin (M22) [56]	El-Hawawish	V.8L-9E
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Nimaatre [60]	Giza	V.8L-9
Iynofert/Shanef [63]	Saqqara	V.9
Khenut [68]	Saqqara	V.9
Ptahhotep/ Thefu [75]	Saqqara	V.9L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Seshemnofer IV [77]	Giza	V.9 – VI.1
G2360 [87]	Giza	V-VI

Table 5.1 Fifth Dynasty Attestations

Angling scenes are first attested in the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27] at Saqqara’s Unis Cemetery. They become common in Memphite tombs of the mid to late Fifth Dynasty, most of which are at Saqqara.⁴⁰³ The scenes can include either one or two anglers. The latter features each angler on a separate boat in a configuration that only occurs in two tombs, that of Niankhkhnum and Khnumhotep [27] and Ihy r/u Seshseshet/ Idut [72]. The more typical depiction of a single angler initially occurs in Ty [35], afterwards appearing in all other remaining Fifth Dynasty scenes.⁴⁰⁴ One example from the provincial tomb of Hesimin (M22) [56] at El-Hawawish finds

⁴⁰² ‘Angling’, Dictionary.com Unabridged. Random House, Inc 11 May 2014.

Dictionary.com [Http://dictionary.reference.com/browse/angling](http://dictionary.reference.com/browse/angling).

⁴⁰³ See Table 5.1. Fifth Dynasty Attestations.

⁴⁰⁴ Ty [35], Hotepherakhti [34], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhethotep (D64) [58], Nimaatre [60], Iynofert/Shanef [63], Khenut [68], Ptahhotep/ Thefu [75] and Seshemnofer IV [77], G2360 [87].

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similarities with the scenes in Ty [35] and Akhethotep (D64) [58]. It, together with the majority of other Fifth Dynasty angling scenes, comprises the angler who, while seated, raises his club to stun the captured fish.

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Dahshur	VI.1
Mereruka [103]	Saqqara	VI.1M-L
Nikauisesi [101]	Saqqara	VI.1M
Hesi [110]	Saqqara	VI.1L-2E
Wedjahateti / Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E
Bawi (G126) [113]	El-Hawawish	VI.1L-2
Nekhebu [119]	Giza	VI.2
Mehu [121]	Saqqara	VI.2
Tomb G97 [125]	El-Hawawish	VI.2L-3
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Djau [141]	Deir el-Gebrawi	VI.4M
Kahep/Tjeti-Iker [140]	El-Hawawish	VI.4M
Shepsipumin/Kheni [147]	El-Hawawish	VI.4L
Pepyankh/ Henykem [146]	Meir	VI.4L
Unisankh [150]	El-Khokha	VI.L-?

Table 5.2 Sixth Dynasty Attestations

There is a slight increase in the depiction of anglers in the Sixth Dynasty. Evidently, under the reigns of Teti (VI.1) and Pepy I (VI.2), they are almost exclusively found in the Memphite region with only two attestations at El-Hawawish. After the reign of Pepy I (VI.2), all remaining angling scenes are found in the provinces.⁴⁰⁵ Multiple anglers can be observed in Mehu [121], with two seated in the same boat, and Pepyankh/ Henykem [146], with three anglers all in separate boats.

Distribution

The angling theme is mostly attested in Memphite cemeteries, particularly Saqqara.⁴⁰⁶ Possibly an innovation by Saqqara artists, it was feasibly later employed by others in surrounding and provincial

⁴⁰⁵ See Table 5.2; See also Appendix 2: Angling Detail Table A.

⁴⁰⁶ See Appendix 2: Angling Detail Table A.

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regions. Similarities in angling scenes at all tombs at Giza⁴⁰⁷ infer either direct influence from the Saqqara school of art, or the employment of an artist(s) who worked at Saqqara.

As with other fishing scenes,⁴⁰⁸ the main shift from Memphite to provincial examples occurs during and after the reign of Pepy I (VI.2) due to the increased appointment and wealth of provincial officials.⁴⁰⁹ The transference of details from Memphite to provincial tombs likely relates to the continued training of officials and artists in the capital.⁴¹⁰ Geographically, angling can be performed at any location along the river. Therefore, the presence or lack of this fishing method in tomb decoration is based on artistic choice, either by the artist(s) or the tomb owner himself.

The Minor Details

Angler



Akhethotep (D64) [58]

An essential part of any angling scene is the angler. He is represented as a minor figure seated on a boat with such equipment as a fishing line, a club or other provisions.⁴¹¹

The majority of Fifth Dynasty scenes represent the angler as a solitary figure on a boat, with the exceptions of Iynofert/Shanef [63] and Ihy r/u Seshseshet/Idut [72]. The figure in Iynofert/Shanef [63] is poorly preserved, however the two separate anglers in Ihy r/u Seshseshet/Idut [72] are both accompanied by labe net fishermen. The addition of other

fishermen on the boat continues in the Sixth Dynasty with labe net fishermen accompanying anglers in the scenes from Kagemni [94], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147], and Pepyankh/Henykem [146]. There are only two examples of multiple anglers on the same boat. Mehu [121] of Saqqara representing two anglers, while Nekhebu [119] from Giza represents three. Pepyankh/Henykem [146] from Meir shows three anglers, each on a separate boat.

⁴⁰⁷ Similarities in Nimaatre [60], Seshemnofer IV [77] and Nekhebu [119] include the standard elements of the angler, the fishing line and the type of fish on the hooks. See Appendix 2: Angling Detail Table B, C, D, F, and G.

⁴⁰⁸ Appendix 2: Detail Table A for Dragnet, Labe Net fishing, Funnel Traps, Round basket traps, Weir and Spearfishing.

⁴⁰⁹ Kanawati, *Governmental Reforms*, 5; See also discussion in Chapter 20: Introduction: Administrative and Political Factors.

⁴¹⁰ Kanawati, *Governmental Reforms*, 5; Kanawati and Woods, *Artists in the OK*, 14-15.

⁴¹¹ See Appendix 2: Angling Detail Table B.

Chapter 5: Angling

Miscellaneous figures were also depicted alongside anglers in the Sixth Dynasty. Such examples occur in the tombs of Kagemni [94] which included a paddler for each of the angling boats. Mereruka's [103] angler is surrounded by servants tending to the needs of Mereruka's brother and a fish gutter, Nikauisesi's [101] angler has both a paddler and men carrying birds. Finally, Hesi's [111] angler has an assistant who is holding the latest catch.

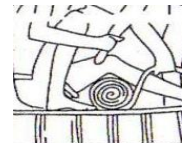
Fishing Equipment: Line



Hesi [110]

As a necessary piece of equipment for this fishing method, the line is found in all angling scenes. It is held by the angler and extends diagonally downward into the water. The ends and tautness can vary in detail.⁴¹²

The angling line is typically held in the hand of the fisherman and occasionally ends in a small length of additional rope at the side. Fifth Dynasty examples typically do not show the additional length of rope, yet three scenes, in Ty [35], Akhethotep (D64) [58] and Hesimin (M22) [56], depict it. Conversely, the majority of Sixth Dynasty scenes exhibit this specific detail.⁴¹³



Nikauisesi [101]

A slight variation is attested in the Sixth Dynasty tombs of Kagemni [94], Nikauisesi [101] and Hesi [110]. The ends of the additional length of rope are coiled, similar to those illustrated in dragnet scenes.⁴¹⁴ As the tombs are situated in the same cemetery, this small detail may point to artistic influence.

In addition to variances in the rope's ends, the line can be shown as either taut or lax. A taut line refers to one being pulled tight or taut by the angler and is found in 14 examples from the Fifth and Sixth Dynasty.⁴¹⁵ Less common is the depiction of a lax line, which only occurs in eight examples, the earliest of which is in Niankhkhnum and Khnumhotep [27].⁴¹⁶

⁴¹² See Appendix 2: Angling Detail Table D.

⁴¹³ Kagemni [94], Mereruka [103], Nekhebu [119], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147], Djau [141] and Pepyankh/ Henykem [146].

⁴¹⁴ See Appendix 2: Dragnets Detail Table F, and Chapter: 4: Dragnets: Rope ends, for a description and discussion of this feature.

⁴¹⁵ It is attested in Ty [35], Nimaatre [60], Iynofert/Shanef [63], Khenut [68], Seshemnofer IV [77], Ihy r/u Sesheshet/ Idut [72], G2360 [87], Nikauisesi [101], Hesi [110], Mehu [121], Tomb G97 [125], Shepsipumin/Kheni [147], Djau [141] and Pepyankh/ Henykem [146].

⁴¹⁶ Further occurrences are found in Akhethotep (D64) [58], Kagemni [94], Mereruka [103], Nekhebu [119], Ibi [130], Kahep/Tjeti-Iker [140] and Pepyankh/ Henykem [146].

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Fishing Equipment: Hook(s)



Kagemni [94]

The line extends into the water, where its end is portrayed with one or several hooks. Barbed hooks are not attested in archaeological evidence dating before the Middle Kingdom,⁴¹⁷ and so barbless hooks in Old Kingdom representations reflect the archaeological record. They are attached to the end of the line together rather than separately or at different intervals along the line.

Approximately 50% of lines in the attested scenes have hooks.⁴¹⁸ There are 25% of lines which terminate at the mouth of fish, signalling that the fish had swallowed the hooks and had thus been caught. Such a portrayal occurs in angling scenes of the Fifth and late Sixth Dynasties.⁴¹⁹ The remaining 25% are poorly preserved and cannot be included in either category.

Within the 50% of scenes with hooks the portrayal of multiple hooks is most typical,⁴²⁰ firstly occurring in the tomb of Niankhkhnum and Khnumhotep [27]. In general, lines with hooks are depicted more regularly across the Fifth and Sixth Dynasties than those which end at the mouth of the fish.

Fishing Equipment: Bait or Sinker?

There are several scenes which show an object attached to the fishing line near the hooks.⁴²¹ This object is small and can be found in various shapes, its identification uncertain.

The earliest known representation of this object is in the tomb of Hesimin (M22) [56] at El-Hawawish,⁴²² where it is bell-shaped and attached to one of the hooks. Such a shape is found in six other tombs at Saqqara, all dating from the late Fifth to the early Sixth Dynasty (V.8L-9E and VI.2L).⁴²³

The late Fifth Dynasty tomb of Nimaatre [60] at Giza may have also featured the object. The scene illustrates a *Clarias* sp. attached to the fishing line with a hook to the left of its mouth, and a small

⁴¹⁷ Brewer - Friedman, *Fish and Fishing*, 26.

⁴¹⁸ See Appendix 2: Angling Detail Table C; *Note*: Several damaged scenes picturing this detail are noted in the table.

⁴¹⁹ In Ty [35], Hotepherakhti [34], Akhetotep (D64) [58], Seshemnofer IV [77], G 2360 [87], Hesi [110], Djau [141] and Pepyankh/ Henykem [146].

⁴²⁰ Niankhkhnum and Khnumhotep [27], Hesimin (M22) [56], Nimaatre [60], Ihy r/u Seshseshet/Idut [72], Kagemni [94], Mereruka [103], Hesi [110], Nekhebu [119], Mehu [121], Tomb G97 [125], Ibi [130] and Shepsipumin/Kheni [147].

⁴²¹ See Appendix 2: Angling Detail Table E.

⁴²² This is the first clear attestation of the object. See the following paragraph on the possible depiction of this object in Nimaatre [60].

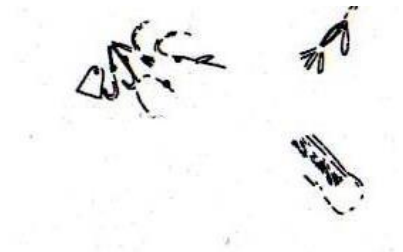
⁴²³ These include Iynofert/Shanef [63], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Mereruka [103], Hesi [110] and Wedjahateti/Neferseshemtah/Sheshi [112].

oval-shaped detail linked to the fishing line above the mouth of the fish. If this detail is one of the objects discussed here, it would be the earliest attested occurrence. It would also reflect a variation in detail, as all later examples show the attachment strung from the fishing line and not *woven* into it.

A few other angling scenes depict the object. Those in Ihy r/u Seshseshet/ Idut [72] and Mereruka [103] have teardrop shapes while Hesi's [110] is rectangular. The one in Kagemni [94] is triangular and more akin to that of Hesimin (M22) [56], possibly indicating some artistic influence across these two tombs as well as others that include a bell-shaped object.

Identification

Due to its absence in the majority of angling scenes, the object was likely not an essential element for angling. It has been identified as a lure, bait or a sinker, all of which are used in modern times and often in conjunction with one another.



Hesimin (M22) [56]

Van Elsbergen suggests that the object is a lure.⁴²⁴ He describes it as a piece of copper or highly reflective material that was polished to reflect light, thereby attracting fish. However, such a function could be achieved more simply with just the line and the hook. As Brewer and Friedman explain, when not using organic bait, the modern Egyptian will pull on the line with the hook attached. This action is believed to catch and reflect light, thus attracting fish by simulating a lure.⁴²⁵ As there are also no similar parallels for the use of lures in other fishing methods, the object's identification as such is not highly feasible.

The second identification of the object refers to its organic attributes as plant or animal bait. While evidence from later periods supports the use of bait by the Egyptians,⁴²⁶ its utilisation in the Old Kingdom is not so clear. Wilkinson implies that the Egyptians used bait at all times when angling,⁴²⁷ a statement refuted by Brewer and Friedman who point to the lack of bait on angler's hooks.⁴²⁸ The latter, however, go on to write that in scenes where fish are shown swallowing the hook, there was most likely bait on it.⁴²⁹ Daumas even proposes that the object is a vessel filled with bait that gives off a strong scent to attract fish,⁴³⁰ yet its size appears too small to hold a sizeable quantity of bait. In fact,

⁴²⁴ Van Elsbergen, *Fischerei*, 51.

⁴²⁵ Brewer- Friedman, *Fish and Fishing*, 30-1.

⁴²⁶ Two such examples are in the Book of the Dead and on a New Kingdom Papyrus. Brewer - Friedman, *Fish and Fishing*, 31.

⁴²⁷ Wilkinson, *Manners and Customs* 2, 116.

⁴²⁸ Brewer - Friedman, *Fish and Fishing*, 31.: Sahrhage, *Fishfang*, 96, 98.

⁴²⁹ Brewer - Friedman, *Fish and Fishing*, 31; See above section on Hooks; and Appendix 2: Angling Detail Table C.

⁴³⁰ Daumas, *BIFAO* 62 (1964), 65-85.

the only example that supports the disputed object's identification as bait comes from Hesimin (M22) [56], where it is clearly shown impaled on a hook like a piece of organic flesh. This placement, however, is unique, with all other depictions of the object showing it attached, rather than impaled, to the fishing line.

A third and more common identification of the object finds it as a sinker, similar to those used in dragnet scenes.⁴³¹ Dragnet sinkers are represented primarily in two different shapes, oval and rectangular.⁴³² Contrarily, the objects in angling representations appear smaller and do not have the same regularity, both in frequency and in shape. This does not discount the possibility of the object representing a sinker. Perhaps, instead of having a sinker as a standard piece of angling equipment, the angler used the most accessible type of material or object for a sinker, attaching it to the tip of the angling line.⁴³³ As evident in the collection of net weights now found in the Petrie Museum from Abydos (Middle Kingdom) and a collection found at Tell el-Retaba, the sinkers could be a variety of shapes including triangular and spherical.⁴³⁴ It is also probable that the object's function altered with the intended catch (i.e. different weights for different sections of the water or different fish species), although the different shapes do not correspond to any particular type of fish.

In summary, it is difficult to identify this detail's function as the abovementioned three possibilities are all viable. The lack of archaeological and literary evidence from the Old Kingdom does not aid in this dilemma. Still, based on its diverse representation, placement and use in other fishing methods, the object is most likely a sinker.

⁴³¹ Brewer- Friedman, *Fish and Fishing*, 31; Kanawati- Personal communication.

⁴³² Please see Chapter 4: Dragnet: Sinkers, and Appendix 2: Dragnets Detail Table E.

⁴³³ An exception is the position of the object in Hesimin (M22) [56].

⁴³⁴ Petrie Museum Catalogue (Online): No. UC43100A-C, UC7353, UC21284, amongst others. Accessed June 2015; Jarmuzek, 'Loom Weights or Net Weights?', in *GM* 226 (2010) 17-21.

Fishing Equipment: Club



Ihy r/u Seshseshet/ Idut [72]

The club is a wooden object commonly with a narrow shaft and bulbous head, although an equal thickness along the length of its body is attested in Shepsipumin/Kheni [147].⁴³⁵ Based on its frequent depiction, it was likely a vital piece of equipment for the angler, providing a useful method of subduing fish, particularly those with large spines or electric discharges.⁴³⁶

The club is first attested in the mid to late Fifth Dynasty, namely in the tombs of Ty [35] and Hotepherakhti [34] at Saqqara, and Hesimin (M22) [56] at El-Hawawish. There are 13 subsequent examples of its use in scenes dating from the mid-Fifth to the early Sixth Dynasty (V.6-8 and VI.2L), all but one located at Saqqara and El-Hawawish.⁴³⁷

Originally theorised to be an exclusive Memphite detail,⁴³⁸ Kanawati has correctly noted the inclusion of the angler's club in several provincial tombs.⁴³⁹ Its representation in the early tomb of Hesimin (M22) [56] may be the result of artistic influence from artists working at Saqqara and may reflect strong ties to the Memphite art tradition or the commission of artists from the capital. Its representation could have also provided a source of inspiration for other artists working in later tombs at El-Hawawish.

Other equipment: Seat

In almost 50% of angling scenes, the angler is seated on a cushion with a back rest.⁴⁴⁰ Extending vertically to the hips or higher, the back rest is typically thicker than the seat and has a rounded top. Seats can be classified into three Types:

⁴³⁵ See Appendix 2: Angling Detail Table F.

⁴³⁶ Catfish are known for their spines, especially the *Synodontis* genus. The electric catfish (*M. electricus*) could create a large enough discharge to incapacitate a man. See Appendix 3: Fish Profiles: *Synodontis schall/batensoda*, *M. electricus*; Brewer - Friedman, *Fish and Fishing*, 67-70.

⁴³⁷ Akhethotep (D64) [58], Khenut [68], Seshemnofer IV [77], Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Nikauisesi [101], Hesi [110], Bawi (G126) [113], Nekhebu [119], Mehu [121], Tomb G97 [125] and Shepsipumin/Kheni [147]. One exception is Nekhebu [119] located in Giza.

⁴³⁸ Vandier, *Manuel V*, 536.

⁴³⁹ Kanawati, *El-Hawawish* 9, 31.

⁴⁴⁰ See Appendix 2: Angling Detail Table G.

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- A. *Back rest above hip level*: the back rest extends above the hips of the seated figure, as seen in Hesi [110];
- B. *Back rest at hip level*: the back rest reaches hip level, as in Iynofert/Shanef [63]; and
- C. *No back rest*: the seat is depicted as a thin cushion underneath the buttocks of the angler.

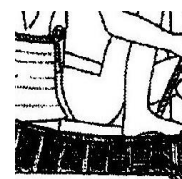
The inclusion of a seat was popular from the mid-Fifth to the early Sixth Dynasty.⁴⁴¹ At the beginning of the Sixth Dynasty, and especially after the reign of Teti (VI.1), it becomes less common, with only 11 examples including one depicting the cushion (Type C).⁴⁴² A possible explanation for its decreased popularity relates to the position of the angler. Dating to the end of Pepy II's reign (VI.4L), the tomb of Pepyankh/ Henykem [146] portrays three anglers with only one seated on a seat. Here, as well as in Ibi [130], the angler is in a reclining position, the seat likely supporting the curvature of the angler's body. The position of other reclining figures (post VI.2) may have rendered the seat's function redundant. For instance, Nekhebu's [119] angler is completely horizontal whereas Djau's [141] is semi-reclining, with the stern of the boat curved upwards in such a manner that it supports his torso. As such, the placement of a seat for either angler would have been plausibly unnecessary.



Hesi [110] Type A Seat



Iynofert/Shanef [63]
Type B Seat



Kagemni [94] Type C
Seat

A greater number of scenes at Saqqara feature a seat, with only three provincial tombs displaying the detail.⁴⁴³ The earliest of the latter is the tomb of Hesimin (M22) [56] at El-Hawawish, which features a Type A seat similar to those in the contemporary tombs of Kayemnofret (D23) [51] and Akhethotep (D64) [58].

Type A, in fact, is the most common seat type.⁴⁴⁴ Occurring in 15 instances, it is first attested in Niankhkhnum and Khnumhotep [27] with two anglers each seated on a separate seat. Ty's [35] example exhibits a thicker back rest and seat, with vertical details highlighting the material from which it is made. It additionally bears a unique decorative edge that clearly correlates to wicker work. Other seats in Akhethotep (D64) [58], Ihy r/u Seshseshet/ Idut [72] and Kagemni [94] similarly comprise a decorated, but less detailed, edge defined by a second line.

⁴⁴¹ See Appendix 2: Angling Detail Table G.

⁴⁴² Kagemni [94]. Also, see Appendix 2 Angling Detail Table G.

⁴⁴³ Hesimin (M22) [56], Ibi [130] and Pepyankh/ Henykem [146].

⁴⁴⁴ Niankhkhnum and Khnumhotep [27] (two anglers), Ty [35], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhethotep (D64) [58], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72] (two anglers), Kagemni [94], Hesi [110], Ibi [130] and Pepyankh/ Henykem [146].

Type B occurs in four tombs at Saqqara that date between the reigns of Niuserre (V.6) and early Pepy I (VI. 2E).⁴⁴⁵ These include Hotepherakhti [34], Iynofert/Shanef [63], Wedjahateti/ Neferseshemtah/ Sheshi [112] and Kagemni [94]. The last features two anglers, one on a Type B seat and the other on Type C, thereby presenting the only attestation of this type in the Old Kingdom. Its inclusion is most likely intentional, perhaps linked to the amount of space allocated for its associated angler. Indeed, the boat on which this angler is shown is occupied by other figures as well as a basket, leaving little room for the depiction of a back rest.

Other equipment: Provisions/Items/Baskets



Ihy r/u Seshseshet: Idut
[72]

Some angling scenes include items that are either related to the angler or to his surroundings. These range from food and equipment to the addition of baskets for captured fish. The inclusion of provisions and baskets is not restricted to angling scenes, but has been found in others such as labe net fishing, spearfishing and fowling scenes.⁴⁴⁶

Secondary items are more frequent in the Fifth Dynasty, occurring in five of the eight known depictions.⁴⁴⁷ They are first attested in Niankhkhnum and Khnumhotep [27], where each angler is supplied with his own basket of provisions. Within the scene, an angler at the far right has a flat mat at his feet as well as a basket filled with possible bread loaves and jars; that on the left appears to have an empty basket ready for the carcass of the *Synodontis* in his hands. The angling scene in Ty [35] illustrates four items, including a loaf of bread at the prow of the boat. Damaged Fifth Dynasty scenes in Hotepherakhti [34] and Hesimin (M22) [56] may also include provisions, the latter possibly portraying a jar and staff protruding from behind an angler's seat at the stern of a boat.

All Sixth Dynasty scenes show baskets.⁴⁴⁸ Pepyankh/ Henykem [146] incorporates rectangular provisions stacked in a basket at the prow of a boat. Conversely, the baskets in three earlier Old Kingdom scenes are empty, occurring in Ihy r/u Seshseshet/ Idut [72], Kagemni [94] and Wedjahateti/

⁴⁴⁵ Hotepherakhti [34], Iynofert/Shanef [63], Kagemni [94] and Wedjahateti/ Neferseshemtah/ Sheshi [112].

⁴⁴⁶ See Appendix 2: Spearfishing Detail Table G and Labe-Nets Detail Table G.

⁴⁴⁷ Niankhkhnum and Khnumhotep [27], Ty [35], Hotepherakhti [34], Hesimin (M22) [56] and Ihy r/u Seshseshet/ Idut [72].

⁴⁴⁸ Ihy r/u Seshseshet/ Idut [72], Kagemni [94] and Wedjahateti/ Neferseshemtah/ Sheshi [112].

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Neferseshemtah/ Sheshi [112]. The first, Ihy r/u Seshseshet/ Idut [72], was probably the source of inspiration for artists working in the two later tombs.⁴⁴⁹

Fish Species

Fish swallowing hooks are depicted in the majority of angling scenes.⁴⁵⁰ Common species include the



Clarias sp. and the *Synodontis schall* or *batensoda*. In representations of the *Synodontis* genus, it is often difficult to identify if the *batensoda* or *schall* is portrayed, although if the fish is inverted then it is a *Synodontis Batensoda*.⁴⁵¹

When attached to an angling line, such fish are often in a vertical or diagonal position, and so cannot be positively identified.

Fifth Dynasty angling scenes represent the *Clarias* and *Synodontis* genus almost equally, with eight attestations of the *Synodontis* ⁴⁵² and six of the *Clarias sp.* ⁴⁵³ The two illustrated anglers in Niankhkhnum and Khnumhotep [27] are each shown with a different type of fish, one a *Clarias sp.* and the other a *Synodontis*.

An examination of Sixth Dynasty fish species offers significantly different observations than those of the former period. The *Clarias sp.* is no longer portrayed, denoting either an artistic trend or perhaps a decrease in the fish's popularity in the secular or religious sphere. The frequency of the *Synodontis* genus also increases,⁴⁵⁴ its representation attested in around 83% of angling scenes. Other fish species are rare. They include the *Barbus bynni* in three tombs at the Teti Cemetery, Saqqara (Kagemni [94], Mereruka [103] and Hesi [110]), possibly indicative of artistic influence. The *Mugil sp.* occurs once in Pepyankh/ Henykem [146] at Meir, where two other anglers have captured *Synodontis* fish, while the *Tetraodon fahaka* is attested in Djau [141]. Only one example in Hesi [110] shows multiple fish attached to a single line, where an angler has caught both a *Synodontis* and a *Barbus Bynni*.

⁴⁴⁹ The use of baskets on laves net fishing boats (usually shown with anglers or other fisherman on board) was also first attested in the tomb of Ihy r/u Seshseshet/ Idut [72] See Appendix 2: Lave Net Detail Table G: Baskets. Other tombs are Kagemni [94] and Wedjahateti/Neferseshemtah/ Sheshi [112].

⁴⁵⁰ See Appendix 2: Angling Detail Table I.

⁴⁵¹ Brewer- Friedman, *Fish and Fishing*, 68.

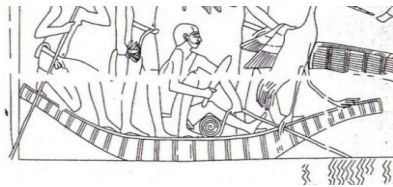
⁴⁵² Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Akhethotep (D64) [58], Iynofert/Shanef [63], Khenut [68] and two in Ihy r/u Seshseshet/ Idut [72], G2360 [87].

⁴⁵³ Niankhkhnum and Khnumhotep [27], Ty [35], Kayemnofret (D23) [51], Hesimin (M22) [56], Nimaatre [60] and Seshemnofer IV [77].

⁴⁵⁴ Kagemni [94], Hesi [110], Wedjahateti/Neferseshemtah/Sheshi [112], Nekhebu [119], Mehu [121], Tomb G97 [125], Ibi [130], Pepyankh/ Henykem [146] and possibly Shepsipumin/Kheni [147].

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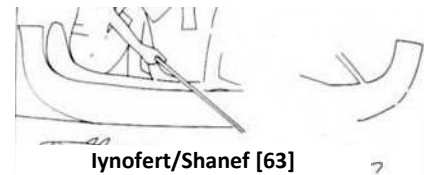
Boats: Structure



Nikauisesi [101]

All anglers are depicted on a small papyrus skiff. It can be positioned in the marsh under or close to another occupied by the tomb owner, or in association with other fishing methods. The boat varies in structure and can be categorised into three Types:⁴⁵⁵

- A. *Near horizontal position:* as in Nikauisesi [101];
- B. *Vertical position:* as in Iynofert/Shanef [63]; and
- C. *Varying position.*



Iynofert/Shanef [63]

Type A is the most frequent, first appearing in the tomb of Niankhkhnum and Khnumhotep [27] at Saqqara. Most remaining Fifth Dynasty tombs also comprise Type A boats,⁴⁵⁶ as do nine scenes from the Sixth Dynasty.⁴⁵⁷ Two of the latter combine Type A with Type B features, with one end of the boat displaying a horizontal alignment above the water and the other curving more sharply. As such a combination surfaces in Kagemni [94] and Hesi [110], both of Teti's reign (VI.1), it infers artistic influences perhaps facilitated by the tombs close proximity in both date and location.⁴⁵⁸

Type B only occurs in two Fifth Dynasty scenes in Iynofert/Shanef [63] and Ptahhotep/Thefu [75]. It is more common in the Sixth Dynasty⁴⁵⁹ with examples in Bawi (G126) [113], Mehu [121], Tomb G97 [125] and Djau [141].

Type C is attested in both Fifth and Sixth Dynasty tombs, mostly in scenes with space constraints. The mid to late Fifth Dynasty scene in Ty [35] depicts such a type, the incomplete stern likely explained by its placement underneath the tomb owner's boat. The transitional period between the reigns of Unis (V.9) and Teti (VI.1) witnesses three further Type C boats in Seshemnofer IV [77], Ihy r/u Seshseshet/ Idut [72] and G2360 [87], it appears that the sterns are not depicted due to limited space. Perhaps the boats in Ty [35] provided artistic inspiration to those portrayed in the later tombs.

⁴⁵⁵ See Appendix 4: Typology; Boat structure for explanation of types; See Appendix 2: Angling Detail Table H.

⁴⁵⁶ Hotepherakhti [34], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhetotep (D64) [58], Nimaatre [60], Khenut [68] and Ihy r/u Seshseshet/ Idut [72].

⁴⁵⁷ Kagemni [94], Nikauisesi [101], Mereruka [103], Hesi [110], Wedjahateti/ Neferseshemptah/ Sheshi [112], Nekhebu [119], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147] and Pepyankh/ Henykem [146].

⁴⁵⁸ Hesi [110] is dated to Teti and into the following reign of Pepy I (VI.1L -2E).

⁴⁵⁹ See Appendix 2: Angling Detail Table H.

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As observed for Type B, there is a slight increase in the frequency of Type C boats in the Sixth Dynasty.⁴⁶⁰ They are found in In-Snefru-Ishtef [96], Ibi [130] and possibly Unisankh [150], and occur primarily in the provinces, especially during and after the reign of Pepy I (VI.2).

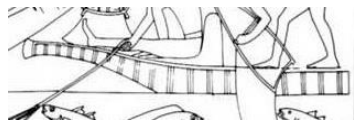
Boats: Detailing



Hesi [110]

The papyrus skiff was the most common type of boat used in angling scenes. It required little effort and expense to construct, repair or replace.⁴⁶¹ Its main constituent, papyrus, could grow up to five meters in length and offered a relatively thick, sturdy, and lightweight material for boats.⁴⁶²

Angling boats can be depicted with the following Types of detailing:⁴⁶³



Ihy r/u Seshseshet: Idut [72]

A. *Lashing and Reed:*

B. *Lashing only:* as in Ihy r/u Seshseshet/ Idut [72]; and

C. *No detailing.*

The earliest attestation for Type A is in the Fifth Dynasty tomb of Ihy r/u Seshseshet/ Idut [72]. It subsequently occurs in only three Sixth Dynasty examples in Kagemni [94], Mereruka [103] and Kahep/Tjeti-Iker [140].

Type B is the most common form of detailing on Fifth Dynasty angling boats. It first surfaces in Niankhkhnum and Khnumhotep [27] and appears in a further eight of the 11 Fifth Dynasty angling scenes.⁴⁶⁴ Not only does one boat in Ihy r/u Seshseshet/ Idut [72] exhibit Type A, but another in the same scene also bears Type B detailing, representing the only known instance of two different detailing types in the one scene. During the Sixth Dynasty, Type B is only used to decorate two boats, one in Nikauisesi [101] and the other in Djau [141], signifying a sharp decrease in popularity.

⁴⁶⁰ See Appendix 2: Angling Detail Table H.

⁴⁶¹ Jones, *Boats*, 44; Partridge, *Transport in Ancient Egypt*, 13-15.

⁴⁶² Partridge, *Transport in Ancient Egypt*, 13.

⁴⁶³ See Appendix 4: Typology; Boat Detailing for explanation of types.

⁴⁶⁴ Ty [35], Hotepherakhti [34], Hesimin (M22) [56], Akhethotep (D64) [58], Ptahhotep/Thefu [75], Seshemnofer IV [77] and Ihy r/u Seshseshet/ Idut [72].

Type C is the second most frequently attested form of detailing on Fifth Dynasty boats, with five examples known.⁴⁶⁵ From the end of Teti's reign (VI.1L-VI.6), it becomes the most common type,⁴⁶⁶ although in some cases the lack of detailing may be due to damage, as in Bawi (G126) [113], Tomb G97 [125], Mehu [121] and Unisankh [150].

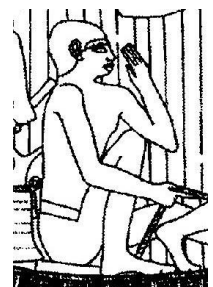
The tomb of Hesi [110] features a unique boat which combines both Type A and C detailing. The prow and stern comprise Type A elements but the middle of the hull is designed with Type C. Such decoration finds parallels with a utility boat employed by a lave net fisherman in the same scene. It is also akin to a papyriform boat depicted in Rahotep's [5] boat construction scene,⁴⁶⁷ another in In-Snefru-Ishtef's [96] proposed lave net fishing scene and one boat in Kagemni's [94] fowling scene. The Type A/C combination could be a different type of boat altogether, perhaps like the papyriform boat that was utilised for ceremonial, religious and funerary purposes.⁴⁶⁸ Yet, as it only surfaces in fishing scenes, the combination is most likely not representative of a different form of boat.

Minor figures

Body positions

The angler's torso can be depicted in two position Types: *Seated*; and *Reclining*.

In the Fifth Dynasty, anglers are consistently depicted in a seated position, the torso vertical.⁴⁶⁹ This trend continues for the majority of anglers in the Sixth Dynasty.⁴⁷⁰ Reclining figures are first attested in the reign of Pepy I (VI.2) in the tomb of Nekhebu [119] at Giza. Three later Sixth Dynasty tombs portray a figure in a semi-reclining stance. Ibi [130] and Djau [141] both show their angler semi-reclined, perhaps evidence of direct artistic influence between the two tombs.



Kagemni [94]

Indeed, the two are closely situated, with Ibi [130] being the grandfather of Djau [141].⁴⁷¹ The angler

⁴⁶⁵ Examples in Kayemnofret (D23) [51], Nimaatre [60], Iynofert/Shanef [63], Khenut [68], and G2360 [87].

⁴⁶⁶ In-Snefru-Ishtef [96], Wedjahateti/Neferseshemptah/Sheshi [112], Bawi (G126) [113], Nekhebu [119], Mehu [121], Tomb G97 [125], Ibi [130], Shepsipumin/Kheni [147], Pepyankh/ Henykem [146] and Unisankh [150].

⁴⁶⁷ Jones, *Boats*, 43, 73.

⁴⁶⁸ Jones, *Boats*, 43.

⁴⁶⁹ Niankhkhnum and Khnumhotep [27], Ty [35], Hotepherakhti [34], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhetotep (D64) [58], Nimaatre [60], Iynofert/Shanef [63], Khenut [68], Ptahhotep/Thefu [75], Seshemnofer IV [77] and Ihy r/u Sesheshet/ Idut [72], G2360 [87].

⁴⁷⁰ Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Hesi [110], Wedjahateti/Neferseshemptah/Sheshi [112], Bawi (G126) [113], Mehu [121], Tomb G97 [125], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147] and Pepyankh/ Henykem [146].

⁴⁷¹ Davies, *Deir el- Gebrawi*, II, 1-3.

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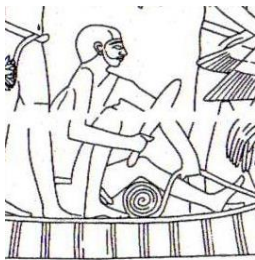
in Pepyankh/ Henykem [146] is similar to that in Nekhebu [119], but the neck and shoulders are elevated slightly due to a Type A seat that is placed under the shoulders.⁴⁷²

Three main functions for the reclining position may be proposed. The first rationalises that these figures convey a sense of relaxation or even tiredness, adding to the few depictions of Old Kingdom workmen expressing their complaints or taking breaks.⁴⁷³ The long hours, the weather, water conditions, and the angler's success may have all contributed to their tiredness. Merzeban also states that such representations are an expression of '*human behaviour, irony and sometimes humour*'.⁴⁷⁴ Another explanation finds reclining positions conversely less tiresome, reflecting angling as a more relaxing occupation. The depiction of an angler's feet dangling in the water in Djau [141], for instance, certainly supports this. A third possibility is that the artist illustrates the posture of the angler leaning back moments before or during the capture, when tension had to be applied on the fishing line to help snag the fish. This could perhaps be compared with fowlers tilting backwards to close their clapnet.

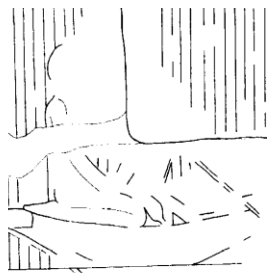


Djau [141]

Arm positions



Nikausesi [101]



Nimaatre [60]



Kagemni [94]

Based on the activity performed, an angler's arms can be in various positions. One arm/hand is always holding the fishing line and is typically at the side of the angler's body; the second could be raising a club, holding fish, or gripping another piece of equipment. There are three main Types of arm positions.⁴⁷⁵

⁴⁷² See Equipment: Seat, in this chapter, and Appendix 2: Angling Detail Table G.

⁴⁷³ Merzeban, *MDAIK* 61 (2007), 225-229.

⁴⁷⁴ Merzeban, *MDAIK* 61 (2007), 245.

⁴⁷⁵ See Appendix 4: Typology: Angling Arm Positions for a full explanation of type. See Appendix 2: Angling Detail Table K.

- A. *One hand holds the fishing line, the other raises a club*, (See Image Nikauisesi [101]);
- B. *One hand holds a fishing line, the other is by the side* (see Image Nimaatre [60]): and
- C. *One hand holds a fishing line, the other is in a unique/rare position* (See Image Kagemni [94]).

Type A is the most common type in the Fifth Dynasty, occurring in eight of the 12 attested scenes.⁴⁷⁶ It continues in use and popularity in the Sixth Dynasty, its high frequency infers that it was the most typical type of arm position for anglers.⁴⁷⁷

Type B, however, was the first to be portrayed in Old Kingdom angling scenes, surfacing in the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27]. It occurs twice more in the Fifth Dynasty, in Kayemnofret (D23) [51], and Nimaatre [60]. Sixth Dynasty attestations are only found in tombs dating to the end of Pepy II's reign (VI.4L), namely Djau [141], Kahep/Tjeti-Iker [140] and Pepyankh/Henykem [146]. The almost contemporary dates and relatively close geographical locations of all three tombs suggests artistic influence or inspiration.⁴⁷⁸

The earliest attestation for Type C comes from Niankhkhnum and Khnumhotep [27], where one angler holds a fishing line in one hand and a *Synodontis* in the other, the arm in front of the torso and at chest height. This same arm position is attested in Iynofert/Shanef [63], where an angler holds a piece of equipment. The angler depicted in fragment G2360 [87] is holding the line with one hand while the other is raised to his mouth. Sixth Dynasty representations are sporadic with most examples dating after the reign of Teti (VI.1). A scene in Kagemni [94] finds the angler's arm crossed over the chest, his hand placed on the opposite shoulder in a position that is repeated in Wedjahateti/ Neferseshemptah/Sheshi [112]. Also in Kagemni [94] is another angler raising the second hand to his mouth in a gesture previously known to be depicted in fragment G2360 [87] and later attested in Pepyankh/Henykem [146]. It is similarly represented in scenes of cattle fording, where a figure is either speaking or reciting spells for the safety of his cattle and companions against crocodiles.⁴⁷⁹

⁴⁷⁶ Ty [35], Hotepherakhti [34], Hesimin (M22) [56], Akhetotep (D64) [58], Khenut [68], Ptahhotep/Thefu [75], Seshemnofer IV [77] and Ihy r/u Sesheshet/ Idut [72].

⁴⁷⁷ Appearing in Nikauisesi [101], Mereruka [103], Hesi [110], Bawi (G126) [113], Nekhebu [119], Mehu [121], Tomb G97 [125] and Shepsipumin/Kheni [147].

⁴⁷⁸ Kanawati - Woods, *Artists of the OK*, 11.

⁴⁷⁹ See Ankhmahor [102] (cattle fording), Kagemni [94] (cattle fording) or Hesi [110] (cattle fording). Kanawati-Hassan, *Teti Cemetery II*, 31-2.

Leg positions



**Akhethotep (D64)
[58]**



Nikauisesi [101]



Iynofert/Shanef [63]

Anglers are commonly represented seated in small boats, restricting the possibilities of diverse leg positions. Four basic types are known to be attested within these scenes:⁴⁸⁰

Type D: Kneeling;

Type E: Semi-Kneeling: as in Akhethotep (D64) [58];

Type F: Seated: with two leg variations F.1 (Nikauisesi [101]) and F.2 (Iynofert/Shanef [63]: and *Reclined*.

Kneeling (Type D) is depicted in two Fifth Dynasty scenes in Ty [35] and Nimaatre [60]. It also occurs in one Sixth Dynasty scene in Nekhebu [119].

Semi-Kneeling (Type E) surfaces in three Fifth Dynasty examples in Kayemnofret (D23) [51], Hesimin (M22) [56] and Akhethotep (D64) [58]. It is featured in five Sixth Dynasty scenes.⁴⁸¹

Seated (Type F) figures are the most frequent Fifth Dynasty leg position. Three depictions of seated F.1 are found, namely in Niankhkhnum and Khnumhotep [27] (both anglers), Iynofert/Shanef [63] and G2360 [87]. On the other hand, two anglers in Ihy r/u Seshseshet/ Idut [72] bear seated F.2 leg positions.

Seated figures (Type F) continue to be the most common leg position in the Sixth Dynasty with three F.1 attestations and four of F.2.⁴⁸² The earliest are all at Saqqara and the later attestations are at El-Hawawish (F.1) and Meir (F.2). The difference in leg positions between earlier scenes at El-Hawawish that exhibit Type E (Hesimin (M22) [56], Bawi (G126) [113] and Tomb G97 [125]) and later ones at the

⁴⁸⁰ See Appendix 4: Typology; Basic Leg Positions for explanation of types; Appendix 2: Angling Detail Table K.

⁴⁸¹ Kagemni [94], Mereruka [103], Hesi [110], Bawi (G126) [113] and Tomb G97 [125].

⁴⁸² The former (F.1) may be found in Wedjahateti/Neferseshemptah/Sheshi [112], Kahep/Tjeti-Iker [140] and Shepsipumin/Kheni [147] whereas the later (F.2) appear in Kagemni [94], Nikauisesi [101] and Pepyankh/Henykem [146].

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site of seated (F.1) figures (Kahep/Tjeti-Iker [140] and Shepsipumin/Kheni [147]) demonstrates that the source of influence may not always be from the same cemetery.

Figures in Nekhebu [119], Ibi [130] and Djau [141] demonstrate reclined figures with both legs extended forward at a 90°-180° angle. This position is only encountered when the torso/body position is reclined.

Individual Characteristics

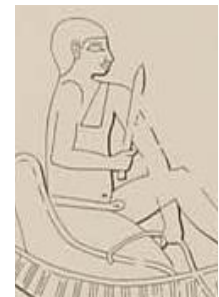
Anglers are represented with one of two hair types:⁴⁸³

- A. *A full head of hair; and*
- B. *A receding hairline.*

As many scenes are damaged, they are not included in this discussion.⁴⁸⁴

Furthermore, Anglers are consistently represented with one of two body types.⁴⁸⁵

- A. *An athletic build, and*
- B. *A non-athletic build*



**Akhethotep (D64)
[58]**

The two hair Types are first attested in the tomb of Niankhkhnum and Khnumhotep [27]. Anglers with Type A⁴⁸⁶ are only slightly greater in number than those bearing Type B,⁴⁸⁷ with three more attestations. There does not appear to be a typical hair type until the late Sixth Dynasty, when scenes in provincial cemeteries represent mostly Type A.⁴⁸⁸

Sahrhage, Brewer and Friedman suggest that angling may have been reserved for older men as it would have had a lighter workload when compared to other fishing methods.⁴⁸⁹ While Type B hair is frequent in angling scenes, which can indicate advanced age, it cannot be used as a definite indicator of age as many older men will retain their hair. In the Sixth Dynasty, the preference for Type A may

⁴⁸³ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁴⁸⁴ Hotepherakhti [34], Kayemnofret (D23) [51], Hesimin (M22) [56], Nimaatre [60], Khenut [68], Ptahhotep/Thefu [75], Seshemnofret IV [77], Bawi (G126) [113], Nekhebu [119], Pepyankh/ Henykem [146] and Unisankh [150].

⁴⁸⁵ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁴⁸⁶ As seen in the tombs of Akhethotep (D64) [58], Iynofert/Shanef [63], G2360 [87], Kagemni [94], Mereruka [103], Nekhebu [119], Tomb G97 [125], Ibi [130], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147] and Pepyankh/ Henykem [146].

⁴⁸⁷ Niankhkhnum and Khnumhotep [27], Ty [35], Ihy r/u Sesheshet/ Idut [72], In-Snefru-Ishtef [96], Hesi [110], Wedjahateti/Neferseshemphah/Sheshi [112], Mehu [121] and Djau [141].

⁴⁸⁸ See Appendix 2: Angling Detail Tables L.

⁴⁸⁹ Brewer - Friedman, *Fish and Fishing*, 30; Sahrhage, *Fischfang*, 96-98.

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indicate the artistic provision of strong men capable enough to complete tasks for the needs of the tomb owner in the afterlife.⁴⁹⁰ Conversely, the use of Type A may reflect reality, with younger men used for this task.

Type A is the typical body form of Fifth and Sixth Dynasty anglers. Type B is only attested twice in the Fifth Dynasty Saqqara tombs of Ty [35] and Akhethotep (D64) [58], perhaps signalling artistic influences.

There is no link between the use of body type and hair type. A receding hairline (Type B) does not always accompany a Type B body and vice versa. In fact, anglers with Type A bodies can have either receding hairlines or a full head of hair.

Clothing

Anglers are depicted wearing one of four main types of clothing:⁴⁹¹

- A. *No clothing*;
- B. *Small belt*;
- C. *Kilt*; and
- D. *Apron/ tunic*.⁴⁹²



Ihy r/u Seshseshet/ Idut [72]

Clothing is often difficult to identify in angling scenes as fishermen are typically seated. Type A is only attested once in Ty [35] and Type B is worn by five anglers, two in Ihy r/u Seshseshet/Idut [72], the sole angler in the fragment G2360 [87] and one in each of the scenes in Kagemni [94], and possibly Wedjahateti/ Neferseshemptah/ Sheshi [112]. The most common article of clothing is Type C⁴⁹³ which, together with Types A and B, is solely attested in tombs at Saqqara dating between the reigns of Unis (V.9) and Pepy I (VI.2).

Type D is worn by anglers in the late Sixth Dynasty (VI.4) tombs of Kahep/Tjeti-Iker [140] and Shepsipumin/Kheni [147] at El-Hawawish. Alongside the anglers are labe net fishermen also in Type D

⁴⁹⁰ Brewer - Teeter, *Egypt and the Egyptians*, 206-7. Indicators include lean bodies and Type A hair.

⁴⁹¹ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types. See Appendix 2: Angling Detail Table L.

⁴⁹² For similar tunics, see Appendix 2: Detail Tables: Labe Net: K; Round Basket Trap: G; and Dragnet: K, L, and N.

⁴⁹³ Niankhkhnum and Khnumhotep [27], Hesimin (M22) [56], Akhethotep (D64) [58], Iynofert/Shanef [63] and Khenut [68]. Type C is also possibly depicted in Ptahhotep/Thefu [75], Kagemni [94], Nikauisesi [101], Mereruka [103], Hesi [110], Nekhebu [119] and Tomb G97 [125].

garments, signifying that the tunic was not restricted to one group of fishermen.⁴⁹⁴ Four additional scenes exhibit a variation in Type D clothing in which the shoulder strap is not attached to the tunic.⁴⁹⁵

Only one angling scene features genitalia.⁴⁹⁶ Dating to the reign of Teti (VI.1), the tomb of Nikauisesi [101] at Saqqara contains the sole reference of an angler represented with exposed genitals. In his boat are a paddler and two other minor figures, with only the genitals of the paddler observable. Other scenes in the tomb feature minor figures with exposed genitalia, such as the fighting boatmen, men returning from the marshes and dragnet scenes.⁴⁹⁷ Their depiction could have influenced the inclusion of genitalia for the angler.

The portrayal of anglers without exposed genitals may be explained in one of two ways, either artistically or as a reflection on angling. Artistically, when seated, the groin area can be either covered by clothing or by a limb. For instance, some leg positions (Type A, F.1 and in some cases E) find the thigh in front of the groin area, thereby limiting space for the representation of genitalia. On the other hand, Geolet writes that fishermen do not wear clothing or adornments due to the '*hot, dirty work*' in which they are engaged.⁴⁹⁸ So, perhaps the frequent depiction of anglers clothed in Type B, C and D garments insinuates that angling was not as laborious as other fishing methods. Both suggestions have merit; however, the seated positions of the anglers may be the determining factor in the lack of depiction of genitalia.

Captions

The occurrence of captions in angling scenes is very rare and is attested four times; once in the Fifth Dynasty and three in the Sixth.⁴⁹⁹

⁴⁹⁴ Unlike other fishing scenes, the representation of this garment in angling scenes is rare. See Appendix 2: Detail Tables: Dragnet Tables K, L, and N; Lave net Table K; Funnel Traps Table N: Weir Tables L, N, P and R, and Round Basket Traps Table G.

⁴⁹⁵ These are found in Ihy r/u Seshseshet/ Idut [72], Nikauisesi [101], Wedjahateti/Neferseshemtah/Sheshi [112] and Mehu [121].

⁴⁹⁶ No genitalia shown in: Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhetotep (D64) [58], Nimaatre [60], Iynofert/Shanef [63], Ptahhotep/Thefu [75], Seshemnofer IV [77], Ihy r/u Seshseshet/ Idut [72], G2360 [87], Kagemni [94], Mereruka [103], Hesi [110], Wedjahateti/ Neferseshemtah/Sheshi [112], Bawi (G126) [113], Nekhebu [119], Tomb G97 [125], Ibi [130], Djau [141], Kahep/Tjeti-Iker [140] and Pepyankh/ Henykem [146]. In these scenes, the groin area is unimpeded by legs or any other object, and so the artist could have depicted exposed genitals. Excluded from the findings are the following damaged scenes: Ty [35], Hotepherakhti [34], Khenut [68], In-Snefru-Ishtef [96], Mehu [121], Shepsipumin/Kheni [147] and Unisankh [150].

⁴⁹⁷ Kanawati-Abder-Raziq, *Teti Cemetery VI*, 35-6, pl. 47.

⁴⁹⁸ Geolet, *Nudity*, 20-21.

⁴⁹⁹ See Appendix 2: Angling Detail Table M.

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There is no standard caption associated with angling. Indeed, there is no mention of the act of fishing or for whom they are fishing for. Out of context, Ptahhotep/Thefu's [75] caption is ambiguous, and that of Kagemni [94] and Mereruka [103] appear to be naming the person that is fishing or their titles. The most informative caption is found in Pepyankh/ Henykem [146], (*mꜣꜣ*) *Ink nfr*, which describes the fisherman's countenance at the time. This method may be considered one of the more pleasurable types of fishing with less hard manual labour and the ability to work individually.

Summary

This theme is primarily found at Memphite cemeteries with the first attestation known from the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27]. In general, the movement of the theme to the provincial areas follows policy changes of the late Fifth and the Sixth Dynasty.⁵⁰⁰ There are many standards to this theme, ones that vary only slightly throughout its date range. An angler is typically depicted with other fishermen frequently included on the same boat from the late Fifth Dynasty.⁵⁰¹ The fishing line is another constant with small variations in the depiction of the end of the line that is held in the hand of the angler. Other items such as sinkers, clubs and seats are not standards and appear in only a limited number of scenes. Hooks can be shown in two different manners, with 50% of fishing lines ending in hooks, the other 50% either undetermined or depicts the hook swallowed by the fish (25%). The appearance of these details appears to be based in influence from other tombs, rather than the artists including it in order to convey the information of the scene. The minor figures are also shown with some regularity in a seated position and with two primary leg positions; F.1 and F.2.⁵⁰² The use of the *Synodontis* species is the most consistent fish featured in both the Fifth and Sixth Dynasties; with the *Clarias* sp. only depicted in the Fifth Dynasty, and the *Barbus bynni* featured in the beginning of the Sixth.

⁵⁰⁰ Kanawati, *Governmental Reforms*, 5.

⁵⁰¹ Iynofert/Shanef [63], Ihy r/u Seshseshet/Idut [72], Kagemni [94], Mehu [121], Nekhebu [119], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147], and Pepyankh/ Henykem [146].

⁵⁰² See Appendix 4: Typology: Basic Leg Positions for full explanation.

Chapter 6: Lave Nets



Kagemni [94]

Introduction

The net explored in this chapter is commonly referred to as a *hand net*. As this term identifies all types of nets that are operated by hand, for example, small dragnets and weirs, the net discussed here has been reclassified as a *lave net*.⁵⁰³ This section examines representations of the lave net fishing technique, their standards, variations, appearance, and distribution in Upper and Lower Egypt. Rare and unique details will also be discussed.

Why the change in name?

Lave net fishing is synonymous with a type of fishing that occurs in Wales. According to the Wales Museum, it has been known for a thousand years within Wales and is currently being practiced by a group of enthusiasts in order to keep this traditional technique alive.⁵⁰⁴ It may appear as though the identification of the ancient Egyptian net with the comparatively modern Welsh net is a large assumption, yet there are a number of similar aspects between the two. A comparison of structure and form indicates that they share the same frame design, the similar use of a yoke or head board for stability, and the inclusion of net attachment at identical points on the frame. The method of fishing is also the same for both as demonstrated by Egyptian tomb art as well as modern Welsh photographs and written testimonials.⁵⁰⁵ Van Elsbergen, Brewer and Friedman state that ropes portrayed on either side of the net in Egyptian scenes were used to open or close it, in much the same way as in the Welsh examples;⁵⁰⁶ however, there are no known depictions of this occurring in representations of Old Kingdom nets. Nevertheless, due to the abovementioned similarities, the term *lave net* is appropriate for describing these Old Kingdom hand nets.

Occurrence of the Scene

The lave net is represented as a small net, its ends attached to the widest points of a solid wooden frame assembled in a 'V' shape. Lave net fishing can be performed via two methods. In the first (a), a fisherman wades out into the water and places the net beneath the surface. He then waits for a fish to swim into it, after which the net is lifted. The second method (b) requires the fisherman to wait for any sign of movement on the surface of the water. Once a fish is spotted, the net is dipped into the

⁵⁰³ This identification is based on the similarities of the structure of the net to more modern examples that are found in Wales. See full explanation under 'Why the change in name?'.
⁵⁰⁴ Wales Museum: '*Traditional Fishing Practices on the Severn Estuary*' Accessed 12/1/2013 (Published 2007) <http://www.museumwales.ac.uk/en/1923/>.

⁵⁰⁵ *Black Rock Lave Net Heritage Fishery* (2016); See Appendix 2: Lave Net Detail Table A.

⁵⁰⁶ Van Elsbergen, *Fischerei*, 48; Brewer- Freidman, *Fish and Fishing*, 38, 40.

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water and is quickly retracted.⁵⁰⁷ The lave net could be used in various areas of the water body, including small channels and areas with vegetation.

Fifth Dynasty

There are 20 known scenes of lave net fishing. The earliest can be found in the mid-Fifth Dynasty Saqqara tomb of Niankhkhnum and Khnumhotep [27].

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Kayemnofret (D23) [51]	Saqqara	V.8-9
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Senedjem-Ib/ Inti [59]	Giza	V.8L-9
Nimaatre [60]	Giza	V.8L-9
Kairer [66]	Saqqara	V.9
Senedjem-Ib/Mehi [76]	Giza	V.9L
Ptahhotep/ Thefu [75]	Saqqara	V.9L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1

Table 6.1 Fifth Dynasty Attestations

The examples from the Fifth Dynasty are all located within Memphite cemeteries. The scene evidently originated at Saqqara,⁵⁰⁸ with the earliest attestations occurring in the tombs of Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51] and Akhethotep (D64) [58]. There is a brief change in location to Giza between V.8L-V.9L with three examples from the tombs of Senedjem-Ib/ Inti [59], Nimaatre [60] and Senedjem-Ib/Mehi [76]. Further cases are found at Saqqara at the very end of the dynasty⁵⁰⁹ in the tombs of Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72]. This may infer that a specific artist(s) from the region of Saqqara or its school of art was employed to execute the scenes at Giza. In fact, it is very likely that the same artist(s) worked in the Giza family complex featuring the tombs of Senedjem-Ib/ Inti [59] and Senedjem-Ib/Mehi [76].⁵¹⁰

⁵⁰⁷ *Black Rock Lave Net Heritage Fishery* (2016), Brewer-Friedman, *Fish and Fishing*, 38-40; Dunncliff, 'Marsh Activities' in *Behind the Scenes*, 120.

⁵⁰⁸ Kayemnofret (D23) [51] and Akhethotep (D64) [58].

⁵⁰⁹ Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72].

⁵¹⁰ Reisner and Brovarski suggest that Senedjem-Ib/Mehi [76] commissioned the decoration of the tomb of his father Senedjem-Ib/ Inti [59] and then was able to continue with the construction and decoration of his own. It is thus possible that the same group of artists were employed for the decoration of these two tombs. Brovarski, *Senedjem-Ib Complex*, 1, 26-29.

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Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Kahep/Tjeti-Iker [140]	El-Hawawish	VI.4M
Djau [141]	Deir el-Gebrawi	VI.4M
Pepyankh/Henykem [146]	Meir	VI.4L
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L
Ankhtyfy [148]	Mo'alla	VI.4L-VIII.E

Table 6.2 Sixth Dynasty Attestations

Early Sixth Dynasty lave net scenes are solely attested at Saqqara and include some of the most well-rendered and vivid examples as seen in Kagemni [94], Mereruka [103] and Hesi [110]. The tomb of In-Snefru-Ishtef [96] may also feature lave net fishing;⁵¹¹ however, following its examination, the decoration does not appear to have any typical elements of such a scene. Borchardt, Porter and Moss suggest that it is part of a funeral procession;⁵¹² therefore, it has not been included here.

All attestations after the reign of Merenre (VI.3) occur in the provinces, primarily from the sites of Deir el-Gebrawi and El-Hawawish.⁵¹³ That from the tomb of Ibi [130] is well-preserved and follows the general composition of earlier cases, however Djau's [141] scene is unusual. The fisherman here wields a rather large net and is shown wading into the shallow water.⁵¹⁴ A familial bond is shared between Ibi [130] and Djau [141], which may explain the inclusion of the lave net in both. Such a bond is also attested for Kahep/Tjeti-Iker [140] and Shepsipumin/ Kheni [147], whose tombs were additionally decorated by the same artist (Seni).⁵¹⁵

The final example from the Old Kingdom occurs in the tomb of Ankhtyfy [148] at Mo'alla. Ascribed a very broad construction date, the tomb has been assigned to the late Sixth Dynasty by some⁵¹⁶ and a much later date by others.⁵¹⁷ The earlier date for this tomb allows for direct artistic influence from

⁵¹¹ OEE Database.

⁵¹² Borchardt, *Denkmäler II*, Blatt 105 [CG1776] 197; PM. III, 891.

⁵¹³ Ibi [130], Kahep/Tjeti-Iker [140], Djau [141], Pepyankh/Henykem [146] and Shepsipumin/ Kheni [147].

⁵¹⁴ The placement of the fisherman submerged in the water is a result of a lack of space and the artist visualising the position of the fisherman as wading in the water from a bird's eye point of view. Davies, *Deir el-Gebrawi II*, 2.

⁵¹⁵ Furthermore, the use of the same artist, Seni, for the decoration of Kahep/Tjeti-Iker [140] and Shepsipumin/ Kheni [147] provides another direct link; Kanawati-Woods, *Artists in the OK*, 9-11.

⁵¹⁶ Kanawati-McFarlane, *Akhmim*, 297.

⁵¹⁷ Harpur, *Decoration*, 281 (F.I.P).

other near contemporary provincial tombs such as those of Pepyankh/Henykem [146] and Shepsipumin/ Kheni [147].

Two further scenes have been postulated to depict lave net fishing. One in Kairer [66] has not been published, therefore it cannot be sufficiently examined.⁵¹⁸ The second in Seshemnofer/Ifi [134] does not bear any elements of a lave net fishing scene, instead illustrating the construction of a triangular net.⁵¹⁹

Distribution

As indicated in the above tables, lave net fishing is solely attested at Saqqara and Giza until the mid-Sixth Dynasty. The three examples from Giza are known from only a limited date range and were most likely perpetuated due to familial links between tomb owners. The appearance and frequency of scenes in the provincial regions coincide with the movement of artists and officials that is evident in several other fishing scenes.⁵²⁰ Such familial and artistic influences between tombs also likely led to the perpetuation of the theme at certain sites such as Giza, El-Hawawish and Deir el-Gebrawi.

Geographically, lave net fishing could be performed at any point along the Nile River. The two methods for using the net are successful in both deep and shallow water, although the net is primarily shown being operated from a boat. Therefore, it appears that the distribution of lave net fishing scenes was not based on geographical factors, but was at the discretion of the tombs owner and artist(s).

The Minor Details

Lave Nets: Structure



Kagemni [94]

The lave net frame can be represented in two different styles: (1) the 'V' structure, which has two rimes joined together at the base to create a 'V' shape; and (2) the 'Y' structure, which is similar to the 'V' structure but has an extended base that forms a 'Y' shape. The base of the frame was likely lashed together for stability and the support bar, or yoke/head board, kept the rimes in an open position.

⁵¹⁸ There are no notes on its appearance. PM. III. 631[12].

⁵¹⁹ Van Elsbergen excludes this scene in his discussion on lave net fishing (Van Elsbergen, *Fischerei*, 59-60) and Porter and Moss describe it as net making (PM. III. 614 [3]). Refer to Chapter 19: *hsf nwt*: Spinning Cord.

⁵²⁰ Kanawati-Woods *Artists in the OK*, 19. Other themes include fishing via the angling method, funnel traps and weirs. See Appendix 2: Detail Table A for aforementioned methods.

The mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27] contains the first known occurrence of the 'V' frame, the most common type of structure. This structure is attested a further seven times in the Fifth Dynasty.⁵²¹ Early Sixth Dynasty examples from the reigns of Teti (VI.1) and Pepy 1 (VI.2) occur at Kagemni [94], Mereruka [103] and Hesi [110], and later scenes with the 'V' structure are illustrated in Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146] and Ankhtyfy [148].

The 'Y' structure is attested in the tombs of Ibi [130], Djau [141] and Pepyankh/Henykem [146]. The repetition of the detail was likely facilitated by familial connections between Ibi [130] and Djau [141], as well as the close proximity of locale (Deir el-Gebrawi and Meir) between these three tombs and their postulated artistic influences.⁵²²

The yoke of the frame is depicted frequently throughout the entire Old Kingdom.⁵²³ Used to stabilise the frame in an open position, it provides a space for a minor figure to grasp the frame with one hand. In most representations, the figure holds the frame at the point where the yoke is attached.⁵²⁴ Only one example, in Niankhkhnum and Khnumhotep [27], shows the hand covering the entire yoke.

Unlike the rope system in modern Welsh lave nets, there is no depiction of a contraption for opening and closing nets in Old Kingdom scenes. The only evidence for ropes occurs in the tomb of Kagemni [94], where one rope extends from the lave net to the yoke. This placement, however, could not feasibly assist in effectively closing the rimes. As such, it could instead be added support for a net that appears heavily laden with fish.

Lave Nets: Detailing

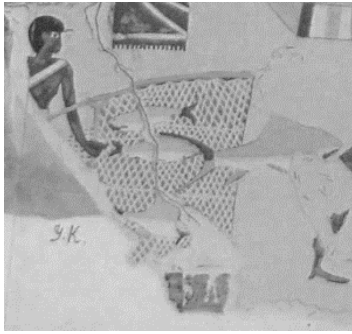
The lave net is commonly attached to rimes at the widest point of the frame. Its netting detail can be represented in a number of ways, such as with or without mesh detailing, or as transparent or opaque.

⁵²¹ Attestations are found in Kayemnofret (D23) [51], Akhetotep (D64) [58], Senedjem-Ib/ Inti [59], Nimaatre [60], Senedjem-Ib/Mehi [76], Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72].

⁵²² Kanawati-Woods, *Artists in the OK*, 11.

⁵²³ Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Nimaatre [60], Senedjem-Ib/Mehi [76], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Mereruka [103], Hesi [110], Ibi [130], Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146] and Ankhtyfy [148].

⁵²⁴ Kayemnofret (D23) [51]?, Nimaatre [60], Senedjem-Ib/Mehi [76], Ptahhotep/ Thefu [75] Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Mereruka [103], Hesi [110], Ibi [130], Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146] and Ankhtyfy [148].



Ankhtyfy [148]

From the Fifth to the first half of the Sixth Dynasty (VI.1-VI.3), the net is primarily shown in outline.⁵²⁵ An exception may be found in Akhethotep (D64) [58], where a fully patterned net is depicted. The pattern is not attested again until the latter half of the Sixth Dynasty in the tombs of Ibi [130], Kahep/Tjeti-Iker [140], Djau [141], Shepsipumin/ Kheni [147] and Ankhtyfy [148]. It is thus possible that the earlier example from Akhethotep (D64) [58] was a source of inspiration for these provincial depictions. Nets loaded with fish typically have no patterning, perhaps due to the difficulty of illustrating the diamond pattern over the fish.

The evidence suggests variances in the depiction of nets between Memphite and provincial tombs. Those in Memphis typically represent the net's outline only, while provincial tombs more frequently depict netting details. An exception to the latter may be found in the tomb of Ibi [130], which combines both features, illustrating fish at the bottom of the net and a diamond pattern between the rimes at the top. That from the tomb of Pepyankh/Henykem [146] also includes a net outline only, following the Memphite standard.

It is possible to discern the transparency of nets in some examples. This is determined by whether there are fish in the net,⁵²⁶ or if other features from the background of the scene shown within its parameters. Evidently, transparent nets are more common than those that are opaque. Lave nets depicting fish within the parameters of the frame are attested in Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Ibi [130], and Pepyankh/Henykem [146]. Others with additional background elements can be observed at Niankhkhnum and Khnumhotep [27] and Nimaatre [60]. Parts of a boat are shown 'behind' nets at Senedjem-Ib/Mehi [76], Ihy r/u Seshseshet/ Idut [72] and Mereruka [103], whereas a paddle pole is included in Ptahhotep/Thefu's [75]'s lave net scene. Opaque nets occur in Nimaatre [60], Ihy r/u Seshseshet/ Idut [72], Kagemni [94] and Djau [141]. The opaque nature of the net in Kagemni [94] is emphasised by the artist(s) depiction of fish heads and tails above the rim of the net rather than within its parameters. A second net in this tomb additionally obscures the fishing boat and aquatic vegetation in the water band.

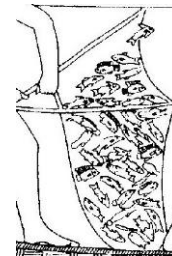
⁵²⁵ Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59], Nimaatre [60], Senedjem-Ib/Mehi [76], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Mereruka [103] and Hesi [110].

⁵²⁶ Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Ibi [130] and Pepyankh/Henykem [146].

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Fish Species

There are eight examples of fish within lave nets, of which Ihy r/u Seshseshet/ Idut [72] and Mereruka [103] provide the greatest numbers of fish per net.⁵²⁷ Some scenes also portray fish stored in baskets placed near a fisherman.



Mereruka [103]

Fish captured by lave nets are similar in type and frequency to those that are associated with dragnet scenes. The most common family of fish is the *Mormyridae*, with identified genera including *Petrocephalus*, *Gnathonemus* and *Hyperopisus*.⁵²⁸ The majority are illustrated without distinguishing characteristics such as fin placement or the length of the fin, and so species identification is problematic. Lave nets in Mereruka [103] feature approximately 18 *Mormyridae* fish, while six are attested in Ihy r/u Seshseshet/ Idut [72].

The *Tilapia sp.* is also frequently depicted. Clearly identifiable by its dorsal fin,⁵²⁹ it only occurs in tombs at Saqqara, with approximately 13 illustrated in Mereruka's [103] lave net scene. Given its frequency in other scenes such as spearfishing and dragnets, its limited appearance at Saqqara is curious.⁵³⁰

Individual attestations of *Synodontis schall* or *batensoda* are difficult to identify.⁵³¹ The most defining characteristic between the two is the fish's position, with the *Synodontis batensoda* often shown swimming upside down.⁵³² However, the lave net's manipulation as well as the available space within its parameters result in the depiction of fish swimming in a vertical direction, thereby voiding this identification criterion.

A few other species occur in limited numbers. These include mullets or *Mugil sp.*,⁵³³ followed less frequently by *Clarias*,⁵³⁴ puffer fish (*Tetraodon fahaka*),⁵³⁵ *Schilbe*⁵³⁶ and *Mormyrus Caschive/Kannume*.⁵³⁷ The eel (*A. vulgaris*) is only represented twice in the nets of Mereruka [103], which possibly also depicts an electric catfish (*M. electricus*). Ankhtyfy [148] additionally illustrates the

⁵²⁷ Others include Kayemnofret (D23) [51], Kagemni [94], Ibi [130], Djau [141], Pepyankh/Henykem [146] and Ankhtyfy [148].

⁵²⁸ Ihy r/u Seshseshet/ Idut [72] x 6, Mereruka [103] x 18 and Ankhtyfy [148] x 1 (possibly 2).

⁵²⁹ Ihy r/u Seshseshet/ Idut [72] x 4 and Mereruka [103] x13.

⁵³⁰ Chapter 4 Dragnets: Fish species: Appendix 2: Dragnet Detail Table D, P; also, Chapter 11: Spearfishing: Fish Species; Brewer and Friedman also comment on the significance of this fish in fishing scenes, which also suggests that this restriction is unusual. Brewer-Friedman, *Fish and Fishing*, 77-8.

⁵³¹ Ihy r/u Seshseshet/ Idut [72] x 2, Mereruka [103] x12 and Ibi [130] x1.

⁵³² Brewer-Friedman, *Fish and Fishing*. 77-8.

⁵³³ Ihy r/u Seshseshet/Idut [72] x 7, Mereruka [103] x 9 and Pepyankh/Henykem [146] x 1?

⁵³⁴ Ihy r/u Seshseshet Idut [72] x 1, Kagemni [94] x1 and Mereruka [103] x 4.

⁵³⁵ Ihy r/u Seshseshet Idut [72] x 2 and Mereruka [103] x 1.

⁵³⁶ Ihy r/u Seshseshet Idut [72] x 1, Mereruka [103] x 1, Ibi [130] x 1 and Pepyankh/Henykem [146] x 1.

⁵³⁷ Ihy r/u Seshseshet Idut [72] x 3 and Mereruka [103] x 3.

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Barbus bynni and moon fish (*Citharinus sp.*), which otherwise are separately and respectively attested in the tombs of Ihy r/u Seshseshet/ Idut [72] and Mereruka [103].

The latter two lave net scenes additionally feature a rare detail capturing the moment when a fish has jumped from the net.⁵³⁸ Another unique variation may be found in the tombs of Pepyankh/Henykem [146] and Djau [141], in which a ‘catch bag’ is represented. Filled with fish, this object is strung off the main lave net which, in Djau’s [141] case, is empty.

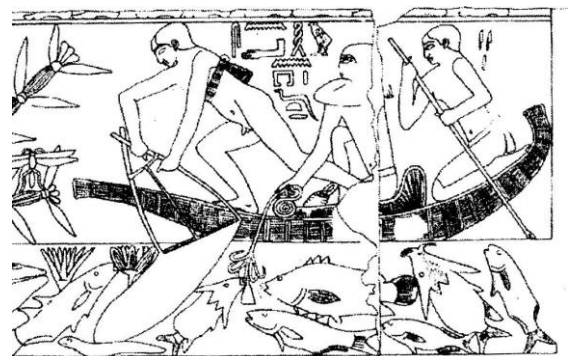
Boats: Structure and Detailing

Most lave net fishermen, with the exceptions of those in Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51] and Djau [141], are depicted fishing from a boat. The boats adhere to Type A (horizontal), a Type A/B combination (horizontal/vertical ends), or Type C (varying position).⁵³⁹

The detailing of the boats can be portrayed in one of three ways:⁵⁴⁰

- A. *Lashing and Reed;*
- B. *Lashing only;* and
- C. *No detailing.*

Most boats follow the Type A structure.⁵⁴¹ Type A/B combination is observed for boats in Akhetotep (D64) [58], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72] and Kagemni [94]. Such a structure features a vertical prow or stern, the other end being horizontal. All of the examples location and construction dates, except Djau [141], infer that the earlier tombs may have been a source of inspiration for the others.⁵⁴²



Kagemni [94]

Type C boats are shown in Ihy r/u Seshseshet/ Idut [72] and Ibi [130]. As suggested in the discussion on angling boats,⁵⁴³ the structures may have been shortened or modified due to the available space

⁵³⁸ See Chapter 3: Fish: Fish Behaviors.

⁵³⁹ See Appendix 4: Typology; Boat Structure for explanation of types.

⁵⁴⁰ See Appendix 4: Typology; Boat Detailing for explanation of types.

⁵⁴¹ These occur in Senedjem-Ib/ Inti [59], Nimaatre [60], Senedjem-Ib/Mehi [76], Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Hesi [110], Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146] and Shepsipumin/ Kheni [147].

⁵⁴² Akhetotep (D64) [58], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72] and Kagemni [94].

⁵⁴³ See Chapter 5: Angling: Boat Structure.

in a scene. Such an explanation may apply to the boat in Ihy r/u Seshseshet/ Idut [72] which is adjacent to the scene's border; however, that in Ibi [130] has ample space. So, perhaps its modification instead reflects the boat's true design.

Type C boat detailing is the most common form in the Fifth Dynasty.⁵⁴⁴ Towards the end of the Fifth Dynasty, Type B began to be utilised for lave net scenes in Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72], also appearing in the mid-Sixth Dynasty tomb of Ibi [130]. Ihy r/u Seshseshet/ Idut's [72] scene features a second boat with Type A detailing, which is not attested again until the early Sixth Dynasty in Kagemni [94] and Mereruka [103]. It is also found in the mid-Sixth Dynasty tomb of Kahep/Tjeti-Iker [140] at El-Hawawish.

Given the small number of scenes, it is possible that the detailing of the boats was purposely repeated in the later tombs scenes. For instance, the Type A detailing in Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72] could have been copied for boats in the provincial tomb of Ibi [130]. Likewise, those in Mereruka [103] and/or Kagemni [94] may have influenced the boats detailing in Kahep/Tjeti-Iker [140]. However, the detail is more likely continued from other boats used in the same marsh scenes or those used within the tomb.⁵⁴⁵ Many other boats in Kahep/ Tjeti-Iker's [140] scenes also show Type A detailing.⁵⁴⁶ Ibi's [130] spearfishing and fowling boats also show Type B detailing.

Occupants of the boat

All lave net scenes that depict fishing from a boat can feature several occupants on the vessel. Lave net fishermen are typically accompanied by anglers.⁵⁴⁷ Less common are pairings with oarsmen or paddlers, as in Ihy r/u Seshseshet/ Idut [72], Kagemni [94] and Hesi [110]. The portrayal of two lave net fishermen is rare, only occurring in Kayemnofret (D23) [51], Nimaatre [60] and Mereruka [103]. Even though the contemporary tombs of Kayemnofret (D23) [51] and Nimaatre [60] are located in different cemeteries, it is possible that the same artist(s) completed both scenes. It is also likely that the two influenced the presence of paired lave net fishermen in Mereruka [103]. The latter, however, may also be explained by the scene's symmetrical elements, with the placement of two fishermen per boat enhancing artistic balance.⁵⁴⁸

⁵⁴⁴ Akhethotep (D64) [58], Nimaatre [60] and Ihy r/u Seshseshet/ Idut [72].

⁵⁴⁵ This is seen in Funnel Trap Scenes.; See Chapter 7: Funnel Traps: Boat Detailing.

⁵⁴⁶ Spearfishing, Cattle Fording and Angling Scenes.

⁵⁴⁷ The two are paired in Ptahhotep /Thefu [75], Ihy r/u Seshseshet/ Idut [72], Kagemni [94] (see above), Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146] and Shepsipumin/ Kheni [147].

⁵⁴⁸ Robins states that, in Egyptian art, Mereruka's [103] scene is particularly striking for the manner in which the lave net fishermen are positioned in mirror image, occupying the entire space. For such symmetry, two lave net fishermen would have been necessitated. Robins, *Egyptian Painting and Relief*, 39, 59.

Minor figures

Body positions

Standing figures are illustrated in various poses, each possibly representing a different stage of fishing. These positions are specific to this task and are as follows:

- A. *Leaning forwards*: the figure leans forward or is bent at the waist at various degrees, typically between 90° and standing upright;
- B. *Vertical*: the body is depicted as vertical, the figure standing upright;
- C. *Leaning back*: the figure leans backward at a slight angle, usually with the weight distributed on the back leg with its knee often bent; and
- D. *Other*: any other position.

A clear sequence of movement may be observed with the above classifications. Type A could reflect the casting out or retrieval of the net, Type B is perhaps the middle stage of the haul, and Type C could indicate the lifting of the net, the required counter-balance or exertive effort demonstrated by the figures' stance.

Type A is the most typical position.⁵⁴⁹ It is first attested in the tomb of Niankhkhnum and Khnumhotep [27] with the fisherman at an approximately 100° angle. From this and later scenes, it is evident that the figure's angle is not standardised until the late Fifth Dynasty where a 90° angle is ubiquitous.⁵⁵⁰



Akhethotep (D64) [58]

Type B occurs in four Memphite tombs of the late Fifth and early Sixth Dynasty: Kayemnofret (D23) [51], Akhethotep (D64) [58], Ihy r/u Seshseshet/ Idut [72] and Mereruka [103]. There is also one later example attested in the provincial tomb of Ankhtyfy [148].

Type C is only found in the tombs of Nimaatre [60] and Hesi [110]. The rarity of the position may be explained by artistic influence between the two. However, due to other compositional differences, the similarity could feasibly also be coincidental.⁵⁵¹

⁵⁴⁹ Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59], Nimaatre [60], Senedjem-Ib/Mehi [76], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Mereruka [103], Ibi [130], Kahep/Tjeti-Iker [140], Djau [141], Pepyankh/Henykem [146] and Shepsipumin/ Kheni [147].

⁵⁵⁰ Kayemnofret (D23) [51] = 135°, Ptahhotep/ Thefu [75] = 170°, Kagemni [94] = 100°, Ibi [130] = 130°, Kahep/Tjeti-Iker [140] = 130°, Djau [141] = 130°, Pepyankh/Henykem [146] = 130°, Shepsipumin/ Kheni [147] = 100°, Nimaatre [60] = 90°, Ihy r/u Seshseshet/ Idut [72] = 90° x3, Kagemni [94] = 90°, Mereruka [103] = 90° x2 and Pepyankh/Henykem [146] = 90°.

⁵⁵¹ Hesi's [110] figure is more upright and has a different leg position.

Chapter 6: Lave Nets

An extreme pose (Type D) occurs in only two tombs, Senedjem-Ib/ Inti [59] and Senedjem-Ib/Mehi [76], which show the figure on hands and knees trying to retrieve a lave net from the water. The replication of this pose in the two scenes adds to other artistic links observed between the tombs.⁵⁵²

Arm positions

The arms of the lave net fisherman are always shown grasping the frame of the net. The positioning of the arms, however, can vary. Two different types of holds are known.⁵⁵³

LA.1 - Forward: both arms are in front of the torso, elbows towards the register base and

LA.2 – Rotated: both arms are in front of the torso but the rear arm has the elbow rotated towards the top of the register.

In general, the arms can be depicted at various heights in front of the body. Those that are hauling the net are commonly at waist height or higher, as seen in such tombs as Kayemnofret (D23) [51], Akhethotep (D64) [58], Nimaatre [60] and Mereruka [103]. Conversely, the arms of fishermen casting or scooping the net are positioned lower or at an angle of 90°. ⁵⁵⁴

Type A is attested in the Fifth Dynasty tombs of Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59] and Senedjem-Ib/Mehi [76] as well as Ihy r/u Seshseshet/ Idut [72]. It is noticeably absent in early Sixth Dynasty scenes, but occurs in the later tombs of Djau [141], Pepyankh/Henykem [146] and Ankhtyfy [148].

Type B is first attested in Niankhkhnum and Khnumhotep [27].⁵⁵⁵ It is the more typical arm position for lave net fishermen; a greater number of scenes utilise this stance rather than Type A in the Fifth Dynasty, and it becomes slightly more frequent in the Sixth Dynasty, with 10 known cases.⁵⁵⁶ One unique case in Ihy r/u Seshseshet/ Idut [72] shows two fishermen holding this pose rather enthusiastically. The figures are each bent at the waist with one arm reaching over and above the head rather than out in front like the other examples.

⁵⁵² See above, n. 510. Brovarski, *Senedjem-Ib Complex*, I, 26-29.

⁵⁵³ See Appendix 4: Typology: Arm positions Lave Net Fishermen for full explanation of position.

⁵⁵⁴ Mereruka [103], Kagemni [94], Nimaatre [60], Ihy r/u Seshseshet/ Idut [72] and Pepyankh/Henykem [146].

⁵⁵⁵ Other are Akhethotep (D64) [58], Nimaatre [60], Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/ Idut [72] x2.

⁵⁵⁶ Kagemni [94] x 2, Mereruka [103] x 4, Hesi [110], Ibi [130], Kahep/Tjeti-Iker [140] and Shepsipumin/ Kheni [147].

Leg positions

Lave net fishermen can be positioned in the open stance position (Type A),⁵⁵⁷ in a lunge (Type G)⁵⁵⁸ or in the specific leg type for this scene;

L.1: one or more of the legs are bent at the knee;⁵⁵⁹

The earliest position is the open stance position (Type A), occurring first in Niankhkhnum and Khnumhotep [27]. Found in a further nine examples, it appears to be more popular in the latter half of the Sixth Dynasty in provincial tombs.⁵⁶⁰

Bent position (L.1) is the most frequently attested leg position for both the Fifth and Sixth Dynasties. It is first represented in Akhethotep (D64) [58], where a fisherman is shown with only the front leg bent. Two further scenes in Ihy r/u Seshseshet/ Idut [72] share this feature. The remaining nine attestations instead illustrate two bent legs (L.1).⁵⁶¹

Fishermen in a lunge (Type G) or crawling pose are found in Senedjem-Ib/ Inti [59] and Senedjem-Ib/Mehi [76]. A lunge position occurs in Kagemni [94], where it is also associated with dragnet fishermen for whom it is more common.⁵⁶²

Clothing

Lave net fishermen wear three of the four common types of garments associated with fishing scenes. The three are Type B (Belt), C (Kilt) and D (Tunic/Apron).⁵⁶³

Type B is only worn by lave net fishermen in the Sixth Dynasty. Figures bearing this type include those in Kagemni [94], Hesi [110], Ibi [130] and Djau [141].⁵⁶⁴

⁵⁵⁷ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁵⁵⁸ See Appendix 4: Typology: Basic Leg Positions for further explanation.

⁵⁵⁹ See Appendix 4: Typology: Lave Net Leg Position for full explanation of position.

⁵⁶⁰ Kayemnofret (D23) [51], Nimaatre [60], Ihy r/u Seshseshet/ Idut [72], Ibi [130], Kahep/Tjeti-Iker [140], Djau [141] and Pepyankh/Henykem [146].

⁵⁶¹ Nimaatre [60], Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Hesi [110] and Shepsipumin/ Kheni [147].

⁵⁶² See Dragnet scene examples include those in Nefer and Kahay [18], Iynofret [19], Iymery [20], Irenkaptah [22], Pehenuika [32], Hotepherakhti [34], Neferirtenef [52], Iynofert/Shanef [63], Werirni [70], Ptahhotep/Iyniankh [80], Kagemni [94], Niankhnesut [99], Nikauisesi [101] and London British Museum No. 994 [135].

⁵⁶³ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁵⁶⁴ Some artistic influence may be inferred between Kagemni [94] and Hesi [110], whose tombs are close in date, location and possibly the use of the same school of artists. These factors also apply between Ibi [130] and Djau [141], who additionally share a familial connection.

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The kilt (Type C) is the sole type of clothing that survives from Fifth Dynasty scenes. It is worn by fishermen in Niankhkhnum and Khnumhotep [27], Akhethotep (D64) [58], Nimaatre [60] and Ihy r/u Seshseshet/ Idut [72].⁵⁶⁵ Only one Sixth Dynasty tomb, that of Mereruka [103], features a figure in a Type C garment. All other figures in Mereruka [103] are dressed in short tunic (Type D). Type D is attested twice more in the late Sixth Dynasty tombs of Kahep/Tjeti-Iker [140] and Shepsipumin/ Kheni [147]. The examples within the tombs of Ihy r/u Seshseshet/ Idut [72] and in Ankhtyfy [148] depict a lave net fishermen with a shoulder strap but no tunic. Perhaps the strap is similar to those found in other fishing scenes such as the dragnet, round basket traps, angling and funnel trap scenes.⁵⁶⁶

The depiction of genitalia is not usual, with only five known possible cases in four scenes. Akhethotep (D64) [58], is the first and only Fifth Dynasty tomb to include this detail. For the Sixth Dynasty, it is attested on two lave net fishermen in Kagemni [94], and one of the four in Mereruka [103]. The genitalia of a figure in the later Sixth Dynasty tomb of Ibi [130] may also be represented by a small protrusion in the groin area. The limited depiction of genitals, especially in the Fifth Dynasty, could be related to the frequent use of Type C clothing which covers the groin.

Individual Characteristics

Like other fishermen, lave net figures are represented with one of two hair types:

- A. *A full head of hair;* and
- B. *A receding hairline.*

They are also depicted with one of two body types:

- A. *An athletic build;* and
- B. *A non-athletic build.*



Ibi [130]

Based on the preserved instances portraying hair, Type A is the most common hair type in the Fifth Dynasty. It is illustrated in Niankhkhnum and Khnumhotep [27], Akhethotep (D64) [58] and Ihy r/u Seshseshet/ Idut [72]. This trend continues in the Sixth Dynasty, with the hair type found in Mereruka [103], Ibi [130], Kahep/Tjeti-Iker [140], Djau [141], Pepyankh/Henykem [146] and Ankhtyfy [148]. Type

⁵⁶⁵ Damaged scenes which cannot be used in this discussion include those in Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59], Senedjem-Ib/Mehi [76] and Ptahhotep/ Thefu [75].

⁵⁶⁶ See Appendix 2: Detail Tables Angling: L, Funnel Traps: N, Round Basket Traps: G and Dragnets: K, L and N.

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B is first attested in Ihy r/u Seshseshet/ Idut [72] and occurs in the Sixth Dynasty tombs of Kagemni [94], Mereruka [103] and Hesi [110].⁵⁶⁷

For body builds, Type A is the most frequent. A total of 15 figures with an athletic build are known from Fifth and Sixth Dynasty tombs while only 10 have been identified with a Type B body.⁵⁶⁸ The latter are usually shown in conjunction with Type A (body) in scenes with multiple fishermen as, for instance, those in Ihy r/u Seshseshet/ Idut [72] and Mereruka [103]. Furthermore, they primarily appear in the Saqqara cemeteries between the reigns of Unis (V.9) and Teti (VI.1).⁵⁶⁹

It is thus apparent that Type A hair and Type A body are more frequently and exclusively depicted in the latter half of the Sixth Dynasty. This trend may support Teeter and Brewer's suggestion that tomb owners wished to represent figures in their tomb in the best possible way or in this case young/healthy, in order for them to be more effective in the afterlife.⁵⁷⁰

Captions

Captions appear in association with lave net fishing scenes. These texts are positioned above the fishermen, identifying either the minor figure(s) or the activity being performed.



Kayemnofret (D23) [51]

Five lave net scenes include short inscriptions.⁵⁷¹ Ranging in date from the mid-Fifth to the second half of the Sixth Dynasty, they appear in Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Ptahhotep/ Thefu [75], Djau [141] and Shepsipumin/ Kheni [147].

The term *ḥwdw* 'fisherman',⁵⁷² followed by a determinative in the shape of a lave net frame, is written above the minor figures in Niankhkhnum and Khnumhotep [27] and Kayemnofret (D23) [51] (see above image). The use of the generic word with a specific determinative suggests that the distinction of lave net fishermen was only shown in writing, as surely if there was a specific term it would have been used to accurately identify both the figure and the activity in the scene.

The texts in Ptahhotep/ Thefu [75] and Djau [141] are more complex. Although that in Ptahhotep/Thefu's [75] is incomplete, the surviving hieroglyphs may be translated as follows: *3 im=f*

⁵⁶⁷ Teeter-Brewer, *Egypt and the Egyptians*, 206-7.

⁵⁶⁸ Type A: Kayemnofret (D23) [51] x 2, Akhetotep (D64) [58], Senedjem-Ib/ Inti [59], Nimaatre [60] x2, Ptahhotep/ Thefu [75], Ihy r/u Seshseshet/ Idut [72], Mereruka [103], Hesi [110], Ibi [130], Kahep/Tjeti-Iker [140], Djau [141], Pepyankh/Henykem [146] and Ankhtyfy [148]. Type B: Niankhkhnum and Khnumhotep [27], Ihy r/u Seshseshet/ Idut [72] x3, Kagemni [94] x2, Mereruka [103] x3 and Shepsipumin/ Kheni [147].

⁵⁶⁹ Ihy r/u Seshseshet/ Idut [72] x3, Kagemni [94]x2 and Mereruka [103]x3.

⁵⁷⁰ Teeter-Brewer, *Egypt and the Egyptians*, 206-7.

⁵⁷¹ See Appendix 2: Lave Net Detail Table M.

⁵⁷² Faulkner, *Dictionary*, 187.

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hrt =t nb //// 'he gave all of your things...//'. This text appears to be instructions given to a figure revealing the movement of objects. The text is placed over both a lave net scene and a paddler in a hippopotamus hunting scene and it is unclear to which it belongs.

The caption in Djau's [130] scene is also poorly preserved, the remaining inscription reads: *hr / hr.ti r (mw)* 'ascend from (waters).⁵⁷³ This caption may belong to the cattle fording scene above the lave net fisherman and describes the cattle moving across the water and ascending to the banks.⁵⁷⁴

The final example attested in the tomb of Shepsipumin/ Kheni [147] appears to be the most appropriate caption to date. The direction of retrieving the net outlined the procedure that was used for this process: *In i3dt r.k sin mhw*, 'bring the net to you quickly, fisherman'.

The limited and inconsistent captions suggest that there was no standard for the inclusion of a caption nor was there any typical wording related to this scene.

Summary

Hand nets, now re identified as Lave Nets in order to specify the fishing method are primarily found in the Memphite cemeteries of Saqqara and Giza until the mid-Sixth Dynasty where the evidence is attested in the provinces. For the most part these scenes follow several standards, including the shape of the net and the frame structure. The net is often only shown in outline in the Memphite examples, while the diamond shaped netting is found in provincial scenes.⁵⁷⁵ Fish depicted within the nets is not a standard of the scene with only eight of eighteen tombs with this detail included. However, it can be said that it is a primarily Sixth Dynasty feature with only two known attestations found in the Fifth Dynasty.⁵⁷⁶ Lave net fishermen are depicted alone in scenes from the beginning (mid Fifth) of their occurrence, with only a few examples found again in the late Sixth Dynasty; otherwise it is typical for the lave net fisherman to be accompanied by other figures including anglers, lave net fishermen and oarsmen. Their positions are fairly standard with the fishermen found standing and performing either a hauling motions (leaning backward / vertical) or scooping motions (bent forwards). The individual characteristics of the minor figures are consistent with Type A hair and Type A body conditions dominating the illustrations. Variations occur to some degree in the majority of the standards; as seen in the use of a different type of frame in the provincial examples from Ibi [130], Djau [141] and Pepyankh/Henykem [146]. Jumping fish are found in the tombs of Ihy r/u Seshseshet/ Idut [72] and

⁵⁷³ Davies, *Deir el-Gebrawi*, II, 6.

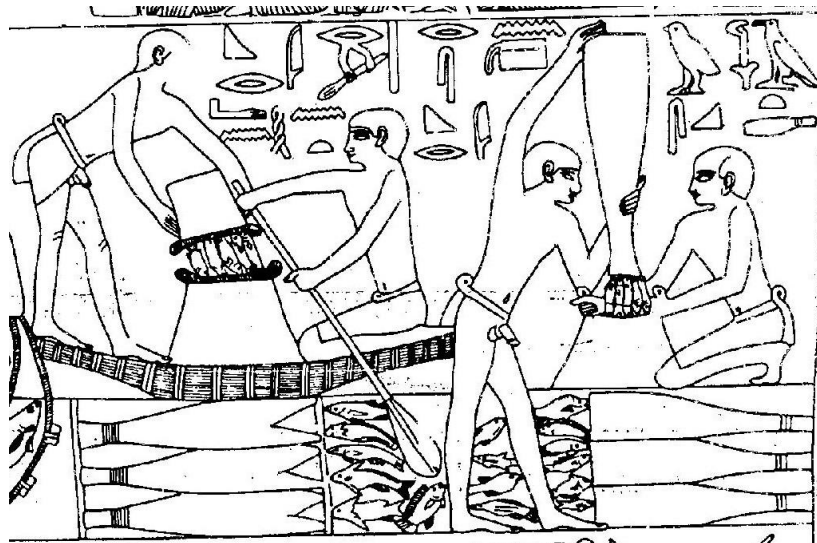
⁵⁷⁴ Davies suggests that this caption belongs to the water fording scene above the lave net scene. Davies, *Deir el-Gebrawi*, II, 6.

⁵⁷⁵ One exception is Akhetotep (D64) [58] located at Saqqara.

⁵⁷⁶ These are Kayemnofret (D23) [51] and Ihy r/u Seshseshet/ Idut [72].

Mereruka [103] indicating direct influence between the tombs with this rare repetition. The structure and detailing of the boats in use are varied, with many factors influencing their design including others in the tomb.

Chapter 7: Funnel Traps



Hesi [110]

Introduction

Funnel traps are observed as conically shaped objects within or close to a water band. The trap appears ridged and is often decorated with horizontal lines. Funnel trap⁵⁷⁷ scenes typically show one or more of the following three activities: (1) the setting or retrieving of the funnel traps; (2) the emptying of the traps; and (3) their storage or drying. These three as well as their chronological development, occurrence, and minor details, are explored in this chapter. An examination of standards and variations to the scenes’ compositions is also included.

Occurrence of Scene

Only seven instances of funnel trap scenes are attested in the Old Kingdom. They first occur in the mid-Fifth Dynasty, with two examples dating to this period. In comparison, five scenes can be assigned to the Sixth Dynasty.

Fifth Dynasty

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8

Table 7.1 Fifth Dynasty Attestations

The earliest funnel trap scene is found in the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27] at Saqqara. It represents a set of three traps placed vertically, covering the entire width of the water band.⁵⁷⁸ The second instance is of a similar date and comes from the nearby tomb of Ty [35]. Here, two funnel trap scenes each illustrate two activities, a minor figure attending to a trap set in the water and two minor figures emptying the trap into a basket, readying it for transportation.

⁵⁷⁷ The OEE Database labels these traps as ‘funnel traps’, however others refer to them as weirs, barricade traps, ‘*reusen* and *korbreusen*’ traps or crab pots. Brewer - Friedman, *Fish and Fishing*, 32-3; Dunnicliff, ‘Marsh Activities’ in *Behind the Scenes*, 121; Sahrhage, *Fischfang*, 102-2.

⁵⁷⁸ Robins suggests that the vertical placement of objects may represent the artist’s attempts at showing their horizontal placement along the river bed. Robins, *Proportions*, 11.

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Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Mehu [121]	Saqqara	VI.2
Ibi [130]	Deir el-Gebrawi	VI.3-4E

Table 7.2 Sixth Dynasty Attestations

The tomb of Kagemni [94] comprises a funnel trap scene with minor figures attending traps in the water. Nearby, two pairs of men are partially preserved, with remnants of a trap and baskets clearly indicating that they are unloading their catch. To the right, and in close proximity, is a papyrus boat, probably intended for the transportation of the fish.

Mereruka [103], Hesi [110] and Mehu [121] all depict funnel traps placed in two sets facing each other. This configuration could either indicate (a) a functional purpose, with each set of traps catching a different species of fish, or (b) an artistic purpose, with the traps creating a visual border containing the essential elements of the scene. An additional set of traps with a singular formation is featured in Mehu's example [121] paralleling that observed in the tombs of Ty [35] and Niankhkhnum and Khnumhotep [27]. Such a similarity could reflect artistic influences from the near contemporary tombs of Mereruka [103] and Hesi [110], or even those of the Fifth Dynasty.⁵⁷⁹ Mehu's [121] scene features two further unique elements, the first depicts a fisherman emptying the trap into an unattended basket and the second, in the same scene, illustrates stacked funnel and round basket traps left to dry.⁵⁸⁰

A scene attested in the tomb of Ibi [130] at Deir el-Gebrawi features two attendants and other figures in boats over an unusually positioned trap in the middle of the register below them, which is otherwise occupied by cattle fording. The example is reminiscent of the trap manipulation found in Mereruka [103]; yet the actions of the figures also correlate to those in a weir scene.⁵⁸¹ This sole attestation outside the Memphite region, indicates that its artist(s) may have been influenced by earlier tomb

⁵⁷⁹ Niankhkhnum and Khnumhotep [27] and Ty [35].

⁵⁸⁰ Mereruka [103] also has a drying basket; however, it is deliberately placed separately in the scene. See discussion on Trap Placement later in this chapter.

⁵⁸¹ The sole reason for this scene to be identified as a funnel trap scene is the accompanying caption which indicated the figures is emptying the trap. This caption is also present in the funnel traps scenes from Ty [35] and Kagemni [94]. Please refer to the section of Captions in this chapter. Kanawati also identifies this scene as a funnel trap scene, Kanawati, *Deir el- Gebrawi II*, 32. See also Appendix 2: Funnel Trap Detail Table O.

Chapter 7: Funnel Traps

decoration at Saqqara (specifically Mereruka [103]), perhaps accessing the tombs during his training in the capital.⁵⁸²

Distribution

All attestations occur at Saqqara, except one.⁵⁸³ This, together with their narrow date range between Niuserre (V.6) to Pepy I (VI.2) suggests that the funnel trap scene originated from the Saqqara school of art, perhaps perpetuated due to the influence of one or more artists. The similarities between the representations in Mereruka [103] and Ibi [130] infer direct influence between them.

Environmental and geographical features of the Delta may have also played a role in the sole appearance of the scene in Memphite tombs. The method of fishing is generally used at one of three areas: shallow water near the bank, inshore water with vegetation, or small channels.⁵⁸⁴ Lower Egypt is arguably a more suitable place for the use of traps, especially in the Delta and Fayum regions.⁵⁸⁵ However, as there is a noticeable absence of the scene in tombs at other locations such as Maidum, Giza, Abusir and Dahshur, the lack of the funnel trap appears to be based on artistic choice.

The Minor Details

Funnel Traps: Placement

Funnel traps can be placed in three different areas of a marsh scene, each corresponding to a specific activity or Type:⁵⁸⁶



Hesi [110]

- A. *Setting/retrieving of trap*: the trap is in the water band, under the water's surface;
- B. *Emptying the trap*: the trap is held vertically to be emptied into a smaller basket; and
- C. *Storage/drying of the trap*: the trap is shown not in use, and is dry or being stored.

When set in multiples in the water, funnel traps can form a physical barrier to the fish, effectively redirecting them from one trap to the other. While some write that the traps were placed to only catch fish swimming upstream,⁵⁸⁷ some scenes with two groups of traps placed opposite to one another hint that they could also be set for fish swimming both upstream and downstream.⁵⁸⁸ As

⁵⁸² Kanawati-Woods, *Artists in the OK*, 11, 14.

⁵⁸³ See Appendix 2: Funnel Traps Detail Table A.

⁵⁸⁴ Brewer - Friedman, *Fish and Fishing*, 34; Sahrhage, *Fischfang*, 101.

⁵⁸⁵ Sahrhage, *Fischfang*, 101.

⁵⁸⁶ See Appendix 2: Funnel Trap Detail Tables B.

⁵⁸⁷ Brewer - Friedman, *Fish and Fishing*, 33.

⁵⁸⁸ See Mereruka [103], Hesi [110] and Mehu [121].

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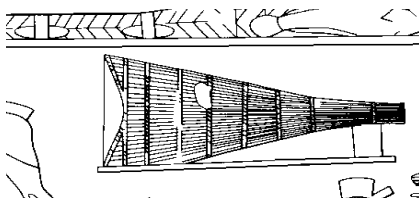
aforementioned, the placement could additionally have either a functional purpose to capture a certain type of fish,⁵⁸⁹ or an artistic purpose to balance the scenes contents.⁵⁹⁰

Type A is the most common in the Old Kingdom with 22 individual traps occurring across the seven attested scenes.⁵⁹¹ The earliest example in the tomb of Niankhkhnum and Khnumhotep [27] has three traps set in series across the water band. The placement of traps in multiples also appears in the Sixth Dynasty scenes of Hesi [110] and Mehu [121], which are composed of six and five traps respectively. Such use of numerous traps may point to a higher yield of captured fish.

Type B is attested in seven depictions of the Fifth and Sixth Dynasty.⁵⁹² There is no peak or decline, indicating that the sequence of tasks associated with funnel trap fishing was visually complete, irrespective of the number of traps in the Type A position, with only one or two traps being emptied. Interestingly, Type A and B sequences are consistently shown together in almost all scenes, except for that in Niankhkhnum and Khnumhotep [27].

Type C is only found in three scenes with a total of six individual traps.⁵⁹³ Examples from Niankhkhnum and Khnumhotep [27] and Mereruka [103] have the traps deliberately segregated by positioning them in a sub-register located in the top half of the register. Furthermore, Mereruka [103] has two traps reduced in scale and stacked end to end next to gutted fish that have been laid out to dry. Mehu [121] contrarily shows three traps piled horizontally on top of a round basket trap. Overall, the lack of a unified method of depicting Type C indicates that there is no standard for its inclusion or composition. Thus, artist(s) were likely able to freely choose the most complementary placement of the trap(s) in the overall scene.

Funnel Traps: Body⁵⁹⁴



Niankhkhnum and Khnumhotep [27]

Funnel traps are constructed of inflexible materials such as dried reed stalks and wicker, both of which retain their shape

⁵⁸⁹ Brewer - Friedman, *Fish and Fishing*, 33.

⁵⁹⁰ Robins suggests that the artists endeavoured to balance scenes. Robins, *Proportions*, 11ff.

⁵⁹¹ Niankhkhnum and Khnumhotep [27] x3, Ty [35] x2, Kagemni [94] x 1, Mereruka [103] x4, Hesi [110] x 6, Mehu [121] x 5, Ibi [130] x1.

⁵⁹² Ty [35] x 2, Kagemni [94] x 1, Mereruka [103] x1, Hesi [110] x 1, Mehu [121] x 2.

⁵⁹³ Niankhkhnum and Khnumhotep [27] x 1, Mereruka [103] x 2?, Mehu [121] x 3.

⁵⁹⁴ See Appendix 2: Funnel Trap Detail Tables C and D.

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during use.⁵⁹⁵ The body of the trap is conical and narrows towards the base where it is lashed together, preventing the escape of fish.⁵⁹⁶ Two such traps found in the tomb of Niankhpepy/ Sobekhotep/ Hepi-Kem [136] are constructed of wheat or barley stems; a thin rope tying the base and near the mouth of the trap.⁵⁹⁷ Its mouth can either have a concave or straight edge. As Brewer, Friedman and Sahrhage suggest, the trap's mouth can also feature a narrower internal opening, preventing fish from swimming back out through its entrance.⁵⁹⁸

There is only one exception to the standard structure of the funnel trap, and it occurs in the tomb of Ty [35]. All traps in the tomb are depicted with slightly bulging sides, giving the appearance of a larger body and therefore a larger capacity.

Funnel traps with a concave mouth edge are first attested in the Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27]. Later attestations only occur in the Sixth Dynasty examples of Mereruka [103], Mehu [121] and Ibi [130], suggesting some influence from the earlier tomb of Niankhkhnum and Khnumhotep [27]. The straight edge mouth is seen in three examples in the tombs of Ty [35], Kagemni [94] and Hesi [110], denoting further artistic influence across these tombs.

The narrowing of the inside of the trap's mouth by an internal structure⁵⁹⁹ can be observed in some instances. The concave mouth edge of traps in Niankhkhnum and Khnumhotep [27] may have been purposed to delineate such a feature. A clearer depiction of a triangular element at the mouth can be seen in the funnel traps of Hesi [110] and Mehu [121]. Given their contemporary date and close location, it is possible that the same artist worked on both tombs and was perhaps inspired to develop this feature further by the scenes in the nearby tomb of Niankhkhnum and Khnumhotep [27].

Depending on the available space, the scale of funnel traps can often alter across the three main activities in which they are used.⁶⁰⁰ This is most apparent in the emptying of the traps, wherein they are depicted approximately one half to two thirds of the minor figures' height.⁶⁰¹ The traps in the tomb of Mehu [121] are shown at three difference scales, those in the water are the smallest, those being dried are slightly larger while those being emptied are around two thirds of the figures' height.

⁵⁹⁵ Brewer - Friedman, *Fish and Fishing*, 33; Dunncliff, 'Marsh Activities' in *Behind the Scenes*, 121; Sahrhage, *Fischfang*, 101-2.

⁵⁹⁶ Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121]. Brewer and Friedman, *Fish and Fishing*, 33.

⁵⁹⁷ Finds M.09.SI.1 and 2 in Kanawati, *Meir III*, 51, pl. 37.

⁵⁹⁸ Brewer - Friedman, *Fish and Fishing*, 33; Sahrhage, *Fischfang*, 102.

⁵⁹⁹ Brewer - Friedman, *Fish and Fishing*, 33; Sahrhage, *Fischfang*, 102.

⁶⁰⁰ Ty [35] (S1), Kagemni [94] and Mereruka [103] especially between the traps left to dry and the others.

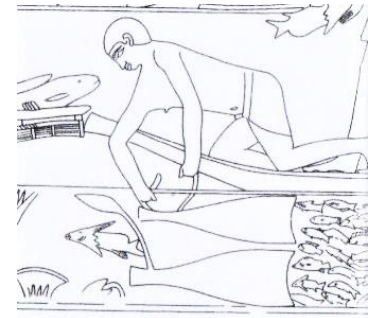
⁶⁰¹ Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121], Ibi [130].

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Funnel Traps: Tethering

Tethering at the base of the trap is depicted as one or more vertical lines. It is only attested in four of the six known funnel trap scenes.⁶⁰²

Scenes from Ty [35], Mereruka [103], Hesi [110] and Ibi [130] show a length of rope or flexible material encircling the base of the trap. The examples from Mereruka [103] and Ibi [130] depicts a minor figure tethering the trap while it is in the water, yet it is not clear whether it was closed prior to being lowered into the water or after.⁶⁰³



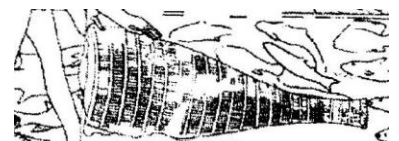
Mereruka [103]

In emptying scenes, the tethering is released to fill baskets with fish.⁶⁰⁴ When traps are stored, they can be depicted with tethering, as in Niankhkhnum and Khnumhotep [27] and Mehu [121],⁶⁰⁵ or without tethering, as in Mereruka [103]. As with the abovementioned similarity in the funnel trap mouth type across these tomb scenes, the resemblance in the tethering element also points to artistic influence.⁶⁰⁶

Sahrhage writes of another method for closing traps that involved material being stuffed into the base as a plug.⁶⁰⁷ It may be observed in traps that have no delineated tethering, as in Niankhkhnum and Khnumhotep [27], Kagemni [94] or Mehu [121]. However, it is more likely that the tethering was simply omitted as it was not deemed an essential feature by the artist(s).

Funnel Traps: Detailing

The body of the trap is often depicted with details highlighting the materials used for the traps construction. Such detailing occurs in three main types:



Kagemni [94]

⁶⁰² Ty [35], Mereruka [103] and Hesi [110].

⁶⁰³ Kanawati-Abder-Raziq, *Teti Cemetery*, V, 31.

⁶⁰⁴ See Ty [35] (Scene 2).

⁶⁰⁵ Traps within the water in Mehu [121] also do not bear tethering.

⁶⁰⁶ See Appendix 2: Funnel Traps Detail Table D.

⁶⁰⁷ Sahrhage, *Fischfang*, 102.

Chapter 7: Funnel Traps

- A. *Lashing or Reed*: traps display either the reeds or the lashing around the trap;
- B. *Lashing and Reed*: traps bear both details; and
- C. *No detailing*: traps are not detailed.

Type A occurs on funnel traps of three tombs. Those in Mereruka [103] and Mehu [121] depict reeds whereas those in Ty [35] include lashing around the circumference of the trap.

Funnel traps with Type B are observed in Niankhkhnum and Khnumhotep [27]. They are also attested in Kagemni [94], where intricately detailed reed lines suggest the weaved traps have opaque bodies.⁶⁰⁸

Type C is attested only in the Sixth Dynasty tombs of Mereruka [103], Hesi [110], Mehu [121] and Ibi [130]. As other examples from Mereruka [103] and Mehu [121] also bear Type A detailing, the Type C traps may have originally been decorated with reeds also.

Types A and C are less detailed and perhaps more stylised versions of Type B. As they retain sufficient elements to project the structural composition of funnel traps, they would not have required a high level of artistic skill to complete.

The use of all three types in contemporary tombs and their almost equal frequency in the available scenes suggest that the type of detailing was not standardised.

Fish Species



Kagemni [94]

Fish are attested in all funnel trap scenes.⁶⁰⁹ They are commonly not shown inside the trap, but swimming freely in front of or in-between two sets

of traps, as in the tombs of Mereruka [103] and Hesi [110]. Three scenes, from the tombs of Ty [35], Kagemni [94] and Mehu [121], illustrate fish swimming into and out of traps. Due to the opaque nature of the traps,⁶¹⁰ only the tails or heads of fish are portrayed at the mouth, paralleling the depiction of fish in Kagemni's [94] lave net scene.⁶¹¹ The following species count includes fish in baskets as well as

⁶⁰⁸ See following section: Fish Species.

⁶⁰⁹ Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121]. Exception is Ibi [130] most likely due to placement within top of Cattle fording register.

⁶¹⁰ The close weave of the traps as portrayed in the tombs of Niankhkhnum and Khnumhotep [27] and Kagemni [94] explain the inability to see through the traps. Also, the lack of any fish depicted within the traps indicates that they were most likely opaque.

⁶¹¹ See Chapter 6: Lave Nets: Fish Species.

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unidentifiable fish. The latter have been calculated and categorised under *Unknown* in this chapters Detail Tables G.1 and G.2.⁶¹²

The most popular fish species in Fifth Dynasty trap scenes is the *Mugil sp.* followed by the *Tilapia sp.*⁶¹³ There are also some illustrations of the *Mormyrus Caschive*, *Synodontis Schall*, *Barbus Bynni*, *M. electricus*, *Eel*, *Clarias sp.* and *Tetraodon fahaka*.⁶¹⁴

Sixth Dynasty scenes display a sharp increase in the number of represented fish, especially in the tombs of Mereruka [103], Hesi [110] and Mehu [121]. The most common are again the *Mugil sp.* and *Tilapia sp.*, followed by the *Tetraodon fahaka*, *Barbus bynni*, *A. vulgaris* and *Synodontis schall*. Those in significantly smaller numbers are the *Clarias sp.*, *Schilbe*, *Mormyrus Caschive* and *Kannume*, as well as other members of the *Mormyridae* family and the *Lates*.⁶¹⁵

A number of observations on this array of fish can be made. The *Mugil sp.* and the *Tilapia sp.* are not only popular in funnel trap scenes, but are also some of the most frequently depicted across all fishing methods,⁶¹⁶ perhaps reflecting true fishing yields. The habitat of both species may also be a factor in their depiction in shallow water fishing methods.⁶¹⁷

Unlike dragnet and lave net scenes, the eel or *A. vulgaris* is not typically attested in funnel traps, only occurring in the examples of, Ty [35], Kagemni [94] and Mereruka [103]. Its habitat is not restricted to a particular part of the water column.⁶¹⁸ This indicates that the eel could have been caught at any location, even in depths wherein funnel traps were used. The lack of frequency may infer to the eels' ability to escape the trap by manipulating its slender body through tight spaces, The *Lates* prefers the open, deep and well-oxygenated water of the middle of the river and, in particular, the rapid moving waters of Upper Egypt.⁶¹⁹ However, it is known to inhabit the shallower, inshore waters for brief periods of time, usually in cooler months or for feeding and protection.⁶²⁰ It only occurs in the tombs of Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121]. The examples from Mereruka [103] and Hesi [110] both show the *Lates* swimming into a trap, while those in Kagemni [94] and Mehu [121] are

⁶¹² See Appendix 2: Funnel Trap Detail Table G.1 and G.2.

⁶¹³ See Appendix 2: Funnel Trap Detail Table G.1 and G.2.

⁶¹⁴ See Appendix 2: Funnel Trap Detail Table G.1 and G.2.

⁶¹⁵ See Appendix 2: Funnel Trap Detail Table G.1 and G.2.

⁶¹⁶ See Volume 2: Table 2 Fish in Techniques.

⁶¹⁷ Brewer- Friedman, *Fish and Fishing*, 72, 77.

⁶¹⁸ Brewer-Friedman, *Fish and Fishing*, 71; Sahrhage, *Fischfang*, 72; FishBase: '*Auguilla auguilla*' (synonym for *A. vulgaris*).

⁶¹⁹ Brewer-Friedman, *Fish and Fishing*, 74-5; Sahrhage, *Fischfang*, 68-9.

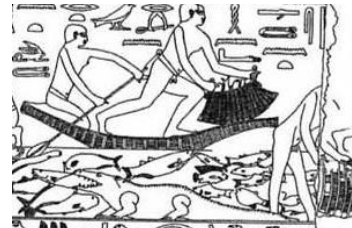
⁶²⁰ Brewer- Friedman, *Fish and Fishing*, 74-5.

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in the water band. Based on its limited depiction and habitat, it is likely that mature *Lates* were not commonly captured by funnel traps.

Boats: Structure

Likely used for the transportation of yields, boats are usually depicted on the surface of water bands over, or in close proximity to, sets of funnel traps. They have a shallow hull, with the prow and stern depicted in one of two positions or Types: ⁶²¹



Kagemni [94] Type A Boat

- A. *Near horizontal position;*
- B. *Vertical position.*

Boats are first attested in the early Sixth Dynasty tomb of Kagemni [94], and afterwards at Mereruka [103], Hesi [110] and Mehu [121]. As all of these examples come from Sixth Dynasty tombs at Saqqara (VI.1- VI.2), it is possible that the same school of art or workshop executed the artwork in all four tombs. All of these attestations represent Type A boat structure, ⁶²² as can be seen in the above image from Kagemni [94]. Ibi's [130] scene however depicts a combination of Type A/B, with both boats showing one horizontal prow with an upturned stern.

Boats: Detailing

Boats are depicted with one of three types of detailing: ⁶²³

- A. *Lashing and Reed;*
- B. *Lashing only:* and
- C. *No detailing*



Mehu [121] Type B Detailing

Evidently, there is no single standard type of detailing for boats. Type A is attested in Kagemni [94] and Hesi [110], Type B in Mehu [121] and Type C in Mereruka [103] and Ibi [130]. The selection may be influenced by the type of detailing chosen for other boats in each respective tomb, which is the same as that selected for the funnel trap boats. Those in Kagemni [94], for instance, comprise Type A

⁶²¹ See Appendix 4: Typology; Boat Structure for explanation of types. See also Appendix 2: Funnel Trap Detail Table H.

⁶²² Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121].

⁶²³ See Appendix 4: Typology; Boat Detailing for explanation of types.

whereas those in Mehu [121] uniformly bear Type B.⁶²⁴ The boats in Hesi [110], however, are an exception, as those associated with funnel traps are illustrated with different detailing.⁶²⁵

Minor Figures

Funnel trap scenes involve several figures acquiring and processing a successful catch. They can be classified into four types: (1) attendants operating traps in the water; (2) attendants emptying traps; (3) attendants holding smaller baskets for the emptying of fish; and (4) other miscellaneous figures associated with the scene. From the mid to late Fifth Dynasty, type (1) is typically attested with the second and third categories.⁶²⁶

Attendants operating traps in the water (Type 1)

Figures attending traps in the water are either adjusting or setting them. The former case is attested in Mereruka [103] and Ibi [130] wherein a minor figure is tying off the end of a trap from a boat, and the latter occurs in Ty [35]. Only two scenes, each in Hesi [110] and Mehu [121], show unattended traps in the water, although attendants are pictured in the vicinity.

Attendants in Ty [35], Kagemni [94] and Mehu [121] are all positioned bent forwards over a funnel trap. Their arms are portrayed in front of the body, the hand at the front grasping the mouth of the trap at an invariably 45° angle. The other arm extends forward at approximately 90°, the hand placed on the trap's body, securing it firmly in place (Type FA. 1). All attendants are in an open stance position (Type A).⁶²⁷

Only Mereruka's [103] trap attendant is depicted kneeling (Type D) in a boat above the trap⁶²⁸, reaching into the water to manipulate its tethering. The arms are both at an approximately 90° angle to the torso, the hands holding onto a rope at the base of the trap. The left elbow is turned out slightly, giving the arm a bent appearance. Mereruka's [103] attendant's legs are positioned with knees on the boat and the toes bent underneath the foot for balance. The position of both of Ibi's [130] attendants is similar; the only difference is the arms are at an approximate 70° angle to the torso.

⁶²⁴ Kagemni's [94] example shows another boat in the same scene with this type of detail. The same detail is used in spearfishing, fowling and cattle fording themes in Mehu [121].

⁶²⁵ The boat used in Hesi's [110] angling scene shows a rare detailing of prow and stern (variation of Type A/C).

⁶²⁶ Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121].

⁶²⁷ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁶²⁸ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

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Attendants emptying traps (Type 2)



Kagemni [94]

Generally, figures emptying funnel traps are illustrated on shore, holding them vertically over baskets. They are attested in five tombs, namely those of Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121].

In all instances, attendants stand slightly bent forward at the torso, at an angle between 10-45°. ⁶²⁹ Each grasps a funnel trap in one of two ways: ⁶³⁰

FA.2: Hand at forefront grasps trap's base; ⁶³¹ and

FA.3: Hand at forefront grasps trap's mouth.

Type FA.2 is attested in the tombs of Ty [35] and Mereruka [103], and Type FA.3 is found in the tombs of Kagemni [94] and Hesi [110]. Attendants with Type FA.2 are all shown leaning forward, reaching high to hold the top, i.e. base, of the trap. Mehu's [121] attendants are positioned in a unique variant of Type FA.2, their torsos unusually bent forwards.

There are two further types of stances used for attendants emptying traps: ⁶³² The tombs of Ty [35], Kagemni [94] and Mehu [121] feature a striding pose (Type B). Although some representations of attendants in Ty [35] and Kagemni [94] are damaged, surviving details suggest that the figure in Ty [35] stands in a striding pose (Type B) while that in Kagemni [94] may be in an open stance (Type A). ⁶³³ Examples from Mereruka [103] and Hesi [110] depict Type B.

Basket attendants (Type 3)

Basket attendants in funnel trap scenes are typically shown kneeling beside a basket. As observed in Ty [35], Kagemni [94] Mereruka [103], Hesi [110] and Mehu [121], the basket is placed underneath a funnel trap that is being emptied.

The majority of basket attendants are kneeling (Type D), their torsos either vertical ⁶³⁴ or slightly leaning forward. ⁶³⁵ In all instances, the arm at the forefront of the body is stretched forwards and

⁶²⁹ Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121].

⁶³⁰ See Appendix 4: Typology: Funnel Trap Attendants Arm Position for full explanation of position Types.

⁶³¹ The trap is inverted when emptying, thus the base is at the bottom.

⁶³² See Appendix 4: Typology; Basic Leg Position for explanation of types.

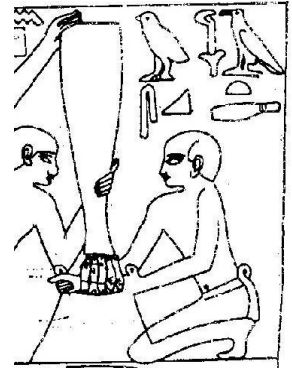
⁶³³ The context drawing from Harpur, *Kagemni*, context drawing 16, shows the heel at the baseline of the register.

⁶³⁴ Mereruka [103].

⁶³⁵ Ty [35], Kagemni [94], Hesi [110] and Mehu [121].

slightly bent, the hand holding the handle of the basket that is closest to the body.⁶³⁶ The other arm also extends forward, the hand grasping the other handle.

In all scenes, except that of Mereruka [103], the attendants kneel along the register's baseline.⁶³⁷ The leg with the knee to the ground has the toes turned under the foot, forcing the torso slightly forwards. Contrarily, Mereruka's [103] basket attendant is seated, both legs bent and drawn into the chest (Type F.2).⁶³⁸



Hesi [110]

Other attendants (Type 4)

In the Sixth Dynasty examples of Kagemni [94], Hesi [110], Mehu [121] and Ibi [130] there are additional figures engaged in funnel trap fishing:

- *Additional basket attendants*

In Hesi [110], an additional basket attendant stands on a boat situated above a set of funnel traps. In an open stance (Type A) and slightly bent forward,⁶³⁹ the figure empties a small basket of fish into a larger one. Conversely, Kagemni's [94] attendant is positioned at the prow of the boat in a lunge (Type G) position,⁶⁴⁰ holding a basketful of fish. Mehu's [121] is also on a boat but is depicted in a less exaggerated lunging pose. Due to the many similarities between the attendants in Kagemni [94] and Mehu [121],⁶⁴¹ direct artistic influence can be inferred. The example from Ibi [130] has one basket attendant behind the trap attendant (1) shown standing vertical with feet in an open stance position (Type A).⁶⁴² The arms are carrying the basket at waist height; the elbow of the visible arm turned out.

- *Paddlers*

The tombs of Kagemni [94], Hesi [110], Mehu [121] and Ibi [130] feature a paddler depicted in the same boat as the abovementioned additional basket attendants. The paddler is

⁶³⁶ Ty [35] Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121].

⁶³⁷ Ty [35], Kagemni [94], Hesi [110] and Mehu [121]. Leg Position Type E; See Appendix 4: Basic Leg Position Type E.

⁶³⁸ See Appendix 4: Typology; Basic Leg positions for explanation of types.

⁶³⁹ See Appendix 4: Typology; Basic leg positions for explanation of types.

⁶⁴⁰ See Appendix 4: Typology: Basic Leg Positions; Type G.

⁶⁴¹ In this small detail alone, the similarities include the position of the extra basket attendant, the basketful of fish, both figures facing the prow of the boat, the position of both on a boat, and the addition of a paddler at the stern.

⁶⁴² See Appendix 4: Typology: Basic Leg Positions for explanation of types.

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consistently pictured kneeling (Type D)⁶⁴³ at the stern, the tops of his feet lying flat against the hull. One hand grips the paddle at the top while the other, at the forefront, holds it below. Ibi's [130] depiction slightly differs from the previous examples in regard to the leg position. The figure is shown with one leg underneath the buttocks; top of foot against the hull and the second is drawn towards the chest and foot flat on the hull (Type E).⁶⁴⁴

Individual Characteristics

As in other fishing methods, minor figures are shown with one of two hair types.⁶⁴⁵

- A. *A full head of hair;* and
- B. *A receding hairline.*

The body types used for figures are;

- A. *Athletic,* or
- B. *Non-athletic.*



Kagemni [94]

After careful observation of the figures in these scenes it is apparent that the artists only used Type A (athletic) bodies for all primary and secondary attendants.⁶⁴⁶

There are 14 cases of Type A hair compared to 10 belonging to Type B.⁶⁴⁷ The funnel trap scene from Ty [35] features both hair types equally, with two figures also bearing the only evidence of facial hair on Old Kingdom funnel trap attendants. The Sixth Dynasty witnesses a slight increase in Type B, perhaps correlating to a greater number of attendants.⁶⁴⁸ No particular pattern in the depiction of the various hair types is evident.

⁶⁴³ See Appendix 4: Typology: Basic Leg Positions for explanation of types.

⁶⁴⁴ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁶⁴⁵ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁶⁴⁶ Ty [35], Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121], Ibi [130].

⁶⁴⁷ Type A: Ty [35] x 2, Kagemni [94] x 2, Mereruka [103] x 3, Hesi [110] x 2, Mehu [121] x 2. Type B: Ty [35] x 2, Kagemni [94] x 2, Mereruka [103] x 1, Hesi [110] x 1, Mehu [121] x 4.

⁶⁴⁸ See previous remarks on trap attendants in this chapter; also, see Appendix 2: Funnel Trap Detail Table N.

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Clothing

There are three different types of garments that these fishermen are depicted wearing.⁶⁴⁹

- A. *No clothing;*
- B. *Small belt/ loincloth; and*
- C. *Kilt*

Naked figures (Type A) appear in Ty [35] and Kagemni [94].

They are either in the water or emptying traps.



Hesi [110]

Type B is first recorded in Ty [35], afterwards occurring in

Kagemni [94], Hesi [110], Mehu [121] and Ibi [130]. The latter two additionally feature a rare detail of one attendant's belt situated high up on the torso.⁶⁵⁰

Type C is the most common article of clothing. It is first attested in the tomb of Ty [35] on a basket attendant and a trap emptier, and is then used for Sixth Dynasty figures in Kagemni [94], Mereruka [103], Hesi [110], Mehu [121] and Ibi's [130] trap attendants and paddler. It can be depicted in one of two lengths, either covering only the buttocks with a split at the front, or extending to just above the knee. The short kilt is usually worn by attendants who are likely to use a large range of movement or who may get wet, like trap emptiers or those who are in the water as in Mereruka [103], Hesi [110] and Mehu [121]. Basket attendants and paddlers are typically clothed in longer kilts as seen in Ty [35], Kagemni [94], Hesi [110], Mehu [121] and Ibi [130].

Genitalia are illustrated in all Fifth and Sixth Dynasty scenes, except for those in the tomb of Mereruka [103] who wear Type C garments.⁶⁵¹ Ibi's [130] figures also lack any depiction of genitalia, another artistic link between the two. Their frequent depiction is likely related to the open types of garments (Types A-C). Furthermore, figures with exposed genitals are typically those that are in the water or emptying the traps;⁶⁵² their stance exposing the groin area.

Captions

There are five funnel traps scenes which include captions.⁶⁵³ The majority of the captions are dialogue between the participants in the scene giving advice on how to perform the task. There is some

⁶⁴⁹ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁶⁵⁰ Please refer to Appendix 2: Detail Tables Dragnets K, L, and N, Weir L, N, and P, Lave Nets K.

⁶⁵¹ Ty [35], Kagemni [94], Hesi [110] and Mehu [121].


⁶⁵² See Appendix 2: Funnel Trap Detail Table N.


⁶⁵³ Appendix 2: Funnel Trap Detail Table O.

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standardisation to the scene; there is the same concepts, instructions and hieroglyphs repeated throughout the attestations.

In the scenes that include captions, it is typical for the artists to multiple lines of text as evident from the table above. In the tomb of Ty [35] the captions document a conversation between two men; (1) *Rdī grg.s nt ḥnꜥ shꜣi išt.k im sr(w)d ḥt int*, and (2) *n twt sbꜣw(i) itꜣ pw rh.k nn ir nb*. The fisherman is setting the trap when a colleague makes suggestions on how to do so. The fisherman is not happy with the unwanted advice, stating that he is aware of the procedure and that the other man is not more an expert than anyone else. A second example occurs in Ty [35] with one figure stating *rdī hꜣ wnn*; another stating *whꜣ skt*. Other examples of this can be found in Kagemni [94] regarding the rowing of the boat which is used for this method.

The remaining scenes, appear to focus on describing the actions taking place.⁶⁵⁴ A common trait between all scenes is the manipulation of the trap. In Ty [35], Kagemni [94], Hesi [110] and Mehu [121] there are captions *whꜣ skt* or ‘shake the trap’. This motion is often grouped together with the image of the figures emptying the trap at the water’s edge. In addition, there is the notion of removing the trap as seen in Mehu [121] and Ibi [130]. The word used differs between the two scenes, Mehu [121] uses *stꜣ* or ‘to drag or pull out’ while Ibi’s [130]; *šdt* is translated directly as ‘remove’. The only caption showing the first step in this process is found within Ty [35] with the dialogue instructing the figure to *Rdī grg.s....* or ‘establish the trap’. The use of the determinative for the trap  is unique to this theme, much like the determinative used for lave net fishing.⁶⁵⁵ The use of this determinative ensures that the viewer is able to determine the exact type of fishing trap being used, and fortunately for this study allows the classification of the partial scene from Ibi [130] to be analyzed in its correct context. All scenes from the Sixth Dynasty also include allusions to rowing.⁶⁵⁶ This follows the inclusion of a boat in this theme which began in the Sixth Dynasty. The inscriptions are fairly standard across all scenes, instructing the oarsman to row well or strong. This instruction is common in Weir scenes which also use boats to haul a trap / net out of the water.⁶⁵⁷

In summary, there is three identifiers or standards of this theme within the captions: (1) instructions or conversation on the manipulation of a *skt*, (2) The inclusion of dialogue concerning rowing (Sixth Dynasty only) and (3) the use of the determinative  after *skt*.


⁶⁵⁴ The scenes of Ty [35] (scene 1), Kagemni [94], Hesi [110], Mehu [121] and Ibi [130].

⁶⁵⁵ Refer to the Chapter 6: Lave Net Fishing: Captions.

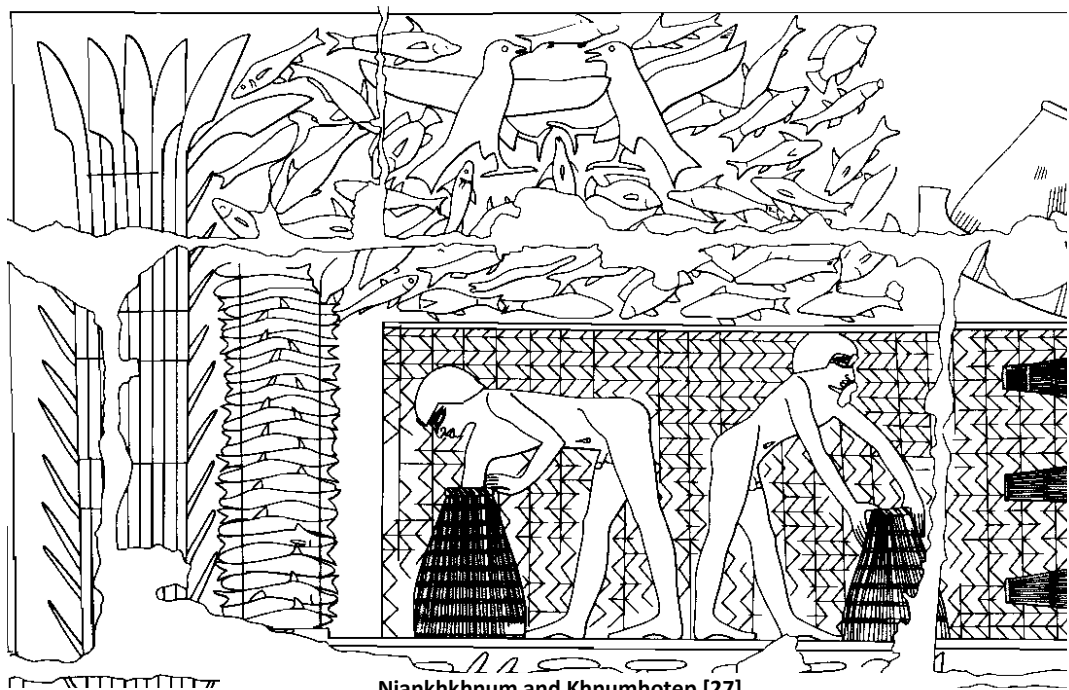
⁶⁵⁶ Kagemni [94], Hesi [110], Mehu [121] and Ibi [130].

⁶⁵⁷ See Chapter 9: Weir: Captions.

Summary

The majority of these scenes are found at Saqqara between the mid Fifth Dynasty and the early Sixth. One exception is attested at the provincial site of Deir el-Gebrawi in the tomb of Ibi [130] dated to the mid – late Sixth Dynasty. Given this restriction is it possible that the theme originated from Saqqara, with artistic influence extending to the provincial tomb. There are three actions performed in this theme; (A) the setting or retrieving of traps from the water, (B) the emptying of the traps and (C) the storage of the traps. Tasks A and B are typically incorporated into the same scene for the entire date range of this theme. The shape of the trap and the use of tethering is typical as well as the lack of fish shown within its body. Boats are not depicted in this method until the early Sixth Dynasty, where it becomes common for them to be used in conjunction with the setting or retrieving of the traps from the water (task B). There are a number of attendants shown including; trap manipulators (Type 1), trap emptier (Type 2) and basket attendees (Type 3). There are additional basket attendants and oarsmen (Type 4) found in the Sixth Dynasty representations. The inclusion of captions provides a great resource for not only the tasks performed during this process such as the ‘shaking of the trap’ and the establishment or removal of the traps from the water but also gives a small insight into the individuals that worked in the industry. In addition to this the use of the specific determinative  shows that Egyptian did have individual titles for the different trapping and fishing methods.

Chapter 8: Round Basket Traps



Niankhkhnum and Khnumhotep [27]

Introduction

Wall scenes reveal two main uses for round basket traps, namely fishing and transportation. This chapter focusses on the former, its other use investigated in Chapter 15: Fish Bearing. The aims for this chapter are to discuss the appearance and distribution of scenes representing fishing with round basket traps, investigating the chronological development of minor details in its depictions.

The use of round basket traps forms one of the most fundamental methods of fishing. It involves a fisherman trapping a fish in the water by placing a basket over it. Four round basket trap scenes are known, appearing in: (1) the tomb of Niankhkhnum and Khnumhotep [27]; (2) a fragment from the tomb of Ptahshepses [41]; (3) a fragment from the tomb of Ptahshepses II [42] and (4) a fragment now held in the Egyptian museum identified as CG 1535 [36]. A fifth possible representation may be identified in a fish bearing scene in Hotepherakhti [34], with a round basket trap positioned and being emptied in a similar fashion to the aforementioned examples. Brewer and Friedman suggest that the depiction of this method of fishing is restricted to the period spanning the Old Kingdom to the very early Middle Kingdom, with no attested representations after the Eleventh Dynasty.⁶⁵⁸ A textual description is known from Spell 158 of the Coffin Texts, which describes how the method was invented by Sobek, stating that it was to be celebrated twice a month in the town of *tr-rmw*.⁶⁵⁹ It is thus possible that round basket traps were frequently used for fishing in the Old and Middle Kingdom.

Occurrence of Scene

Fifth Dynasty

Representations of round basket traps first occur in the mid-Fifth Dynasty in the tombs of Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], fragment CG 1535 [36] and Ptahshepses [41]. Contemporary in date, the four are ascribed to the period between the reigns of Niuserre (V.6) and Djedkare (V.8). Their compositional differences suggest there were limited typical elements associated with the depiction of round basket trap fishing.

⁶⁵⁸ The Eleventh Dynasty tomb of Djaou, located in Thebes, includes the last known portrayal of this scene. Brewer-Friedman, *Fish and Fishing*, 37-8, ft. 72.

⁶⁵⁹ Brewer-Friedman, *Fish and Fishing*, 38; Faulkner, *Coffin Texts vol 1*, 348-9. Spell 158 Lines 353-356 are as follows; (353) ‘...And Sobk from the back waters said; ‘I have fished and I have sought; they slipped from my hand upon the banks of the waters, but I fished them up in the end with a fish-trap’. *THAT IS HOW THE FISH-TRAP CAME INTO BEING*.(355)... Then said Re: ‘Hidden are the mysteries concerning this fish-trap (356) which brought Horus’s hands; the sight is cleared because of it in the monthly festival and the half-monthly festival in this *tr rmw*.... ‘.

Chapter 8: Round Basket Traps

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Hotepherakhti [34]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V. 6L-9
Ptahshepses II [42]	Abusir	V. 6L-9?

Table 8.1 Fifth Dynasty Attestations

Distribution

Round basket trap fishing is only attested within the Memphite area. All Fifth Dynasty representations occur at Saqqara, with the exception of Ptahshepses [41] and his son Ptahshepses II [42] at Abusir. The former features a fragment of two figures attending a partially preserved basket of which only the top rim and part of the body remain. The overall shape and size of the basket is difficult to ascertain given the remaining details, however other elements, such as the position of the minor figures and the type and weave of the baskets, are similar to Niankhkhnum and Khnumhotep's [27] example. The occurrence of this scene in Ptahshepses II [42] is more complete and may reflect the original scene found in that of Ptahshepses [41]. When the trap is used as a vessel for transportation, it is apparent that the same restrictions apply to its distribution.⁶⁶⁰ This may suggest that the same artist or artistic school was responsible for the innovation and use of the round basket traps in scenes.

This method requires shallow water and small channels,⁶⁶¹ allowing the fisherman to see his quarry and place the basket over it to trap it. The height of the basket would have determined which water depth would have been appropriate. The Delta and parts of Lower Egypt were likely prime fishing grounds for this method given the plentiful marshland and low-lying water areas or channels. This, however, is not reflected in the location of the scenes due to their limited occurrence at Saqqara and Abusir. The cemeteries of Giza, Maidum and Dahshur were equally popular during the Fifth and Sixth Dynasties, yet no evidence of this technique is attested at these locations. Therefore, the restriction in the depiction of the trap at Saqqara and Abusir may be explained by its fishing ground limitations, yet a lack of evidence from other Memphite sites suggests that this was not a geographical restriction, but an artistic one.

⁶⁶⁰ See Chapter 15: Fish Bearing; Transportation; and Appendix 2: Fish Bearing Table A.

⁶⁶¹ Brewer-Friedman, *Fish and Fishing*, 37.

The Minor Details

Round Basket Trap Structure

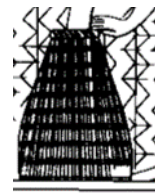
Round basket traps are of a wicker design.⁶⁶² As the representations of CG 1535 [36] and Niankhkhnum and Khnumhotep [27] suggest, they had two openings, one that was placed over the fish and another smaller opening at the top of the trap that allowed the fisherman to reach in and retrieve the fish by hand.⁶⁶³ This section examines the shape of the basket trap, of which there are two types:

- A. *A semi-spherical basket; or*
- B. *A conical basket with a slightly elongated frame at its top.*

Type A is attested three times on fragment CG 1535 [36], and again in the tomb of Hotepherakhti [34]. Type B occurs twice in the tomb of Niankhkhnum and Khnumhotep [27], and once in the tomb of Ptahshepses [41]. The basket traps used in the example from Ptahshepses II [42] also appear to be Type B, although slightly shorter in appearance. The portrayal of similar baskets in the tombs of Niankhkhnum and Khnumhotep [27], Ptahshepses [41] and Ptahshepses II [42] suggests some influence between them which may have been facilitated by the close dates of the tombs.



Type A
Hotepherakhti [34]



Type B
Niankhkhnum and
Khnumhotep [27]

The earliest depiction in the tomb of Niankhkhnum and Khnumhotep [27] portrays the traps at approximately mid-thigh height. The scenes from Hotepherakhti [34] and CG 1535 [36] show smaller traps reaching knee height, while preserved details of the fragmentary trap in Ptahshepses [41] and those from Ptahshepses II [42] suggest that it was between knee and mid-thigh height. Thus, it is typical to depict the traps relatively small in size, with some variance in height compared to the accompanying minor figures. This detail distinguishes the round basket trap from the funnel trap as there is an observable difference in height, length, and shape.⁶⁶⁴

Round Trap Construction Detailing

The basket is woven in a cage-like manner, with space between its vertical and horizontal wicker threads.⁶⁶⁵ Two different types of weaves are attested. Type A refers to the trap having a close weave,

⁶⁶² Brewer-Freidman, *Fish and Fishing*, 37.

⁶⁶³ See CG 1535 [36] and Niankhkhnum and Khnumhotep [27].

⁶⁶⁴ The funnel trap is approximately one third to one half of the minor figure's height. See Chapter 7: Funnel Traps: Body.

⁶⁶⁵ CG 1535 [36] and Ramaka [28].

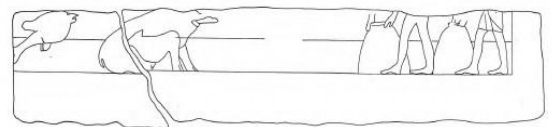
Chapter 8: Round Basket Traps

with minimal gaps between the vertical and horizontal rows of wicker, whereas Type B is an open weave, with large spaces between the wickers, forming a transparent trap.

Examples from Niankhkhnum and Khnumhotep [27] and Ptahshepses [41] depict Type A weaving. Type B is more frequently observed in the entire collection of round basket traps,⁶⁶⁶ yet is only associated with fishing activities in the tomb of Hotepherakhti [34] and fragment CG 1535 [36]. The use of either Type A or B detailing has led to various interpretations. Brewer and Friedman suggest that the trap depicted in CG 1535 [36] was made purposely transparent so that the scene could act as a guide to the successful trapping of a fish.⁶⁶⁷ However, other basket traps, such as the one in Hotepherakhti [34] and those used for transportation,⁶⁶⁸ are similarly of Type B detailing,⁶⁶⁹ indicating that such a design was not purely for instructional purposes. Van Elsbergen additionally proposes that the trap was constructed with an open weave (Type B) to ensure that, when the fisherman was trapping fish, it minimised the disturbance to the water so that the fish was not startled.⁶⁷⁰ This construction also allowed the water to continue to flow through the trap without the fish escaping and permitting its easier submergence in the water. Type A, may have had a slight disadvantage over Type B as its closed weave creates more water displacement and its extra material could increase the floatation properties of the trap. This would suggest that the fisherman would have had to exert more pressure on the trap to keep it submerged. There is no typical Type of detailing used for this trap in fishing scenes and it appears that the use of either type of weave was acceptable.

Trap Placement

The placement of round basket traps helps define their use. Those related to fishing activities are almost always illustrated within or near the water band.



Ptahshepses II [42]

Fragment CG 1535 [36] depicts the optimal placement of the round basket trap, with the majority of the device shown submerged in the water, the top opening breaching the water's surface. This allows for the basket's simple operation, the attendant easily accessing the trap and the fish unable to escape. This type of placement is also found in the tomb of Ptahshepses II [42]. The only other trap portrayed in a water band can be found in Niankhkhnum and Khnumhotep [27], where both the traps and attendants are shown engulfed by the

⁶⁶⁶ This includes those used for transportation as seen in CG 1535 [36], Hotepherakhti [34], Ramaka [28] and possibly Mereruka [103].

⁶⁶⁷ Brewer-Freidman, *Fish and Fishing*, 37.

⁶⁶⁸ See those in Ramaka [28].

⁶⁶⁹ There is no surviving detailing on the examples from the tombs of Ty [35] and Mereruka [103].

⁶⁷⁰ Van Elsbergen, *Fischerei*, 37.

Chapter 8: Round Basket Traps

water band. When viewed as a three-dimensional scene, it is possible that the artist may have been representing a large water body and/or using this same band to accommodate other fishing methods that required more space. The examples from Hotepherakhti [34] and Ptahshepses [41] do not appear to be in a water band, yet are not classified as transportation. Hotepherakhti's [34] example depicts the trap on shore, adjacent to a dragnetting scene which may thereby connect it to the water band and fishing activities. It bears similarities to the round basket trap fishing scene in Niankhkhnum and Khnumhotep [27], wherein a fish is being retrieved from the trap. Ptahshepses's [41] fragment, although difficult to classify, clearly shows two attendants leaning over a basket in a posture also similar to those in Niankhkhnum and Khnumhotep [27]. The lack of any water detailing behind the figures may suggest that it was not placed in the water band; however, as with CG 1535 [36] and Ptahshepses II [42], it is possible that the trap breaches the surface, its now missing lower half situated in the water.

Fish associated with Round Basket Traps

While the representation of fish in association with round basket traps occurs in 60% of scenes,⁶⁷¹ the inclusion of fish within the traps is unique to CG 1535 [36]. No common species can be specifically associated with round basket trap fishing, but those depicted could have been attainable in shallower waters.

Fragment CG 1535 [36] depicts two species of fish. The left round basket trap features a *Tilapia sp.* whereas the other two traps each have a *Clarias sp.* Both types inhabit inshore waters and therefore are an appropriate selection of the possible catches for this method.⁶⁷² They are also carried by a fourth minor figure in the scene, most likely as previous catches. Another minor figure in Hotepherakhti [34] holds a possible *Mugil sp.* that has been pulled from an upside-down trap.

The example from Niankhkhnum and Khnumhotep [27] uniquely illustrates a plethora of fish strewn within the register above the round basket trap, their chaotic portrayal emphasised by the addition of two birds fighting over their next meal. Along the left-hand side of the scene is a 'stack' of fish which may all be identified as the *Barbus bynni* with its single dorsal fin, forked caudal fin, body shape and length. Its abundance here infers that it was a common or highly prized catch for the basket trap fishermen. Other fish in this scene include those of the *Mormyridae* family,⁶⁷³ the *Tilapia sp.*, *Mugil sp.*, *Schilbe* and an eel (*A. vulgaris*).⁶⁷⁴ Distinctively representing a high scale of success in all fishing

⁶⁷¹ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and CG 1535 [36].

⁶⁷² Brewer-Friedman, *Fish and Fishing*, 66, 77.

⁶⁷³ *Petrocephalus*, *Gnathonemus* and *Hyperopisus*.

⁶⁷⁴ For the numerical values of each species found in Niankhkhnum and Khnumhotep [27], see Appendix 2: Round Basket Traps Table D.

Chapter 8: Round Basket Traps

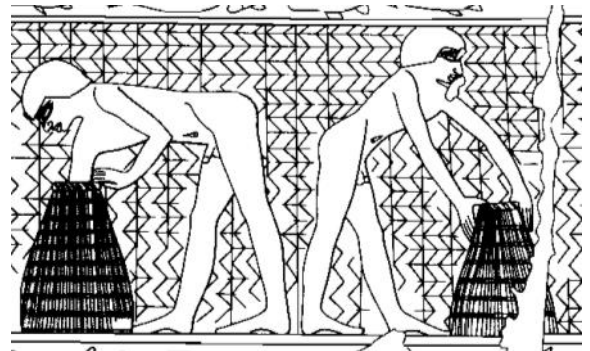
activities,⁶⁷⁵ the mass of fish in the tomb of Niankhkhnum and Khnumhotep [27] may be a combination of those caught via various fishing methods, such as funnel trap or weir fishing. However, the stack of fish leads the viewer's eye vertically to the register directly over the round basket traps, creating a visual link between the traps and the fish. Consequently, this could suggest that the fish portrayed above the round basket traps were indeed caught via this method, rather than those depicted nearby.

Minor Figures

Body and Limb Positions

A minimum of one attendant is typically depicted beside each round basket trap. His body is usually bent at the waist at an approximately 90-135° angle,⁶⁷⁶ influencing his arm and hand placement.

The scene in the tomb of Niankhkhnum and Khnumhotep [27] depicts two attendants, one bent at the waist at 90° and the other at approximately 135°. The examples from Hotepherakhti [34], Ptahshepses [41] and Ptahshepses II [42] also depict the attendants bent at a 135° angle. The arm and hand placement, together with the height of the traps, suggest that the figures in fragment CG 1535 [36] would have most likely been bent at the waist at 90° in order to reach the trap and appear in a natural position.



Niankhkhnum and Khnumhotep [27]

The arms and hands of the minor figures can be depicted in one of two Types, depending on the position of the torso:

- A. An acute 45° angle to the body, typically attested for figures with a torso bent at 135°; or
- B. A 90° angle from the body, used for minor figures with a 90° bend to the waist.

The scenes from the tombs of Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and Ptahshepses [41] portray fishermen with arm Position A.⁶⁷⁷ The hands in all of these examples vary slightly as seen in Niankhkhnum and Khnumhotep's [27] example, where the figure is shown with both hands grasping the top opening of the trap. This hand position is also used for both attendants in the

⁶⁷⁵ A higher yield of captured fish would be more typical in scenes of large-scale fishing such as drag-netting. Trapping on the other hand, would likely only allow a few fish to be caught at a time, with the capture of a singular fish or none more likely.

⁶⁷⁶ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], CG 1535 [36] and Ptahshepses [41].

⁶⁷⁷ The figures in Ptahshepses II [42] are damaged and cannot be discussed for this detail.

Chapter 8: Round Basket Traps

theme from Ptahshepses II [42]. Hotepherakhti's [34] fisherman has one hand at the top of the trap, whilst the other is holding a fish that has been pulled from it. Ptahshepses [41] shows a figure with one hand grasping the top opening and the other reaching into the trap.

Arm Position B is attested for one fisherman from Niankhkhnum and Khnumhotep [27], and three others from CG 1535 [36]. Niankhkhnum and Khnumhotep's [27] attendant has one hand in the trap, the other grasping the top opening. Those in CG 1535 [36] are depicted with other hand variations: two figures are shown holding the side body of round basket traps, the other hand reaching into the top; while one figure only has one arm visible inside the trap, a *Clarias sp.* within its grasp.

In the majority of examples, the legs and feet are positioned in an open stance (Type A),⁶⁷⁸ with one foot behind the other, the soles of the feet flat on the base of the register.⁶⁷⁹ The third trap attendant in CG 1535 [36] is shown with one foot flat on the ground and the front foot raised to the ball of the foot.⁶⁸⁰

Individual Characteristics

Individual characteristics for any attendant in a fishing scene include hair and body types. Those in round basket trap scenes are shown with Type A hair (a full head of hair)⁶⁸¹ and a Type A body (athletic build).⁶⁸²

Due to damage to the scenes, only three figures preserve details of their hair type. Two in Niankhkhnum and Khnumhotep [27] and one in Hotepherakhti [34] are depicted with Type A hair. These attendants, as well as two others from the tomb of Ptahshepses [41], also have Type A bodies.⁶⁸³

Clothing

Round basket trap attendants are clothed in a variety of garments, including Type A (nakedness), B (belt) and C (kilt).⁶⁸⁴

Common in this theme, Type A appears to be the typical style for round basket trap attendants. It is attested for two fishermen in Niankhkhnum and Khnumhotep [27]. One in Ptahshepses [41] is also

⁶⁷⁸ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁶⁷⁹ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and CG 1535 [36].

⁶⁸⁰ Two examples of figures are preserved without feet: fragment CG 1535 [36] shows one figure with only one foot; and Ptahshepses's [41] fragment does not show the lower half of the bodies of the two trap attendants.

⁶⁸¹ See Appendix 4: Typology Individual Characteristics and Clothing for explanation of types.

⁶⁸² See Appendix 4: Typology: Individual Characteristics and Clothing for explanation of types.

⁶⁸³ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and Ptahshepses [41].

⁶⁸⁴ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

Chapter 8: Round Basket Traps

naked but wears a belt around the torso with a shoulder strap, which has been referred to in other themes as a variation of Type D.⁶⁸⁵ The figures in Ptahshepses II [42] are clothed in Type C, and possibly Type A. Hotepherakhti [34] depicts one attendant in Type B clothing, while the garments of three figures from CG 1535 [36] are too fragmentary for identification. The depiction of genitalia is also common, with most scenes showing attendants with this detail.⁶⁸⁶ The inclusion of the phallus is accommodated by the exposure of the genital region as a direct result of the clothing choice made by the artist.

Captions

There is only one scene which includes a caption, this is found within the tomb of Ptahshepses [41] at Abusir.⁶⁸⁷

ḥꜣ is defined in Faulkner's Dictionary as *fish trap*. This caption is not exclusively used in round basket trap scenes, but is also attested in dragnet scenes.⁶⁸⁸ The caption is only used in the Fifth Dynasty between V.6- V.9 in these two themes. The surviving details on the fragment does not indicate that there is a dragnet scene in close proximity to the round basket traps, therefore it is possible that the caption is identifying the equipment and action taking place directly underneath it.

Summary

This theme is a rare inclusion into Old Kingdom tomb decoration programs with only five known. All scenes are dated to the Fifth Dynasty between the reigns of Niussere (V.6) and Unis (V.9); for all examples the proposed earliest construction date is V.6. The scene appears to be restricted to Saqqara and Abusir.

The use of the theme in Ptahshepses [41] may be due to such factors as influence from Niankhkhnum and Khnumhotep [27] or the use of the same artists. It is most certain that the attestation of the theme in the second tomb from Abusir, Ptahshepses II [42], is due to direct influence from his father Ptahshepses [41].

⁶⁸⁵ See Minor Figures: Clothing in Chapters: Angling Chapter 5; Funnel Traps Chapter 7; and Dragnets Chapter 3.

⁶⁸⁶ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and Ptahshepses [41]. Only CG 1535 [36] has no genitalia due to the missing half of the scene. Ptahshepses II [42] also does not include genitalia.

⁶⁸⁷ See Appendix 2: Round Basket Trap Detail Table H.

⁶⁸⁸ Particularly Niankhkhnum and Khnumhotep [27], Irenkaptah [22], Akhethotep (Louvre) [31], Hotepherakhti [34], Sekhemka [48] and Neferirteneb [52].

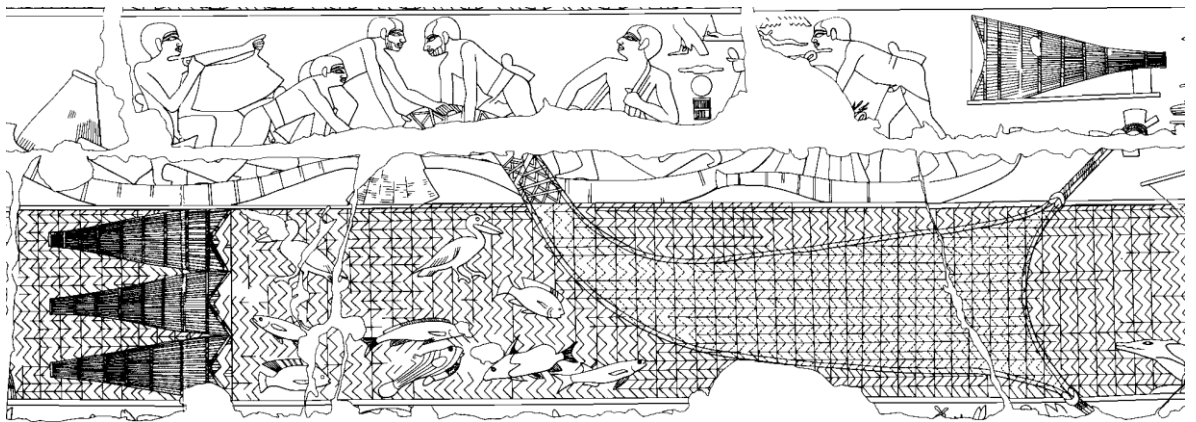
Chapter 8: Round Basket Traps

As noted in the above analysis there are two types of funnel traps depicted, Type B or the conical structured trap is the most common with five attestations across three tombs.⁶⁸⁹ The traps are found primarily within the water band and feature such species as the *Tilapia sp.*, *Mugil sp.* and *Clarias sp.* within them, yet there is not standard type of fish depicted for this method. The fisherman could be seen reaching into the trap or leaning on its rim while standing in an open stance (Type A leg position).⁶⁹⁰ Unfortunately, due to poor preservation, captions are only known from one scene, that of Ptahshepses [41] indicating a ‘fish trap’.

⁶⁸⁹ See above section: Round Basket Trap Structure; Niankhkhnum and Khnumhotep [27], Ptahshepses [41] and Ptahshepses II [42].

⁶⁹⁰ See Appendix 4: Typology: Round Basket Trap Fisherman’s Arm Positions, and Basic Leg Position Type A.

Chapter 9: Weirs



Niankhkhnum and Khnumhotep [27]

Introduction

The following chapter examines scenes focussed on the weir,⁶⁹¹ a cylindrical net similar in design to a modern trawl.⁶⁹² Largely attested in Memphite tombs of officials, particularly those at Saqqara, the weir provides support for the evident artistic influence on the perpetuation of fishing scenes. Although uncommon in Fifth and Sixth Dynasty tomb art, some standards and variations are observable. These are explored here, together with some comments regarding the scene's artistic development.

Occurrence of the Scene

Weirs are not commonly depicted in tomb art, their first attestation occurring in the Fifth Dynasty Royal Sun Temple of Niuserre (V.6).⁶⁹³ They are artistically represented as large nets that are manipulated into cylindrical or funnel-like shapes by minor figures.⁶⁹⁴ They were made of reeds or strips of loosely braided papyrus,⁶⁹⁵ with ropes attached at varying intervals for their effective handling. Staked to the banks of a river/canal,⁶⁹⁶ they were possibly positioned against the water flow, allowing the current to support and open the net's body.⁶⁹⁷

Fifth Dynasty

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9

Table 9.1 Fifth Dynasty Attestations

The earliest known depiction of weirs in an elite funerary context occurs in the Saqqara tomb of Niankhkhnum and Khnumhotep [27].⁶⁹⁸ Here, the net is attached to the banks by wooden stakes and spans the width of the portrayed water band. Tapering to a point, it is hauled out of the water by two

⁶⁹¹ These traps may also be referred to as large hand nets (OEE database), *Grossreuse* 'large fish traps' (Van Elsbergen, *Fischerei*, 31) or *großen Reuse* 'large fish trap/pot' (Sahrhage, *Fischfang*, 101).

⁶⁹² The Free Dictionary: Trawl Net; <http://dictionary.reference.com/browse/rawl+net?s=t> (Accessed 4/4/2012).

⁶⁹³ Edel, E., 'Zu den Inscripten auf den Jahreszeitenreliefs der "weltkammer" aus den Sonnenheiligtum des Niusere II'. (in) *Nachrichten der Akademie der Wissenschaften zu Göttingen. Philologisch-historische Klasse* (4/5) (1963) 208, fig. 18.

⁶⁹⁴ See Niankhkhnum and Khnumhotep [27] versus Ty [35].

⁶⁹⁵ Sahrhage, *Fischfang*, 102; Van Elsbergen, *Fischerei*, 35.

⁶⁹⁶ Niankhkhnum and Khnumhotep [27], Ty [35] and Mehu [121].

⁶⁹⁷ Van Elsbergen, *Fischerei*, 35. The direction of the current helps keep the mouth of the net open and horizontal, directing fish to swim into it.

⁶⁹⁸ Brewer-Friedman, *Fish and Fishing*, 33.

Chapter 9: Weirs

minor figures into a nearby boat. The section of the net that is removed from the water has a clear mesh pattern.

Two further weir net scenes are found in the tomb of Ty [35]. The minor figures in both are positioned similarly to those in Niankhkhnum and Khnumhotep [27]. One scene also shows a weir being manipulated into chambers, ready for the emptying process.

Another weir may also be depicted in a fragmentary scene from Ptahshepses [41]. It is identified by the presence of a minor figure on a boat who could be hauling a weir from the water or holding a basket to be filled with fish. Similar basket attendants, however, are associated with other scenes, such as the funnel trap fishing as seen in Hesi [110] or Mereruka [103], and so the scenes identification as that of weir net fishing is uncertain.

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Mehu [121]	Saqqara	VI.2

Table 9.2 Sixth Dynasty Attestations

Two Sixth Dynasty weir net scenes, both from the early Sixth Dynasty, are attested in Saqqara, in Kagemni [94] and Mehu [121]. That in Kagemni [94] portrays a boat with fishermen grasping long ropes, possibly underwater, reminiscent of those in Niankhkhnum and Khnumhotep [27]. The ends of the weir are fragmented, yet the position of minor figures on the boat is similar to earlier Fifth Dynasty examples. Basket attendants and a paddler are also depicted. Mehu's [121] scene is very similar to Kagemni's [94] but includes a funnel-shaped net with a variety of fish depicted at its mouth.

Distribution

Most weir net scenes occur in tombs at Saqqara. One possible exception is known in the tomb of Ptahshepses [41] at Abusir. The tombs of Niankhkhnum and Khnumhotep [27], Ty [35] and Ptahshepses [41] share a common date and close proximity, which may suggest that there was a school of artists or perhaps one artist that was involved in their decoration. The Sixth Dynasty tombs at Saqqara may have also been influenced by these earlier *grand* tombs, with the artist(s) or his successor implementing aspects of these tombs decoration programs.

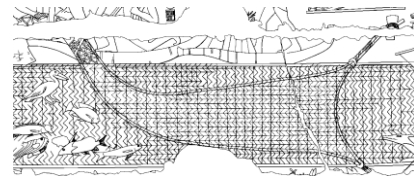
Chapter 9: Weirs

Geographically, weir net fishing requires shallow waters or small channels for optimal use.⁶⁹⁹ The Delta and its surrounds would have thus been prime areas for the utilisation of this fishing technique. This may be the reason for the lack of scenes in Upper Egypt; however, it does not explain its absence in Lower Egyptian sites such as Maidum, Giza and Dahshur. As such, weir net scenes were likely perpetuated by artistic influence rather than geographical limitation.

The Minor Details

Weir Nets: Structure

The weir can be represented either as a funnel-like or cylindrical shape, the form possibly dependent on the stage of the fishing process. Other aspects of the weir may also vary. This includes the shape of the mouth and whether or not the weir is fixed to a stationary surface.



Niankhkhnum and Khnumhotep [27]

The tomb of Niankhkhnum and Khnumhotep [27] includes the depiction of a funnel-like weir with a narrow base pulled from the water for emptying. This shape is again attested in the Sixth Dynasty tomb of Mehu [121]. A cylindrical shape is featured in Ty [35] and Kagemni [94].

The weirs are typically shown staked to the banks, stretching across the entire water body as in Niankhkhnum and Khnumhotep [27], Ty [35] and Mehu [121]. Such a positioning would have ensured a successful catch as the mouth covers a large portion of the water. Variations occur in the scene at Kagemni [94], where the weir does not appear to be fixed to the shore. Despite the fragmentary scene in Kagemni [94], the remaining details do not show any signs of a stake or rope knots as found in other tombs.

Overall, there does not appear to be a definitive standard for the composition of the weir net scene. It is possible that different stages of the trapping process are portrayed in various tombs. So perhaps the cylindrical nets in Ty [35] and Kagemni [94] depict an early phase where fish are captured by weirs still floating in the water. The second stage may then be represented by the funnel-like nets in which fish are possibly isolated within compartments, ready for emptying.

⁶⁹⁹ Brewer-Friedman, *Fish and Fishing*, 37; Sahrhage, *Fischfang*, 101-2.

Weir Nets: Attachments



Ty [35]

The weir can be represented with a number of attachments. The most common of these are ropes which aided in the manipulation of the heavy net. Brewer and Friedman suggest that fish could also be trapped at certain points in the net by tightening the ropes to create compartments.⁷⁰⁰ Without having to remove the weir from the water, this would isolate fish while others were still being captured.

Weirs can have one or two ropes attached at the base of the net, each typically handled by one minor figure. That pictured in the tomb of Niankhkhnum and Khnumhotep [27] has a single rope attachment whereas those in Kagemni [94] and Mehu [121] have two. The weir in Ty [35] also has two ropes, although the minor figure configuration is different. One figure operates a rope at the base of the trap and helps another holding the second rope further up the weir's body. This second rope features the only known example of a float from the Old Kingdom, one that is distinctively different and larger than those used in dragnet scenes.⁷⁰¹ Depicted with an oval shape, it aids in both the weir's visibility and ease of manipulation. Evidently, the depiction of weirs with two ropes becomes common from the tomb of Ty [35] onwards (V.6 onwards).

Fish Species

The depiction of fish within weirs is uncommon compared to other fishing scenes.⁷⁰² The absence of fish in some may be explained by the opaqueness of the weir net or artistic choice.⁷⁰³

Of the known attestations of these scenes, there are only two that depict detailed weirs. Positioned outside of the water, the base of the weir in Niankhkhnum and Khnumhotep [27] is portrayed with a tight weave. Another in Kagemni [94] appears to only highlight bands of material around the circumference of the trap's body. These details, however, are not sufficient to indicate whether weirs were transparent or opaque in reality⁷⁰⁴, but the absence of representations of fish within most weir nets suggests that they were likely opaque. One possible exception occurs in the scene from Ty [35], in which fish are illustrated within an area likely occupied by a missing weir. Yet, without any preserved

⁷⁰⁰ Brewer- Friedman, *Fish and Fishing*, 37.

⁷⁰¹ See Chapter 4 Dragnets: Sinkers.

⁷⁰² Dragnet, angling and spearfishing scenes most commonly depict fish within or attached to fishing equipment.

⁷⁰³ The details of the netting may provide too much interference in the painting or inscribing of the fish within the net.

⁷⁰⁴ In terms of a closed or open weave of the net which would have affected the ability to observe fish within the net.

Chapter 9: Weirs

parameters of the weir, this remains unconfirmed.⁷⁰⁵ Nevertheless, the fish are identified as a possible *Synodontis Schall*, and three unidentifiable species.

At the mouth of the net, only two weir net scenes feature fish: those in Kagemni [94] and Mehu [121]. The damage to Kagemni's [94] scene hinders the identification of a partially preserved fish. That from Mehu [121] depicts several species such as the *Tetraodon fahaka*, *Synodontis Schall*, *Clarias sp.*, *Barbus Bynni* and *Citharinus*. There are also a number of other unidentified fish in the scene.⁷⁰⁶

The standard thus appears to exclude fish within or at the mouth of the weirs. Perhaps the representation of the net itself hauled and emptied by fishermen was considered sufficient to convey the necessary information regarding this fishing practice.

Boats: Structure and Detailing

Weir net scenes contain the largest number of boats associated with any fishing method.⁷⁰⁷ Emptying a weir may have been a laborious process: two or three boats were positioned side by side, the men pulling the net's base up from the water to empty its catch into baskets.⁷⁰⁸ This is clearly apparent in the weir net scene from Ty [35], the caption of which describes how two boats were pulled next to each other for the men to haul the net.⁷⁰⁹ Most examples similarly feature two boats.⁷¹⁰ That in Niankhkhnum and Khnumhotep [27], however, shows three while the scene in Ptahshepses [41] is too fragmentary for analysis.



Kagemni [94]

The structure of these boats can be divided into three Types: ⁷¹¹

- A. *Near horizontal position;*
- B. *Vertical position; and*
- C. *Varying position.*

⁷⁰⁵ The scene is identified as one with a weir net due to its similarities with another weir net scene in the tomb (in general composition and the position of minor figures and boats). It is also similar to weir net scenes in Kagemni [94], and Mehu [121].

⁷⁰⁶ Please see Appendix: 2 Weir Detail Table G.

⁷⁰⁷ Angling x 1, Dragnets x 1-2 (boats are a rare addition), Lave nets x 1 per fisherman, Funnel traps x 1-2 per scene, Round basket traps x 0.

⁷⁰⁸ Brewer-Friedman, *Fish and Fishing*, 37.

⁷⁰⁹ Brewer-Friedman, *Fish and Fishing*, 37; See the caption in the scene from Ty [35] discussed later in this chapter under Captions.

⁷¹⁰ Ty [35], Kagemni [94], Mehu [121].

⁷¹¹ See Appendix 4: Typology; Boat Structure for explanation of types.

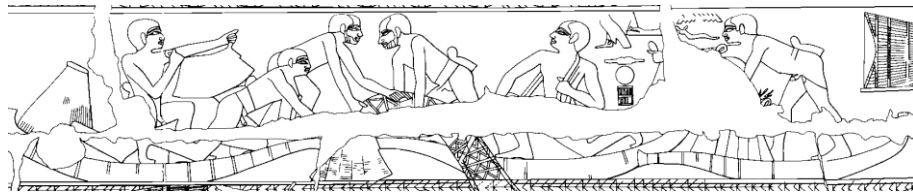
The boats used in these scenes are shown with two types of detailing:⁷¹²

- A. *Lashing and Reed*; and
- B. *Lashing only*.

Type A is the most frequently attested boat structure. It is found in the weir net scenes of Niankhkhnum and Khnumhotep [27], Ptahshepses [41], Kagemni [94], and Mehu [121]. Some of these scenes also have a second boat with a different type of structure, namely a combination of Type A and B, with one horizontal prow/stern and a more vertical end. This variation is only slightly less frequent than Type A, with four known cases, two in Niankhkhnum and Khnumhotep [27], and two in Ty [35]. Type C occurs only once in Kagemni [94], with the stern of the boat terminating under the legs of the paddler.

The most typical form of detailing for boats is Type A. It occurs in the Fifth Dynasty scenes of Niankhkhnum and Khnumhotep [27], Ty [35] and Ptahshepses [41]. Two boats pictured in the Sixth Dynasty tomb of Mehu [121] also follow this type, however those in Kagemni [94] are of Type B. The use of the latter type could be due to the portrayal of similar detailing for boats in adjacent fishing scenes.⁷¹³

Minor Figures



Niankhkhnum and Khnumhotep [27]

In all recorded weir net scenes, a number of attendants are depicted to actively engage in the fishing process. In general, there are consistently two types of figures shown: (1) rope manipulators/handlers; and (2) basket attendants.⁷¹⁴ Paddlers (3) and Weir Handlers (4) may also be included in the scene.⁷¹⁵

⁷¹² See Appendix 4: Typology; Boat Detailing for explanation of types.

⁷¹³ Type A detailing is observed in the scene depicting funnel trap fishing that is located within the same register in Kagemni's [94] tomb.

⁷¹⁴ Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mehu [121].

⁷¹⁵ Weir Handlers: Niankhkhnum and Khnumhotep [27]. Paddlers: Ty [35], Kagemni [94], Mehu [121].

Rope manipulators (Type 1)

Rope manipulators/handlers are pictured in a boat above the weir, grasping its ropes. As two ropes are commonly attached to the weir, a minimum of two figures perform this task per scene.⁷¹⁶

Sixth Dynasty rope manipulators in Kagemni [94], and Mehu [121] are all depicted with a torso positioned diagonally 45° (bent) to the rest of the body. The angle is reliant on the upper and lower limb positions with the figures kneeling (Type D⁷¹⁷), their shins either against a boat's hull or supported by feet with toes curled underneath.⁷¹⁸ The buttock is slightly raised, resting on the calves or heels of the feet. The arms are at a 45° angle from the body, reaching out to grasp the ropes.

The bodies' stance may explain different torso positions. For instance, one rope manipulator from an earlier scene in Niankhkhnum and Khnumhotep [27] is portrayed with a vertical torso. He is, however, in a lunge position (Type G)⁷¹⁹, the ropes anchored around the neck and shoulders so that the weight is distributed onto the feet as he leans back. Three in Ty [35] are represented with torsos nearly horizontal. Like the handlers in Kagemni [94], they are kneeling (Type D), but lean further to reach ropes that are situated lower in the water.

No pattern in the handlers' depiction is evident in early weir net scenes, their positioning reliant on distinct artistic elements. But, some standardisation in the torso is clear in the Sixth Dynasty, as the positioning of all figures is similar if not identical across the attested scenes.

Basket attendants (Type 2)

Basket attendants are commonly represented in fishing scenes, including those with weir nets.⁷²⁰ The men are identified by the presence of baskets in close proximity, and are depicted in a variety of positions.⁷²¹

Niankhkhnum and Khnumhotep [27] three basket attendants each display a different body position (see image previous). The first attendant (on the left) is shown lunging (Type G)⁷²², his torso vertical with the arms holding a basket at chest height. One arm is extended, its hand grasping the handle furthest from the body, the other is bent at the elbow, the hand gripping the basket's other handle.

⁷¹⁶ Ty [35], Kagemni [94], Mehu [121]. Niankhkhnum and Khnumhotep [27] example is compositionally different from those of later date and only has one rope manipulator.

⁷¹⁷ See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷¹⁸ Toes curled under the foot are attested in Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mehu [121]. The shin touching the hull of the boat is attested in Ty [35] and Kagemni [94].

⁷¹⁹ See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷²⁰ 11 figures versus 8 rope handlers, 9 paddlers and two weir handlers. See Appendix 2: Weir Detail Table J.

⁷²¹ See Appendix 4: Typology; Basic Leg Position Type D and G.

⁷²² See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

The second attendant is kneeling (Type D)⁷²³, the weight evenly distributed between slightly separated knees while the toes are curled under the feet. The torso is nearly horizontal with one arm extended forwards, holding a second basket at the water's surface. The other arm is almost perpendicular to the torso and supports the body against the hull. The third attendant is bent at the waist at 90°. He stands in an open stance (Type A)⁷²⁴ position with the arms reaching down, the hands grasping the handles of a third basket.

The latter stance is similar to those of four basket attendants in Ty [35]. These men's elbows are, however, bent and the torsos are at a more obtuse angle of 135°. One of the two scenes in the tomb represents two attendants with baskets at chest height while the other has it lower and closer to the boat's hull. One of the figures additionally has his head turned, facing the above register. His gaze is directed towards the fighting boatmen. His attention may be drawn there due to the noise and level of activity that the men are displaying. It is unlikely that these two activities occurred within close proximity as the fighting would have caused the fish to scatter.

The positioning of basket attendants in Sixth Dynasty scenes is more standardised than those of the Fifth Dynasty.⁷²⁵ All men are portrayed standing in an open stance position (Type A), their torsos vertical and the baskets held at chest height.

Paddlers (Type 3)

Paddlers are as frequently represented in weir net scenes as basket attendants.⁷²⁶ Their inclusion was essential for the successful containment and transportation of fish.⁷²⁷

The paddler in the weir net scene is usually illustrated seated at the stern of a boat. His arms extend forward, the hands holding a pole or paddle⁷²⁸ with the arm at the forefront grasping its lower end. The only variant detail among all attestations of paddlers is their leg position. For example, of two paddlers in Ty [35], one is seated with a leg extended before him (Type F.2)⁷²⁹, while the other in kneeling (Type D)⁷³⁰ with both legs underneath the buttocks, the top of the feet flat against the hull.⁷³¹ This latter positioning is also attested in Ptahshepses [41], Kagemni [94] and Mehu [121].

⁷²³ See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷²⁴ See Appendix 4: Typology; Basic Leg Positions for full explanation of type

⁷²⁵ Kagemni [94], Mehu [121].

⁷²⁶ Ty [35] x 4, Ptahshepses [41] x 1, Kagemni [94] x 2, Mehu [121] x 2; See Appendix 2: Weir Detail Tables J, O and P.

⁷²⁷ Brewer-Friedman, *Fish and Fishing*, 37; See Ty [35] *ḥnī wrt nt ḥnṣ dī smz=sn mnḥ ṣnd ḥnī iw ḥnī wrt ḥr ipf*.

⁷²⁸ Ty [35], Ptahshepses [41], Kagemni [94], Mehu [121].

⁷²⁹ See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷³⁰ See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷³¹ See Appendix 4: Typology; Basic Leg Positions for full explanation of types.

Weir handlers (Types 4)

Only one Old Kingdom scene portrays figures handling the weir net. It is found in the tomb of Niankhkhnum and Khnumhotep [27].

The scene portrays two figures in separate boats, each holding one end of a weir net. The figure on the right, bottom half damaged, appears to have the trap encircled by his arms, his body leaning forward at a 135° angle. The second handler is partially obscured by a basket attendant; however, the position of the body is similar to that of the first, with the arms forward, manipulating the tip of the weir into a basket. His torso is leaning forward at a slightly less obtuse angle of approximately 100°. The legs are possibly in an open stance position (Type A),⁷³² the front leg bent at the knee, the foot placed on an elevated prow.

Individual Characteristics

Weir net attendants are represented with one of two hair Types:⁷³³

- A. *A full head of hair; and*
- B. *A receding hairline.*

They are also depicted with either:⁷³⁴

- A. *An athletic build; and*
- B. *A non-athletic build.*

There are 11 known attestations for the depiction of men with Type A hair compared to 10 of Type B.⁷³⁵ Weir handlers from Niankhkhnum and Khnumhotep [27], and paddlers in Ty [35], Ptahshepses [41], Kagemni [94], and Mehu [121], are commonly shown with Type B hair. Basket attendants almost always have a full head of hair (Type A) and rope manipulators are equally portrayed with either Type A or Type B.⁷³⁶ Interestingly, Fifth Dynasty rope handlers are represented with Type B hair while those of the Sixth Dynasty are only shown with Type A.

⁷³² See Appendix 4: Typology; Basic Leg Positions for full explanation of type.

⁷³³ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁷³⁴ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁷³⁵ See Appendix 2: Weir Detail Tables L, N, P, and R.

⁷³⁶ Basket attendants: Type A is attested in Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mehu [121]. Niankhkhnum and Khnumhotep [27]; second basket attendant has Type B. Rope Manipulators: Type A occurs in Kagemni [94] x2, and Type B in Niankhkhnum and Khnumhotep [27] and Ty [35] x2; See also Appendix 2: Weir Detail Table L, N, P, and R.

For the body, Type A is more common. 24 minor figures have an athletic build while only seven have a non-athletic build (Type B).⁷³⁷ These statistics do not correlate with those of the hairlines. Therefore, if using hair type as an indicator of age, this would suggest that both older and younger men could have been depicted with athletic bodies. The weir handlers in Niankhkhnum and Khnumhotep [27], however, also have beards. Their combined portrayal with Type B hairlines, beards and Type B body builds could thereby indicate that they were older and more experienced. Other minor figures, namely paddlers and basket attendants, are rarely shown with Type B bodies, with only one paddler from Ty [35] illustrated with a non-athletic build.⁷³⁸

Clothing

Of the four categories of garments identifiable in fishing scenes, only three Types are attested in association with weir nets:⁷³⁹

- A. *No clothing*;
- B. *Belt/loincloth*; and
- C. *Kilt*.

Type A is only known from two basket attendants in Kagemni [94], and one paddler from Ty [35].

Type B is popular for all attendants. The weir handlers in Niankhkhnum and Khnumhotep [27] wear the garment, as do two basket attendants from the tomb. The rope manipulators in Kagemni [94] and Mehu [121] are also depicted with Type B clothing.

Type C is the most common form.⁷⁴⁰ It is attested on three rope manipulators from weir net scenes in Ty [35], Kagemni [94], six basket attendants from Ty [35] and Kagemni [94], and five paddlers from Ty [35], Kagemni [94], and Mehu [121].

There does not appear to be a pattern to the type of clothing worn by a particular attendant, or for when they were most common. The kilt, however, is almost exclusively worn by paddlers, most likely because of their less active role and that it is the typical type of garment used for these minor figures in other fishing scenes.⁷⁴¹

⁷³⁷ Body Type A: Niankhkhnum and Khnumhotep [27] x 4, Ty [35] x 6, Ptahshepses [41] x 1, Kagemni [94] x 5, Mehu [121] x 4. Type B: Niankhkhnum and Khnumhotep [27] x 2, Ty [35] x 4, Ptahshepses [41] x 0, Kagemni [94] x 0, Mehu [121] x 1. See also Appendix 2: Weir Detail Table L, N, P, R.

⁷³⁸ Those in Niankhkhnum and Khnumhotep [27], Ty [35], Ptahshepses [41], Kagemni [94], Mehu [121] all depict body Type A.

⁷³⁹ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁷⁴⁰ See Appendix 2: Weir Detail Tables L, N, O, R.

⁷⁴¹ See Appendix 2: Lave Net Detail Table K; See also Appendix 2: Funnel Trap Detail Table N.

Genitalia are not commonly represented: they are portrayed for 10 of the 32 attendants.⁷⁴² The earliest are attested on a weir handler depicted in Niankhkhnum and Khnumhotep [27]. Further occurrences are found on two rope manipulators and a paddler in the scene from Ty [35]. Basket attendants are evidently more frequently pictured with genitalia, as seen in Niankhkhnum and Khnumhotep [27] (x3), Ty [35] (x2) and Kagemni [94] (x1). Overall, it is apparent that the majority of figures depicted with genitalia are from the Fifth Dynasty tombs of Niankhkhnum and Khnumhotep [27] and Ty [35].

Captions

Five weir net scenes have accompanying captions detailing the fishing process.⁷⁴³ They occur in Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], and Mehu [121]. Unfortunately, most have sustained severe damage and are only partially decipherable. Still, one of the scenes from Ty [35] is well preserved and contributes the most information regarding this method.

The captions evidently share a common theme in the activity of rowing. The expression *hni wrt* 'row strong!' is found in all five and is often complimented by indications of bringing something together, such as gathering the boats in Ty [35].⁷⁴⁴ Another commonality is the use of the term *st* 'to bring/drag',⁷⁴⁵ which may textually represent the dragging of a weir into a boat for emptying. The repetition of both expressions correlates with the frequent depiction of rowing as well as dragging in weir net scenes from the Fifth and Sixth Dynasties.

Summary

Weirs are only depicted in the Memphite Cemeteries of Saqqara and Abusir. The fragment from Ptahshepses [41] at Abusir is partial and only shows a minor figure on a boat in a similar position as those found in the scene at Saqqara. However, this position may also be used for other methods and is not conclusive. The remaining four scenes show several standards across them; the placement of the weir, the visible netting and chambers, lack of fish in the nets, the inclusion of Rope manipulators (Type. 1) and Basket attendants (Type. 2). There is also much innovation within this theme which may be explained by both artistic influence from other tombs and the limited depiction of the theme. The rare use of the scene may have given the artists licence to further embellish the scene as there was no strict standards outside those listed above; furthermore, influence from other tombs would encourage the replication of minor details and perhaps push the artist further to individualize and

⁷⁴² See Appendix 2: Weir Detail Tables L, N, P, R.

⁷⁴³ See Appendix 2: Weir Detail Table S.

⁷⁴⁴ Ty [35], Kagemni [94], Mehu [121].

⁷⁴⁵ Faulkner, *Dictionary*, 225.

enhance the details of the scene. Some variations include the attachment of a float in the tomb of Ty [35], the inclusion of extra or new attendants such as Weir handlers (Type. 4) and Paddlers (Type. 3). The replication of the shape of the tombs of Niankhkhnum and Khnumhotep [27] and Mehu [121], versus the shape of the net in Ty [35] and Kagemni [94] and the fish positioned at the mouth of the weir in Kagemni [94] and Mehu [121].

Chapter 10: Unique Fishing Scenes



Mereruka [103]

Introduction

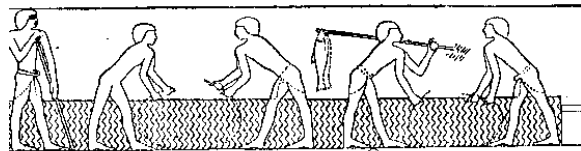
Whilst the previous fishing methods that have been discussed in this study are known to occur multiple times, the following two scenes are evidently unique. The first, a hand net fishing scene attested in the Giza tomb of Nefer (1) [78] dating to the period between the reigns of Unis and Teti (V.9-VI.1). The other depicts minor figures spearfishing in the marshes in the tomb of Mereruka [103] at Saqqara from the early Sixth Dynasty (VI.1M-L).⁷⁴⁶ These two scenes are investigated in similar detail to those that have been examined in previous chapters. As there are only singular examples, the appearance and documentation of these scenes are the most relevant aspects for this study.

Small Hand Net

The scene in the tomb of Nefer (1) [78] depicts two pairs of minor figures holding the ends of a hand-net, similar to a larger dragnet. One figure from the pair on the right is holding a long pole on which there are two fish hung. The entire scene is being surveyed by a supervisor to the left, leaning on a staff.⁷⁴⁷

Net Composition

The nets are small and semi-circular in shape with only the bottom rope visible. There is no netting depicted nor is there fish shown within them.⁷⁴⁸ The



Nefer (1) [78]

fish on the pole are difficult to identify due to their preservation. Their general body shape suggests a limited selection of species,⁷⁴⁹ the position of the dorsal fin and the shape of the head excluded species of the *Mormyridae* family, *Lates*, *Tilapia sp.* or the *Mugil sp.*. Therefore, the most likely identification for these fish is either the *Labeo* or *Barbus* from the *Cyprinidae* family.

⁷⁴⁶ The occurrence of this minor spearfishing scene is different to those that illustrate a son spearfishing on the tomb owner's boat. The latter occur in the tombs of Hesimin (M22) [56], CG 1782/ 1786 [95], Mereruka [103], Remni/Merwi [109], Heri/Meru [118], Nekhebu [119], Kairer [66], Niankhpepy/Khnumhotep/Heti [123] and Cairo Frag. 6.12.24.5 [152].

⁷⁴⁷ This is a common addition to dragnet scenes. See Appendix 2: Dragnet Detail Table H.

⁷⁴⁸ See Appendix 2: Dragnet Detail Table B.

⁷⁴⁹ These include the *Petrocephalus*, *Gnathonemus* or *Hyperopisus* of the *Mormyridae* family, *Mugil sp.*, and *Labeo* or *Barbus* of the carp family (*Cyprinidae*).

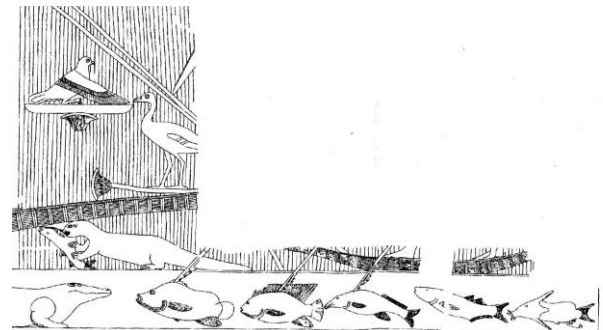
Minor Figures

The minor figures are depicted in uniform positions. All are shown standing in an open stance (Type A), and leaning forward.⁷⁵⁰ The arms are shown at 45° angles from the body and are bent at the elbows, the arm in the foreground (holding the end rope) is in a lower position. The only exception is the fisherman in the pair on the right who is shown with one arm lifted higher, at a 90° angle, holding a pole resting on his shoulder. The supervisor is in an open stance position (Type A), torso vertical with the one arm across the chest;⁷⁵¹ the elbow is bent at a 45° angle allowing the hand to grasp the tip of the staff. The second arm is resting along the slightly diagonal plane of the staff.⁷⁵²

All of the men, including the supervisor, are shown with an athletic body (Type A build) and a full head of hair (Type A hair). All, except one figure (naked, Type A clothing), are wearing a short kilt (Type C) with no genitals exposed.⁷⁵³

Minor Spearfishing

Not to be confused with family members or esteemed individuals⁷⁵⁴ shown spearfishing from a tomb owner's boat,⁷⁵⁵ this scene depicts men on a small skiff in front of Mereruka [103] and his family who are possibly performing the ritual 'pulling of the papyrus' or *ssš w3d*. The majority of this scene is missing; only the boat, feet of the figures, spearheads and the fish in the water band are preserved.⁷⁵⁶



Mereruka [103]

⁷⁵⁰ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁷⁵¹ See Appendix 4: Typology; Basic Leg Positions for explanation of types.

⁷⁵² This is a standard pose for a supervisor. See discussion in Chapter: 3 Dragnets: Minor figure Positions Supervisors; See also Appendix 2: Dragnet Detail Table N.

⁷⁵³ See Appendix 4: Typology; Individual Characteristics and Clothing for explanation of types.

⁷⁵⁴ Woods, *A Day in the Marshes*, 55 ff.

⁷⁵⁵ These individuals are examined in Chapter 11: Spearfishing. Occurring in the tombs of Hesimin (M22) [56], CG 1782/ 1786 [95], Mereruka [103], Remni/Merwi [109], Heri/Meru [118], Nekhebu [119], Kairer [66], Niankhpepy/Khnumhotep/Heti [123] and Cairo Frag. 6.12.24.5 [152].

⁷⁵⁶ The Oxford Expedition to Egypt's Database (OEE) lists Neuchâtel Mus. No. 321 as another example of this theme, yet, after careful examination, it appears to show a paddling pole rather than a spear, and no fish are present within its water band. Porter and Moss additionally describe the scene as that of fighting boatmen, and therefore it is not included in this discussion. PM, III, 570.

Fishing Equipment

Three bident spears, with the tips lashed at different intervals along the shaft (Type 2 spears),⁷⁵⁷ are being thrust in a diagonal direction into the water band from a small papyrus skiff. Brewer and Friedman suggest that the bident spears are a religious and political symbol⁷⁵⁸ reserved for the tomb owner to make a statement of authority and prowess. This scene, however, shows that it was acceptable for this type of spear to be used by others.⁷⁵⁹

Each of the spears are artistically linked to one type of fish; identified as *Lates*, *Tilapia sp.* and a *Mormyrus Caschive*. The spear head is not shown piercing the flesh as seen in larger spearfishing scenes,⁷⁶⁰ but are depicted overlaying the bodies.

The boat that is used in this scene appears to replicate the tomb owner's boat in the same scene, with Type A (horizontal ends) boat structure and Type A detailing (lashing and reed) applied to the boat.⁷⁶¹

Minor Figures

Due to the poor state of preservation, the presence of three spears suggests that a minimum of three individuals are on the boat; however, only three (singular) feet are visible. The largest is possibly orientated in a striding position (Type B) as the back foot is lifted onto the ball of the foot. This corresponds to that of the tomb owner when spearfishing and it is most likely that this position is also replicated for the other minor figures in the boat.⁷⁶²

⁷⁵⁷ Brewer-Friedman, *Fish and Fishing*, 24. See Chapter 11 Spear-fishing: Spears; Also, Appendix 2: Spearfishing Detail Table D.

⁷⁵⁸ Brewer-Friedman, *Fish and Fishing*, 24.

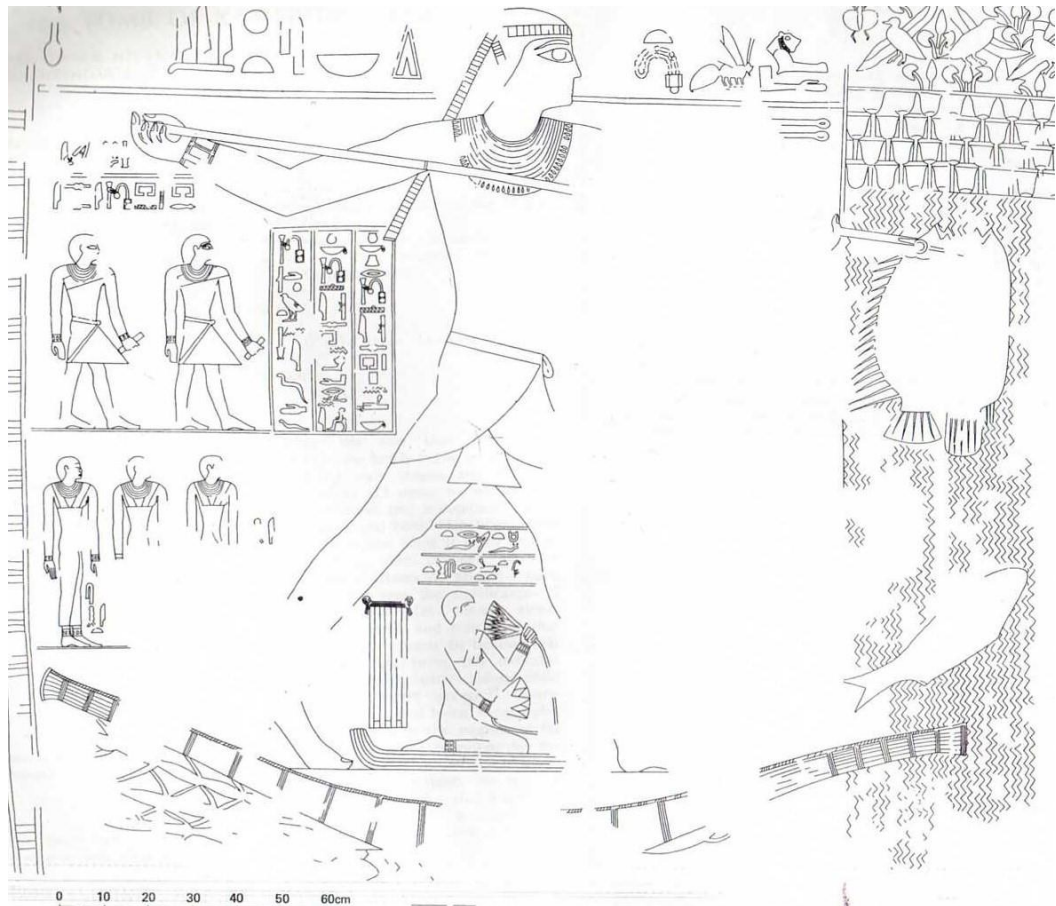
⁷⁵⁹ It is conceivable that the persons within the boat are of high or noble status given their position in front of Mereruka [103]. However, fishermen are also placed in close proximity. For example, anglers and lave net fishermen as seen in, but not limited to, Ty [35], Senedjem-Ib/ Inti [59], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Hesi [110], Pepyankh/ Henykem [146], and Ankhtyfy [148].

⁷⁶⁰ See Appendix 2: Spearfishing Detail Table C.

⁷⁶¹ See Appendix 4: Typology; Boat Structure and Detailing for explanation of types.

⁷⁶² See Appendix 4: Typology; Basic Leg Positions, as well as Individual Characteristics and Clothing for explanation of types.

Chapter 11: Spearfishing



Kahep/ Tjeti-Iker [140]

Introduction

The tomb owner shown spearfishing is one of the most recognisable images in tomb art. This figure differs from those discussed elsewhere in this study as the scene depicts the tomb owner fishing for pleasure, not for industry or employment. The associated captions suggest that the locations shown in these scenes have been cultivated or created in the naturally occurring marshlands of the Delta, as well as at other sites near Memphis and further south in Upper Egypt.⁷⁶³ The natural inundation and receding cycles of the Nile River aided this by creating marshlands and natural pools along its length often lasting from one flood till the next.⁷⁶⁴ This cycle would have been exploited by the Egyptians, who used and reinforced naturally occurring water features instead of creating new marshlands or pools. The sites could change locations or size from year to year depending on environmental variables, which may explain the lack of information from ancient sources as to the exact locations of the marshland and pools.⁷⁶⁵ The act of preparing specific fishing grounds suggests that spearfishing was indeed an important activity exclusive to the elite.

Brewer and Friedman suggest that tomb art was used to convey ritual, political, and religious statements through the use of certain iconography such as the spearing of two unlikely paired fish.⁷⁶⁶ Given the significance that may be deduced from the frequent portrayal and size of the depiction of this theme, it would be a mistake to assume that the portrayal is simply presenting an event that happened in the official's lifetime. The theme may well have also been used to express the official's status, wealth and power. The use of the spear by minor figures in the spearfishing scene is infrequent and usually restricted to the son or close family member perched in the same boat as the tomb owner. In reality, private use of the spear for fishing by the non-elite is likely, as it was a less expensive and an easily repairable method of catching small quantities of fish.

The aims of the present study rule out an investigation of the large number of details available in the spearfishing theme. Consequently, the aspects to be investigated will be restricted to those relating specifically to the act of fishing by the tomb owner. Multiple studies focus on this theme, its significance and its details, which will not be addressed here.⁷⁶⁷ The aim of this chapter is to gain an

⁷⁶³ Woods, *A Day in the Marshes*, 3-4.

⁷⁶⁴ Peters, 'Mesolithic fishing'. 35.

⁷⁶⁵ Woods, *A Day in the Marshes*, 2-3; See also Discussion in Chapter 1: Introduction: The Marshlands and River Nile in Marsh Scenes.

⁷⁶⁶ Brewer-Friedman, *Fish and Fishing*, 24.

⁷⁶⁷ These studies include Woods, *A Day in the Marshes*, 150-192; Sahrhage, *Fischfang*, 87-115; van Elsbergen, *Fischerei*, 9-60; Brewer – Friedman, *Fish and Fishing*, 21-46. Discussions regarding reality and symbolism for the afterlife see: Davies, *Deir el-Gebrâwi*, I, 12; Harpur, *Decoration*, 181, n. 131; Decker, *Sport and Games in Ancient Egypt*, 158-167; Kanawati, *The Tomb and Beyond*, 92-94. Brovarski, *Senedjemib Complex*, I, 38, n. 25; Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*, 168-69; Malek, *Egyptian Art*, 129. Robins, *Women in Ancient Egypt*, 187-189; Germond – Livet, *An Egyptian Bestiary*, 99-101. And

overview of the occurrence and development of the scene that will contribute to the discussion of artistic influences later in this study.

Occurrence of Scene

Fourth Dynasty

The tomb of Nefermaat [2] at Maidum is credited with the first known non-royal example of the spearfishing theme; unfortunately, however, it has been destroyed. This non-royal example, mentioned by Mariette⁷⁶⁸ and Harpur⁷⁶⁹, suggests an early development for this scene within the Fourth Dynasty. Outside the scope of this study, Petrie found a fragmentary First Dynasty tablet at Abydos which depicts a king spearfishing.⁷⁷⁰ Further royal evidence occurs on the monuments of Userkaef and Sahure.⁷⁷¹ Brewer and Friedman discuss the adaptation of details from the royal scenes into the elite representations following the occurrence of the theme in the early Fifth Dynasty royal monuments.⁷⁷² The numerous comparable details such as the stance of the tomb owner, water mound and clothing and accessories certainly support this adaptive process. It is unfortunate that the scene in Nefermaat [2] is destroyed, and that there are no known attestations prior to these monuments. Scenes from earlier tombs might have either confirmed or challenged this theory depending on the type of details that were included.

Tomb	Location	Date
Nefermaat [2]	Maidum	IV.1-M

Table 11.1 Fourth Dynasty Attestations

finally, on the symbolism of the *Tilapia* and *Lates*: Lates Niloticus: Brewer, 'Fish', *OEAE* I (2001), 535; Gamer-Wallert, *Fische*, 128-130; Gamer-Wallert, 'Fische, religiös', *LÄ* II (1977), 230. *Tilapia Niloticus*: Gamer-Wallert, *Fische*, 110-111; Dambach – Wallert, 'Das Tilapia-Motiv in der altägyptischen Kunst', *CdÉ* 41 [81] (1966), 283-294; Sahrhage, *Fischfang*, 89-94, 137-138; Wilkinson, *Reading Egyptian Art*, 111; Robins, 'Problems in Interpreting Egyptian Art', *DE* 17 (1990), 50-52; Brewer, 'Fish', *OEAE* I (2001), 533; Brewer – Friedman, *Fish and Fishing*, 77; Gamer-Wallert, 'Fische, religiös', *LÄ* II (1977), 232-233. For the significance of the spearing of the two fish from Upper and Lower Egypt see: Kamrin, *The Cosmos of Khnumhotep II at Beni Hasan*, 113; Binder, 'The Tomb Owner Fishing and Fowling' in: Donovan – McCorquodale (eds.), *Egyptian Art*, 116.

⁷⁶⁸ Mariette, *Mastabas de l'Ancien Empire*, 473.

⁷⁶⁹ Harpur, *Maidum*, 56-7, 180, 286 nn. 3-5.

⁷⁷⁰ Petrie, *Royal Tombs*, II, pl.7; Smith, *HESPOK*, 121-122, fig. 37.

⁷⁷¹ Woods, *A Day in the Marshes*, 26-7.

⁷⁷² Brewer-Friedman, *Fish and Fishing*, 24.

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Fifth Dynasty

The following elite example occurs in the mid-Fifth Dynasty tomb of Irenkaptah [22] at Giza. This scene is a composite fishing and fowling scene, which a study by Woods suggests was common from the mid-Fifth Dynasty onwards.⁷⁷³

Tomb	Location	Date
Irenkaptah [22]	Giza	V.6
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Neferseshemptah and Sekhentiu [33]	Saqqara	V.6-8
Hotepherakhti [34]	Saqqara	V.6-8
Neferirtenef [51]	Saqqara	V.8-9
Akhetmehu [53]	Giza	V.8-9
Kednes [54]	Saqqara	V.8-VI.1
Hesimin (M22) [56]	El-Hawawish	V.8L-9E
Kaiemankh [57]	Giza	V.8L-9E
Senedjem-Ib/ Inti [58]	Giza	V.8L-9
Nimaatre [59]	Giza	V.8L-9
Hem-Min (M43) [60]	El-Hawawish	V.9E
Nebet [62]	Saqqara	V.9
Iynofert/Shanef [63]	Saqqara	V.9
Kairer [66]	Saqqara	V.9
Khunes [67]	Zawyet el-Maiyetin	V.9
Akhethotep [71]	Saqqara	V.9
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Seshemnofer IV [77]	Giza	V.9-VI.1
Akhmerutnesut [82]	Giza	V.9-VI.1
Senedjem-Ib/ Mehi [76]	Giza	V.9L
G2360 [87]	Giza	V.-VI
Berlin Fragment 14103 [88]	Unknown	V.-VI
Borchardt Fragment [90]	Abusir	V.-VI
Mehu [91]	Giza	V.I-VI.1
Paris Louvre E. 26092 [92]	Saqqara	V.L-VI

Table 11.2 Fifth Dynasty Attestations

As indicated in the above table (Table 11.2), spearfishing is largely lacking from tomb art between the Fourth and mid-Fifth Dynasties. Following this period the theme primarily occurs in Saqqara and Giza but it is also known in the provincial sites of El-Hawawish and Zawyet el-Maiyetin. The majority of the standard features were established during this time, especially in relation to the scenes from Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], and Neferirtenef [51]. The scene from

⁷⁷³ Woods, *A Day in the Marshes*, 323.

Chapter 11: Spearfishing

Hesimin (M22) [56] introduced the concept of a minor figure spearfishing from the same boat as the tomb owner, a rare detail. It is clear that this theme increased in popularity during the latter half of this dynasty and continued to feature in the decorative programs of the elite until the end of the Old Kingdom.

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
CG 1782/1786 [95]	Dahshur	VI.1
In – Snefru- Ishtef [96]	Dahshur	VI.1
Iteti/ Shedu [97]	Deshasha	VI.1
Mereruka [103]	Saqqara	VI.1M-L
Henqu/ Kheteti 1 [105]	Deir el-Gebrawi	VI.1L
Seankhuipah [106]	Saqqara	VI.L-2E
Mereri [108]	Saqqara	VI.1L-2E
Remni/ Merwi [109]	Saqqara	VI.1L-2E
Hesi [110]	Saqqara	VI.1L-2E
Inumin [111]	Saqqara	VI.1L-2E
Bawi (G126) [113]	El-Hawawish	VI.1L-2
Wernu [114]	Saqqara	VI.1L-2
Heri/ Meru [118]	Saqqara	VI.2E
Nekhebu [119]	Giza	VI.2
Henqu/Iy...f II [120]	Deir el-Gebrawi	VI.2
Mehu [121]	Saqqara	VI.2
Khewen-wekh/Tjetji [122]	Quiser el-Amarna	VI.2
Niankhpepy/Khnumhotep/Heti [123]	Zawyet el-Maiyetin	VI.2
Tomb G97 [125]	El-Hawawish	VI.2L-3
Hesi-min/ Sesi (F1) [127]	El-Hawawish	VI.2-4E
Idu 1 [128]	Dendera	VI.3-4E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	Meir	VI.3-4E
Meryrenefer/ Qar [133]	Giza	VI.3-4
Seshemnofer/ Ifi [134]	Saqqara	VI.3-4
Ihy [137]	El-Khokha	VI.4E-M
Idu/ Seneni [138]	Qasr el-Sayad	VI.4E-M
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M
Djau [141]	Deir el-Gebrawi	VI.4M
Sabni (1) [142]	Aswan	VI.4L
Sabni (2) [143]	Aswan	VI.4L
Khunes (A6) [144]	Aswan	VI.4L
Pepyankh/Henykem [146]	Meir	VI.4L
Shepsipumin/Kheni [147]	El-Hawawish	VI.4L
Ankhtyfy [148]	Mo ^c Alla	VI.4L-VIII.E
Cairo Fragment 6.12.24.5 [152]	Saqqara	VI
Pepyankh/Khuwi [153]	el-Kom el-Ahmar	VI
Ma [154]	Zawyet el-Maiyetin	VI
Dauhep [155]	Saqqara	VI
Mastaba B [156]	Saqqara	VI

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Tomb	Location	Date
Khuwi/Tjeti-Iker [157]	Gohainna	VI.L-VIII.E
Mery Aa [158]	El-Hagarsa	VI.L-VIII.E
Wahi (D4) [162]	El-Hagarsa	VIII
Baketi I [163]	Beni Hassan	VIII-FIP
MFA 13.5965 [165]	Giza	OK

Table 11.3 Sixth Dynasty Attestations

There was a slight increase in frequency of the scene in the Sixth Dynasty with the locations extending beyond the two primary cemeteries of Saqqara and Giza. Saqqara attestations are common in the first half of the dynasty which is to be expected with the royal cemetery established there. Giza is noticeably lacking in scenes of this nature, with only three examples, two of which are in the latter half of the dynasty. Nekhebu [119] built his tomb at Giza owing to familial links with the Senedjem-Ib Complex established in the Fifth Dynasty.⁷⁷⁴ Harpur, Simpson and Porter and Moss connect Meryrenefer/Qar [113] to another tomb at Giza, that of Idu.⁷⁷⁵ All three authorities suggest that Meryrenefer/Qar [113] and Idu are father and son or vice versa.⁷⁷⁶ In addition, the posts of Meryrenefer/ Qar [113] as *imy-r niwt 3ht-hwfw* “overseer of the pyramid town of Akhet-Khufu.” and *imy-r niwt Njry-Mn-k3w-R*, “overseer of the pyramid town Netjery-Menkaure” may have made Giza a suitable location for his tomb.⁷⁷⁷ The use of this scene in the provincial regions is significantly higher which conforms to the movement of officials' burials to the provincial areas during this dynasty.

There are two variations of features worthy of mention in the Sixth Dynasty. The first has been discussed in Chapter 10: Unique Fish Scenes, with the use of spears by minor figures on a separate boat. The second is found within the tomb of Khuwi /Tjeti-Iker [157] which depicts a vibrant spear fishing scene with two extra motifs that are not observed in any other spearfishing scene within the Old Kingdom. In this scene attendants are placed directly behind the major figure and appear to be washing or cleaning the feet of the tomb owner. Further to the left of this motif there is a canopy and other minor figures attending to the seated male and steering the boat. El-Masry suggests that the canopy is reminiscent of the canopies represented in sailing scenes of other tombs, such as Kahep/Tjeti-Iker [140] and Shepsipumin/Kheni [147].⁷⁷⁸ He further suggests that the seated male figure is a statue and that the scene is a combination of the spearfishing theme and the ‘journey to the west’

⁷⁷⁴ Harpur, *Decoration*, 287.

⁷⁷⁵ Harpur, *Decoration*, 289: PM, III.185-6: Simpson, *Qar and Idu*, 1-2.

⁷⁷⁶ Harpur, *Decoration*, 289: PM, III.185-6: Simpson, *Qar and Idu*, 1-2. Simpson suggests that the two tombs are dated to the same time period and an argument can be made for each to be the father or son. Harpur lists Idu as the father yet uses a double ended arrow to show that they may be exchanged.

⁷⁷⁷ Simpson, *Qar and Idu*, 18.

⁷⁷⁸ El-Masry, *Two Old Kingdom Tombs*, 92-94, fig. 2.

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theme.⁷⁷⁹ Woods, however suggests that the minor figure is offering incense to the seated male. Consequently, it is not a statue at all as this is not the usual posture when representing statuary in the Old Kingdom wall scenes.⁷⁸⁰ It is likely that the scene is a combination of two themes, perhaps spearfishing and cruise, or a special event which has taken place in the lifetime of Khuwi/Tjeti-Iker [157].

Distribution

Geographically the method of spearfishing might have been performed at any point along the Nile river. However, the act of spearfishing for the elite was a leisure activity and most likely performed in a specific setting. Basing her case on titles and the hieroglyphic inscriptions associated with marsh scenes, Woods suggests that there were two settings: (1) the natural marshlands of the Delta and Upper Egypt as well as (2) the specifically created pools near to the capital of Memphis.⁷⁸¹ The status of the official would have allowed him to participate in this elitist activity, the ability to travel long distances or create time to go hunting perhaps as part of the pattern of their life's responsibilities. There is no restriction on either the location of this act nor on the artistic use of the theme as this would have been a highlight the tomb owner would have wished to portray for affirmation of his status and any iconographical significance.

The Minor details

Fish Species

In the iconography associated with this theme there are almost always two fish shown pierced at the tip of the bident spear. Typically, these two fish are the *Tilapia sp.* and the *Lates* and are usually shown enlarged compared to other species highlighting their significance within the scene.

The scene from Irenkaptah [22] is poorly preserved; only the water mound and some distinguishing features of the speared fish remain.

Woods suggests⁷⁸² that there is a *Tilapia sp.* and a *Lates* speared; yet the lack of a dorsal or caudal fin for the first fish hinders a positive identification. The second fish, given the rounded caudal fin, appears most likely to be a *Lates*. The tomb of Niankhkhnum and



Niankhkhnum and Khnumhotep
[27]

⁷⁷⁹ El-Masry, *Two Old Kingdom Tombs*, 92-94.

⁷⁸⁰ Woods, *A Day in the Marshes*, 61: Eaton-Krauss, *Statuary in Private Tombs of the Old Kingdom*, 6-7.

⁷⁸¹ Woods, *A Day in the Marshes*, 3-4.

⁷⁸² Woods, *A Day in the Marshes*, Appendix 3 [criterion 43].

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Khnumhotep [27] has two scenes which depict the tomb owner spearing fish. Both show two *Tilapia* sp. speared on each bident. This, as will be seen, is not the typical arrangement.

The pairing of the *Tilapia* sp. and *Lates* is typical for the representation of fish speared by the major figure for the remainder of the Old Kingdom.⁷⁸³ The identification of the fish is determined by the characteristics of the dorsal spines and fins as well as the caudal fin.⁷⁸⁴ Typically, the *Tilapia* is shown with a fully extended and rectangular shaped dorsal fin from the nape to near the base of the tail. The caudal fin is trapezoidal with a straight edge to its end. Conversely, the *Lates* is shown with both dorsal spines (at the nape) and a dorsal fin (directly behind the spines). The caudal fin is fan-like in shape, rounded instead of straight edged. While not all depictions are so detailed, the caudal fin is the best identifier.

In addition to the scenes in Niankhkhnum and Khnumhotep [27] where two *Tilapia* sp. are speared on each bident there are two further exceptions. The first is found in the tomb of Akhmerutnesut [82] where the speared fish are simplified and lack many distinguishing features. The features that are present suggest that they are possibly the *Barbus bynni*. The second exception is found in the late Sixth Dynasty tomb of Khunes (A6) [144] located at Aswan. This scene depicts two *Tilapia* sp. speared in a similar fashion to Niankhkhnum and Khnumhotep's [27] examples. It is unlikely that the late Sixth Dynasty tomb of Khunes (A6) [144] was influenced by the tombs of Akhmerutnesut [82] and Niankhkhnum and Khnumhotep [27] owing to the distance in location and time between the monuments. Furthermore, there is a second scene within the tomb of Khunes (A6) [144] that portrays the spear piercing a *Tilapia* sp. and *Lates*, a typical paired set of fish.

Occasionally a minor figure accompanies the spearfishing tomb owner. This occurs in ten Old Kingdom tombs ranging from the later Fifth to the late Sixth Dynasty.⁷⁸⁵ Of these examples the fish on the spears in Hesimin (M22) [56], In-Snefru-Ishtef [96], Remni/Merwi [109], and Heri/ Meru [118] have not survived. The minor figures have speared the typical set of fish, a *Tilapia* sp. and *Lates*, in the scenes of Nekhebu [119], Niankhpepy/Khnumhotep/Heti [123], Ibi [130] and Cairo Fragment 6.12.24.5 [152]. These represent the majority of the available evidence and thus it may be suggested that this was the

⁷⁸³ Hotepherakhti [34], Neferirtenef [52], Kaiemankh [57], Senedjem-Ib/ Inti [59], Iynofert/Shanef [63], Kairer [66], Akhethotep [71], In-Snefru-Ishtef [96], Hesi [110], Inumin [111], Bawi (G126) [113], Heri/ Meru [118], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Khewen-wekh/Tjetji [122], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Djau [141], Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144] Pepyankh/Henykem [146], Shepsipumin/ Kheni [147], Ankhtyfy [148], Khuwi/ Tjetji-Iker [157], Mery Aa [158], Wahi (D4) [162].

⁷⁸⁴ See Appendix 3: Fish Profiles for *Tilapia* spp. and *Lates*.

⁷⁸⁵ In the tombs of Hesimin (M22) [56], Kairer [66], CG 1782/1786 [95], In -Snefru-Ishtef [96], Remni/ Merwi [109], Heri/ Meru [118], Nekhebu [119], Niankhpepy/Khnumhotep/Heti [123], Ibi [130], and Cairo Fragment 6.12.24.5 [152].

standard composition for this minor motif. Unusual species used for this detail do occur in Kairer [66] where a catch of a 'catfish' is depicted⁷⁸⁶ and the scene from CG 1782/1786 [95] shows a *Mugil sp.*

Three variant methods show how the fish were pierced by the spear. These are (1) through the head, (2) through the eye and finally (3) in the body. The most commonly attested method is (2) through the eye, followed by (1) through the head. During the Fifth Dynasty, fish pierced through the eye were most frequent between the reigns of Niuserre (V.6) and Unis (V.9), after which the method is not again known until later in the reign of Teti (VI.1L).⁷⁸⁷ Fish shown pierced through the head (1) are attested in the Fifth and early Sixth Dynasty, increasing slightly in frequency in the latter half of the Sixth Dynasty after the reign of Pepy I (VI.2).⁷⁸⁸ The final style (3) which shows the spear through the fishes' body is infrequent and while appearing in the Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27], the style is primarily attested in the Sixth Dynasty after the reign of Teti (VI.1).⁷⁸⁹ In rare instances, the barbs are visible; these occurrences are known in all types of piercings mentioned above.⁷⁹⁰

The *Tilapia sp.* and the *Lates*

It is not the purpose of this study to investigate in detail the iconography and theories behind the choice of these two species. Yet a general overview of the practical and ideological implications of representing these two species together is useful in determining the answer to the question, why were the *Tilapia sp.* and *Lates* the species chosen for the spear? The two species live in different environments within the river, the *Lates* preferring the deeper water of the mid river, and the *Tilapia sp.* inhabiting the inshore waters with mass vegetation.⁷⁹¹ The variation in habitats would make it very difficult to spear both species within one thrust.⁷⁹² The juvenile *Lates* will inhabit shallower waters⁷⁹³ for defence, shelter and food (consuming *Tilapia sp.* and cichlid eggs amongst others), later moving to

⁷⁸⁶ Daoud, 'The Mastaba of Kairer', *ASAE* 75 (2000), 100.

⁷⁸⁷ Hotepherakhti [34], Akhetmehu [53], Kaiemankh [57], Iynofret/Shanef [63], Akhethotep [71], Mereruka [103], Mereri [108], Inumin [111], Nekhebu [119], Mehu [121], Khewen-wekh/Tjetji [122], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147].

⁷⁸⁸ Irenkaptah [22], Senedjem-Ib/ Inti [59], Akhmerutnesut [82], Berlin Fragment 14103 [88], Iteti/ Shedu [97], Hesi [110], Ibi [130], Idu/ Seneni [138], Djau [141], Sabni (I) [142], Khunes (A6) [144] and MFA 13.5965 [165].

⁷⁸⁹ Bawi (G126) [113], Heri/ Meru [118], Henqu/Iy...f II [120], Tomb G97 [125], Sabni (2) [143], Ankhtyfy [148], and Mery Aa [158].

⁷⁹⁰ In the scenes from Niankhkhnum and Khnumhotep [27], Akhetmehu [53], Khewen-wekh/Tjetji [122], Ibi [130], Djau [141] and Sabni (1) [142].

⁷⁹¹ Brewer- Friedman, *Fish and Fishing*, 74, 77.

⁷⁹² Kanawati, *The Tomb and Beyond*, 93.

⁷⁹³ At sites in the Sudan, the *lates* is only captured at small lengths. This suggests that the inhabitants did not fish in deeper waters (no boats or rafts). Thus, these smaller fish are the sizes that are available in the in-shore waters accessible to the people fishing; Peters, 'Mesolithic fishing', 39.

the deeper waters when they mature.⁷⁹⁴ These behaviours allow for the remote possibility of the two species being caught together by spear. Due to the large sizes the *Lates* can reach, the possibility of spearing both the *Lates* and *Tilapia sp.* at similar sizes, as portrayed within the tomb wall scenes, infers that the *Lates* are caught within the earlier stages of maturity. The chances of capturing these fish at similar sizes increased if fishing took place in the marshlands and pools that are thought to have been created.⁷⁹⁵ The reason is a migration of fish into the shallower areas created by the flooding waters for reproduction. Juvenile fish are more likely to not follow the receding waters and become trapped.

Apart from the behaviour of the juvenile fish, the artistic factors of the scene should not be ignored. It is likely that in depicting fish of the same size the artist was aiming for an aesthetic balance in the scene rather than a representation of the true size of the caught fish.

Symbolically, it is generally assumed that the two fish together represent the unification of the two lands of Egypt. The *Lates* is a symbol of Upper Egypt, where it is primarily found in great quantities, and the *Tilapia sp.* is most common in the shallow waters of the Delta therefore representing Lower Egypt.⁷⁹⁶ Kanawati suggests that the artist may be depicting two preferred types of fish on the same spear showing them in a dominant position or perhaps showing the rare occasion of the spearing of both species together, a great achievement worth recording.⁷⁹⁷ The first suggestion has validity, as the *Tilapia* and *Lates* are well known and liked for their meat.⁷⁹⁸ Occasionally a 'memory' was included in tomb decorative programs; yet the mass production of this 'memory' overshadows the possibility that all officials were able to perform the feat of spearing two fish together. It is possible that while some had caught both, the scene developed more as a symbolic representation than as a factual message. Thus, depiction of prowess in the sport of spearfishing may have been utilized as a visual demonstration of the wealth, power and dignity of the tomb owner.

Bident Spear

The spear that is used within these scenes is referred to as a 'bident' spear and is constructed of a wooden shaft onto which one of two types of spearheads is attached. Each point displays a barbed edge.⁷⁹⁹ The two types represented are:

Type A: a forked head with both points at equal lengths lashed elaborately to the shaft.

⁷⁹⁴ Brewer-Friedman, *Fish and Fishing*, 75.

⁷⁹⁵ See discussion in Occurrence section of this chapter; Woods, *A Day in the Marshes*, 3-4; Peters, 'Mesolithic fishing', 35, 38.

⁷⁹⁶ Brewer-Friedman, *Fish and Fishing*, 79; Kanawati, *The Tomb and Beyond*, 94.

⁷⁹⁷ Kanawati, *The Tomb and Beyond*, 94.

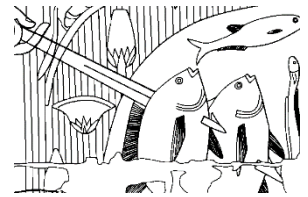
⁷⁹⁸ See Appendix 3: Fish Profiles: *Lates* and *Tilapia*.

⁷⁹⁹ See Appendix 2: Spearfishing: Detail Table D.

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Type B: two tips lashed separately and set at different intervals along the shaft depicting one prong longer than the other.

The spearheads are infrequently represented in the scene for two reasons: most of them are embedded within the flesh of the fish and secondly, the upper portions of the scene are often poorly preserved. The surviving evidence suggests that the Type B spearhead is the most popular type used in both the Fifth and Sixth Dynasty. The scenes from Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and Kaiemankh [57] have Type B spearheads which is not again attested till the Sixth Dynasty, when there are five examples.⁸⁰⁰ Connections have been highlighted in the chapter on artistic influences between these Sixth Dynasty tombs,⁸⁰¹ and the source clearly seen in the earlier Fifth Dynasty examples. Type A spears, first known in the scene from Neferirtenef [52], are also found in the contemporary tomb of Akhetmehu [53] at Giza, and in the slightly later tomb of Hesimin (M22) [56] at El-Hawawish. Although there is a long period of time between Hesimin (M22) [56] and Kahep/ Tjeti-Iker [140], they are at the same location, which provides a strong link between monuments



Niankhkhnum and
Khnumhotep [27] Type B
Spear



Neferirtenef [52] Type A
Spear

The angle at which the bident spear is held varies little over the course of the Old Kingdom. According to Kanawati the typical angle is between zero to twenty degrees which is considered standard within the Old Kingdom.⁸⁰² Woods, further differentiates⁸⁰³ these figures by identifying those held at 1° - 6°, ⁸⁰⁴ and those greater than 23 ° ⁸⁰⁵ which are less common and primarily found in provincial tombs.

There are several scenes, all within the provincial region, which have the addition of vertical lines at equal intervals along the shaft of the spear.⁸⁰⁶ The continuation of this minor detail within the tombs of Hesimin (M22) [56], Bawi (G126) [113] and Kahep/ Tjeti-Iker [140] may have been facilitated by location. Yet its appearance in Meir and Deir el-Gebrawi may suggest that the artist was familiar with these works or that the work was completed by a close colleague of the same artist.⁸⁰⁷ The attachment

⁸⁰⁰ The Memphite tombs of Mereruka [103], Inumin [111], Nekhebu [119] and provincial examples in Pepyankh/ Heri-Ib/ Neferka / Heny [131] and Pepyankh/ Henykem [146] of Meir.

⁸⁰¹ See Chapter 20: Artistic Influences I: Tracking minor details.

⁸⁰² Kanawati, *The Tomb and Beyond*, 94.

⁸⁰³ Woods, *A Day in the Marshes*, Appendix 3 criteria [37] and [38].

⁸⁰⁴ As seen in Hotepherakhti [34], Akhethotep [71], Henqu/ Kheteti 1 [105], Remni/ Merwi [109], Hesi [110], Nekhebu [119], Mehu [121], Khewen-wekh/Tjetji [122], Ibi [130], Kahep/ Tjeti-Iker [140], and Baketi I [163].

⁸⁰⁵ Found in Niankhkhnum and Khnumhotep [27], Hesimin (M22) [56], Henqu/Iy...f II [120], Ankhtyfy [148], Mery Aa [158] and Wahi (D4) [162].

⁸⁰⁶ These are found in Hesimin (M22) [56], Bawi (G126) [113], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Kahep/ Tjeti-Iker [140].

⁸⁰⁷ Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

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of the spear tips is rarely shown in detail. The individual wrapping of each strap of binding can be seen in the scenes of Hesimin (M22) [56], Mereruka [103], Nekhebu [119], and Pepyankh/ Heri-Ib / Neferka/ Heny [131].

The final detail relating to the spear is the addition of a retrieving line. The retrieving line is attached to the spear near the spear tip, the remaining length of the rope is held coiled in the hand. This line aids the retrieval of the spear once it has been thrown. This attachment is common in hippopotamus hunting scenes yet only occurs twice in the spearfishing theme. Attestations are found in the Sixth Dynasty tomb of Idu 1 [128], followed by the later tomb of Ankhtyfy [148].

Mound of Water

The mound or 'hill' of water typically appears at the prow of the boat. This is an essential addition to the scene and is standard from the mid Fifth Dynasty onwards, with only seven exceptions.⁸⁰⁸ The mound often encapsulates the speared fish which are positioned in the top half of the mound with smaller fish species surrounding them. The mound varies slightly from scene to scene with the main divergence concentrated on the height and its general shape.



Mereruka [103]

The scenes from Niankhkhnum and Khnumhotep [27] both display mounds that are at waist height of the tomb owner. This explains the need for a sharply angled spear for it to reach the mound. This height of water has a short date range (V.6-V.9E) and is only found in two other scenes from Hesimin (M22) [56] and Hem-min (M43) [61]. Irenkaptah [22] shows the first known attestation of the shoulder high mound which is found in scenes through to the latter half of the reign of Pepy II.⁸⁰⁹

The typical shape of the water mound attested from the Fifth and Sixth Dynasties depicts the side closest to the tomb owner as rounded and flowing while the opposite side is straight with the top of the mound and the straight side meeting at a right angle. First observed in the scene from Niankhkhnum and Khnumhotep [27], it is then found in a further twelve tombs.⁸¹⁰ After the reign of

⁸⁰⁸ The mound of water is absent from Heri/ Meru [118], Hesi-min/ Sesi (F1) [127], Djau [141], Sabni (2) [143], Khunes (A6) [144] (Scene 2), Khuwi/Tjeti-Iker [157], and Baketi I [163].

⁸⁰⁹ Hotepherakhti [34], Neferirtene[52], Akhetmehu [53], Kaiemankh [57], Senedjem-Ib/ Inti [59], Iynofert/Shanef [63], Akhethotep [71], Mereruka [103], Seankhuiptah [106], Hesi [110], Inumin [111], Bawi (G126) [113], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Khewen-wekh/Tjetji [122], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Idu/ Seneni [138], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147].

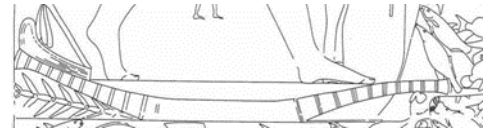
⁸¹⁰ Hotepherakhti [34], Neferirtene[52], Akhetmehu [53], Senedjem-Ib/ Inti [59], Nimaatre [60], Hem-min (M43) [61], Iynofert/Shanef [63], CG 1782/1786 [95], Mereruka [103], Hesi [110], Nekhebu [119], and Mehu [121]. Please refer to Appendix 2: Spearfishing Detail Table E.

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Pepy I (VI.2) it is no longer used and the second shape, the straight edges and rounded top mound, is prevalent.⁸¹¹ This is a dramatic change and it is only found in provincial examples.

Tomb Owner's Skiff

A boat is a standard inclusion for this theme with the tomb owner standing on deck in a prominent position. These boats follow the same structure and detailing as seen in previous marsh scenes with Types A (Horizontal ends) and B (Vertical ends) structure attested.⁸¹²



Inumin [111] Type A/B Structure

The standard structure of the boat is an A/B combination. Thus, the prow is shown in a near horizontal position (Type A) while the stern is flared upwards (Type B). This combination is attested in other themes,⁸¹³ yet it is not used with such consistency as seen in this corpus of examples. This detail is standardized from the mid Fifth Dynasty and is used until the end of the Old Kingdom and beyond.⁸¹⁴ The deliberate use of this prow/stern combination is a striking feature for this scene. Even where the craft only has a slight vertical lift to the stern, it is deliberately different to the prow. This may be seen in such scenes as Iynofert/Shanef [63] and Inumin [111].

Infrequently there are depictions of either a pure Type A or B boat structure. Type A is found in the tomb of Akhetmehu [53], and Hesimin (M22) [56], followed by five Sixth Dynasty examples.⁸¹⁵ Type B occurs in the scenes from Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Sabni (2) [143], Khunes (A6) [144] and possibly in Ankhtyfy [148]. Noticeably, most the examples are in the provinces. Type B boat structure is only attested in the latter half of the reign of Pepy I and later and only at El-Hawawish, Aswan and possibly Mo'alla.

The late Sixth Dynasty and Eight Dynasty scenes from Mery Aa [158] and Wahi (D4) [162] do not include a boat. Given that these scenes are both located at El-Hagarsa, Wahi (D4) [162] was probably

⁸¹¹ Examples include Henqu/Iy...f II [120], Khewen-wekh/Tjetji [122], Ibi [130], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Kahep/ Tjeti-Iker [140], Sabni (1) [142], Khunes (A6) [144], Shepsipumin/Kheni [147], Mery Aa [158] and Wahi (D4) [162]. Earlier attestations of this shape are found in Akhethotep [71], Akhmerutnesut [82], and Seankhuiphtah [106].

⁸¹² See Appendix 4: Typology: Boat Structure.

⁸¹³ See examples in Appendix 2: Detail Table: Lave Net F; Weirs H; and Angling H.

⁸¹⁴ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenef [52], Kaiemankh [57], Senedjem-Ib/ Inti [59], Nimaatre [60], Nebet [62], Iynofert/Shanef [63], Ihy r/u Seshseshet/ Idut [72], Seshemnofer IV [77], Akhmerutnesut [82], Senedjem-Ib/ Mehi [76], Berlin Fragment 14103 [88], Kagemni [94], CG 1782/1786 [95], In-Snefru-Ishtef [96], Mereruka [103], Seankhuiphtah [106], Mereri [108], Remni/ Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Wernu [114], Nekhebu [119], Mehu [121], Niankhpepy/Khnumhotep/Heti [123], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Seshemnofer/ Ifi [134], Kahep/ Tjeti-Iker [140], Djau [141], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], and Khuwi/Tjeti-Iker [157].

⁸¹⁵ Heri/ Meru [118] Henqu/Iy...f [120], Khewen-wekh/Tjetji [122], Ibi [130] and Sabni (1) [142].

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influenced by Mery Aa's [158] scene and continued the omission of the boat as a standard element. Baketi I [163] from Beni Hasan included a flat platform or raft structure in place of the boat. It is also decorated with wood graining suggesting it was not a vessel constructed of papyrus, as previous scenes had used.

The detailed decoration for the boat includes all three Types: A (*Lashing and Reed*), B (*Lashing Only*) and C (*None*).⁸¹⁶ The available images suggest that Type A is by far the most frequently applied, peaking in the early Sixth Dynasty during the reigns of Teti and Pepy I.⁸¹⁷ Of these, some examples exhibit a slight change in the lashings. Hotepherakhti [34], Neferirtenef [52], and Hesimin (M22) [56] depict the intervals between the lashing on the prow and stern as significantly smaller.⁸¹⁸ This pattern may suggest some influence between these three contemporary tombs. Furthermore, four other tombs; Inumin [111], Mehu [121], Khewen-wekh/ Tjeti [122], and Ibi [130], represent the lashings on the prow and stern, while the middle of the hull is not detailed. This appears to be a deliberate style that has been applied rather than poor preservation. The fragment known as Paris Louvre E.26092 [92] depicts horizontal striping (the reeds) rather than the lashings as is typical for this type. The detailing extended from the prow to stern, which is rare with only one other example found in a dragnet net scene of Kaiemheset [84], which has a similar date range.

Type C is infrequent with eleven known occurrences across the Fifth and Sixth Dynasties.⁸¹⁹ It is found typically in examples from Giza, as seen in Senedjem-Ib/ Inti [59], Nimaatre [60], Seshemnofer IV [77], Senedjem-Ib/ Mehi [76] and Akhmerutnesut [82]. However, the preservation of these scenes is not ideal which may have led to the loss of any detailing that had been applied.

⁸¹⁶ See Appendix 4: Typology: Boat Detailing.

⁸¹⁷ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Nebet [62], Iynofert/Shanef [63], Berlin Fragment 14103 [88], In-Snefru-Ishtef [96], Henqu/ Kheteti I [105], Seankhuiphtah [106] Mereri [108], Remni/Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Wernu [114], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Khewen-wekh/ Tjeti [122], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130] Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Seshemnofer/ Ifi [134], Djau [141], Pepyankh/Henykem [146], Ankhtyfy [148], Cairo Fragment 6.12.24.5 [152].

⁸¹⁸ Most boats have some shortening of the intervals which may represent reality and the perception of the prow/stern becoming smaller and angled upwards, yet the tomb mentioned show a significant shortening which is different to others and noteworthy.

⁸¹⁹ Niankhkhnum and Khnumhotep [27], Akhetmehu [53], Senedjem-Ib/ Inti [56], Nimaatre [60], Akhethotep [71], Seshemnofer IV [77], Akhmerutnesut [82], Senedjem-Ib/ Mehi [76], CG1782/1786 [95], Heri/ Meru [118], Khunes (A6) [144].

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Type B is infrequent and is not known before the tomb of Ihy r/u Seshseshet/ Idut [72] dated to the late Fifth Dynasty and repurposed in the early Sixth.⁸²⁰ Type B is the mostly encountered during the Sixth Dynasty with seven examples, two in the Memphite region and five in the provinces.⁸²¹

Deck of the skiff

Most skiffs on which the tomb owner stands are fitted with a deck of some sort. The inclusion of decking is standard in spearfishing scenes⁸²² and



Ibi [130] Deck

is first attested in the scenes from Niankhkhnum and Khnumhotep [27]. It is possible that there is a deck on the boat found in Irenkaptah [22], but due to the damage that the image has sustained it is difficult to identify it confidently. The latest known occurrence appears in the scene from Khuwi/Tjeti-Iker [157] which has been dated to the late Sixth Dynasty and extends into the early Eighth. There are only seven known examples of skiffs without decking (excluding those damaged).⁸²³ In these, the tomb owner is shown standing directly on the hull of the boat. Most of these instances are found outside the Memphite region.

The deck is used artistically to both elevate the tomb owner and give the artist a straight base line to place the tomb owner's feet against. This also aids in keeping the leg position of the tomb owner in a dignified stride (Type B)⁸²⁴ without excess bending of the rear leg.⁸²⁵ The deck would have given the tomb owner a stable place to stand and his weight would have been evenly distributed across the vessel.⁸²⁶ While uncommon, there are examples of the back foot resting on the stern.⁸²⁷ The example

⁸²⁰ G2360 [87] also has Type B detailing but a very large date range of V-VI. Given the use of this type in the Sixth dynasty, perhaps the fragment may be either Late Fifth or more Likely Sixth Dynasty in date.

⁸²¹ Kagemni [94], Mereruka [103], Niankhpepy/Khnumhotep/Heti [123], Kahep/ Tjeti-Iker [140], Sabni (1) [142], Shepsipumin/Kheni [147], and Khuwi/Tjeti-Iker [157].

⁸²² Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenef [52], Akhetmehu [53], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Hem-Min (M43) [61], Iynofret/Shanef [63], Seshemnofer IV [77], Akhmerutnesut [82], Berlin Fragment 14103 [88], Paris Louvre E.26092 [92], Kagemni [94], CG 1782/1786 [95], In-Snefru-Ishtef [96], Iteti/ Shedu [97], Mereruka [103], Henqu/ Kheteti 1 [105], Seankhuiptah [106], Mereri [108], Remni/ Merwi [109], Hesi [110], Inumin [111], Wernu [114], Heri/ Meru [118], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Seshemnofer/ Ifi [134], Kahep/ Tjeti-Iker [140], Sabni 1 [142], Pepyankh/Henykem [146], Cairo Fragment 6.12.24.5 [152], and Khuwi/Tjeti-Iker [157].

⁸²³ Found in the tombs of Senedjem-Ib/ Mehi [76], Bawi (G126) [113], Khewen-wekh/Tjetji [122], Niankhpepy/Khnumhotep/Heti [123], Djau [141], Sabni (2) [143], and Khunes (A6) [144].

⁸²⁴ See Appendix 4: Typology: Basic Leg Positions.

⁸²⁵ See Appendix 4: Typology: Basic Leg Positions.

⁸²⁶ Kanawati, *Giza*, 1, 31.

⁸²⁷ Niankhkhnum and Khnumhotep [27], Akhmerutnesut [82], In-Snefru-Ishtef [96], Tomb G97 [125] (Possible), and Khuwi/Tjeti-Iker [157].

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from Sabni (1) [142] is unique and shows the deck ending abruptly at a right angle before it meets the stern.

The deck may be treated in one of two ways: (1) it is left undecorated or (2) it has wood grain patterning. The choice of wood grain patterning infers the Egyptian used wood for this part of the boat as it would create a solid surface for the tomb owner to stand on. This deck is also present in other scenes which include the tomb owner. For example, fowling, pleasure cruises, papyrus pulling and other activities.⁸²⁸ Overall the deck is usually shown undecorated. This occurs from the earliest examples and up until late in the Sixth Dynasty.⁸²⁹ Decks with wood grain are more frequently found in the provincial regions; especially at El-Hawawish.⁸³⁰ There are two examples with horizontal detailing present on the deck in the scenes from Akhetmehu [53] and In-Snefru-Ishtef [96]. It is unclear whether these lines are the remnants of the woodgrain detailing. An unusual detail in the Sixth Dynasty tombs of Kagemni [94], and Remni/Merwi [109] appears to show a second layer to the deck. This is a thin curved piece of wood or other material which lies underneath the larger deck.

Equipment

The placement of equipment on the tomb owner's boat is rare and only known from ten scenes from the mid Fifth Dynasty until the late Sixth. There is only one Fifth Dynasty example, which belongs to Kaiemheset [84] and is dated late in this period. In this scene the equipment consists of a basket full



Hesi [110] Equipment

of fruit or vegetables accompanied by neatly stacked flowers and stalks. An example from In-Snefru-Ishtef [96] depicts two items, a folded cushion or mat and a basket which may have been full of foodstuffs. Most of the following examples also include these two items, for example, Inumin [111], Nekhebu [119], Pepyankh/Henykem [146] and Shepsipumin/Kheni [147]. Hesi's [110] example is elaborate with standard items as well as rare objects such as a linen bag, sandals and gloves.⁸³¹ Inumin's [111] depiction includes a whisk. A long rectangular reed case⁸³² becomes frequent in the

⁸²⁸ Woods, *A Day in the Marshes*, Appendix 3 Criterion [121, 122, 123].

⁸²⁹ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtnef [52], Kaiemankh [57], Nimaatre [60], Iynofert/Shanef [63], Seshemnofer IV [77], Akhmerutnesut [82], Paris Louvre E. 26093 [92], Kagemni [94], CG 1782/1786 [95], Iteti/Shedu [97], Mereruka [103], Henqu/Kheteti 1 [105], Seankhuptah [106], Mereri [108], Hesi [110], Inumin [111], Wernu [114], Heri/Meru [118], Nekhebu [119], Mehu [121], Tomb G97 [125], Idu 1 [128], Ibi [130], Pepyankh/Heri-Ib/Neferka/Heny [131], Seshemnofer/Ifi [134], Kahep/Tjeti-Iker [140], Pepyankh/Henykem [146], Cairo Fragment 6.12.24.5 [152].

⁸³⁰ Hesimin (M22) [56], Hem-Min (M43) [61], Remni/Merwi [109], Henqu/Iy...f II [120], Hesimin/Sesi (F1) [127], Sabni (1) [142], and Khuwi/Tjeti-Iker [157].

⁸³¹ Kanawati-Abder-Raziq, *Teti Cemetery*, V, 26.

⁸³² Kanawati, *El-Hawawish II*, 20-21.

Sixth Dynasty.⁸³³ It is possible that the case was associated with the seat and used to store and carry the seat base and cushion. A fragment known from the tomb of Seshemnofer/ Ifi [134] presents an impressive stack of equipment which includes a basket of produce, three folded mats, a rectangular case and jars of liquid.

The equipment for the spearfisher usually consisted of mats and seats, standard items needed for this activity. The inclusion of a rectangular case is common from the Sixth Dynasty onwards. The inclusion of additional equipment was seemingly dependent on factors such as the tomb owner's request or the prerogative of the artist(s).

Other Animals

Fish are not the only animal found in these scenes.⁸³⁴ Artists have added frogs and other aquatic animals, insects and birds within the water weeds. There are no typical or common patterns in the depiction of these animals in the scene, such as the inclusion of insects, frogs or water birds that can be ascertained from the corpus of spearfishing scenes. Frogs are the most frequent addition and are found in 16 scenes across the mid Fifth Dynasty until the late Sixth.⁸³⁵ Insects such as the grasshopper are found in the scenes from Hesimin (M22) [56], and Seshemnofer IV [77]; while the butterfly is found in Kaiemankh [57], and Kagemni [94]. Interestingly, unlike the frog which was first established at Saqqara, the addition of insects appears not to have been first established in the Saqqara cemeteries. In the above four occurrences, each scene also had a frog within the weeds. Only one example of birds within the weeds, found in the tomb of Ibi [130]. The features of this bird do not allow for a positive identification yet Kanawati suggests that it is a heron, which is also featured in the tombs fowling scene.⁸³⁶

⁸³³ Seen in the tombs of Nekhebu [119], Henqu/ Iy...f II [120], Pepyankh/Heri-Ib/Neferka/Heny [131], Mehu [121], Pepyankh/Henykem [146], Kahep/ Tjeti-Iker [140] and Shepsipumin/Kheni [147].

⁸³⁴ Frogs and other aquatic animals are discussed in Chapter 3: Fish: Other Animals.

⁸³⁵ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirteneb [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/Shanef [63], Seshemnofer IV [77], Paris Louvre E. 26092 [92], Kagemni [94], CG 1762/1786 [95], In-Snefru-Ishtef [96], Mereruka [103], Mereri [108], Bawi (G126) [113], Pepyankh/Heri-Ib/Neferka / Heny [131] and Djau [141].

⁸³⁶ Kanawati, *Deir el-Gebrawi II*, 27.

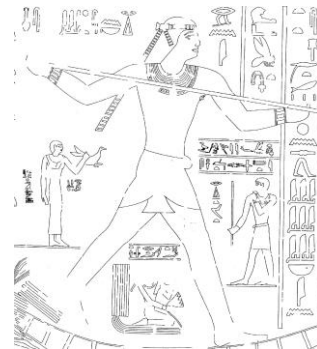
Major Figure

Major Figure: Position

This is the only theme to include the tomb owner as an active participant in a *fishing* activity. The inclusion is standard from the Fourth Dynasty onwards. Standards for the position, clothing and individual characteristics of the tomb owner were also established early in the date range for the theme.

The standard orientation of the tomb owner in spearfishing scenes is the figure facing right.⁸³⁷ There are exceptions to this, which show the figure facing left. The early examples of the figure facing left in the tomb of Niankhkhnum and Khnumhotep [27] and Berlin fragment 14103 [88] may be due to ‘pre-standardization’⁸³⁸ which occurred in the mid Fifth Dynasty.⁸³⁹ Other examples of this configuration are within, but not limited to the tombs of Mehu [121], Pepyankh/ Henykem [146] and Khunes (A6) [144].

The striding leg position (Type B)⁸⁴⁰ is the typical pose taken by the tomb owner as he stands in his skiff spearing fish.⁸⁴¹ Yet there are small variances attested in the positioning of the feet. Generally, the feet of the major figure are confined to the boat deck⁸⁴² although there are a few examples of



Shepsipumin/ Kheni [147]

⁸³⁷ This orientation however originally occurred in earlier marsh related scenes in the Fourth Dynasty; Woods, *A Day in the Marshes*, 48-9.

⁸³⁸ Cherpion, 'De quand Date la tombe du nain_Seneb?', *BIFAO* 84 (1984), 48.

⁸³⁹ Woods, *A Day in the Marshes*, 49.

⁸⁴⁰ See Appendix 4: Typology: Basic Leg Position: Type B.

⁸⁴¹ Type A Leg positions: Niankhkhnum and Khnumhotep [27], Neferseshemptah and Sekhentiu [33], Hotepherakhti [34], Neferirtenef [51], Akhetmehu [53], Hesimin (M22) [56], Kaiemankh [57], Hem-Min (M43) [60], Iynofert/Shanef [63], Akhethotep [71], Ihy r/u Seshseshet/ Idut [72], Seshemnofer IV [77], Akhmerutnesut [82], Senedjem-Ib/ Mehi [76], Berlin Fragment 14103 [88], Kagemni [94], CG 1782/1786 [95], In – Snefru- Ishtef [96], Iteti/ Shedu [97], Mereruka [103], Henqu/ Kheteti 1 [105], Seankhuipah [106], Mereri [108], Remni/ Merwi [109], Inumin [111], Bawi (G126) [113], Wernu [114], Heri/ Meru [118], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Khewen-wekh/Tjetji [122], Niankhpepy /Khnumhotep /Heti [123], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Seshemnofer/ Ifi [134], Kahep/ Tjeti-Iker [140], Djau [141], Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157], Wahi (D4) [162], Baketi I [163], Ankhtyfy [148] and Mery Aa [158].

⁸⁴² Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenef [52], Akhetmehu [53], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Hem-Min (M43) [61], Iynofret/Shanef [63], Seshemnofer IV [77], Akhmerutnesut [82], Berlin Fragment 14103 [88], Paris Louvre E.26092 [92], Kagemni [94], CG 1782/1786 [95], In-Snefru-Ishtef [96], Iteti/ Shedu [97], Mereruka [103], Henqu/ Kheteti 1 [105], Seankhuipah [106], Mereri [108], Remni/ Merwi [109], Hesi [110], Inumin [111], Wernu [114], Heri/ Meru [118], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Seshemnofer/ Ifi [134], Kahep/ Tjeti-Iker [140], Sabni (1) [142], Pepyankh/Henykem [146], Cairo Fragment 6.12.24.5 [152], and Khuwi/Tjeti-Iker [157].

scenes which show a foot of the figure placed on other surfaces such as the prow or stern of the boat. These examples are depicted sporadically from the mid Fifth Dynasty onwards with the first attested in the tomb of Niankhkhnum and Khnumhotep [27], showing the back foot of the spear fisher on the stern of the boat. Most examples are concentrated in the late Fifth and early Sixth Dynasty,⁸⁴³ all showing the back foot on the stern. A final example depicted in the late Old Kingdom tomb of Khuwi/Tjeti-Iker [157] shows the only image of the tomb owner placing his front foot on the prow.⁸⁴⁴

The striding pose (Type B) includes the front foot shown flat on the surface, while the back foot is raised to the ball of the foot.⁸⁴⁵ This position is not confined to spearfishing scenes; it is also common in fowling and less frequently in other marsh scenes of the Old Kingdom.⁸⁴⁶ A variance is attested in Aswan in the tombs of Khunes (A6) [144] and Sabni (2) [143]. These examples show both feet raised to the balls of the feet. Conversely, in Djau [141] the artist has raised the heel of the front foot.

The arms of the tomb owner holding the spear can be identified as one of four different types: SF.A (arms stretched horizontally), SF.B (arms below shoulder level and bent at both elbows), SF.C (arms bent with both elbows at 45 degrees) and SF.D (rear arm is above shoulder level).⁸⁴⁷ SF.A is rare in both the Fifth and Sixth Dynasty with a total of five known representations. This type first occurs in Hesimin (M22) [56] and Kaiemankh [57], followed by Henqu/Iy...f II [120] Pepyankh/ Heri-Ib/ Neferka/Heny [131] and finally by Baketi I [163]. The Sixth Dynasty examples are all of a provincial location.

⁸⁴³ See Akhmerutnesut [82], In-Snefru-Ishtef [96], and Khewen-wekh/Tjeti [122].

⁸⁴⁴ This scene also depicts many other objects on the boat and this may have resulted in having the position of the tomb owner's figure forward on the boat resulting in this variation.

⁸⁴⁵ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Kaiemankh [57], Hesimin (M22) [56], Neferirtenef [52], Akhetmehu [53], Senedjem-Ib/Inti [59], Nimaatre [60], Iynofert/Shanef [63], Senedjem-Ib/Mehi [76], Seshemnofer IV [77], Akhmerutnesut [82], In-Snefru-Ishtef [96], CG 1782/1786 [95], Iteti/Shedu [97], Kagemni [94], Mereruka [103], Mereri [108], Hesi [110], Inumin [111], Seankhuipah [106], Remni/Merwi [109], Henqu/Iy...f II [120], Her-Meru/Mereri [108], Mehu [121], Niankhpepy/Khnumhotep/Heti [123], Nekhebu [119], Wernu [114], Khewen-wekh/Tjeti [122], Tomb G97 [125], Hesi-min/Sesi (F1) [127], Bawi (G126) [113], Ibi [130], Pepyankh/Heri-Ib/Neferka/Heny [131], Idu 1 [128], Kahep/Tjeti-Iker [140], Shepsipumin/Kheni [147], Pepyankh/Henykem [146], Sabni (1) [142], Khunes (A6) [144], Khuwi/Tjeti-Iker [157] and Ankhtyfy [148].

⁸⁴⁶ Woods, *A Day in the Marshes*, Appendix 3 criterion [10]; The position of the feet is known to earlier examples of other scenes as suggested by Woods.

⁸⁴⁷ See Appendix 4: Typology: Spearfishing Major Figure/ Active Son Arm Positions.

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SF.B is the most frequent type overall with fifteen examples,⁸⁴⁸ and the peak for its representation in the Sixth Dynasty. SF.C was the second most attested type with twelve representations,⁸⁴⁹ most of which were in the Fifth Dynasty where it was the most frequent.

The SF.D position first occurs in the tomb scene of Niankhkhnum and Khnumhotep [27] and is possibly represented in the later tomb of Mehu [91] at Giza. This position is more frequent in the Sixth Dynasty yet is only attested in the provincial regions.⁸⁵⁰ It can be explained in some instances, such as in the tomb scenes of Niankhkhnum and Khnumhotep [27] and Wahi (D4) [162], that the angle of the spear had to be greater so that the tomb owner is effectively thrusting into the short water mounds. Other examples of this arm position may reflect the positions taken by fowlers in fowling scenes.⁸⁵¹

Clothing of Major Figure

The spearfishing scene is the only theme where the figure engaged in the act of fishing is always clothed. There are two types of kilts that the major figure is shown wearing, the wrap around kilt⁸⁵² and the *shendyt* kilt. The tomb owner also has accessories such as wigs, false beards and other adornments. In all representations, the tomb owner is shown with an athletic build (Type A⁸⁵³) when spearfishing.

The wrap-around kilt may be shown with a projecting point at the base⁸⁵⁴ and without a point.⁸⁵⁵ These styles of kilt are only depicted sporadically through the Old Kingdom, and in the Sixth Dynasty only in provincial locations. They are more frequently used in other marsh pursuit scenes such as the pleasure cruise and papyrus pulling scenes, where it becomes standard from the mid Fifth Dynasty.⁸⁵⁶

The *shendyt* kilt is introduced to spearfishing scenes in the late Fifth Dynasty tomb of Neferirtenefer [52], which depicts a kilt in three panels, one covering each thigh and a longer middle panel. It is

⁸⁴⁸ Niankhkhnum and Khnumhotep [27], Akhetmehu [53], Akhmerutnesut [82], Iteti/ Shedu [97], Seankhuipah [106], Remni/ Merwi [109], Nekhebu [119], Hesimin/ Sesi (F1) [127], Idu 1 [128], Djau [141], Sabni (1) [142], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157].

⁸⁴⁹ Hotepherakhti [34], Neferirtenefer [52], Senedjem-Ib/ Inti [59], Inyofert/Shanef [63], Akhethotep [71], Berlin Fragment 14103 [88], Henqu/ Kheteti I [105], Mereri [108], Heri/ Meru [118], Mehu [121], Khewenwekh/ Tjeti [122], Ibi [130].

⁸⁵⁰ As early as VI.1L as seen in Bawi (G126) [113] followed by Tomb G97 [125] both located in El-Hawawish. Late Sixth Dynasty examples occur in the scenes from Sabni (2) [143] and Khunes (A6) [144] at Aswan and in Mery Aa [158] and Wahi (D64) [162] at El- Hagarsa.

⁸⁵¹ See Khunes [67].

⁸⁵² See Appendix 4: Typology: Individual Characteristics and Clothing.: Clothing.

⁸⁵³ See Appendix 4: Typology: Individual Characteristics and Clothing: Body Type.

⁸⁵⁴ Henqu/Iy...f II [120].

⁸⁵⁵ Niankhkhnum and Khnumhotep [27], Akhmerutnesut [82], Bawi (G126) [113], Sabni (2) [143] and Khunes (A6) [144].

⁸⁵⁶ Woods, *A Day in the Marshes*, Appendix 3 Criterion [67], [68], [69].

believed by Woods that the introduction of this kilt was due to the restrictiveness of the wrap around kilt in heavily active marsh pursuit activities, especially spearfishing and fowling.⁸⁵⁷ This type of kilt is a standard of the scene from the late Fifth Dynasty,⁸⁵⁸ and it can also be worn by the tomb owner's son (both active and inactive).⁸⁵⁹ Woods suggests that the wrap around kilt with the long sash, depicted in the preceding scene of Niankhkhnum and Khnumhotep [27], is an earlier version of the *shendyt* kilt as it closely resembles other early examples of the *shendyt* kilt in fowling scenes.⁸⁶⁰

The tomb owner is often depicted with a ceremonial false beard,⁸⁶¹ first attested in this theme in Irenkaptah [22]. Even though the appearance of the false beard is attested in both the Memphite region and in the provinces,⁸⁶² the depiction decreases in the provinces near the end of the Sixth Dynasty.⁸⁶³

The depiction of wigs throughout Egyptian art may have been a way of showing the wealth and privilege of the wearer, as they would have been expensive and cherished articles.⁸⁶⁴ A short wig with a fillet and streamer was standard in the spearfishing scene from the late Fifth Dynasty onwards. The tombs of Hesimin (M22) [56], Akhethotep [71], and Iynofert/Shanef [63] represent some of the earliest examples of this type of wig, which extends through to the last tombs of the Old Kingdom as seen in the spearfishing scene of Baketi I [163].⁸⁶⁵ The short wig without any accessories is only attested twice in the Old Kingdom, in the tomb scenes of Akhmerutnesut [82] and Henqu /Kheteti 1 [105]. A shoulder length wig is attested infrequently, worn without accessories it is first depicted in

⁸⁵⁷ Woods, *A Day in the Marshes*, 50.

⁸⁵⁸ Neferirteneb [52], Akhetmehu [53], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Hem-Min (M43) [61], Iynofret/ Shanef [63], Akhethotep [71], Berlin Fragment 14103 [88], In-Snefru-Ishtef [96], Iteti/ Shedu [97], Mereruka [103], Mereri [108], Inumin [111], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Khewen-wekh/ Tjeti [122], Hesimin / Sesi (F1) [127], Idu 1 [128], Ibi [130], Pepyankh/Heri-Ib/Neferka/ Heny [131], Ihy [137], Kahep/ Tjeti-Iker [140], Djau [141], Sabni (1) [142], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147].

⁸⁵⁹ Woods, *A Day in the Marshes*, Appendix 3 Criterion [69]; Examples of son in *shendyt* kilt; Cairo frag 6.12.24.5 [152], Akhethotep [71], Seshemnofer IV [77], CG 1782/1786 [95], Remni/ Merwi [109], Heri/ Meru [118] and Ibi [130].

⁸⁶⁰ Woods, *A Day in the Marshes*, 50.

⁸⁶¹ Brewer- Friedman, *Fish and Fishing*, 234.

⁸⁶² Akhethotep [71], Iynofert/Shanef [63], Irenkaptah [22], Pepyankh/Henykem [146], Pepyankh/ Heri-Ib / Neferka/ Heny [131], Nekhebu [119], Mereri [108], Mehu [121], Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Heri/ Meru [118], Remni/ Merwi [109], Hotepherakhti [34], Khunes (A6) (second pillar) [144], Sabni (I) [142], Djau [141], Mehu [91] and Cairo Frag 6.12.24.5 [152].

⁸⁶³ See Ankhtyfy [148], Wahi (D4) [162], Idu/ Seneni [138], Idu I [128], Ibi [130]?, Baketi I [163].

⁸⁶⁴ Brier-Hobbs, *Daily life of the Ancient Egyptian*, 133.

⁸⁶⁵ Hesimin (M22) [56], Hesi-min (M43) [61], Iynofert/Shanef [63], Akhethotep [71], Mereri [108], Remni/Merwi [109], Heri/ Meru [118], Nekhebu [119], Mehu [121], Khewen-wekh/Tjetji [122], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/Neferka/Heny [131], Idu/ Seneni [138], Kahep/ Tjeti-Iker [140], Djau [141]?, Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/ Kheni [147], Mery Aa [158], and Baketi I [163].

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the tomb of Irenkaptah [22] and followed by nine other examples.⁸⁶⁶ The inclusion of a filet and streamer on a shoulder length wig is extremely rare and only found in the scenes of Berlin Fragment 14103 [88], Tomb G97 [125], and Ankhtyfy [148].

The tomb owner is typically shown with a 'broad' collar or 'wesekh' necklace.⁸⁶⁷ The first representations of this feature are in the scene from Irenkaptah [22] and the last in the tomb of Baketi I [163].⁸⁶⁸ There are spearfishing scenes where the tomb owner is also shown wearing wrist bands⁸⁶⁹ which may be accompaniments to the 'broad' collar.⁸⁷⁰ The representations of this type of jewellery are not as frequent as the broad collar and are attested more frequently in the provincial tombs.

A unique example of another type of necklace is attested in the scene from the tomb of Henqu/ Iy...f II [120]. The tomb owner is shown with a necklace which is longer than the broad collar, and comes to a point at his abdomen. This scene is fragmentary and the pendant does not survive, but similar necklaces with a pendant are known from rare examples in fowling scenes.⁸⁷¹ There is also a pendant necklace around the neck of the male figure who is standing behind Henqu /Iy...f II [120]. In addition to the collared necklace, Wahi (D4) [162] is shown with a lotus garland around his neck, a unique depiction in spearfishing scenes.

Examples from Sabni (1) [142] and Ankhtyfy [148] include a strap of material across the torso and shoulder of the tomb owner. The repetition of this feature in these two tombs indicates an artistic connection between the sites, and possibly the same artist. This strapping is more commonly found on minor figures in other scenes such as angling, and lave net fishing.⁸⁷²

⁸⁶⁶ Others include Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Kaiemankh [57], Neferirtenef [52], Akhetmehu [53], Senedjem-Ib/ Mehi [76], Henqu/ Iy...f II [120], Mehu [91] and Khunes (A6) [144] (Second pillar). The Berlin Fragment 14103 [88] depicts the tomb owner in a shoulder length wig with a filet and streamer.

⁸⁶⁷ For Old Kingdom examples see the Museum of Fine arts in Boston collection. Example: Accession Number MFA 37.1314: Giza, late Fifth Dynasty and MFA 33.1020.2: Giza Dynasty Six; *Museum of Fine Arts Boston* (2016) www.mfa.org (accessed 7/7/2013).

⁸⁶⁸ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Neferseshemptah and Sekhentiu [33], Hotepherakhti [34], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Hem-Min (M43) [61], Akhethotep [71], Akhmerutnesut [82], Berlin Fragment 14103 [88], Mehu [91], Iteti/ Shedu [97], Henqu/Kheteti I [105], Mereri [108], Remni/Merwi [109], Bawi (G126) [113], Nekhebu [119], Mehu [121], Khewen-wekh/ Tjeti [122], Tomb G97 [125], Hesi-min/ Sesi (F1) [127], Idu 1 [128], Ibi [130], Ihy [137], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Idu/ Seneni [138], Kahep/ Tjeti-Iker [140], Djau [141], Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Ankhtyfy [148], Khuwi/Tjeti-Iker [157], Mery Aa [158], Wahi (D4) [162], Baketi I [163].

⁸⁶⁹ See Ankhtyfy [148], Inumin [111], Ibi [130], Wahi (D4) [162], Bawi (G126) [113], Baketi I [163], Pepyankh/Henykem [146], Mery Aa [158], Nekhebu [119], Henqu/Iy...f II [120], Hesi-min/ Sesi (F1) [127], Khewen-wekh/Tjeti [122], Tomb G97 [125], Shepsipumin/Kheni [147], Kahep/ Tjeti-Iker [140], and Djau [141].

⁸⁷⁰ MFA 37.1335; *Museum of Fine Arts Boston* (2016) www.mfa.org (accessed 7/7/2013).

⁸⁷¹ Woods, *A Day in the Marshes*, Appendix 3: Criterion [70].

⁸⁷² See Appendix 2: Angling Detail Table L; Lave Nets Detail Table K for attestations of this feature.

Minor Figures

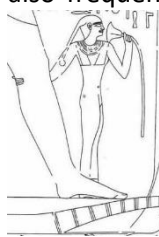
Several minor figures are involved within these scenes. The most notable are the tomb owner's wife, his son and other family members, including grandchildren,⁸⁷³ who can be shown as active participants in the marsh scene. The inclusion of family is a standard of the scene from the mid Fifth Dynasty onwards.⁸⁷⁴

Positions of the wife and female figures

In this scene the most frequent position of the wife or a female figure is to stand (Type A) , kneel (Type D) or semi-kneel/ crouch (Type E) between the legs of the tomb owner who stands in stride position (Type B).⁸⁷⁵ Of these Type D is the most frequent in both dynasties as Type E was only used in the Sixth Dynasty.⁸⁷⁶ Representations of the wife/daughter in other positions are



Ibi [130]



Inumin [111]

also frequent and can be divided into two categories: those standing (type A leg position) at the stern⁸⁷⁷ or, slightly more frequently, those standing (type A leg position) at the prow.⁸⁷⁸

A rare position taken by the wife is attested in three tombs, Neferseshemptah and Sekhentiu [33], Hesimin [M22] [56] and In-Snefru-Ishtef [96]. This position depicts the wife at a slightly larger scale behind the tomb owner, holding the back leg and the waist of the tomb owner whilst he is spearfishing.

The arms of the female figure can be shown in five different ways:⁸⁷⁹

SF.W.A - Actively gesturing forwards; rear arm touching tomb owner.

SF.W.B - One arm holding an object; the other touching tomb owner.

SF.W.C - One arm held to chest or at rest; the other touching tomb owner.

SF.W.D - One arm holding an object; other at rest by side or on lap.

SF.W.E - One arm across chest; other at rest.

⁸⁷³ See the tombs of Seshemnofer IV [77] and Khewen-wekh/Tjetji [122].

⁸⁷⁴ Woods, *A Day in the Marshes*, 52.

⁸⁷⁵ See Appendix 4: Typography: Basic Leg positions: A, B, D and E.

⁸⁷⁶ Wife in Type D Position: Niankhkhnum and Khnumhotep [27], Neferirtenef [52], Seshemnofer IV [77], Senedjem-Ib/ Mehi [76], CG 1782/1786 [95], Remni/Merwi [109], Heri/ Meru [118], Nekhebu [119], Mehu [121], Ihy [137], Kahep/ Tjeti-Iker [140], Khunes (A6) [144], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157]; Type E: Niankhpepy/Khnumhotep/Heti [123], Idu 1 [128], Ibi [130], and Ankhtyfy [148].

⁸⁷⁷ Akhetmehu [53], Hesimin (M22) [56], In-Snefru-Ishtef [96], Ankhtyfy [148], Wahi (D4) [162], Baketi I [163].

⁸⁷⁸ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Kagemni [94], Iteti/ Shedu [97], Mereruka [103], Seankhuipah [106], Mereri [108], Inumin [111], Khunes (A6) [144], Wahi (D4) [162].

⁸⁷⁹ Please see Appendix 4: Typography: Arm Positions: Spearfishing Wife Arm positions.

SF.W.D is the most frequent position held over the entire period reaching its peak in the Sixth Dynasty.⁸⁸⁰ There are four tombs with a slight variation depicting the wife holding a lotus stem in both hands rather than one arm being at rest. This occurs in Kahep/ Tjeti-Iker [140], in the of example of his son Shepsipumin/Kheni [147], in Khuwi/Tjeti-Iker [157] and Baketi I [163]. SF.W.A was represented by one example in the Fifth Dynasty with an increase in the Sixth attributed to the wife becoming more active in the scene by gesturing or holding objects for the tomb owner.⁸⁸¹ As with SF.W.A; SF.W.B and SF.W.C both involve the wife touching the legs of the tomb owner. SF.W.B depicts the wife typically holding a lotus stem as well,⁸⁸² while SF.W.C shows the second arm at rest.⁸⁸³ SF.W.E is only found in two scenes, Seshemnofer IV [77], and Ibi [130].

In many tombs the wife is the only minor figure depicted; this is especially common in the early Sixth Dynasty at the Teti Cemetery.⁸⁸⁴ It is suggested by Woods⁸⁸⁵ that the depiction of only wives in a prominent position within the marsh scenes was to emphasize the family lineage, especially in the case of Kagemni [94] and Mereruka [103], whose wives were of royal descent.⁸⁸⁶ There are tomb scenes without the depiction of the wife,⁸⁸⁷ perhaps because the tomb owner constructed and decorated his tomb at a later stage in his life and career. Therefore, due to the reduced life expectancy of women in ancient Egypt, it is possible that the tomb owner was a widower at the time of decoration.⁸⁸⁸ Other reasons for the omission of the wife may include the lack of space within the composition, or personal choice of the tomb owner.⁸⁸⁹

⁸⁸⁰ Akhetmehu [53], Senedjem-Ib/Mehi [76], Kagemni [94], Iteti/ Shedu [97], Mereruka [103], Mereri [108], Niankhpepy/Khnumhotep/Heti [123], Idu 1 [128], Ibi [130], Kahep/ Tjeti-Iker [140] Khunes (A6) [144], Shepsipumin/Kheni [147], Ankhtyfy [148], Khuwi/Tjeti-Iker [157], Wahi (D4) [162], and Baketi I [163].

⁸⁸¹ Irenkaptah [22], Seankhuipah [106], Heri/ Meru [118], Henqu/Iy...f II [120], and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

⁸⁸² Niankhkhnum and Khnumhotep [27], Neferirtenef [52], Akhmerutnesut [82], Berlin Fragment 14103 [88], CG 1782/ 1786 [95], Inumin [111].

⁸⁸³ Niankhkhnum and Khnumhotep [27], Remni/Merwi [109], Mehu [121].

⁸⁸⁴ Akhmerutnesut [82], Iteti/ Shedu [97], Kagemni [94], Mereruka [103], Inumin [111], Seankhuipah [106],

⁸⁸⁵ Woods, *A Day in the Marshes*, 53.

⁸⁸⁶ Kanawati, 'Nepotism in the Egyptian Sixth Dynasty', *BACE* 14 (2003) 39-59.

⁸⁸⁷ Sporadically from the mid Fifth Dynasty onwards: Hotepherakhti [34], Kaiemankh [57], Senedjem-Ib/ Inti [59], Nimaatre [60], Henqu/ Kheteti I [105], Khewen-wekh/ Tjeti [122], Hesi-min/ Sesi (F1) [127], Djau [141], Sabni (1) [142], Sabni (2) [143]; Woods, *A Day in the Marshes*, 54.

⁸⁸⁸ Swinton, 'The Depiction of Wives', *BACE* 14 (2003), 106-7 – Swinton further suggests that the tomb builders of the late Fifth and Sixth Dynasty show scenes with absent family members reflecting the circumstances at the time i.e. children grown up and left the household.

⁸⁸⁹ Woods, *A Day in the Marshes*, 57.

Clothing and individual characteristics of the wife and other minor female figures

The primary clothing for a female was a sheath dress⁸⁹⁰ which could be adorned with various types of jewellery such as the broad collared necklace like that of the major figure⁸⁹¹, and ankle and wrist bands.⁸⁹² The broad collar or 'wesekh' necklace is rare in the Fifth Dynasty only becoming standard in the early Sixth, especially in the Teti Cemetery. There are rare depictions of the wife shown wearing a 'dog collar'⁸⁹³, a short lived feature restricted to the Fifth Dynasty.⁸⁹⁴ The wife usually wore a shoulder length, or longer wig⁸⁹⁵ which could be decorated with various types of headdresses such as lotus flower headdresses⁸⁹⁶ or a fillet and streamer.⁸⁹⁷ There are also frequent examples of a short wig, primarily attested in the Teti Cemetery and in the later half of the Sixth Dynasty.⁸⁹⁸ These also can be shown with a fillet and streamer.⁸⁹⁹ There are two rare depictions in Kagemni [94] and Inumin [111] which show the wife with a type of side-lock.⁹⁰⁰ This is different to the style used for the depiction of daughters and sons as the end of the hair has a disk attached to it. McCorquodale states that the appearance of a disk at the end of the braid in a female's hair is indicative of a connection to musicians.⁹⁰¹

⁸⁹⁰ Irenkaptah [22], Niankhkhnum an Khnumhotep [27], Neferirteneb [52], Akhetmehu [53], Hesimin (M22) [56], Akhmerutnesut [82], CG 1782/1786 [95], In-Snefru-Ishtef [96], Iteti/ Shedu [97], Mereruka [103], Seankhuipah [106], Mereri [108], Remni/Merwi [109], Inumin [111], Nekhebu [119], Henqu/Iy...f II [120], Mehu [121], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Kahep/ Tjeti-Iker [140], Shepsipumin/Kheni [147], Ankhtyfy [148], Wahi (D4) [162], Baketi I [163]; Brier- Hobbs, *Daily Life*, 123-4

⁸⁹¹ Neferirteneb [52], Seshemnofer IV [77], Kagemni [94], Mereruka [103], Seankhuipah [106], Remni/Merwi [109], Inumin [111], Nekhebu [119], Mehu [121], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157], Wahi (D4) [162] and Baketi I [163].

⁸⁹² Iteti/ Shedu [97], Nekhebu [119], Mehu [121], Ibi [130], Kahep/ Tjeti-Iker [140], Shepsipumin/Kheni [147], Wahi (D4) [162], and Baketi I [163].

⁸⁹³ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Neferirteneb [52].

⁸⁹⁴ Is found in other earlier marsh scenes from the Fourth Dynasty – Woods, *A Day in the Marshes*, Appendix 3 Criterion [77].

⁸⁹⁵ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Neferirteneb [52], CG 1782/1786 [95], In-Snefru-Ishtef [96], Mehu [121], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Khunes (A6) [144], Khuwi/Tjeti-Iker [157], Wahi (D54) [162], Baketi I [163].

⁸⁹⁶ Berlin fragment 14103 [88], Neferirteneb [52], Mehu [121], and Pepyankh/ Heri-Ib/ Neferka/ Heny [131].

⁸⁹⁷ Neferirteneb [52], CG 1782/1786 [95], In-Snefru-Ishtef [96].

⁸⁹⁸ Seshemnofer IV [77], Akhmerutnesut [82], CG 1782/1786 [95], Iteti/ Shedu [97], Mereruka [103], Seankhuipah [106], Remni/Merwi [109], Nekhebu [119], Henqu/Iy...f II [120], Niankhpepy/ Khnumhotep/Heti [123], Ibi [130], Kahep/ Tjeti-Iker [140].

⁸⁹⁹ Seshemnofer IV [77], Akhmerutnesut [82], CG 1782/1786 [95], Iteti/ Shedu [97], Mereruka [103], Seankhuipah [106], Nekhebu [119], Niankhpepy/ Khnumhotep/Heti [123], Ibi [130].

⁹⁰⁰ Woods, *A Day in the Marshes*, 53.

⁹⁰¹ McCorquodale, *Representations of the Family*, 47-48.

Chapter 11: Spearfishing

The Sons

The tomb owner frequently included his son(s) in the spearfishing scenes.⁹⁰² In some attestations a son is also shown actively engaging in the hunt with his position mirroring that of his father.⁹⁰³ The son may be placed at any point along the hull of the boat or in the register behind the major figure. The sons, as with the wife, daughters and grandchildren, are also depicted at a reduced scale to that of the major figure.⁹⁰⁴

Inactive son

The representation of the son not engaged in spearfishing is classified as the inactive son. He may be shown in a variety of positions and typically holds objects related to the spearfishing or marsh scenes. The son is known from attestations as early as the mid Fifth Dynasty and continues until the late Sixth and Eighth Dynasties.



Idu 1 [128]

Limb positions

In all scenes, the son is depicted in a type A (open stance) leg position,⁹⁰⁵ while the arms vary between five positions identified as:⁹⁰⁶

SF.S. A- One arm at rest/ one to mouth; variation one arm to chest, other at rest (holding object)

SF.S. B – One arm touching tomb owner, the other holding an object.

SF.S. C – Both hands holding object(s)

SF.S. D – One hand holding object, other at rest.

SF.S. E – Both hands/ arms at rest

⁹⁰² Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenefer [52], Akhetmehu [53], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Kairer [66], Akhethotep [71], Seshemnofer IV [77], Senedjem-Ib/ Mehi [76], Mehu [121]. CG 1782/1786 [95], In-Snefru-Ishtef [96], Henqu/ Kheteti I [105], Remni/ Merwi [109], Heri/ Meru [118], Nekhebu [119], Henqu/ Iy... f II [120], Niankhpepy/Khnumhotep/Heti [123], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Djau [141], Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Cairo Fragment 6.12.24.5 [152], Khuwi/Tjeti-Iker [157], Wahi (D4) [162], Baketi I [163], and MFA 12.5965 [165].

⁹⁰³ Hesimin (M22) [56], Kairer [66], Seshemnofer IV [77], CG 1782/1786 [95], In-Snefru-Ishtef [96], Remni/ Merwi [109], Heri/ Meru [118], Nekhebu [119]. Niankhpepy/Khnumhotep/Heti [123], Ibi [130], Cairo Fragment 6.12.24.5 [152], and Baketi I [163].

⁹⁰⁴ Woods, *A Day in the Marshes*, 52.

⁹⁰⁵ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenefer [52], Akhetmehu [53], Kaiemankh [57], Nimaatre [60], Akhethotep [71], Senedjem-Ib/ Mehi [76], Henqu/ Kheteti I [105], Remni/ Merwi [109], Hesi [110], Nekhebu [119], Henqu/ Iy... f II [120], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Djau [141], Sabni (1) [142], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157], MFA 13.5965 [165].

⁹⁰⁶ See Appendix 4: Typology Arm Positions: Spearfishing Inactive son: SFS A-E.

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The typical position for these figures is Type SF.S.C, found in the Fifth Dynasty six times and then in 11 examples from the Sixth Dynasty.⁹⁰⁷ SF.S. D is the second most frequent position in both dynasties with four found in the Fifth and eight examples in total for the Sixth.⁹⁰⁸ SF.S. B is found in two examples from the Fifth Dynasty, including the earliest representation in Niankhkhnum and Khnumhotep [27]; followed by Akhetmehu [53]. This type is only found once in the Sixth Dynasty in Henqu/ Kheteti I [105]. Types SF.S. A is attested once in the Fifth,⁹⁰⁹ while Type SF.S. E only appears in the Sixth Dynasty.⁹¹⁰

A variation of type SF.S. A is present in five examples in the Sixth Dynasty, namely Ibi [130], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], and Khuwi/Tjeti-Iker [157]. In all examples the son holds one closed fist to the chest while the other hand either holds an object or hangs at rest by the side of the body. This variation is only found in provincial tombs after the reign of Merenre (VI.3).

Those holding objects (SF.S. A (Var), B, C and D) typically have either fish, birds or spears. The representation of fish is rare with only one example found in Djau [141]. Yet birds are found in eleven examples, most typically before the Sixth Dynasty.⁹¹¹ The figure may hold birds and spears but this combination was short lived with most examples found in the late Fifth Dynasty.⁹¹² Examples attested during and after the reign of Unis typically represented the figure holding a spear (or two).⁹¹³ One scene, in the tomb of Pepyankh/ Heri-Ib/ Neferka/ Heny [131], represents a unique combination of a spear and fowling sticks.⁹¹⁴

⁹⁰⁷ Hotepherakhti [34], Neferirteneb [52], Akhetmehu [53], Kaiemankh [57], Nimaatre [60], CG 1782/1786 [95], In-Snefru-Ishtef [96], Remni/ Merwi [109], Hesi [110], Henqu/ Iy...f II [120], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/Neferka/ Heny [131], Djau [141], Sabni (1) [142], and Wahi (D4) [162].

⁹⁰⁸ Akhethotep [71], Senedjem-Ib/Mehi [76], Mehu [121], Henqu/Kheteti I [105], Ibi [130], Khunes (A6) [144], Wahi (D4) [162], and MFA 13.5965 [165].

⁹⁰⁹ Niankhkhnum and Khnumhotep [27].

⁹¹⁰ Henqu/ Kheteti I [105] and Nekhebu [119].

⁹¹¹ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirteneb [52], Akhetmehu [53], Kaiemankh [57], Nimaatre [60], Hesi [110], Ibi [130], Djau [141], Khuwi/Tjeti-Iker [157], and Wahi (D4) [162].

⁹¹² Neferirteneb [52], Akhetmehu [53], Kaiemankh [57], Nimaatre [60], and Wahi (D4) [162].

⁹¹³ Akhethotep [71], Senedjem-Ib/ Mehi [76], Mehu [121], Henqu/Kheteti I [105], Henqu/Iy...f II [120], Idu 1 [128], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Cairo Fragment 6.12.24.5 [152], Baketi I [163] and MFA 13.5965 [165].

⁹¹⁴ The attendants in Kahep/ Tjeti-Iker [140] Shepsipumin/Kheni [147] may also be carrying sticks, although they appear short and cylindrical.; see also Woods, *A Day in the Marshes*, Appendix 3, Criterion [103].

Chapter 11: Spearfishing

Clothing and Individual Characteristics

The inactive son is typically clothed in Type C (Kilt) with a few attestations in Type A (Naked) and Type B (Belt).⁹¹⁵ All the sons are shown with an athletic body (Type A)⁹¹⁶ and wear wigs (or have a full head of hair (Type A)).⁹¹⁷

Type C clothing is the standard dress for the inactive son in these scenes. The kilt may be further modified to a pointed kilt or a wrap-around kilt. Of these the use of the pointed kilt is more frequent; yet this only becomes obvious in the Sixth Dynasty with a marked increase from the single example known from the Fifth Dynasty in the tomb of Senedjem-Ib/ Mehi [76].⁹¹⁸ The wrap around kilt is seen once in the Fifth Dynasty in the scene from Akhetmehu [53], then is attested in five examples from the Sixth Dynasty all in a provincial setting.⁹¹⁹ The *shendyt* kilt is only found once on a non active figure in the scene of Akhethotep [71] from the Fifth Dynasty. Those who are naked (Type A) appear to be young as they have the side lock hair style.⁹²⁰ An exception to this is found in Hesi [110] where two sons are shown with a side lock and pointed kilts. This hair style paired with the absence of clothing (Type A) was only used twice in the Fifth Dynasty.⁹²¹ All the figures identified as sons have Type A hair.⁹²² It is most likely that they wear a wig; indeed, there are examples of a long and short wigs which mirror the usage of the tomb owner. Most are shown with a short wig⁹²³ and only five wear shoulder length wigs, which are seen in Nekhebu [119], Ibi [130], Djau [141], Khuwi/Tjeti-Iker [157] and Wahi (D4) [162]. The son also has similar accessories to that of his father with broad collar

⁹¹⁵ See Appendix 4: Typology: Individual Characteristics and Clothing.

⁹¹⁶ Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenefer [52], Akhetmehu [53], Kaiemankh [57], Nimaatre [60], Akhethotep [71], Seshemnofer IV [77], Senedjem-Ib/Mehi [76], Mehu [121], CG1782/1786 [95], In-Snefru-Ishtef [96], Henqu/ Kheteti I [105], Remni/Merwi [109], Hesi [110], Heri/ Meru [118], Nekhebu [119], Henqu/Iy...f II [120], Niankhpepy/Khnumhotep/Heti [123], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Djau [141], Sabni (1) [142], Khunes (A6) [144], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Cairo Fragment 6.12.24.5 [152], Khuwi/Tjeti-Iker [157], Wahi (D4) [162], MFA 13.5965 [165].

⁹¹⁷ See Appendix 4: Typology: Individual Characteristics and Clothing.

⁹¹⁸ Henqu/Kheteti I [105], Hesi [110], Nekhebu [119], Henqu/Iy...f II [120], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Sabni (2) [143], Khunes (A6) [144], Pepyankh/Henykem [146], Khuwi/Tjeti-Iker [157], Wahi (D4) [162] and Baketi I [163].

⁹¹⁹ Henqu/ Kheteti I [105], Idu 1 [128], Sabni (1) [142], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157].

⁹²⁰ Niankhkhnum and Khnumhotep [27], Kaiemankh [57], Seshemnofer IV [77].

⁹²¹ Other possible examples of side-lock hair styles paired with Type A clothing are found in Nimaatre [60] (clothing damaged), and a naked figure is found in Hotepherakhti [34] (hairstyle damaged).

⁹²² Except for the sons found in Nimaatre [60], Hotepherakhti [34], and Hesi [110] which have the side lock hair style.

⁹²³ Neferirtenefer [52], Akhetmehu [53], Senedjem-Ib/Mehi [76], Henqu/Kheteti I [105], Henqu/Iy...f II [120], Idu 1 [128], Ibi [130], Pepyankh/ Heri-Ib/ Neferka / Heny [131], Sabni (1) [142], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Wahi (D4) [162], and MFA 13.5965 [165].

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necklaces⁹²⁴ and wristbands.⁹²⁵ Nekhebu's [119] son also appears to have a band of material around his shoulders, while Henqu/Iy...f II's [120] has a pendant like his father. MFA 13.5965 [165] features the only non-active son who has a filet and streamer.

The Active Son

The active son is identified by his role within the scene as a direct participant in the hunt. This figure is shown in the same or similar stance as the tomb owner with whom he shares many attributes. The active son is first noted in the tomb of Hesimin (M22) [56] in the late Fifth Dynasty.



Ibi [130]

Limb positions

The leg placement of this figure typically mirrors that of the tomb owner in a stride (Type B leg position).⁹²⁶ Only one exception is known in Remni / Merwi [109] where the figure is depicted with an open stance (Type A).

The arm positions follow the types for the major figure:⁹²⁷

SFB: Both elbows bent; arms below shoulder height;

SFC: Both elbows bent at 45 degrees;

SFD: Rear arm is above shoulder height.

The first known attestation of the active son in Hesimin (M22) [56] depicts the only known example of SFD arm position. SFC appears more frequently in the early Sixth Dynasty with examples found in CG 1782/1786 [95], In-Snefru-Ishtef [96] Remni / Merwi [109]. However, from the reign of Pepy II onwards the SFB style comes into use, as can be seen in Heri / Meru [118], Nekhebu [119], Ibi [130], and Cairo Fragment 6.12.24.5 [152]. The only figure to replicate the tomb owner's arm position is in the scene of Nekhebu [119].

⁹²⁴ Neferirtene [52], Akhetmehu [53], Kaiemankh [57], Hesi [110], Nekhebu [119], Idu 1 [128], Ibi [130], Pepyankh / Heri-Ib / Neferka / Heny [131], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Wahi (D4) [162].

⁹²⁵ Nekhebu [119], Henqu/Iy...f II [120], Idu 1 [128], Ibi [130].

⁹²⁶ See Appendix 4: Typology: Basic Leg Positions; See Hesimin (M22) [56], Seshemnofer IV [77], CG 1782/1786 [95], In-Snefru-Ishtef [96], Heri / Meru [118], Nekhebu [119], Niankhpepy / Khnumhotep / Heti [123], Ibi [130], Cairo Fragment 6.12.24.5 [152].

⁹²⁷ See Appendix 4: Typology: Spearfishing Major figure/Active Son Arm positions.

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Clothing and Individual Characteristics

The active son is shown with an athletic body (Type A),⁹²⁸ wearing a wig and dressed in a kilt (Type C).⁹²⁹ He wears either a *shendyt* kilt or wrap-around kilt but more frequently a *shendyt* kilt, as attested in Seshemnofer IV [77], CG 1782/1786 [95], Heri/ Meru [118], Ibi [130], and Cairo Fragment 6.12.24.5 [152]. Only two wrap-around kilts are known, in In- Snefru-Ishtef [96] and Remni/Merwi [109]. A short wig is most typical for this figure with all the examples of the active son using this type.⁹³⁰ However three active sons also include a filet and streamer as seen in CG 1782/1786 [95], Nekhebu [119], and Ibi [130]. The active son may also have wristbands⁹³¹ and collars⁹³² although the damage to these figures may not show a true representation of their usage across the examples.

Other Male Figures

Minor figures studied in this theme include the punters of the papyrus skiff and male attendants, often located behind the tomb owner carrying objects such as spears. This section only outlines the basic details relating to these figures. For a more complete list of details please refer to Appendix 2: Spearfishing Detail Tables P-S.

Oarsmen/Punters

These men are positioned on the boat with the tomb owner and are infrequently depicted in this theme with only eight known attestations, the majority of which are found in a provincial setting.⁹³³

These men are typically shown in a lunge (Type G) position at the stern or prow of the boat.⁹³⁴ This leg position emphasises the effort being used by the figure to propel the boat forwards.⁹³⁵ Type A (open stance) and B (stride) leg positions are also found in smaller frequencies.⁹³⁶ The leg position G typically forces the torso to be slightly bent forwards over the front leg (an exception being Bawi (G126) [113]),

⁹²⁸ See Appendix 4: Typology: Individual Characteristics and Clothing; Body Type A; Seshemnofer IV [77], CG 1782/1786 [95], In- Snefru-Ishtef [96], Remni/ Merwi [109], Heri/ Meru [118], Niankhpepy/ Khnumhotep/Heti [123], Ibi [130], Cairo Fragment 6.12.24.5 [152].

⁹²⁹ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing Types.

⁹³⁰ CG 1782/1786 [95], Ibi [130], Cairo fragment 56.12.24.5 [152], and Baketi I [163].

⁹³¹ Ibi [130].

⁹³² CG 1782/1786 [95], In-Snefru-Ishtef [96], Remni/Merwi [109], Ibi [130], Cairo Fragment 6.12.24.5 [152].

⁹³³ Niankhkhnum and Khnumhotep (scene 2) [27], Berlin Fragment 14103 [88], Bawi (G126) [113], Henqu/Iy...f II [120], Niankhpepy/Khnumhotep/Heti [123], Tomb G97 [125], Hesimin/ Sesi (F1) [127], and Khuwi/Tjeti-Iker [157].

⁹³⁴ See Appendix 4: Typology: Basic Leg Positions.

⁹³⁵ This type is found in Niankhkhnum and Khnumhotep [27], Berlin Fragment 14103 [88], Bawi (G126) [113], Tomb G97 [125], and Hesi-min / Sesi (F1) [127].

⁹³⁶ See Appendix 4: Typology: Basic Leg Positions: Type A; Berlin Fragment 14103 [88], Niankhpepy/Khnumhotep/Heti [123] and Khuwi / Tjeti-Iker [157]; Type B: is found in Berlin Fragment 14103 [88], and Henqu/ Iy... f II [120].

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all other oarsmen (those with Type A and B Leg Positions) are found with a vertical torso.⁹³⁷ There is no standard posture for the arms of the oarsmen/ punters. All figures grasp the pole. Those in Niankhkhnum and Khnumhotep [27], one figure in Berlin Fragment 14103 [88], and Niankhpepy/Khnumhotep/Heti [123] depict the oarsman/ punter with both hands in front. Two figures in the Berlin Fragment 14103 [88], as well as the group of tombs at El-Hawawish, Bawi (G126) [113], Tomb G97 [125], and Hesi-min/ Sesi (F1) [127], depict the arms on either side of the body with the pole across the body of the oarsman/ punter. The former three El-Hawawish examples are so similar that it may be inferred that there was direct influence between them.

These men are shown with Type A hair (full) and athletic body conditions.⁹³⁸ They are mostly represented as naked (Type A)⁹³⁹ with exposed genitalia.⁹⁴⁰ Two men wearing kilts (Type C)⁹⁴¹ may be found in Bawi (G126) [113] and Henqu/Iy...f II [120], although the poor state of preservation makes it difficult to identify the use of the kilt with confidence.

Officials

These men appear in 27 examples dating from the mid-Fifth Dynasty until the late Sixth and beyond. Officials are typically shown in registers behind and in front of the tomb owner.⁹⁴² They are often shown carrying objects that would be useful in the hunt and may have accompanied to tomb owner to assist the success of the venture. Their depiction was most frequent in the latter stages of the Fifth Dynasty, peaking in the Sixth.



Hesi [110] Officials

⁹³⁷ Bent torso: Niankhkhnum and Khnumhotep [27], Berlin Fragment 14103 [88], Tomb G97 [125], Hesimin/ Sesi (F1) [127]. Vertical Torso; Berlin Fragment 14103 [88], Bawi (G126) [113], Henqu/Iy...f II [120], Niankhpepy/ Khnumhotep/Heti [123], Khuwi/Tjeti-Iker [157].

⁹³⁸ See Appendix 4: Typology: Individual Characteristics; Niankhkhnum and Khnumhotep [27], Berlin Fragment 14103 [88], Bawi (G126) [113], Niankhpepy/Khnumhotep/Heti [123], Tomb G97 [125] and Hesimin/ Sesi (F1) [127].

⁹³⁹ Niankhkhnum and Khnumhotep [27], Berlin Fragment 14103 [88], Niankhpepy / Khnumhotep/ Heti [123].

⁹⁴⁰ See Bawi (G126) [113], Hesi-min/Sesi (F1) [127], Niankhkhnum and Khnumhotep [27], Tomb G97 [125], Berlin Fragment 14103 [88]. See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

⁹⁴¹ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

⁹⁴² See Appendix 2: Spearfishing Detail Table R.; Mereri [108] has attendants both in front and behind him in the scene. Bawi (G126) [113] and Nekhebu [119] show a single attendant in front of them.

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Limb Positions

All are shown standing with an open stance leg position (Type A);⁹⁴³ yet the position of their arms varies significantly. Seven types are identified as SF.A. A-G.⁹⁴⁴

SF.A.A – Arms are either side of body with slight bend to elbows (may or may not be holding an object).

SF.A.B – One arm at rest by side, other extended forwards at any degree (may be holding object).

SF.A.C – One at rest by side, other hand is raised up to or above shoulder.

SF.A.D – Both arms are holding an object across the torso.

SF.A.E – One arm/hand is raised across the chest, other arm either by side or extended forwards to any degree (including to shoulder height).

SF.A.F – Both arms are crossed at chest, either with forearms crossed or one hand on shoulder and other hand tucked under armpit of opposite arm.

SF.A.G – Other, infrequent or unique arm position.

Types SF.A. A-E are known in the Fifth Dynasty with Types SF.A. A and SF.A.B being the most frequent. Type SF.A.B is known in twelve examples with five occurrences of Types SF.A.A.⁹⁴⁵ These two types of arm placement allow the depiction of spears⁹⁴⁶ and objects such as fish⁹⁴⁷ which is typical during this dynasty. SF.A.C⁹⁴⁸ and SF.A. E⁹⁴⁹ have two examples each while Type SF.A.D⁹⁵⁰ is only shown once. There is a dramatic shift in positions in the Sixth Dynasty with Types SF.A.A and SF.A.E significantly increased. Types SF.A.A⁹⁵¹ has 26 examples versus SF.A.E⁹⁵² with eighteen. However, the high count of

⁹⁴³ Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Iynofert/Shanef [63], Senedjem-Ib/ Mehi [76], CG 1782/1786 [95], Iteti/ Shedu [97], Mereruka [103], Seankhuiptah [106], Mereri [108], Remni/ Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Niankhpepy/Khnumhotep/Heti [123], Tomb G97 [125], Hesi-min/Sesi (F1) [127], Pepyankh/Heri-Ib/ Neferka/Heny [131], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157]. See Appendix 4: Typology: Basic Leg Positions.

⁹⁴⁴ See Appendix 4: Typology: Arm Positions: Spearfishing Attendant Arm positions.

⁹⁴⁵ Types SF.A.A: Niankhkhnum and Khnumhotep [27], Kaiemankh [57], Senedjem-Ib/ Mehi [76]. Type SFA.B: Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Hesimin (M22) [56], Nimaatre [60], Iynofert/Shanef [63].

⁹⁴⁶ Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Hesimin (M22) [56], Nimaatre [60], Iynofert/Shanef [63].

⁹⁴⁷ Niankhkhnum and Khnumhotep [27], Neferirteneb [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/Shanef [63].

⁹⁴⁸ Hesimin (M22) [56], Kaiemankh [57].

⁹⁴⁹ Kaiemankh [57], and Nimaatre [60].

⁹⁵⁰ Kaiemankh [57].

⁹⁵¹ Mereruka [103], Mereri [108], Inumin [111], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147].

⁹⁵² Mereruka [103], Mereri [108], Hesi [110], Inumin [111], Bawi (G126) [113], Ihy [137], Pepyankh/Henykem [146].

thirteen individuals with type SF.A.A in one scene from Mereruka [103] must be acknowledged. As with the previous dynasty Type SF.A.A facilitates the holding of spears⁹⁵³ and animals such as fish and birds.⁹⁵⁴ However, there is also a slight increase in other objects such as food stuffs⁹⁵⁵, flowers⁹⁵⁶, oars⁹⁵⁷, sandals⁹⁵⁸ and vessels or cases⁹⁵⁹ which require the figure to carry them close to the chest, thus, the increase in SF.A.E is expected. Type SF.A.B has nine examples⁹⁶⁰, which is slightly less than in the previous dynasty while SF.A.D has a slight increase with three known attestations⁹⁶¹ Type SF.A.F is only found in this theme in two tombs from the Teti cemetery, Mereruka [103] and Seankhuipah [106] which show the figures with their arms folded across the chest in same manner. This is previously seen in the registering-the-catch scenes from Kagemni [94] and later in Mehu [121]. This repetition indicates influence between the tombs of the site and may suggest that similar if not the same artists were responsible for the duplication. Finally, Type SF.A.G is found in the tomb of Seankhuipah [106] which depicts an official leaning forward and extending an object to the tomb owner's leg. The second hand is touching the shoulder, holding a sack or piece of linen. The other tomb which holds unique arm positions is that of Khuwi/Tjeti-Iker [157]. This scene is unique in its composition with the motifs of a seated figure being offered incense and two other figures possibly washing the feet of the spearfishing tomb owner.

Officials' Clothing and Individual Characteristics

All the known attendants have Type A hair (full) and Athletic body conditions (Type A).⁹⁶² In the same fashion, they are all dressed in Type C clothing.⁹⁶³ Two types of kilt are worn; the pointed kilt is the most attested with 63 individual examples. Most of these are Sixth Dynasty with 25 in Mereruka [103] alone⁹⁶⁴ and it may be said that this was a standard for the Sixth Dynasty. The wrap-around style is

⁹⁵³ Iteti/ Shedu [97], Mereruka [103], Mereri [108], Hesi [110], Bawi (G126) [113], Nekhebu [119], Hesimin/Sesi (F1) [127], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], Pepyankh/Henykem [146].

⁹⁵⁴ Mereri [108], Remni/ Merwi [109], Meryrenefer/ Qar [133], and Pepyankh/Henykem [146].

⁹⁵⁵ Mereri [108], Remni/ Merwi [109].

⁹⁵⁶ Mereri [108].

⁹⁵⁷ Hesi [110].

⁹⁵⁸ Hesi [110].

⁹⁵⁹ Seankhuipah [106], Mereri [108], Hesi [110], Pepyankh/Henykem [146].

⁹⁶⁰ Iteti/ Shedu [97], Mereri [108], Remni/ Merwi [109], Nekhebu [119], Tomb G97 [125], Pepyankh/Heri-Ib/ Neferka / Heny [131].

⁹⁶¹ Seankhuipah [106], Hesi [110], Meryrenefer/ Qar [133], and Khuwi/Tjeti-Iker [157].

⁹⁶² See Appendix 4: Typology: Individual Characteristics; also Appendix 2: Spearfishing Detail Tables R, S; Niankhkhnum and Khnumhotep [27], Neferirtenefer [52], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Iynofert/Shanef [63], Senedjem-Ib/ Mehi [76] Iteti/ Shedu [97], Mereruka [103], Seankhuipah [106], Mereri [108], Remni/Merwi [109], Hesi [110], Inumin [111], Bawi (G126) [113], Nekhebu [119], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Ihy [137], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157].

⁹⁶³ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

⁹⁶⁴ Neferirtenefer [52], Senedjem-Ib/ Mehi [76], Iteti/ Shedu [97], Mereruka [103], Mereri [108], Remni/ Merwi [109], Inumin [111], Bawi (G126) [113], Nekhebu [119], Tomb G97 [125], Hesimin/ Sesi (F1) [127],

Chapter 11: Spearfishing

found in both dynasties, and was more frequent than the pointed kilt in the Fifth Dynasty.⁹⁶⁵ There was a slight increase in the Sixth Dynasty, yet it did not rival the frequency of the pointed kilt. The *shendyt* kilt, usually reserved for the tomb owner and his sons, is found on two figures only, both in the tomb of Iynofert/Shanef [63].

Captions

The use of captions in this theme is prolific with text used not only to describe what is happening in the scene but to recall the names and titles of those represented. Due to the nature of the scene, a myriad of sons, wives and daughters as well as notable officials are thus named. After careful consideration, it was decided that only the text regarding the activity of the scene was clearly beneficial to this study and therefore only those describing this fishing method are discussed here.

There are 30 captions used in this section which all relate to the act of spearfishing.⁹⁶⁶ This caption is present in the scene dating from the mid-Fifth Dynasty until the end of the Old Kingdom.

In all captions the use of *stt.t mhy.t* 'Spearing Fish' directly connects the scene to the spearfishing method. In all 30 attestations, this phrase is used or is reconstructed within the missing/ damaged text.⁹⁶⁷ While a few examples such as Irenkaptah [22], Senedjem-Ib/ Inti [59], Tomb G97 [125], Idu 1 [128], and Sabni (1) [142] only offer this succinct wording, it is typical for the artist to have elaborated to include the location and quantity of fish.

There are primarily two descriptions of the location. The marshlands or marshes; *phw(.w)* or marsh fields *sh.wt* are more frequent with the earlier examples in the Fifth Dynasty as seen in Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], and Kaiemankh [57]. Only a few others, Mehu [91], Kahep/ Tjeti-Iker [140] and Khuwi/Tjeti-Iker [157] solely use this description. After Kaiemankh [57] it becomes more typical to specify the lotus pools *šš.w* within the marshlands or field as seen in the captions attested in Hesimin (M22) [56], Hem-min (M43) [61], Bawi (G126) [113] and Idu/ Seneni [138]. While Henqu/Iy...f II [120], and Pepyankh/Henykem [146] refer instead to bird pools or *sš.w*. Hesi [110] and Seankhuiptah [106] only refer to bird pools *sš.w* not the marshlands as was seen in the previous

Pepyankh/Heri-Ib/ Neferka /Heny [131], Meryrenefer/ Qar [133], Kahep/ Tjeti-Iker [140], Pepyankh/Henykem [146], Shepsipumin/Kheni [147], Khuwi/Tjeti-Iker [157].

⁹⁶⁵ Niankhkhnum and Khnumhotep [27], Hesimin (M22) [56], Kaiemankh [57], Nimaatre [60], Seankhuiptah [106], Mereri [108], Hesi [110], Pepyankh/Henykem [146], Khuwi/Tjeti-Iker [157].

⁹⁶⁶ See Appendix 2: Spearfishing Detail Table T for table of captions in this theme.

⁹⁶⁷ Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Neferseshemptah and Sekhentiu [33], Hotepherakhti [34], Kaiemankh [57], Senedjem-Ib/ Inti [59], Hesimin (M22) [56], Hem-Min (M43) [61], Iynofert/Shanef [63], Akhethotep [71], Hesi [110], Seankhuiptah [106], Mehu [91], Henqu/Iy...f II [120], Hesi-min/Sesi (F1) [127], Bawi (G126) [113], Tomb G97 [125], Ibi [130], Pepyankh/Heri-Ib/ Neferka/ Heny [131], Idu 1 [128], Djau [141], Idu/ Seneni [138], Kahep/ Tjeti-Iker [140], Shepsipumin/Kheni [147], Pepyankh/Henykem [146], Sabni (1) [142], Pepyankh/Khuwi [153], Khuwi/Tjeti-Iker [157], and Ankhtyfy [148].

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examples. Akhethotep [71] is the only attestation which refers to both bird and lotus pools. While there is no clear standard, the elaboration of the description of location occurs in the late Fifth Dynasty. It is also clear that the mention of both the *phw* (. w) and either the bird *ss.w* or lotus *šz.w* pools occurs only in provincial examples.⁹⁶⁸

Frequently, the allusion of a great catch is given with the phrase *ʿz.t-wr.t* or 'great quantities'. This appears in eleven examples.⁹⁶⁹ The captions of Kahep/ Tjeti-Iker [140] and Shepsipumin/Kheni [147] word this concept slightly differently with *rdi n=k šht {htp.w}=s nfr* or the 'Marsh/field gives to you its goodly offerings'.

Only two examples mention any relation to religion or the afterlife. These are found in the tombs of Ibi [130] and Djau [141] of Deir el-Gebrawi. Each scene mentions *šh.t*, with the epithet in Djau [141] of *nb.t hzḥ* or 'mistress of the catch'.

Summary

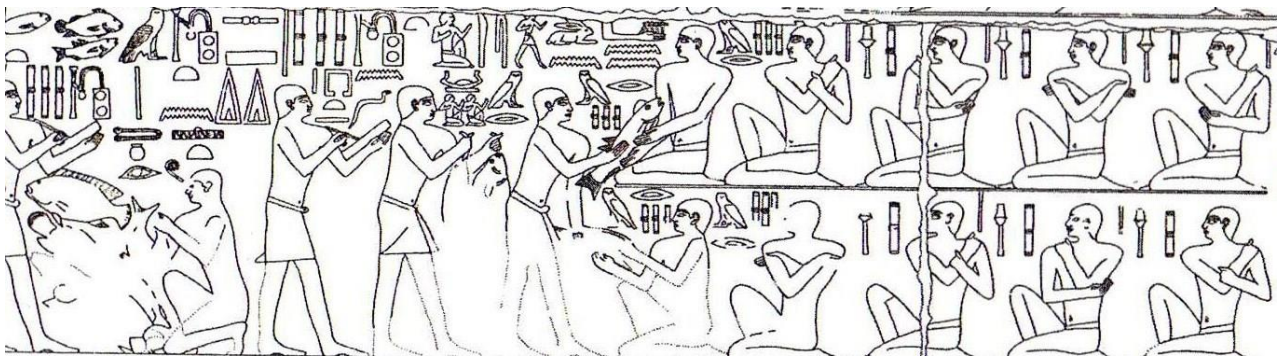
As the most frequently attested theme which includes a fishing activity, spearfishing is also the most widely distributed amongst both Upper Egypt and the Memphite region. The theme includes standards details such as the fish used for the major figure; the *Tilapia sp.* and *Lates*, which are also the standard for the son spearfishing.

The position, adornment and clothing of the tomb owner are standardized early in the depictions of this theme and carefully replicated. The theme is portrayed on a larger scale than other fishing methods and always includes the tomb owner. The philosophic significance of the theme is a major factor and clearly totally different to that of other fishing scenes. The central feature in the scene is invariably the tomb owner rather than any fishing technique. Standardization extended to the other essential elements such as the boat, the mound of water and spears. The artist was able to individualize them with small details such as the equipment on the boat, their use by family members and their names, the incorporation of attendants and the inclusion of smaller animals in the weeds. Captions accompanying this theme served two purposes: to highlight the persons and family members who were special to the tomb owner, as only those close him would have a spot in these significant scenes and to impart to the viewer the location and the successful catch the tomb owner has achieved.

⁹⁶⁸ Hesimin (M22) [56], Hem-Min (M43) [61], Henqu/Iy...f II [120], Bawi (G126) [113], Idu/ Seneni [138], and Pepyankh/Henykem [146].

⁹⁶⁹ Neferseshemptah and Sekhentiu [33], Hesimin (M22) [56], Iynofert/Shanef [63], Mehu [91], Hesi [110], Seankhuiptah [106], Hesi-min/ Sesi (F1) [127], Pepyankh/Heri-Ib/ Neferka / Heny [131], Idu/ Seneni [138], Pepyankh/Henykem [146], and Pepyankh/Khuwi [129].

Chapter 12: Registering the Catch



Kagemni [94]

Introduction

As the majority of fishing activities represented in the tomb do not coincide with a leisure activity performed by the tomb owner, a broader purpose may be inferred. Scenes of large scale fishing activities could indicate that some of the tomb owners were involved in these tasks in order to contribute to the local and national economy.⁹⁷⁰ Indeed, this is suggested by scenes that depict the presentation and recording of the catch, such as those in Ty [35], Kagemni [94] and Mehu [121]. Such scenes consist of three parts: (1) a long procession of minor figures carrying different species of fish; (2) the registration of the fish, which is typically identified by a scribe standing in front of a kneeling figure showcasing the fish in a basket in front of him;⁹⁷¹ and (3) eight or more seated officials presented with the catch while another scribe records its allocation and distribution. This process is usually condensed into one register, aiding in the flow of the scene’s narrative of the entire event from step to step, even though it is likely that each part of the process occurred at different locations. The following chapter aims to both examine the appearance and distribution of this theme, and to analyse its minor details, drawing comparisons and indicating possible artistic influences among its attestations.

Occurrence of Scene

Fifth Dynasty

Tomb	Location	Date
Ty [35]	Saqqara	V. 6-8

Table 12.1 Fifth Dynasty Attestations

The first known scene of registering the catch occurs in the tomb of Ty [35]. It is not recognised as such by the OEE database nor explained in full by Porter and Moss;⁹⁷² however, there are many apparent similarities between this scene and the two known Sixth Dynasty examples. These include the long line of bearers, the placement of a drying net in the top of the register and the accompanying inscription which suggests that bearers are bringing fish for verification.⁹⁷³

⁹⁷⁰ Van Elsbergen suggests that large scale fishing activities were carried out by other individuals, such as wealthy estate owners and high-ranking officials, and then redistributed by the *pr-ḏ.t* as wages and for bartering purposes in the commercial sphere. See Van Elsbergen, *Fischerei*, 97-123.

⁹⁷¹ Van Elsbergen combines parts 2 and 3, classifying the registration of the fish with the distribution of the catch. Van Elsbergen, *Fischerei*, 97, 99.

⁹⁷² The OEE Database records this scene as a bearing scene whereas Porter and Moss simply state that it shows the bringing of fish. PM. III, 469 [1d].

⁹⁷³ Please see Appendix 2: Registering the Catch Detail Table O for full translation.

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Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Mehu [121]	Saqqara	VI.2

Table 12.2 Sixth Dynasty Attestations

The theme occurs in two known tombs at Saqqara dating from the Sixth Dynasty. The first, located in the Teti Cemetery, is that of Kagemni [94] and dates to the early reign of Teti (VI.1E), and the second, at the Unis Cemetery, is that of Mehu [121] and dates to the reign of Pepy I (VI.2). The scene in the latter displays a slightly different arrangement to that in the former, with the groups of bearers shown to the left and right of the seated officials.

Distribution

All examples are thereby attested at Saqqara, their number and geographical distribution explained by several possibilities. For instance, perhaps the tomb owners' involvement in keeping the documents of the king or overseeing the marshland influenced the scenes' appearance. All held the position of *im.y-r3 sš(.w) ʿ.w nsw.t* 'overseer of the scribes of the king's documents'; Kagemni [94] and Mehu [121] were each *im.y-r3 prw.y-ḥd* 'overseer of the two treasuries' and *im.y-r3 šnw.ty* 'overseer of the granaries'; and Ty [35] was *im.y-r3 ph.w* 'overseer of the marshlands', *im.y-r3 šs* 'overseer of the fowling marshlands', *sš pr-ḥd* 'scribe of the treasury' and *sš pr-šn* 'scribe of the storehouse'. The registration process also likely took place in the Memphite region, where the scenes are attested. Although this does not explain why other high-ranking officials excluded the theme from their tombs, perhaps Kagemni [94], Mehu [121] and Ty [35] played a major role in registering the catch, either as overseers or contributors, and thus wished to make note of it. Another possibility is that the scenes in Kagemni [94] and Mehu [121] are influenced by that in Ty [35], adding to a number of other known details evidently inspired by the latter's artistic repertoire.⁹⁷⁴ Therefore, it is likely that the depiction of registering the catch in these three specific tombs is due to either the tomb owner's requirements and/or artistic influence.

⁹⁷⁴ Some similarities between these tombs occur in (yet not limited to) the spinning cord scene of both Ty [35] and Mehu [121], the net drying in Ty [35] and Kagemni [94], and funnel trap fishing in all three. Details such as the shape of the funnel trap's mouth in Ty [35] and Kagemni [94] or fish entering funnel traps, are only found in these three tombs. The weir net fishing scene in all three also has the same number and type of attendants in very similar positions, and the same use of ropes to create weir net chambers. See Chapter 7: Funnel Traps, 9: Weir and 19: *ḥsf nwt*, for a detail discussion of these details and their occurrence.

The Minor Details

Fish Species

In the three recorded scenes of registering the catch, a large variety of fish are brought before the head officials for recording and redistribution.⁹⁷⁵ They could be carried by hand, by rope strung through the mouth of the fish, or by a pole with either the fish strung or speared at the end.⁹⁷⁶ They could also be placed within round basket traps or rectangular vessels either carried or suspended off a pole. All methods of transportation are attested in Ty [35], Kagemni [94] and Mehu [121].

In general, the most frequently depicted fish are the *Lates* and *Mugil sp.*. Minor figures carry them in three main ways: directly; via a rope that is strung through the mouth of the fish; or by a pole with the rope tied at its end.⁹⁷⁷ The *Tilapia sp.* is slightly less frequent with only six attestations across all scenes. It is primarily carried by hand,⁹⁷⁸ with some figures offering it in baskets or suspended from a pole.⁹⁷⁹ *Mormyridae* fish also feature in all scenes, with the *Mormyrus Caschive* represented four times and *Mormyrus Kannume* portrayed twice.⁹⁸⁰ The *Gnathonemus* fish only occurs four times in Kagemni [94] carried by hand, by the rope in its mouth or speared onto one of the poles carried by the minor figures. Catfish are represented by the *Clarias*, *Schilbe* and *Synodontis* genera. Kagemni [94] includes five *Clarias sp.* held by hand, by rope or in baskets, and one *Synodontis sp.* in a sling placed over the forearm of a minor figure. Conversely, Mehu's [121] artists illustrate four *Synodontis sp.* fish carried by hand or in baskets, and only one *Clarias sp.* placed in a round basket. *Schilbe sp.* is found in Ty [35] twice and once in Kagemni [94]. Various other species, such as the *Tetraodon fahaka*, the *Citharinus sp.* and *Barbus bynni* in Mehu [121], are attested only once.

It thus appears that the most popular species in other fishing scenes, such as the *Mugil sp.*, *Tilapia sp.* and *Lates*, are also favoured in the registering of the catch theme.⁹⁸¹ This could be due to their frequent capture, their economic and culinary value, or artistic preference for their aesthetic qualities

⁹⁷⁵ The damage sustained to the scene in the tomb of Ty [35] makes many of the representations of fish unidentifiable.

⁹⁷⁶ For a detail explanation of transportation methods please refer to Chapter 15: Fish Bearing: Method of Transportation.

⁹⁷⁷ *Mugil sp.* = 3 carried, 1 strung on a pole and 1 in a sling in Kagemni [94]; 3 carried, 2 strung on rope and held in hand in Mehu [121]. *Lates* = 1 strung on rope held in hand, 2 strung on a pole and 1 speared on a pole in Kagemni [94]; 1 carried, 1 strung on rope held in hand and 1 strung on a pole in Mehu [121].

⁹⁷⁸ Kagemni [94] x 2 and Mehu [121] x 1.

⁹⁷⁹ Kagemni [94] shows the suspension from pole, while both Kagemni [94] and Mehu [121] depict the fish in baskets.

⁹⁸⁰ *Mormyrus Caschive* are found twice in Kagemni [94] carried by hand and strung on rope held by hand, and twice in Mehu [121] also being carried by hand and in a basket. *Mormyrus Kannume* is found twice in Mehu [121], once strung on rope held by hand and once placed in a basket.

⁹⁸¹ See Appendix 2: Registering the Catch Detail Table B.1, B.2.

Chapter 12: Registering the Catch

and fit in the available space and scene. The collected evidence hints at a slight shift in the type of favoured catfish. This, however, cannot be explored further due to the limited number of representations.

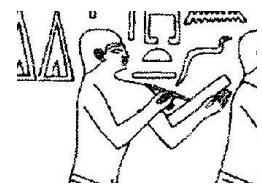
Equipment

The equipment used in the registering of the catch theme include: (1) items used in the transportation of fish, such as the types of basket and poles; and (2) writing implements held by scribes.



Kagemni [94]

Fish can be portrayed attached to ropes or poles, or placed within baskets. The rope is by far the most frequent piece of equipment utilised in the transportation of fish. It can be shown threaded through the mouth of the fish or grasped by a figure, which occurs eight times in Kagemni [94] and six times in Mehu [121].⁹⁸² Ropes strung through fish are affixed to poles four times in Kagemni [94] and only once in Mehu [121]. Those adjoining baskets to poles are attested in Ty [35] and Mehu [121] whereas basket handles made of ropes can be observed in Kagemni [94] and Mehu [121].



Kagemni [94]

The first attested basket shape, and also the most common, is the rectangular type that occurs once in Ty [35].⁹⁸³ It is portrayed with a close weave and two small handles which, as illustrated in Kagemni [94], can be tied to ropes carried at the crease of an offering bearer's elbow. Two other types of vessels are known, one a smaller rectangular basket and the other an inverted round basket trap. The latter is depicted twice in Ty [35] and once in Mehu [121].⁹⁸⁴ While the portrayal of ropes and baskets evidently occur in all known scenes of registering the catch, fish pierced by poles are only attested in Mehu [121].⁹⁸⁵

Writing implements also do not feature in all recorded scenes. Only Kagemni [94] and Mehu [121] feature two scribes, each holding a writing implement poised over a thick tablet.

⁹⁸² Each fish that has a rope threaded into its mouth is counted as one example. Fish that are strung up together over a pole are thus counted as two examples.

⁹⁸³ The rectangular basket is the most common type of basket in other themes such as those depicting funnel traps, weirs, angling, and lave net fishing.

⁹⁸⁴ A full analysis of the round basket trap can be found in Chapter 8: Round Basket Traps.

⁹⁸⁵ The pole is not classified as a spear as its end is not tapered to a point. It is also not shown with any barbs that are typical of harpoons or bident spears used by tomb owners and other spear fishermen.

Minor Figures

The following discusses minor figures, their position, adornments and individual characteristics, according to the three aforementioned segments in registering the catch scenes.

Positions of Bearers

Bearers are shown transporting fish from the river to be presented to officials for registration and distribution. Ten are portrayed in Kagemni [94] behind the seated officials, eight are shown in Ty [35]⁹⁸⁶ and seven are represented on either side of the officials in Mehu [121]. All are shown with a vertical torso and an open stance foot position, (Type A)⁹⁸⁷ except for one in Ty [35] who stands in a striding position (Type B).⁹⁸⁸ Arm positions can be categorised into main three Types:⁹⁸⁹



Mehu [121]

- A. Both arms are bent 45° at the elbow, each reaching up to hold onto the end of a pole;
- B. One arm is placed straight at the body, its hand holding a fish either directly or by rope; the other arm is bent at a 90° angle, holding the fish against the chest or at chest height.
- C. One arm is placed straight at the body, its hand holding a fish; the other arm is bent up at a 45° angle, holding a fish slung over the shoulder or placed in a basket balanced on the shoulder.

Type A is attested for four individuals in Ty [35], four in Kagemni [94] and one in Mehu [121]. The latter, as well as a figure in Kagemni [94], bears a slight variation to this type with one of the arms lowered, holding a basket in front of the torso. Another variation is found in one example from Ty [35] wherein the figure carries a pole across his shoulders with one hand at a typical 45° angle, the other slung over the pole, leaving the elbow pointed to the top and the hand facing down.⁹⁹⁰

Type B can be observed for three figures in Kagemni [94], each holding a fish or basket at chest height. A unique variation in Ty [35] shows a figure with one arm lowered to the thigh, its hand holding a fish by the head. Another variation in Kagemni [94] portrays the figure holding a fish at chest height, the second arm bent upwards at a 45° angle (similar to Type A), balancing a fish in the palm of the hand.

⁹⁸⁶ Ty's [35] example is incomplete, therefore the position of the bearers in relation to the seated officials is inconclusive.

⁹⁸⁷ See Appendix 4: Typology: Basic Leg Positions: Type A for full explanation.

⁹⁸⁸ See Appendix 4: Typology: Basic Leg Positions: Type B for full explanation.

⁹⁸⁹ See Appendix 4: Typology: Arm Positions: Registering the Catch Bearers Arm Positions.

⁹⁹⁰ This is unique to registering the catch scenes but not to bearing scenes as seen in Rakhaefankh [26], Kayemnofret (D23) [51], Meryteti/Meri [116] and Ibi [130].

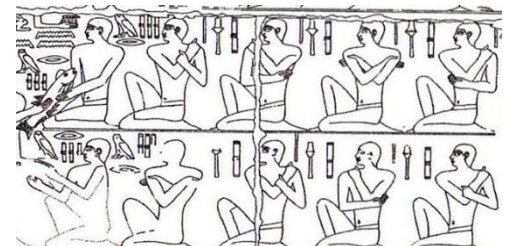
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Type C is found in Kagemni [94] and Mehu [121]. A slight variation in Mehu [121] shows a figure holding a large fish in front of the torso, the bent arm supporting the head of a fish and the vertical arm extending to a hand holding the tail.

Arm positions thus vary greatly and are dependent on the portrayed type of fish or transportation method. No typical arm position can be discerned as there is no common method of transportation. The procession of offering bearers was likely composed and modified according to artistic choice to both fit the allotted space and create an aesthetically-pleasing scene.

Position of Seated officials

Officials are commonly depicted seated in two sub-registers. Their legs can be positioned in one of two Types, kneeling (Type D) or semi-kneeling (Type E), with one leg invariably drawn towards the chest.⁹⁹¹ In both, the toes are flat along the register line. Their arms can be placed in one of four positions:⁹⁹²



Kagemni [94]

- A. The arms are crossed over the chest and the hands are under the armpits;
- B. One arm is across the chest, its hand placed on the opposite shoulder; the second hand holds the first arm's elbow;
- C. A variation of Type B, where the second hand is not holding the elbow, but the forearm of the arm crossed over the chest; and
- D. Both arms are extended forwards as if to receive fish. This position is reserved for the first two officials of the sub-registers.

Officials in Kagemni [94] and Mehu [121] are typically shown in a semi-kneeling position (Type E).⁹⁹³ Only one figure in Kagemni [94] out of the 20 seated figures across both scenes is kneeling,⁹⁹⁴ perhaps due to his placement in the upper sub register and the inclusion of a fish in the area that the bent leg would have occupied.

⁹⁹¹ See Appendix 4: Typology: Basic Leg Positions: Type D: Kneeling and Type E: Semi-Kneeling.

⁹⁹² See Appendix 4: Typology: Arm Positions: Registering the Catch Seated Official Arm Positions.

⁹⁹³ See Appendix 4: Typology: Basic Leg Positions: Type D Kneeling.

⁹⁹⁴ See Appendix 4: Typology: Basic Leg Positions: Type E: Semi-Kneeling.

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Referring to arm positions, Type A is the least frequent and occurs twice in Kagemni [94] and once in Mehu [121]. Type B is shown six times⁹⁹⁵ and Type C has a total of five occurrences.⁹⁹⁶ Of two damaged figures in Mehu [121], one appears to have both arms crossed over the chest, the hands placed on the shoulders in a Type A variation, while the other, based on the depiction of its elbows, likely has a Type B arm position. Type D is attested for the first two individuals in each sub-register of officials in Kagemni [94] and Mehu [121].

Position of Other Figures

Other than the standing offering bearers and seated officials, three more categories of minor figures can be identified in scenes of registering the catch. The first is the scribe, with at least two figures per scene represented facing activities of cataloguing or noting the distribution of fish. The second is the seated bearer, who is identified by his kneeling position in front of one of the scribes, and the third, the distributor, is shown in front of the seated officials.



Kagemni [94]

The scribe appears to be a very standardised figure with all examples of this individual, two from Kagemni [94] and two from Mehu [121], shown in the same position. The figures stand in an open stance (Type A) with vertical torsos.⁹⁹⁷ Their arms are held out, bent at the elbows at a 45° angle.⁹⁹⁸ The hand at the forefront carries a writing implement positioned over a tablet placed on the forearm of the opposite arm.

Two seated bearers are recorded, one in Kagemni [94] and one in Mehu [121]. That in Kagemni [94] is semi-kneeling (Type E) while that in Mehu [121] is kneeling (Type D).⁹⁹⁹ The position of the toes pushes their bodies slightly forward, especially in Mehu's [121] example, however the torsos are still vertical. Although Mehu's [121] bearer is damaged, the arm positions appear to be similar: they are extended forwards at chest height, elbows bent at a 45° angle. Each figure presents fish from a basket in front of him to the scribe towering overhead. Based on such details, the seated bearer was likely also a standardised figure, the only discrepancy arising in his leg position.

⁹⁹⁵ Type B arms can be positioned two ways: the left hand can be shown cupping the right elbow or the right-hand cups the left elbow. The former is more common and is represented four times, while the latter is only shown twice, once in Kagemni [94] and once in Mehu [121].

⁹⁹⁶ Kagemni [94]: Type C x 3 and Type B x3. Mehu [121]: Type C x 2 and Type B x 3.

⁹⁹⁷ See Appendix 4: Typology: Basic Leg Positions: Type A.

⁹⁹⁸ One figure in the scene from Mehu [121] is damaged.

⁹⁹⁹ See Appendix 4: Typology: Basic Leg Positions: Types D, E.

Chapter 12: Registering the Catch

Two distributors are usually found in each scene, always in front of seated officials.¹⁰⁰⁰ They stand vertically in an open stance leg position (Type A).¹⁰⁰¹ The torsos of three, two in Kagemni [94] and one in Mehu [121], are slightly bent forwards as they pass fish to seated officials. The distributor directly in front of the seated officials has one arm bent at 90°, passing a fish to an official in the upper sub-register, and another arm diagonally downwards, passing a fish to an official in the lower sub-register.¹⁰⁰² Behind him, a second distributor



Kagemni [94] Distributors

is shown in a similar way to those bearing fish, his arms in the bearers Type A position,¹⁰⁰³ the hands holding two fish rather than a pole. That in Kagemni [94] grasps the end of a rope that has been strung through the mouth of fish, whereas that in Mehu [121] holds a *Mugil* sp. by the head and a *Mormyrus Kannume* by the tail.

Clothing

While several types of figures are involved in registering the catch, the kilt (Type C) is the most popular form of clothing. The men can also be depicted naked (Type A) or dressed in a tunic (Type D).¹⁰⁰⁴ There does not appear to be any association between the clothing of the minor figures and their roles in registering the catch. Based on the preserved outlines of their garments, the seated officials, ten in Kagemni [94] and eight in Mehu [121], are all clothed in Type C.¹⁰⁰⁵ Distributors also wear Type C,¹⁰⁰⁶ as does a seated bearer in Mehu [121].¹⁰⁰⁷ Scribes similarly don kilts, however one in Mehu [121] wears a herdsman's kilt which is commonly found in marsh scenes, especially on overseers of such fishing activities as dragnetting.¹⁰⁰⁸ Bearers are additionally portrayed in Type C garments, the herdsman's kilt worn by five of the eight bearers in Mehu [121], the fringed kilt with a patterned overlaying material by three of Mehu's [121] bearers,¹⁰⁰⁹ and the pointed kilt by all bearers in Kagemni [94]. Those in Ty [35] are badly damaged, yet at least two wear kilts. As for other types of clothing, only two bearers are clothed in tunics (Type D) in Mehu [121] and one in Ty [35] is possibly naked

¹⁰⁰⁰ Kagemni [94] and Mehu [121].

¹⁰⁰¹ See Appendix 4: Typology: Basic Leg Positions.

¹⁰⁰² Kagemni [94] and Mehu [121].

¹⁰⁰³ Refer to the above section: Position of Bearers.

¹⁰⁰⁴ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

¹⁰⁰⁵ Two in Mehu [121] are damaged. However, the consistent depiction of Type C for all of Kagemni's [94] figures as well as the surviving figures in Mehu [121] suggests that the damaged figures would have also worn Type C clothing.

¹⁰⁰⁶ Two examples in each scene from Kagemni [94] and Mehu [121].

¹⁰⁰⁷ The seated bearer in Kagemni [94] is damaged.

¹⁰⁰⁸ See Appendix 2: Dragnet Detail Table N.

¹⁰⁰⁹ This is rarely seen in other fishing scenes. See examples in Dragnets: Fetekta [25], Ty [35], Sekhemka [48], Neferirtenef [52], CG1720 [83] and Ptahhotep/Iyniankh [80].

(Type A), the point of separation between his legs and across the thighs preserving no outline of a material covering the thighs.

Genitalia are not depicted for any figure in this theme. This is mostly likely due to the types of clothing worn by all figures, perhaps related to the less laborious nature of the tasks carried out.¹⁰¹⁰ The majority of persons involved in registering the catch are also of higher status than surrounding fishermen.¹⁰¹¹ Scribes are known for their status and the seated officials all bear titles indicating their role as '*head/leader of the is.t/ls.w.t*'.¹⁰¹² This may suggest that the bearers are similarly of high rank, possibly supervisors or overseers such as those depicted in dragnet scenes presenting their finest catch.¹⁰¹³ Conversely, bearers could have also needed to dress appropriately for the event, to present their offerings to those of higher rank.

Individual Characteristics

Different types of hair and body builds are portrayed for the various persons involved in registering the catch. Their hair could be one of two Types:¹⁰¹⁴

- A. *A full head of hair; or*
- B. *A receding hairline*

Their bodies could be represented as one of two main Types:¹⁰¹⁵

- A. *An athletic build; or*
- B. *A non-athletic build.*

Scribes, seated officials and bearers show some consistency in the depiction of individual characteristics. The majority have a full head of hair (Type A) and an athletic build (Type A),¹⁰¹⁶ but six out of the seven bearers in Mehu [121] have Type B hair.¹⁰¹⁷ The seated bearer in Kagemni [94] also has Type A hair and a Type A body, but that in Mehu [121] has a slightly rounded abdomen with a

¹⁰¹⁰ For example, the dragnet scene is adjacent to the registering scene in Mehu [121] while funnel trap and weir fishing are above Kagemni's [94] registering scene.

¹⁰¹¹ See De Moor, 'In the Beginning', 85; Geolet, *Nudity*, 20-21; Ruiz, *The Spirit of Ancient Egypt*, 16; Robins, 'Hair and the Construction of Identity' in *JARCE 36 (1999)*, 5, 8. All suggest that fishermen are of lower status, their nakedness or exposure of genitalia reaffirming this for the viewer.

¹⁰¹² These titles are depicted in both Kagemni [94] and Mehu [121]. For more, see the later section: Captions, in this chapter.

¹⁰¹³ See Appendix 2: Registering the Catch Detail Table N, O; Dragnet Detail Table N.

¹⁰¹⁴ See Appendix 4: Typology: Individual Characteristics and Clothing: Hair Type.

¹⁰¹⁵ See Appendix 4: Typology: Individual Characteristics and Clothing: Body Shapes.

¹⁰¹⁶ As Mehu's [121] scene is partially preserved, the features of two seated officials, one scribe and one bearer, could not be assessed. However, following the similarity of other details such as body position and clothing to those in Kagemni [94], it is possible that they too originally had Type A hair and Type A bodies. See Appendix 2: Registering the Catch Detail Table F, H, J, L, N.

¹⁰¹⁷ The hair type for the bearers in Ty [35] are no longer preserved.

possible hernia protruding from it.¹⁰¹⁸ One other bearer in Mehu [121] is similarly shown afflicted with this medical condition; he is positioned directly behind the seated officials.¹⁰¹⁹ Evidently, in comparison to such unique details in Mehu [121], the scene in Kagemni [94] is very structured in terms of both composition and details, the portrayal of its individuals following a typical and consistent pattern.

Captions

Captions are written near or over various parts of the registering of the catch theme. While there are differences between the scenes of Ty [35], Kagemni [94] and Mehu [121], their captions generally convey the same information.¹⁰²⁰

Several captions are associated with offering bearers. Only one in Ty [35] is preserved. A horizontal row of text above the scene's bearers reads */// t šht ʿz wr.t r m33 ///* '[...] very great fields in order to be seen/looked at/ verified [...]'. Based on Van Elsbergen's reconstruction, the beginning of this text states that the bearers were bringing fish from the great fields.¹⁰²¹

Kagemni's [94] scene provides inscriptions over the entire length the scene. Beginning at the bearers to the right of the scene the caption reads *inl.t mḥ.yt m šḥ ʿz m33 [///] / sḏfzy n* 'Bringing fish from the great field, oversee [///] / we r endowed?'. Mehu's [121] example is similar as it states *'inl.t wšnw.w in wh'* or 'bringing of an offering of fish by fishermen' and in a second section of fish bearing *'mḥ šhn* 'behold! the fishes dwell'. All of these inscriptions describe the process of the fish being brought to be registered by the scribes. The scribes also have a caption associated with them; this is their title *'sš isw.t'* or 'scribe of the *isw.t*'. This title is absent in Mehu [121] possibly due to the damage that the upper half of this section of the scene has sustained. There is a partial inscription above the kneeling scribe which speaks of fish, *'mḥyt, sšmw.t? n isw.t'*, or 'procession (registering)¹⁰²² fish, leader of the *isw.t*'. Kagemni's [94] scene informs the viewer as to what task they are performing *'sš m mḥyt'* above the scribe indicates that he is making a 'Document/list of fishes'.

The seated officials in both scenes have the same titles *'hrp is.t'* or *'hrp isw.t'* meaning 'administrator of the *Is.t/isw.t*'. Mehu's [121] first two seated figures are further defined with elaborate titles of *'Imy-r isw.t B3-ḥw'* 'Overseer of the *isw.t B3-ḥw*', The lower figure is the *'Imy-r isw.t* or 'overseer

¹⁰¹⁸ The head is damaged, and the hair type is unidentified. The hernia is visible protruding from the naval area of the abdomen.

¹⁰¹⁹ As with the previous example, the hernia is visible protruding from the naval area.

¹⁰²⁰ See Appendix 2: Registering the Catch Detail Table O.

¹⁰²¹ Van Elsbergen, *Fischerei*, 293.

¹⁰²² Van Elsbergen, *Fischerei*, 245 reconstructs the passage to suggest it reads the '[registration] of fish, leader of the *isw.t* (Palace/ workshop)'.

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of the *šw.t*'. The first four figures of Kagemni's [94] scene also use the above title. The differentiation of the roles and status of the figures is seen in the inscriptions only.

The bearers that are offering the fish to the seated figures are also given titles in Kagemni ' *Imy-r whr.wwy n pr.d*' or ' the two overseers of the fishermen for the estate' the inscription above the same figures in Mehu [121] is damaged however the surviving text suggests that it is highlighting the fish caught, '*mk mhyt nfrt [///] mhyt, ššmw.t? n šw.t*', or ' look after the good fish [///] [procession/ registration] of fish, leader of the *šw.t*'. In both scenes above the kneeling basket attendant the fish that are being sighted by the scribe are given numeral significance. Kagemni's [94] basket of fish is numbered in the hundreds '*tni ir.t š.t*' or 'count achieved is 100'. Mehu's [121] fish basket holds significantly more according to the scribe which describes the fish as a thousand, '*ir mi hz*'.

The use of these similar titles for both of the scene suggests that there was one system for the registration of fish.

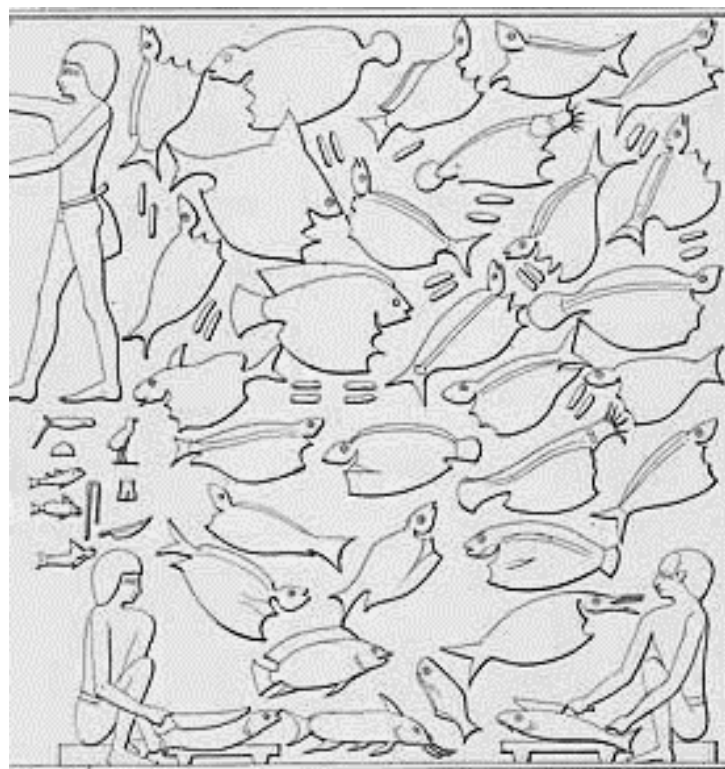
Summary

This theme has three known attestations; Ty [35], Kagemni [94] and Mehu [121]. All of these are found within Saqqara and between the date ranges of V.6-VI.2. The incomplete nature of Ty's [35] depiction hampers the comparison of all three scenes, however the remaining details of the procession of bearers suggests that all three are linked by artistic influence. The scenes from Kagemni [94] and Mehu [121] include two sub-registers of officials overseeing the distribution of the catch. These men are shown in similar seated positions, the rendering of their arms however marks a slight difference between them.

The captions of this theme are very informative. Not only is there text describing the activity taking place in all examples, but the seated figures in Kagemni [94] and Mehu [121] are given titles. A comparison of these titles shows that they are very similar and may suggest that one central system for the registration and distribution of fish had been established.

Due to the limited number of examples the establishment of standards is difficult, however given the visual and key compositional commonalities between the three it may be suggested that this theme was placed in one tomb and directly sourced for the latter two attestations on request of the tomb owner, and perhaps indicating their involvement in the activity.

Chapter 13: Gutting and Dehydration of Fish



Pehenuika [32]

Introduction

The scenes discussed in this chapter are commonly referred to as 'gutting scenes'. This broad term represents two different scene constructs: the more common combines gutting and dehydration of fish while the other only depicts dehydration. From the early Fourth Dynasty, the combination of gutting and dehydration scenes often accompanied marsh activities in tombs of the officials.¹⁰²³ Workmen are shown gutting fish by removing all of the internal organs to prolong the freshness of the fish for cooking and for transport to market. The gutted fish are shown 'butterflied' with their flesh sliced open to aid drying as the larger and thinner surface area allowed the flesh to dry faster. A shorter dehydration time meant that the flesh was less likely to spoil, especially in the Egyptian climate. There was less time for bacteria to contaminate the fish or insects to lay eggs in it. Four techniques could have been used to dry out the carcass: (1) leaving the gutted fish to dry naturally using the heat of the sun. (2) The fish could have been buried in the hot sand to aid in the dehydration process although there is no known scene depicting this.¹⁰²⁴ Further methods include air drying (3) and salting (4). Salting was well known to the Egyptians and most likely was used for the preparation of fish.¹⁰²⁵ Images from the tombs of Hotepherakhti [34] and Ty [35] depict fish carcasses hanging from the roof of a small tent. This may have been a representation of method (3), although it could have been a means of storing fish. Later representations show fish suspended from boat rigging,¹⁰²⁶ which may have been an attempt to use both the sun and wind to dry the carcass.

The following discussion documents the appearance and distribution of the gutting/drying scene. Minor details of the scene are considered in terms of standards and variations of features which developed over the course of the Old Kingdom.

¹⁰²³ Nefermaat [2], Rahotep [5].

¹⁰²⁴ Wilson, *Egyptian Food and Drink*, 39. Sahrhage, *Fischfang*, 125.

¹⁰²⁵ Salt was easily accessible in Old Kingdom Egypt. Temple personnel are thought to have had specific tasks in connection with the drying of fish and other food items. See Sahrhage, *Fischfang*, 128; Wilson, *Egyptian Food and Drink*, 38.

¹⁰²⁶ Sahrhage, *Fischfang*, 125. Fig. 58 [F, G].

Occurrence of the Scene

Fourth Dynasty

The Fourth Dynasty tomb of Nefermaat [2] depicts the first known instance of the combined gutting and dehydration theme. Harpur suggests, and rightfully so, that the scene is unusual due to its setting and inclusions of other animals.¹⁰²⁷ The fish in this scene are placed on top of flattened vegetation, which is unique. Further unusual elements include the position of the gutter (Type E leg position with curled toes)¹⁰²⁸ and the fish carcasses appear to be whole and not butterflied. The scene is only partially preserved making further analysis difficult. Harpur states that the gutter is cutting a whole fish that he holds in his hand.¹⁰²⁹ This, however, is not visible in the image provided in Harpur's report and is thus unconfirmed.¹⁰³⁰ It is possible that this scene does not show gutting but another method of preservation, especially given the dramatic difference in details of the near contemporary scene in the tomb of Rahotep [5] and later attestations.¹⁰³¹

Tomb	Location	Date
Nefermaat [2]	Maidum	IV.1E
Rahotep [5]	Maidum	IV.2
Nebemakhet [8]	Giza	IV.4-6

Table 13.1 Fourth Dynasty Attestations

The gutting scene from the tomb of Rahotep [5] is well preserved and depicts a solitary fisherman processing fish in combination with gutted fish drying out. The gutter sits near a papyrus thicket, gutting five fish, the bodies of which have been strewn haphazardly within the register to dry. This depiction appears to set the standard composition for the Old Kingdom.

The last known occurrence in the Fourth Dynasty is found in the tomb of Nebemakhet [8], which also depicts a combination scene. The gutter is seated on a stool cleaning a fish, with other carcasses pictured above him in the register. Unusually in this scene a second figure who is seated opposite the

¹⁰²⁷ According to Harpur the position of the gutter is unusual, however there are a number of examples of a gutter positioned in the Type E leg position. See the section below on Leg Positions. Harpur, *Maidum*, 63.

¹⁰²⁸ See Appendix 4: Typology: Basic Leg Positions: Type E.

¹⁰²⁹ Harpur, *Maidum*, 63.

¹⁰³⁰ Harpur, *Maidum*, fig. 75.

¹⁰³¹ Harpur states that the only detail identifying this scene as gutting is the position of the minor figure. Harpur, *Maidum*, 64. Later attestations include Nebemakhet [8], Rakhaefankh [26], Ramaka [28], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], CG 1535 [36], Sopedhotep (D15) [40], Ptahshepses [41], Inti [45], Neferirtenef [52], CG 1562 [53], Werirni [70], Nikauhor [64], Khunes [67], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Nebkauhor/ Idu [73], Kagemni [94], Mereruka [103], Niankhnesut [99], Mereri [108], Henqu/Iy...f II [120], GL .115 [126], Pepyankh/Khuwi [129], Ibi [130], and Khenty [132].

Chapter 13: Gutting and Dehydration of Fish

gutter appears to be placing fish carcasses into a large pot. Hassan suggests that this is the process of salting.¹⁰³² This particular scene is discussed under Chapter 15: Preparing Fish for Consumption.

Fifth Dynasty

Tomb	Location	Date
Werirniptah [16]	Saqqara	V.3-5
Iymery [20]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Rakhaefankh [26]	Giza	V.6?
Ramaka [28]	Saqqara	V.6-7
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Kapi [30]	Giza	V.6-8E
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Pehenuika [32]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Sopedhotep (D15) [40]	Saqqara	V.6-9
Ptahshepses [41]	Abusir	V.6-9
Inti [45]	Deshasha	V.8
Neferirtenef [52]	Saqqara	V.8-9
CG 1562 [53]	Saqqara	V.8-9
Nikauhor [64]	Saqqara	V.9
Khunes [67]	Zawyet el Maiyetin	V.9
Iynofert/ Shanef [63]	Saqqara	V.9
Werirni [70]	Sheikh Said	V.9
Nebkauhor/ Idu [73]	Giza	V.9 r/u VI.1
Ptahhotep II/ Thefi [74]	Saqqara	V.9M-L
Ptahhotep/ Iyniankh [80]	Saqqara	V.9-VI.1
Mereri (Hassan Gutting) [79]	Saqqara	V.9-VI

Table 13.2 Fifth Dynasty Attestations

It would appear that the standard features of the scene developed from the earliest examples in the Fourth Dynasty.¹⁰³³ Fifth Dynasty representations continued these features but they became more elaborate as time progressed. Scenes from the earlier Fifth Dynasty such as in the tombs of Iymery [20] and Irenkaptah [22] are similar to the scene of Rahotep [5]. In contrast, later Fifth Dynasty scenes¹⁰³⁴ evolved to depict more fish, two figures gutting or performing other tasks and in general

¹⁰³² Hassan, *Giza IV*, 135.

¹⁰³³ Such details include setting, figure positions, and equipment used. Refer to later sections within this chapter for full details on their development.

¹⁰³⁴ From the tombs of Ramaka [28], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32] and Ty [35].

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added more detailing to the fish or the setting. Examples from the tombs of Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Neferirtenef [52], and Werirni [70] include other figures preparing food alongside the gutter, elaborating on the detail that first appeared in Nebemakhet [8] in the Fourth Dynasty.

The majority of the Fifth Dynasty scenes depict the combination of gutting and drying the fish¹⁰³⁵ although three scenes, in Werirniptah [16], Rakhaefankh [26] and Inti [45], depict only dehydration. The example from Werirniptah [16] is poorly preserved, yet the space which might have been allocated to a possible figure is too small to have contained a human figure. Following this, the scene from the tomb of Rakhaefankh [26] depicts an unusual variation with whole fish randomly placed within the register in a fashion similar to that seen for drying gutted fish. The remnants of a hand in the damaged scene indicates that there was a figure associated with it; however, the hand does not hold a knife and this fish is not placed on a board. A link may be inferred between this example and that of Nefermaat [2] with the whole carcass shown being preserved. The final example is attested within the tomb of Inti [45]. Gutted fish are positioned and scaled with the intention to fill the register, leaving no space for the inclusion of a gutter.

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Niankhnesut [99]	Saqqara	VI.1-2
Mereri [108]	Saqqara	VI.1L-2E
Henqu/Iy...f II [120]	Deir el-Gebrawi	VI.2
GL .115 [126]	Giza	VI.2-4E
Pepyankh/Khuwi [129]	El Kom el Ahmar Sawaris	VI. 3-4E
Ibi [130]	Deir el Gebrawi	VI.3-4E
Khenty [132]	El Khokha	VI.3-4M

Table 13.3 Sixth Dynasty Attestations

The scenes from the tombs of Kagemni [94] and Mereri [108] appear to follow similar compositions as the Fifth Dynasty examples of Pehenuika [32] and Ty [35]. Mereruka's [103] scene is unique with the task of gutting occurring on board a boat. It is likely that the gutting and dehydration of fish were performed in multiple settings such as on shore, in a workshop context or on a boat, in order to

¹⁰³⁵ These are Iymery [20], Irenkaptah [22], Ramaka [28], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhetotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], CG 1535 [36], Sopedhotep (D15) [40], Ptahshepses [41], Neferirtenef [52], CG 1562 [53], Werirni [70], Nikauhor [64], Khunes [67], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Nebkauhor/ Idu [73].

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forestall the decomposition of the fish.¹⁰³⁶ Examples from the tombs of Henqu/Iy...f II [120], GL. 115 [126], and Khenty [132] have one fish gutter and are reminiscent of examples in earlier tombs such as Ramaka [28] and Werirni [70].

Distribution

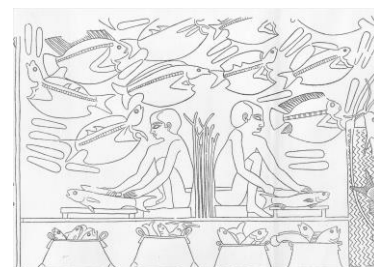
As is apparent from the above tables, the majority of tombs are located in Saqqara, especially after mid Fifth Dynasty.¹⁰³⁷ In comparison, only six examples exist at Giza and a further seven outside the Memphite region. Factors which influenced this spread include that of the site of Saqqara which was in use for a longer period of time coinciding with the expansion of tomb art, which may have contributed to the higher percentage of examples.¹⁰³⁸ It is also clear that during the Fifth Dynasty the theme increased in popularity (26 of 36 examples), a trend which did not continue in the Sixth Dynasty. This trend infers a decline in popularity, particularly starting with the reign of Teti (VI.1). Additionally, it was rarely included in the provincial tomb decorative programs, and it is not known from tombs dated after the beginning of the reign of Pepy II (VI.4E). The infrequency of this theme in provincial locations suggests that there was a limited transfer of this theme into the later tombs and those that do include it may have been influenced either by artists employed directly from the capital or under instruction of the tomb owner.

There is no geographical restriction to the performance of this activity. This process would have been carried out by both private fisherman and by those employed in the larger fishing industry. Consequently, this task did not require a specific location or setting.

The Minor Details

The Representation of Fish

Fish are represented either whole or gutted. In some scenes the fish may show the head, spine and other features. It is also apparent that the artist has, in some examples, arranged the fish in a particular manner, which can be identified as random, aligned or contained.



Ty [35]

¹⁰³⁶ Sahrhage, *Fishfang*, 124; Bekker-Nielsen, 'The technology and productivity of ancient sea fishing'. In *Ancient Fishing and Fish Processing in the Black Sea Region 2* (2005), 88.

¹⁰³⁷ See table 13.2 Fifth Dynasty Attestations in this chapter.

¹⁰³⁸ The site of Saqqara was used by Fourth and Fifth Dynasty officials, most remaining burials at Saqqara from the reign of Niuserre until the end of the Sixth Dynasty; See also Harpur, *Decoration*, 8.

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Fish that are gutted appear more frequently with a total of 201 confirmed images in comparison to 70 whole fish.¹⁰³⁹ The whole fish are depicted either in the hands of a gutter, in piles or in vessels in close proximity awaiting processing. Scenes depicting fish contained in baskets are found in the tombs of Ramaka [28], Ty [35] and Neferirteneb [52]. Gutted fish are typically placed spread out in the register, to dry. As mentioned, they are arranged in three different ways. The majority of gutted fish are depicted randomly scattered in the register.¹⁰⁴⁰ In only seven examples do fish appear to have been arranged in an orderly fashion.¹⁰⁴¹ Both Hotepherakhti [34] and Ty [35] have fish strung up to the beams of small tents to air dry.

Fish Features

Fish are frequently shown with a nondescript head, often combined with the spine along the length of the carcass. Some artists have elaborated these details and included a few identifying characteristics. The spines of gutted fish in seven tombs¹⁰⁴² all show detailing which individualises the vertebrae. The head of the fish in fifteen scenes from Memphite and provincial tombs¹⁰⁴³ all show at least the eye and mouth. Many of these examples depict the correctly shaped head for the fish species represented.¹⁰⁴⁴ Some examples also depict the dorsal fins which can aid in the identification of species.¹⁰⁴⁵

Fish Roe

A small number of scenes depict fish roe. Twelve examples ranging from the mid Fifth Dynasty to the reign of Teti in the early Sixth Dynasty represent pairs of roe as thin ovals placed beside a gutted fish. The first occurrence of this is found in the tomb of Iymery [20] which portrays four oval shapes at the

¹⁰³⁹ This count only included those images verified by visual inspection by the author. Some reports on these scenes suggest that there are further representations of fish within them. See Appendix 2: Gutting and Dehydration Detail Table C, D.1 and D.2 for Gutted/Whole Fish for individual occurrences per tomb.

¹⁰⁴⁰ Randomly scattered gutted fish appear in the tombs of Nefermaat [2], Rahotep [5], Nebemakhet [8], Iymery [20], Irenkaptah [22], Rakhaefankh [26], Ramaka [28], Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Ptahshepses [41], Neferirteneb [52], CG 1562 [53], Khunes [67], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99], Henqu/Iy...f II [120], GL.115 [126].

¹⁰⁴¹ In the tombs of Werirniptah [16], Inti [45], Werirni [70], Mereruka [103], Mereri [108], Ibi [130] and Khenty [132].

¹⁰⁴² These tombs are of Rahotep [5], Akhetotep (Louvre) [31], Ty [35], Ptahshepses [41], Mereruka [103], Ibi [130], and Khenty [132].

¹⁰⁴³ These tombs are Rahotep [5], Nebemakhet [8], Akhetotep (Louvre) [31], Pehenuika [32], Ty [35], Ptahshepses [41], Neferirteneb [52], Werirni [70], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereruka [103], Henqu/Iy...f II [120], GL. 115 [126], Pepyankh/Khuwi [129], Ibi [130] and Khenty [132].

¹⁰⁴⁴ Examples are found in Akhetotep (Louvre) [31], Pehenuika [32], Ty [35], Ptahhotep II/ Thefi [74], Kagemni [94], Mereruka [103], GL.115 [126], but are not limited to these tombs.

¹⁰⁴⁵ Dorsal fins appear in the tombs of Rahotep [5], Akhetotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Ptahshepses [41], Neferirteneb [52], Ptahhotep II/ Thefi [74] and Mereruka [103].

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bottom of the register. The majority of these examples include two to six individual roe.¹⁰⁴⁶ Others such as Nebkauhor/ Idu [73], Pehenuika [32] and Ty [35] include a large quantity of this delicacy with 28, 23 and 19 individual images of fish roe respectively. Niankhkhnum and Khnumhotep's [27] scene depicts the greatest number with over 45 individual depictions haphazardly spread between the three gutters. This chaotic scene is further complicated by the unique addition of insects over the fish and fish roe.

A unique representation occurs in the tomb of Ty [35]. In a scene separate to the gutting of fish, there is a marquee set up with several men working on tasks such as detaining and killing birds. In the rafters of these tents not only fish are drying (also represented in Hotepherakhti [34]) but a pair of fish roe are strung up. The drying of roe in this manner suggests that it was wrapped or enclosed in some type of material so that it maintained this shape.

Fish Species

Modification of the body of the fish and the artists' frequent lack of defining characteristics make the identification of species difficult. In total, 171 depictions of both gutted and whole fish are unidentifiable.¹⁰⁴⁷ Identified species are noted in the following discussion.

The *Mugil sp.* is the most frequently depicted fish. It is easily identifiable in its whole form with such features as the double dorsal fin, forked tail fin and general body shape.¹⁰⁴⁸ The dorsal fins are a definite indicator of species in the gutted specimens with the fins attached to the spine in the centre of the gutted fish.¹⁰⁴⁹ There are also a substantial number of fish that appear to resemble the *Mormyridae* family; specifically, the *Petrocephalus*, *Gnathonemus* or *Hyperopisus*. These species have been grouped together as the representations are indistinguishable yet still display certain characteristics of this family.¹⁰⁵⁰ These fish are represented 21 times with the majority found in one scene from the tomb of Pehenuika [32].¹⁰⁵¹ The *Tilapia sp.* is also frequent with 13 representations

¹⁰⁴⁶ As seen in the tombs of Ramaka [28], Akhetotep (Louvre) [31], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Mereri (Hassan Gutting) [79] and Kagemni [94].

¹⁰⁴⁷ See Appendix 2: Gutting and Dehydration Detail Table D.1, D.2.

¹⁰⁴⁸ Whole fish appear in scenes in Rahotep [5], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhetotep (Louvre) [31], Ty [35], Neferirteneft [52], Ptahhotep II/ Thefi [74], Mereruka [103]. Brewer-Freidman, *Fish and Fishing*. 72-3; See also Appendix 3: Fish Profile: *Mugil sp.*

¹⁰⁴⁹ Gutted: Ptahshepses [41], Ptahhotep II/ Thefi [74], Kagemni [94], GL.115 [126].

¹⁰⁵⁰ Such characteristics are the long-rounded body shape, the blunt rounded head, defined lips or mouth and finally the forked caudal fin. See Appendix 3: Fish Profile: *Petrocephalus*, *Gnathonemus* and *Hyperopisus*.

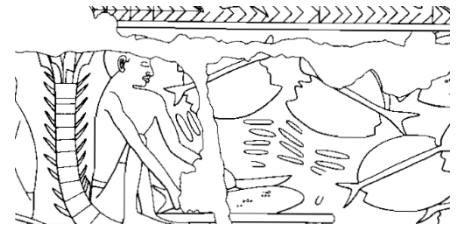
¹⁰⁵¹ Pehenuika [32] has 16 of these fish in the scene. Other representations are found in Hotepherakhti [34], Ty [35], and Mereruka [103].

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in total.¹⁰⁵² However other species are only found in small numbers. These include *Synodontis sp.*¹⁰⁵³ and *Clarias sp.*¹⁰⁵⁴ each represented three times, the *Barbus bynni*,¹⁰⁵⁵ *Tetraodon fahaka*¹⁰⁵⁶ and *M. electricus*¹⁰⁵⁷ depicted twice and finally the *Citharinus*¹⁰⁵⁸ and *Schilbe*¹⁰⁵⁹ only once.

Location of the Gutting Scene

According to both Sahrhage and Bekker-Nielsen, the most effective location to perform gutting or dehydration would be on a boat, followed by the banks of the river.¹⁰⁶⁰ This would be prudent as limiting the time between catch and processing would better preserve the carcass. The river bank would be particularly favoured by persons using fishing methods



Niankhkhnum and Khnumhotep [27]

involving large quantities of fish such as dragnetting. Representations of gutting and dehydration typically depict two locations: (1) surrounded or seated near a papyrus thicket clearly indicating the river bank or (2) with no indication of a natural setting, and possibly accompanied by another figure completing tasks.¹⁰⁶¹ This suggests perhaps a workshop or a specific location (temporary or permanent) set up for such activities. A unique scene in Mereruka [103] however suggests that gutting may also have taken place on vessels.

The earliest gutting scenes occur in a natural setting in Nefermaat [2] and Rahotep [5]. Each depicts foliage, with the scene from Nefermaat [2] showing low dense foliage and Rahotep [5] depicting a large papyrus thicket which became a typical indication of a natural setting. Following these, the natural setting does not reoccur until the mid-Fifth Dynasty.¹⁰⁶² In the Sixth Dynasty this setting appears less frequently with only three known examples attested in the tombs of Kagemni [94], Ibi [130] and the fragment GL.115 [126]. The natural setting can be also defined by other attributes, for example the task taking place directly beside a dragnetting or fishing related iconography without segregation between the scenes. Instances of this occur in the depictions from CG 1535 [36] with a

¹⁰⁵² Scenes with depictions of *Tilapia sp.* occur in Rakhaefankh [26], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Neferirtenef [52], Kagemni [94], and Mereruka [103].

¹⁰⁵³ *Synodontis sp.* depicted in Pehenuika [32], Hotepherakhti [34], Ty [35].

¹⁰⁵⁴ *Clarias sp.* depicted in Pehenuika [32], Ty [35], Neferirtenef [52].

¹⁰⁵⁵ *Barbus bynni* depicted in Rakhaefankh [26], Mereruka [103].

¹⁰⁵⁶ *Tetraodon fahaka* depicted in Niankhkhnum and Khnumhotep [27], GL.115 [126].

¹⁰⁵⁷ *M. electricus* depicted in Pehenuika [32], Ty [35].

¹⁰⁵⁸ Pehenuika [32].

¹⁰⁵⁹ Nebkauhor/ Idu [73].

¹⁰⁶⁰ Sahrhage, *Fishfang*, 124; Bekker-Nielsen, 'The technology and productivity of ancient sea fishing'. In *Ancient Fishing and Fish Processing in the Black Sea Region 2* (2005): 88.

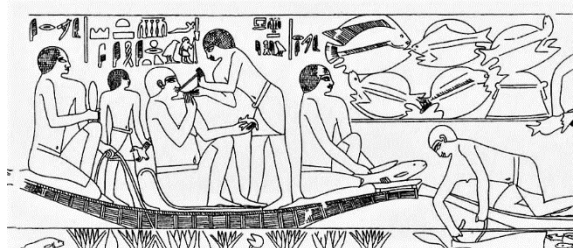
¹⁰⁶¹ See Appendix 2: Gutting and Dehydration Table F.

¹⁰⁶² When it is seen in the tombs of Iymery [20], Rakhaefankh [26], Ramaka [28], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhethotep (Louvre) [31], Ty [35], CG 1562 [53], Werirni [70] and Khunes [67].

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round basket trap being operated directly in front of the gutter. The scenes from the tombs of Nikauhor [64] and Ibi [130] portray fighting boatmen between the two gutters on opposite banks of the river.

Slightly less frequent are examples that appear to depict a workshop or specific setting in an absence of foliage.¹⁰⁶³ This setting is first attested in the Fourth Dynasty in the tomb of Nebemakhet [8] which portrays men carrying fish and agricultural activities in close proximity to each other. The setting is also found in the earlier half of the Fifth Dynasty in the scenes from the tombs of Werirniptah [16] and Irenkaptah [22]. An increase in popularity of this iconography occurred in the latter half of the dynasty.¹⁰⁶⁴ In the Sixth Dynasty only two scenes, those in the tombs of Mereri [108] and Khenty



[132], are not shown in a natural setting. As mentioned above, a unique location appears in Mereruka [103] where the tasks are performed on a boat.

The slightly higher frequency of natural settings does not define a standard for this scene. Both locations were used indiscriminately. There was a trend to use natural settings in the earlier period of the date range of this scene, with the unnatural setting becoming popular during the mid and latter half of the Fifth Dynasty onwards.

Equipment

There are three main pieces of equipment in this theme: (1) a knife¹⁰⁶⁵ (2) the cutting slab, and (3) the seat used by the gutter.¹⁰⁶⁶

¹⁰⁶³ Werirniptah [16], Irenkaptah [22], Hotepherakhti [34], Sopedhotep (D15) [40], CG 1535 [36], Ptahshepses [41], Inti [45], Neferirteneb [52], Nikauhor [64], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], and Nebkauhor/ Idu [73].

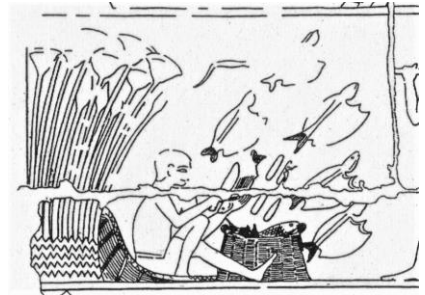
¹⁰⁶⁴ Attestations appear in the tombs of Hotepherakhti [34], Sopedhotep (D15) [40], Inti [45], Neferirteneb [52], Iynofert/ Shanef [63], Ptahhotep II /Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79] and Nebkauhor/ Idu [73]. Ty [35] represents a scene which is not directly related to gutting or market activity yet still depicts both drying fish and roe strung from the rafters of the tent. This may be classed as an industrial setting.

¹⁰⁶⁵ There are damaged scenes in which the knife is absent, these are Werirniptah [16], Iymery [20], Ptahshepses [41], Khunes [67], Nebkauhor/ Idu [73], Niankhnesut [99], Pepyankh/Khuwi [129] and Khenty [132].

¹⁰⁶⁶ See Appendix 2: Gutting and Dehydration Table H.

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A knife appears in the majority of scenes.¹⁰⁶⁷ The fragments from the tomb of Ptahshepses [41] are incomplete and show no evidence of a knife; however, the inscription preserved on fragment S 445(1001) depicts the knife as a determinative to the word *wgs* 'to cut open' or 'gut' fish. In six tombs the knife has a broad blade and is of a reasonable length, approximately half to two thirds of the body of the fish.¹⁰⁶⁸ Examples of a thinner bladed knife are pictured in Fifth and Sixth Dynasty tomb chapels.¹⁰⁶⁹ Conversely, some depict the knife to be short, defined as under half of the length of the body of the fish. These instances are attested in Pehenuika [32], Hotepherakhti [34], Ptahhotep II/ Thefi [74], Mereruka [103], Henqu/Iy...f II [120], Mereri [108], and Ibi [130]. Possibly the different lengths and widths were pictured to represent different types of knives. This may have been the case in tombs where two gutters wield different knives, as seen in Irenkaptah [22], and Pehenuika [32]. However, there is no discernible pattern to the depiction of these differently shaped knives nor are there any surviving inscriptions to suggest a different process is being performed which would require a specialized knife.



Ramaka [28]

In accompaniment to the knife, a slab or board is depicted on which the fish was cut. This piece of equipment does not appear as frequently as the knife and varies in shape, height and decoration. No board is portrayed in the Fourth Dynasty, although a low table is used by the gutter in the tomb of Nebemakhet [8]. The first occurrence of the board appears in the scene of Iymery [20]. This board is poorly preserved, and from the surviving details it appears to sit flush on the register base and to be rectangular in shape. Irenkaptah's [22] scene depicts two instances, one with a thick board and rectangular block legs keeping it lifted above the register line and the second thinner with narrow coiled legs, a detail unique to this tomb. The use of rectangular block legs is portrayed in eight tombs of Dynasties Five and Six.¹⁰⁷⁰ Less common are boards without legs that sit flush on the register base. These are portrayed in the tombs of Niankhkhnum and Khnumhotep [27], CG 1562 [53], Neferirteneb [52], and Nikauhor [64]. Two other box-like boards appear in the scenes from Nebkauhor/ Idu [73]

¹⁰⁶⁷ Knives are present in the following scenes: Nefermaat [2], Rahotep [5], Nebemakhet [8], Irenkaptah [22], Ramaka [28], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], CG 1535 [36], Sopedhotep (D15) [40], Neferirteneb [52], CG 1562 [53], Werirni [70], Nikauhor [64], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Kagemni [94], Mereruka [103] Mereri [108], Henqu/Iy...f II [120], GL.115 [129], Ibi [130]. Exceptions occur in the scenes of Rakhaefankh [26] and Inti [45] as they do not depict a gutter.

¹⁰⁶⁸ See scenes in the tombs of Rahotep [5], Nebemakhet [8], Irenkaptah [22], Ramaka [28], Kapi [30], and Werirni [70].

¹⁰⁶⁹ See scenes in Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ty [35], Sopedhotep (D15) [40], Iynofert/ Shanef [63], Mereri (Hassan Gutting) [79] and Kagemni [94].

¹⁰⁷⁰ See scenes in Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ty [35], Sopedhotep (D15) [40], Werirni [70], Kagemni [94], Mereruka [103], and Mereri [108].

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and Khenty [132].¹⁰⁷¹ Ptahhotep II/ Thefi's [74] tomb has the only scene to depict a slanting cutting board with small possibly rectangular legs under the top of the board. The slanting board would have helped with the removal of any liquid and viscera which would slide to the base keeping the area uncluttered.

In general, the portrayal of the gutter using any type of seat (18 examples) is nearly as common as the absence of a seat (20 examples). Instances of gutters without seats are more frequent in the Fourth and Fifth Dynasties.¹⁰⁷² They are also more frequent in the Sixth Dynasty with six occurrences.¹⁰⁷³

Two main types of seats are portrayed: (1) a full seat which included a cushion and back rest commonly seen in angling scenes,¹⁰⁷⁴ and (2) a small stool or box. During the Fourth and mid Fifth Dynasties, the most common seat was a small stool which had no feet. These could range from mid-calf to knee height as seen in Nebemakhet [8] to smaller stools at ankle height, which are depicted in Pehenuika [32], Ty [35], and Sopedhotep (D15) [40]. Only one stool has detailing attested. In the tomb of Sopedhotep (D15) [40], a stool has three grouped, equidistant vertical lines, which is similar to the detail of a papyrus boat.¹⁰⁷⁵ This may suggest that the stools were constructed of papyrus and lashed together for stability.

In the middle of the Fifth Dynasty the full seat became more frequent with seven known examples seen in the scenes from the tombs of Ramaka [28], Kapi [30], Nikauhor [64], Khunes [67], Iynofert/Shanef [63], Mereri (Hassan Gutting) [79] and Ptahhotep/ Iyniankh [80]. The full seat is the only type depicted after the reign of Unis (V.9) and is attested in the Sixth Dynasty tombs of Mereri [108], Henqu/Iy...f II [120], and GL.115 [129]. Unusually the figure in Irenkaptah [22] is seated on a structure similar to a board. The structure has a thick platform and is supported by rectangular legs. It is raised above the register line to the same height as the cutting board in front of it.

Minor Figures

In the majority of scenes there is only one fish gutter.¹⁰⁷⁶ The first instance of two figures, portrayed in the scene from the tomb of Irenkaptah [22], appeared slightly earlier than the unique

¹⁰⁷¹ Ibi's [130] board has no legs yet does not sit flush with the register base.

¹⁰⁷² As seen in Nefermaat [2], Rahotep [5], Iymery [20], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Hotepherakhti [34], Neferirtenef [52], CG 1562 [53], Werirni [70], and Ptahhotep II/ Thefi [74].

¹⁰⁷³ In the tombs of Kagemni [94], Mereruka [103], Ibi [130] and Khenty [132].

¹⁰⁷⁴ The seat is a Type A Angling seat with the back rest at or above the hips of the figure: See Chapter 5: Angling: Fishing Equipment: Seats; Appendix 2: Angling Detail Table G.

¹⁰⁷⁵ Similar to a boat with Type A detailing or only lashing; See Appendix 4: Boat Detailing: Type A and B.

¹⁰⁷⁶ There is only one fish gutter in Nefermaat [2], Rahotep [5], Nebemakhet [8], Iymery [20], Ramaka [28], Kapi [30], Akhetotep (Louvre) [31], Hotepherakhti [34], CG 1535 [36], Sopedhotep (D15) [40], Neferirtenef

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representation of three figures in the tomb of Niankhkhnum and Khnumhotep [27]. There are only six other examples of two gutters, the last dated to the early reign of Pepy II.¹⁰⁷⁷

Limb positions

All gutters are seated, yet the legs may be shown in a variety of positions: following the basic leg positions D (Kneeling), E (Semi Kneeling), F.1 (Seated with both legs to chest), and F.2 (Seated with one leg extended forwards).¹⁰⁷⁸ All arms are extended in front of the torso and appear to be more structured with only two variances demonstrated by the fish gutter. These arm positions are classified as GA (forearm gutting the fish) and GB (other arm gutting fish).¹⁰⁷⁹



Irenkaptah [22]

The figures of gutters from the Fourth Dynasty do not show any standards in terms of leg position. The scene from the tomb of Nefermaat [2], depicts the figure semi-kneeling (Type E) with toes curled under the foot, while Rahotep's [5] gutter has the Type E position with the top of the foot flat against the register. Nebemakhet's [8] artist(s) represented the gutter seated on a chair; thus, both legs are bent at the knee at a 90° angle and feet are flat on the baseline.

There are 23 examples of Type F.1 in the Fifth Dynasty, which indicates that this was the typical leg position employed in this dynasty.¹⁰⁸⁰ Type F.2 is only attested twice, in the tombs of Ramaka [28], and Akhethotep (Louvre) [31] with a possible instance of Type D attested in the fragment CG 1535 [36].

Leg positions of Type F.1 and E are the primary depictions for the Sixth Dynasty. Type F.1 is attested in the images of Kagemni [94], Mereri [108], and Khenty [132], while Type E is found in three examples in Mereruka [103], Henqu/Iy...f II [120], and Ibi [130]. In Ibi's [130] scene figures have an unusual foot position. The back leg, drawn to the chest, is depicted with the foot placed in front of the thigh of the leg in the foreground as though the figure has crossed one foot over the front of the other foreleg.

[52], Werirni [70], Nikauhor [64], Khunes [67], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Nebkauhor/ Idu [73], Mereruka [103], GL.115 [129], and Khenty [132].

¹⁰⁷⁷ Pehenuika [32], Ty [35], CG 1562 [53], Kagemni [94], Mereri [108] and Ibi [130].

¹⁰⁷⁸ See Appendix 4: Typology: Basic leg Positions.

¹⁰⁷⁹ See Appendix 4: Typology: Arm Positions: Gutters Arm Positions. See also Appendix 2: Gutting and Dehydration Table I.

¹⁰⁸⁰ For the 23 instances see tombs of Iymery [20], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Sopedhotep (D15) [40], Neferirtenef [52], CG 1562 [53], Werirni [70], Nikauhor [64], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Nebkauhor/ Idu [73].

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One instance of Type D appears on the fragment GL.115 [129] which depicts the figure on a seat with both legs folded beneath the buttocks.

The standard arm position is Type GA through the entire date range of the scene. A total of 19 individual figures hold this position which first appeared in the Fourth Dynasty tomb of Nebemakhet [8].¹⁰⁸¹ Three of these arm positions are somewhat unusual. The figures in the tombs of Ramaka [28] and Akhethotep (Louvre) [31] both have the second hand holding the fish close to the chest. The same arm position in both these tombs suggests that there was influence between them. The position is similar to the earlier unique scene from Rahotep [5] which shows the gutter holding a fish close to his chest with the other arm bent at the elbow and stretched across the chest. Ibi's [130] scene offers a slight variation of Type GA. The forearm is still shown gutting the fish, but the second arm of both gutters, are shown holding an already prepared fish in the air above their heads. The position of Type GB is only represented 12 times with no variation in the position of the second arm.¹⁰⁸²

Individual Characteristics

Gutters may be depicted with full heads of hair (Type A) or receding hair lines (Type B). The body conditions of the figures are also classified into two types: athletic (Type A) or non-athletic (Type B).¹⁰⁸³

In the Fourth Dynasty gutting scenes of Rahotep [5], and Nebemakhet [8] only Type A hair and body condition are represented. Type A body condition continues to be typical for the Fifth Dynasty with seventeen depictions.¹⁰⁸⁴ By comparison Type B is attested only four times in the scenes of Irenkaptah [22], Ramaka [28], Akhethotep (Louvre) [31] and Ptahhotep II/ Thefi [74]. Types A and B hair are found in equal numbers. Each attested in seven scenes.¹⁰⁸⁵

¹⁰⁸¹ The nineteen instances are in the tombs of Iymery [20], Ramaka [28], Niankhkhnum and Khnumhotep [27], Kapi [30], Akhethotep (Louvre) [31], Pehenuika [32], Hotepherakhti [34], Ty [35], Sopedhotep (D15) [40], Werirni [70], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Mereri (Hassan Gutting) [79], Kagemni [94], Mereruka [103], Mereri [108], Henqu/Iy...f II [120], and Ibi [130].

¹⁰⁸² For the twelve instances of *Type GB* see the tombs of Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Pehenuika [32], Ty [35], Neferirtenef [52], CG 1562 [53], Ptahhotep/ Iyniankh [80], Nebkauhor/ Idu [73], Kagemni [94], and Mereri [108].

¹⁰⁸³ See Appendix 4: Typology: Individual Characteristics and Clothing: Individual Characteristics. See also Appendix 2: Gutting and Dehydration Table J.

¹⁰⁸⁴ The depictions occur in Iymery [20], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Kapi [30], Pehenuika [32], Ty [35], CG 1562 [53], Werirni [70], Nikauhor [64], Khunes [67], Iynofert/ Shanef [63], Ptahhotep/ Iyniankh [80] and Mereri (Hassan Gutting) [79].

¹⁰⁸⁵ Type B hair is shown in scenes from Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Ty [35], Ptahhotep II/ Thefi [74] and Ptahhotep/ Iyniankh [80]. Type A is in the scenes from Iymery [20], Ramaka [28], Pehenuika [32], Hotepherakhti [34], CG 1562 [53], Werirni [70] and Khunes [67].

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Examples from the Sixth Dynasty depict six occurrences of Type A Body condition.¹⁰⁸⁶ Only one example of Type B is attested in the tomb of Mereri [108]. A standard for hair type appears in this dynasty with Type A becoming the most common with six instances;¹⁰⁸⁷ one Type B may be found in Mereri [108].

Clothing

The kilt (Type C) is the only form of clothing identified in this scene.¹⁰⁸⁸ This section considers the use of the kilt for the gutter.

Due to the poor preservation of some scenes only a select few can be used for this detail. Gutters shown in Type C clothing are found in 21 Memphite and provincial tomb chapels.¹⁰⁸⁹ The use of the kilt is appropriate for the type of work the gutter is performing, the person is stationary and not engaged in heavy lifting or performing tasks within the water. The seated position of the gutter also lends to the use of a kilt (Type C).

Captions

There are seven scenes in Memphite and provincial tombs that include a caption.¹⁰⁹⁰ These occurrences are rare and appear between mid-Dynasty Five and mid Dynasty Six.

Four of these inscriptions¹⁰⁹¹ record the actions carried out by the workman with the term *wgs* which is 'to cut open'.¹⁰⁹² This verb combined with *mhyt* meaning 'fish' (collectively)¹⁰⁹³ clearly conveys the action of gutting fish.

The caption accompanying the scene from Akhethotep (Louvre) [31] appears to indicate that the gutted fish may be intended for redistribution.

¹⁰⁸⁶ Type A Body condition appears in seen in Kagemni [94], Mereruka [103], Mereri [108], Henqu/Iy...f II [120], GL. 115 [129], Ibi [130], and Khenty [132].

¹⁰⁸⁷ In Dynasty Six Type A hairstyle is seen in Mereruka [103], Mereri (Hassan Gutting.) [79], Henqu/Iy...f II [120], Ibi [130] and Khenty [132].

¹⁰⁸⁸ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

¹⁰⁸⁹ The 21 tombs are Nebemakhet [8], Iymery [20], Irenkaptah [22], Ramaka [28], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], Pehenuika [32], Ty [35], CG 1535 [36], Sopedhotep (D15) [40], Werirni [70], Khunes [67], Iynofert/ Shanef [63], Ptahhotep II/ Thefi [74], Ptahhotep/ Iyniankh [80], Mereri (Hassan Gutting) [79], Kagemni [94], Mereruka [103], Mereri [108], Henqu/Iy...f II [120], Ibi [130] and Khenty [132].

¹⁰⁹⁰ These are of Akhethotep (Louvre) [31], Pehenuika [32], Ptahshepses [41], Ptahhotep/ Iyniankh [80], Mereruka [103], GL.115 [120], and Ibi [130]. See Appendix 2: Gutting and Dehydration Table K.

¹⁰⁹¹ Pehenuika [32], Ptahshepses [41], Ptahhotep/ Iyniankh [80], and Ibi [130].

¹⁰⁹² Faulkner, *Dictionary*, 71.

¹⁰⁹³ Faulkner, *Dictionary*, 114.

Summary

The gutting/dehydration theme is most frequently found within the Memphite cemeteries in the date range of IV.1 to IV.4M. The combination of gutting and dehydration is the more common composition type, with individualization apparent within the standard features set for each detail. The setting for the scene could be either natural or lacking any natural features. There is a general trend of non-natural settings after the mid Fifth Dynasty.

The fish may be represented whole (pre-processed) or more typically gutted with frequent use of defining details to identify the species. The equipment items become standard from the mid Fifth Dynasty, with most scenes including a knife and slab with small variations in their appearance. Two styles of knives may be distinguished, a broad and narrow blade, yet there is no pattern to their representation nor information as to whether they were to be used for different purposes. The arm positions of the gutter are clearly standardized (Type GA)¹⁰⁹⁴ yet unusually the seated figure can be shown with a variety of leg positions. The gutter may be semi- kneeling (Type E) or more typically seated (Type F.1) on the resister base.¹⁰⁹⁵

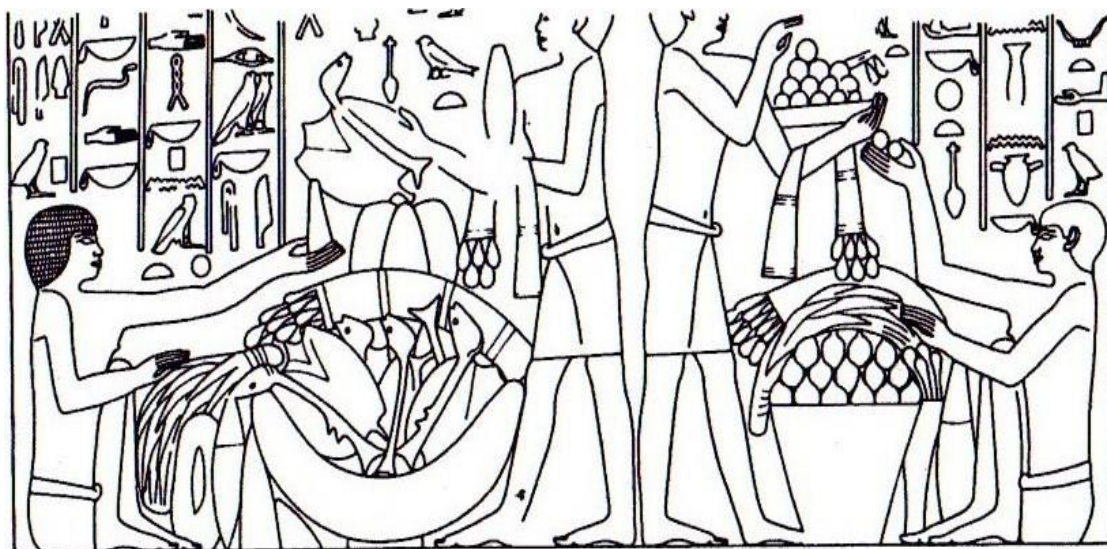
Captions are used infrequently, and usually state the task performed. In general, this theme has standards which have been established from the Fourth Dynasty. However, there is much individualisation apparent within the art.

¹⁰⁹⁴ See Appendix 4: Typology: Arm Positions: Gutter's Arms Positions.

¹⁰⁹⁵ See Appendix 4: Typology: Basic Leg positions; Type E and F.1.

Chapter 14: Market Scenes

The purchase of fish and fishing related implements.



Ankhmahor [102]

Introduction

Out of the 11 scenes that depict market activity,¹⁰⁹⁶ only five portray the trade in fish or fishing implements. These are attested in the tombs of Tepemankh (II) [17], Fetekta [25], Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73] and Ankhmahor [102]. The trade in fish or fishing equipment appears to be central to market scenes in Tepemankh (II) [17] and Niankhkhnum and Khnumhotep [27]; yet this is not always the case. The scene in Fetekta [25], for instance, is overwhelmed by details of trade in pots, vessels and other foodstuffs which are being exchanged in the same or adjacent registers as the fish. This is also observed in Ankhmahor [102], wherein fish products are stored within the same baskets as other foodstuffs. The following chapter documents and discusses the appearance and distribution of these market scenes. It also investigates any standards or variations to the scene and the manner in which fish are represented.

Although more popular in non-royal tombs, the examined theme does appear in a royal context. Found on a fragment from the causeway of the late Fifth Dynasty King Unis (V.9), the scene depicts various figures exchanging fish placed in large baskets with other foodstuffs and household items.¹⁰⁹⁷ This conforms with many elements recognisable in earlier and contemporary scenes from the non-royal tombs of Tepemankh (II) [17], Fetekta [25] and Niankhkhnum and Khnumhotep [27].¹⁰⁹⁸

Occurrence of Scene

Fifth Dynasty

Tomb	Location	Date
Tepemankh (II) [17]	Saqqara	V.5-6?
Fetekta [25]	Abusir	V.6-?
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1

Table 14.1 Fifth Dynasty Attestations

¹⁰⁹⁶ The following market scenes are not included in this study: the tomb of Ptahshepses [41] at Abusir (Verner, *Abusir I. Ptahshepses*, 62-3, photos 44-7, pls. 29-30); the Saqqara tombs of Ty [35] (Wild, *Ti Fasc.* III [2], pl. clxxiv), Tomb S920 (Harpur, in *SÄK* 13, 115-17, fig. 4), Kagemni [94] (von Bissing, *Gem-ni-kai* I, 15-16, 28, 33, Taf. xxii-xxiii) and Mehu [121] (Altenmüller, *Mehu*, 205-6, Taf. 102 [5]); the fragment Tokyo Bridgestone Mus. No. 154 (Tokyo. *Bridgestone Museum of Art* (1977), No. 154); and a fragment from Giza (Hassan, *Giza* III, 23-4, pl. xiv [C]).

¹⁰⁹⁷ Hassan, 'Excavations at Saqqara, 1937-1938' in *ASAE* 38, (1938), 520 [E], Taf. 46; Van Elsbergen, *Fischerie*, 118-119, 222, abb 82-4; *PM* III. 419-420.

¹⁰⁹⁸ Van Elsbergen, *Fischerei*. 118-9, Abb. 82-4.

Chapter 14: Market Scenes

Four Fifth Dynasty tombs feature a market scene with details concerning the trade in fish.¹⁰⁹⁹ The first attested scene is found in the mid-Fifth Dynasty tomb of Tepemankh (II) [17] at Saqqara. Preserved only fragmentarily, the scene depicts traces of figures trading in fish. The inscriptional evidence suggests that the figure closest to the stack of fish is encouraging the other to view his product.¹¹⁰⁰

The tomb of Fetekta [25] includes one of the most brightly coloured and visibly active market scenes, with three registers of figures trading their products. It is the only one outside the Saqqara cemeteries to include the trade in fish as well as such implements as fishing hooks.

The tomb of Niankhkhnum and Khnumhotep [27] features two separate market scenes, each depicting the trade in fish and hooks. The first includes two figures negotiating over a small basket of freshly captured fish, while the second larger scene illustrates the trade in gutted fish and hooks.

The latest Fifth Dynasty scene occurs in the tomb of Nebkauhor/ Idu [73]. The rather unusual image portrays two figures, one seated and one surrounded by gutted fish. While Van Elsbergen classifies such details as a market scene, Hassan suggests that the two men could be either engaged in a disagreement over the fish, or possibly that the gutted fish are being thrown to the ground to dry.¹¹⁰¹ Alternatively, the scene may simply represent the inspection of a product, perhaps before it's sent to a market. Indeed, it lacks the most common elements of a market scene such as its distinctive setting, other items for trade, or a vessel holding fish. However, the seated figure is similar to that preserved in a fragment from the causeway of King Unis and the posture of the standing figure is also attested in other market scenes.¹¹⁰² Given the lack of inscriptional evidence and the flexible arrangements of market scenes (see discussion below), it is possible that the scene, at the very least, depicts a trading activity. As such, it is included here in the corpus of examined scenes.

Sixth Dynasty

Tomb	Location	Date
Ankhmahor [102]	Saqqara	VI.1M

Table 14.2 Sixth Dynasty Attestations

Only one Sixth Dynasty tomb features the trade in fish. The tomb of Ankhmahor [102] retains two incomplete but highly detailed scenes. Similar to the first scene in Niankhkhnum and Khnumhotep

¹⁰⁹⁹ Another fragment, CG 1720 [83], has also been interpreted to depict a market scene involving the trade in fish; Van Elsbergen, *Fischerei*, 124, 301. However, little remains that may classify it as a market scene. For a similar conclusion, see Borchardt, *Denkmäler II*, 154 Taf. 92; PM. III, 754.

¹¹⁰⁰ See Section: Captions: Also, Appendix 2: Market Detail Table H.

¹¹⁰¹ Van Elsbergen, *Fischerei*, 124, 249-52; Hassan, *Neb Kau Hor*, 36.

¹¹⁰² See, for instance, those in Tepemankh (II) [17], Fetekta [25] and Ankhmahor [102].

Chapter 14: Market Scenes

[27], the two scenes show gutted and dried fish among other foodstuffs within baskets. They also include inscriptions outlining the conversation between depicted figures.¹¹⁰³

Distribution

Except for the scene in Fetekta [25], all examined attestations of the trade in fish or associated equipment occur at Saqqara.¹¹⁰⁴ This can perhaps be explained by their date, as they range between the mid-Fifth and the early Sixth Dynasties, when Saqqara was the primary cemetery for elite burials. The scene's rarity suggests that it was specifically requested by the tomb owner, who may have had a particular interest in this activity. Markets would not have been limited to the Memphite region and therefore the scene's occurrence cannot be attributed to a geographical restriction; yet, the region would have enjoyed larger and more dynamic market activity due to its administrative significance and central location.

The Minor Details

Fish in market scenes

Market scenes feature fish in one of two ways: (1) gutted or (2) whole. Species of gutted fish are difficult to identify due to their standardised depiction; however, attestations of whole fish point to a variety that were traded and consumed by the general populace.

The two earliest known attestations of trade in fish depict them as whole. Tepemankh (II) [17] shows a large array of whole fish including such species as *Mugil sp.*, *Clarias*, *Synodontis sp.*, possibly a *Mormyrus Caschive* and a *Citharinus*. A merchant also possibly holds a *Tilapia sp.*¹¹⁰⁵



Fetekta [25]

Fetekta [25] features five fish; only three of which, according to their outline, can be identified as a *Synodontis sp.*, a *Clarias sp.* and a *M. electricus*.

Scenes in Niankhkhnum and Khnumhotep [27] and Nebkauhor/ Idu [73] show 18 gutted and a variety of whole fish. Identifiable species of the latter include three *Mugil sp.*'s. and one elephant snout fish, perhaps a *Gnathonemus*. Of the three-whole fish in Nebkauhor/ Idu [73], only two, a *Synodontis sp.* and a *Schilbe*, can be identified. The two scenes from Ankhmahor [102] depict a combined total of

¹¹⁰³ See the later section Captions; See Also Appendix 2 Market Detail Table H.

¹¹⁰⁴ All scenes of market activity, including those of King Unis's causeway, are also found in Saqqara, except for the following attestations in: the Abusir tomb of Ptahshepses [41] (Verner, *Abusir I. Ptahshepses*, 62-3, photos 44-7, pls. 29-30); the fragment Tokyo Bridgestone Mus. No. 154 (*Bridgestone Museum of Art* (1977), No. 154); and a fragment from Giza (Hassan, *Giza III*, 23-4, pl. xiv [C]).

¹¹⁰⁵ As suggested in Van Elsbergen, *Fischerei*, 116.

Chapter 14: Market Scenes

only seven gutted fish, some of which can be identified by the addition of two dorsal fins on the spine, indicative of the butterflied *Mugil sp.*.

The variety of whole fish indicates a large range of species traded at markets. Attested in most tombs and in greater numbers is the *Synodontis sp.*,¹¹⁰⁶ followed by the *Mugil sp.*¹¹⁰⁷ These have been consistently some of the most frequent in scenes of fishing activities and therefore it is not surprising that they are also common in this theme.¹¹⁰⁸ As noted in their respective fish profiles,¹¹⁰⁹ both are also known for their versatility and taste.

Gutted fish are more commonly portrayed in later examples of this theme. Perhaps their inclusion reflects increased purchase due to their lower value or ease of use. It is also possible that they represent a different season or type of exchange, as dried or smoked fish may have been more prevalent during the warmer months as fresh fish would spoil quickly in the heat.

Vessels holding fish at markets

Fish in most scenes of the examined theme are either contained within various baskets or placed on what appears to be a platform. There does not appear to be a standard for their placement within any of the selected scenes.

The earliest known depiction from the tomb of Tepemankh (II) [17] represents a reed platform on which fish are stacked. Based on its detailing, the platform appears to be constructed in a similar fashion to papyrus skiffs. It is rectangular in shape with groups of three lashing details equidistantly apart (Type B boat detailing).

The representation of fish in vessels is first attested in Fetekta [25]. The scene includes a trapezoidal basket that is commonly shown in other fishing, agricultural and offering scenes. Highly detailed with looped handles and a vertical weave along its body, the basket is illustrated with a yellow body, dark brown and green detailing, and dark brown and green handles.¹¹¹⁰ In contrast, the vessels in Niankhkhnum and Khnumhotep [27] are semi-spherical in shape, large, shallow and overflowing with fish, while that in Ankhmahor [102] is tall and crescent-shaped, and holds gutted fish as well as other foodstuffs.

¹¹⁰⁶ Tepemankh (II) [17], Fetekta [25] and Nebkauhor/ Idu [73].

¹¹⁰⁷ Tepemankh (II) [17] and Niankhkhnum and Khnumhotep [27].

¹¹⁰⁸ See section of Fish Species in Chapter 4: Dragnets, Chapter 5: Angling, Chapter 6: Lave nets, Chapter 7: Funnel Traps and finally Chapter 9: Weirs.

¹¹⁰⁹ See Appendix 3: Fish Profiles *Synodontis Schall*, *Synodontis Batensoda* and *Mugil sp.*

¹¹¹⁰ Large semi-spherical baskets similar to those in Niankhkhnum and Khnumhotep [27] are also present in this scene, however they do not carry fish.

Chapter 14: Market Scenes

Equipment and accessories

Market scenes from the tombs of Fetekta [25] and Niankhkhnum and Khnumhotep [27] not only include the trade in fish, but also feature the exchange of fishing hooks.

In all attestations, three hooks of identical structure are carried by one figure. The items are of the most common Old Kingdom type and have an exaggerated curvature without barbs.¹¹¹¹ Unlike the hooks in Niankhkhnum and Khnumhotep [27], those held by a merchant in Fetekta [25] are suspended from three individual strings.

The trader also carries a second, cylindrical, implement in his other hand. It is likely the same item held by a hook merchant in Niankhkhnum and Khnumhotep [27] which, however, is bulbous at one end. The item can perhaps be identified as a club or baton that is used to stun or kill fish retrieved from the water.¹¹¹² Indeed, both shapes are similar to clubs/batons attested in angling scenes.¹¹¹³

One other item is associated with the hook merchant. The scene in Fetekta [25] portrays a cloth sack or bag strung over the shoulder of the trader's seated customer. This sack is also depicted on the register base between the hook merchant and another figure exchanging fish in Niankhkhnum and Khnumhotep [27].

Minor Figures

The Merchant (1)

Minor figures include a male merchant either seated behind a vessel containing fish or standing in front of a fish stack.¹¹¹⁴

Five scenes portray a seated merchant. One occurs in Fetekta [25], two are in Niankhkhnum and Khnumhotep [27], and two can be found in Ankhmahor [102].

A standing merchant is only attested in two scenes, one from Tepemankh (II) [17] and the other from Nebkauhor/ Idu [73].



Fetekta [25]

The seated merchant is usually depicted with one arm extended forwards, offering or retrieving an object from the customer. The other arm rests atop produce in the basket before him, and is often bent at the elbow. This arm position is best represented by the attestations in Niankhkhnum and

¹¹¹¹ See discussion in Chapter 5: Angling: Hooks.

¹¹¹² Please refer to Chapter 5 Angling: Fishing Equipment: Club.

¹¹¹³ Cylindrical clubs can be observed in Akhetotep (D64) [58], Ihy r/u Seshseshet/Idut [72] and Shepsipumin/Kheni [147] while the bulbous shape is attested in, but not limited to, angling scenes in Ty [35], Mereruka [103] and Nikauisesi [101].

¹¹¹⁴ See Appendix 2: Market Detail Table F, G.

Khnumhotep [27] and Ankhmahor [102]. The leg position is more varied, with figures in Fetekta [25] and Niankhkhnum and Khnumhotep [27] each having one leg folded underneath the torso, the top of the foot lying flat against the register base, and the other leg bent with its knee drawn towards the chest (Type E semi-kneeling position).¹¹¹⁵ Conversely, figures in Ankhmahor [102] have both legs drawn towards the chest (Type F.1 seated position).¹¹¹⁶ This may have been used for aesthetic purposes as all other figures in Ankhmahor's [102] market scene are shown seated in a similar fashion. Furthermore, the detailed nature of the scene leaves little space for another leg position, thereby favouring a more contracted stance.

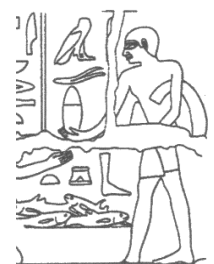
The standing merchant is always depicted with his torso in a frontal position, the arms extended out. The hand behind the torso typically grasps a fish while the other passes another fish to the customer. Legs are in an open stance position (Type A).¹¹¹⁷ If trading hooks, the standing merchant slightly bends at the waist. His arms extend in front of him: one reaches downwards with its hand grasping the hooks; and one is slightly elevated and bent at a 45° angle at the elbow, the hand holding a club. As such a position is almost replicated in all depictions of hook merchants, it is likely that those in Fetekta [25] may have served as inspiration for the artists working in the tomb of Niankhkhnum and Khnumhotep [27].

Overall, the positions of limbs for both seated and standing merchants evidently follow some standards. Those of the seated merchants bear only one small variation, specifically in the leg position of a figure in Ankhmahor [102].

Customers (2)

Customers receiving products of exchange are found in Tepemankh (II) [17], Fetekta [25], Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73] and Ankhmahor [102].

The leg position of customers is similar to those of merchants. Those in Tepemankh (II) [17], Fetekta [25] and Ankhmahor [102], and one in Niankhkhnum and Khnumhotep [27], are depicted standing in an open stance position (Type A Leg).¹¹¹⁸ Those in Nebkauhor/ Idu [73] and one in Niankhkhnum and Khnumhotep [27] are seated, with one leg tucked underneath the torso, the top of the foot flat on the



**Niankhkhnum and
Khnumhotep [27]**

¹¹¹⁵ See Appendix 4: Typology: Basic Leg Positions Type E.

¹¹¹⁶ See Appendix 4: Typology: Basic Leg Position Type F.1.

¹¹¹⁷ See Appendix 4: Typology: Basic Leg Position Type A.

¹¹¹⁸ See Appendix 4: Typology: Basic Leg Position: Type A.

register line, and the other leg drawn up to the chest (Type E Semi-kneeling position).¹¹¹⁹ The customer in Niankhkhnum and Khnumhotep [27] is unusually shown with the latter's foot is crossed over the thigh of the leg tucked beneath the torso, rather than in front of the knee as is common.¹¹²⁰

Arm positions display greater variance. Typically, one arm reaches down towards an item(s) held either in the basket of produce or in a merchant's hand. It can be either fully extended¹¹²¹ or bent at the elbow,¹¹²² the hand either holding a fish¹¹²³ or another object to trade.¹¹²⁴ The second arm is often placed behind or in line with the torso,¹¹²⁵ or drawn towards the chest.¹¹²⁶ It can hold other objects to trade, or previous purchases. The tomb of Ankhmahor [102] features a unique exception, with a customer extending both hands forwards, in the same position as surrounding figures. Other than fish, customers are attested with bread,¹¹²⁷ chests,¹¹²⁸ vessels of liquid,¹¹²⁹ small implements¹¹³⁰ and linen.¹¹³¹ The hook merchant depicted in the tomb of Fetekta [25] is accompanied by a customer who is shown standing in front of him, arms by his side with the front arm marginally extended towards the hooks. Unlike other customers trading in other examined scenes, he is neither holding any objects nor engaging with the trader.¹¹³²

Evidently, the figure of the customer is highly individualised. This is best reflected in the positioning of the arms, which is primarily dependent on accompanying objects. A customer in Ankhmahor [102], for example, has one arm bent at the elbow in an acute angle with the hand pointed directly up. Other objects require the arm to be bent at a larger angle, as for a female customer in Fetekta [25], whose elbow is at a 45° angle to accommodate the grasp of the wooden chest placed on her shoulder. Such details emphasise the specificity of each scene and the customisation that is fluent across all. This may

¹¹¹⁹ See Appendix 4: Typology: Basic Leg Position: Type E.

¹¹²⁰ See, for instance, the seated figures in Nebkauhor/ Idu [73], as well as those in the market scenes of Niankhkhnum and Khnumhotep [27] and Fetekta [25]. This position also occurs in the Gutting and Dehydration scene in Ibi [130].

¹¹²¹ See those in Tepemankh (II) [17], Fetekta [25] and Niankhkhnum and Khnumhotep [27].

¹¹²² See those in Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73] and Ankhmahor [102]. The second example from the tomb of Ankhmahor [102] depicts the figure with an object at head-level.

¹¹²³ See those in Fetekta [25], Nebkauhor/ Idu [73] and Ankhmahor [102].

¹¹²⁴ See those in Niankhkhnum and Khnumhotep [27] and Ankhmahor [102].

¹¹²⁵ Tepemankh (II) [17], Fetekta [25], Nebkauhor/ Idu [73], Ankhmahor [102] (x1).

¹¹²⁶ Niankhkhnum and Khnumhotep [27] (x2), Ankhmahor [102] (x2).

¹¹²⁷ See that in Tepemankh (II) [17].

¹¹²⁸ See those in Tepemankh (II) [17] and Fetekta [25].

¹¹²⁹ See those in Niankhkhnum and Khnumhotep [27] and Ankhmahor [102].

¹¹³⁰ See those in Niankhkhnum and Khnumhotep [27] and Ankhmahor [102].

¹¹³¹ See those in Niankhkhnum and Khnumhotep [27] and Ankhmahor [102].

¹¹³² The figure is rigid, not touching any produce or item of interest, nor reaching out with any effort to engage the trader.

be due to the creativeness of the artist, or a specific market or memory of the tomb owner or indeed the artist.

Individual Characteristics and Clothing

Generally, merchants and customers are shown with hair of one of two types:¹¹³³

- A. *A full head of hair; or*
- B. *A receding hairline.*

The men could also have one of two body types:

- A. *An athletic body; or*
- B. *A non-athletic body.*

Most minor figures have a full head of hair (Type A).¹¹³⁴ This is especially evident for those classified as customers, with five (possibly six) of eight figures with this type.¹¹³⁵ Three merchants clearly have Type A hairstyles and three bear a receding hairline (Type B).¹¹³⁶ All figures have an athletic body (Type A).¹¹³⁷

The piece of clothing worn by all customers and merchants is the kilt (Type C).¹¹³⁸ The majority of figures wear standard kilts, however one customer in Fetekta [25] is dressed in a pointed kilt. The tomb also features a completely different attire worn by a female customer, who dons a mid-calf length dress with a triangular strap over the left shoulder, the breasts exposed. This dress is depicted within the same market scene for two other women. As for genitalia, none are shown for any of the male minor figures.¹¹³⁹

Captions

The exchange of fish and/or fishing implements can be accompanied by various inscriptions labelling activities or captioning communications. These occur in four of the examined scenes, namely those in: Tepemankh (II) [17], Fetekta [25], Niankhkhnum and Khnumhotep [27], and Ankhmahor [102].¹¹⁴⁰

¹¹³³ See Appendix 4: Typology Section: Individual Characteristics and Clothing: Individual Characteristics.

¹¹³⁴ See Appendix 2: Market Detail Table F, G.

¹¹³⁵ Type A: Tepemankh (II) [17], Fetekta [25] (x2), Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73], Ankhmahor [102] (possible); Type B: Niankhkhnum and Khnumhotep [27].

¹¹³⁶ Type A: Fetekta [25] (possible), Nebkauhor/ Idu [73], Ankhmahor [102]; Type B: Niankhkhnum and Khnumhotep [27] (x3).

¹¹³⁷ Tepemankh (II) [17], Fetekta [25], Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73], Ankhmahor [102].

¹¹³⁸ Tepemankh (II) [17], Fetekta [25], Niankhkhnum and Khnumhotep [27], Nebkauhor/ Idu [73], Ankhmahor [102].

¹¹³⁹ See Appendix 2: Market Detail Table F and G.

¹¹⁴⁰ See Appendix 2: Market Detail Table H.

Chapter 14: Market Scenes

The text from Tepemankh (II) [17] is incomplete. The surviving inscription suggests that the merchant is presenting his catch to a possible customer: *ḏi ḏrr mḥyt... snb ph///*, 'see the fish... healthy...'

Both scenes in the tomb of Niankhkhnum and Khnumhotep [27] are accompanied by a text. Each describes an exchange of goods for the fish that are on display:

- S1:** *im išt.k r mḥit(.i) swnt* Give your food (in exchange) against my fish (as) purchase price.
S1: *bgst* *Mugil*¹¹⁴¹
S2: *wḏi ḥr.f wḏz išt(.i) r ib ndm* O engraver, the rest of my food (in exchange) a happy heart (as)
swnt purchase price
S2: *wḏ^c(.i) ḥtm* I cut the seal cylinder!

The two scenes from Ankhmahor [102] are similarly captioned, their translations as follows:

- S1:** (Merchant) *mzḏ.k is ndḥ (?) .k pn m ḥt.k ḏḏ.k* Look! Your... is as your thing. Say, may you the
wḏḥ.ti ḥt (?) is pw put down this thing
S1: (Customer) *nfr wrt* very good
S2: (Merchant) *mzḏ nw n...* look these...
S2: (Customer) *ikr* Excellent

The captions all show conversations between the participants of the scene, outlining the exchange of fish for other objects. Variances can be explained by the lack of a standard phrase or term that signifies trade.

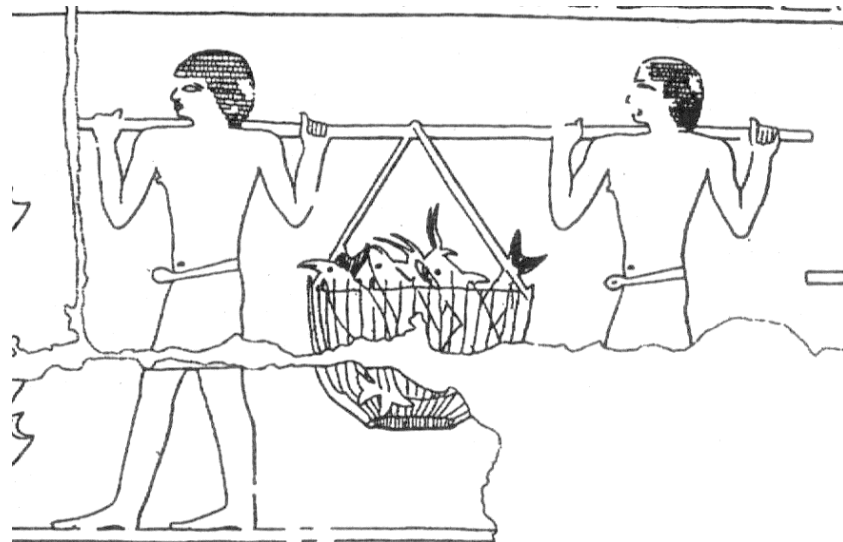
Summary

This theme is clearly one which was able to be customized and influenced by the artist, tomb owner, and the space dedicated to its application. There are no formal standards for many of the details discussed in this chapter. The positions of the arms and legs show some frequency, as do the individual characteristics and clothing. The various species of fish and fishing implements suggest that there was a variety of fish sold at the market and it was also a hub for the acquiring of fishing equipment. The lack of fish found in all markets scenes may suggest that it was not a popular detail to replicate; also, that the tomb owner may have had some connection with the sale of fish at market

¹¹⁴¹ Van Elsbergen translates this as 'Mugil' (Van Elsbergen, *Fischerei*, 251-2).

Chapter 15: Fish Bearing

The Transportation of Fish



Ramaka [28]

Introduction

Scenes from officials' tombs show fish being carried in a variety of ways: by pole, by basket as seen in the opening image from Ramaka [28] and by hand. The reasons for transporting fish vary with some scenes showing fish being conveyed after capture from the marsh lands as for example in the tomb of Nikauisesi [101], and also to the location of gutting or presentation to an authority as seen in Nebemakhet [8] and Nefer and Kahay [18]. A rare theme, with the fish ultimately being offered to the tomb owner, appears in the tomb of Meryteti/Meri [116]. The presentation of offerings to the tomb owner was an important ritual as the inscribed objects, food and special items, ensured that the tomb owner would be provided for in the afterlife,¹¹⁴² but it is perplexing that the depiction of fish is rare in these offering scenes. Perhaps this was due to fish being considered unclean and therefore 'taboo' so that the tomb owner excluded such negatively charged iconography from the scene. Yet analysis of sources on this subject¹¹⁴³ suggests that the tomb owner preferred only the most appetizing cuts of meat in the afterlife.¹¹⁴⁴

This chapter investigates the issue of transporting fish but not all depictions of fish held by bearers are in the process of being transported to a location indicated above. The figures bearing fish in the tombs of Ty [35], Kagemni [94],¹¹⁴⁵ and Mehu [121] have been classified as a 'registering the catch' scene and are discussed in Chapter 12: Registering-the-Catch.

Occurrence of Scene

Fourth Dynasty

The conveyance of fish is one of the earliest non-fishing tasks represented in Old Kingdom funerary art. It is featured in the early Fourth Dynasty tombs of Rahotep [5] and Akhethotep (G7650) [14] and later in the tomb of Nebemakhet [8]. The examples from Rahotep [5] and Nebemakhet [8] depict men using a pole to transport a number of fish. Other figures in the scene from Nebemakhet [8] are also shown carrying large specimens in their hands, as in Akhethotep (G7650) [14].

¹¹⁴² Dodson-Ikram, *The Tomb in AE*, 121.

¹¹⁴³ See Chapter 16: Fish for Consumption: Introduction.

¹¹⁴⁴ Wilson, *Food and Drink*, 35.

¹¹⁴⁵ Kagemni [94] has two scenes in which fish are held; the first is a registering-the-catch scene and the second is a fish bearing scene which relates to the present enquiry.

Chapter 15: Fish Bearing

Tomb Owner	Location	Date
Rahotep [5]	Medium	IV.1L-1
Akhethotep (G7650) [14]	Giza	IV.2-4
Nebemakhet [8]	Giza	IV.4-6

Table 15.1 Fourth Dynasty Attestations

Fifth Dynasty

In the Fifth Dynasty, there are 23 scenes detailing the conveyance of fish, that depict men carrying fish by pole and by hand in a fashion similar to that in the tomb of Nebemakhet [8]. The first is attested in the tomb of Persen [9] at Giza. Two early Fifth Dynasty scenes are found in the tombs of Werirniptah [16], and Nefer and Kahay [18] at Saqqara, a location with the highest frequency of such scenes after the middle of the dynasty.¹¹⁴⁶ Only three instances have been found outside the Saqqara and Giza cemeteries. These occur at Abusir (Ptahshepses [41]), Deshasha (Inti [45]), and El-Hawawish (Hesimin (M22) [56]). The example from the tomb of Ramaka [28] has the first known depiction of carrying fish in a basket tied to a pole.¹¹⁴⁷

Tomb Owner	Location	Date
Persen [9]	Giza	V.1-2
Werirniptah [16]	Saqqara	V.3-5
Nefer and Kahay [18]	Saqqara	V.6E
Rakhaefankh [26]	Giza	V.6?
Iymery [20]	Giza	V.6
Iynofret [19]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ramaka [28]	Saqqara	V.6-7
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Inti [45]	Deshasha	V.8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Neferirtenef [52]	Saqqara	V.8-9
Hesimin (M22) [56]	El- Hawawish	V.8L-9E
Kaiemankh [57]	Giza	V.8L-9E
Iynofert/ Shanef [63]	Saqqara	V.9
Nebet [62]	Saqqara	V.9

¹¹⁴⁶ The Saqqara tombs with this feature are Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhethotep (Louvre) [31], Hotepherakhti [34], CG 1535 [36], Kayemnofret (D23) [51], Neferirtenef [52], Iynofert/ Shanef [63], Nebet [62], Kairer [66].

¹¹⁴⁷ Ty [35] also represents a figure using a basket tied to a pole in a Registering of the Catch scene (V.6-8).

Chapter 15: Fish Bearing

Tomb Owner	Location	Date
Kairer [66]	Saqqara	V.9
Akhmerutnesut [82]	Giza	V.9-VI.1

Table 15.2 Fifth Dynasty Attestations

Sixth Dynasty

While this theme does not appear so frequently in the Sixth Dynasty,¹¹⁴⁸ several variations may be noted. Baskets are carried by hand in the tomb of Mereruka [103].¹¹⁴⁹ Others are placed in boats beneath heavily laden figures, as seen in Nikauisesi [101], and fish are held in slings in the tomb of Wedjahateti/ Neferseshemptah/ Sheshi [112].¹¹⁵⁰ The tomb of Meryteti/Meri [116] is the only chapel to show fish in an offering bearer scene. In the ten registers of these figures 20 identifiable fish are carried by various methods for presentation to the tomb owner.

Tomb Owner	Location	Date
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Saqqara	VI.1
Niankhnesut [99]	Saqqara	VI.1-2
Nikauisesi [101]	Saqqara	VI.1M
Ankhmahor [102]	Saqqara	VI.1M
Mereruka [103]	Saqqara	VI.1M-L
Watetkhet-Hor/Seshseshet [104]	Saqqara	VI. 1M-L
Remni/ Merwi [109]	Saqqara	VI.1L-2E
Wedjahateti/ Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E
Meryteti/Meri [116]	Saqqara	VI.1L-2M
Merefnebef [117]	Saqqara	VI.1L-2L
GL.115 [126]	Giza	VI.2-4E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Idu 1 [128]	Dendera	VI.3-4E
Meryrenefer/ Qar [133]	Giza	VI.3-4
Khenty [132]	El Khokha	VI.3-4M
Pepyankh/ Henykem [146]	Meir	VI.4L
Mery Aa [158]	El-Hagarsa	VI.L-VIII E
Tjemerery [159]	Naga el- Deir	VI-FIP
Twau [160]	Naga el-Deir	VI-FIP

Table 15.3 Sixth Dynasty Attestations

¹¹⁴⁸ 23 occurrences in the Fifth Dynasty as against 20 in the Sixth Dynasty. See Appendix 2: Bearing Detail Table A.

¹¹⁴⁹ Carrying baskets by hand is attested in an earlier scene of registering the catch. See Kagemni [94].

¹¹⁵⁰ Only seen previously in Kagemni [94] in a registering-the-catch scene. See Chapter 12: Registering the Catch: Method of Transportation.

Chapter 15: Fish Bearing

Most of the attestations are at Saqqara, especially for the reigns of Teti and Pepy I. The scenes from GL.115 [126] and Meryrenefer/ Qar [133], both located in Giza, are the only examples found within a Memphite cemetery after the reign of Merenre.

Distribution

The majority of the scenes are attested in the Memphite area until the latter half of the Sixth Dynasty when provincial examples dominate. This change in location is typical of this time as provincial officials were constructing their tombs in the provinces and artists were working in the provinces.¹¹⁵¹ The ability to use three different methods of transportation (and their variations) created a highly versatile framework and makes it difficult to identify any influence that tombs might have had on each other. Yet, certain variations such as the use of slings or unusual hand positions may indicate artistic influence.¹¹⁵² The transportation of fish from fishing sites, to markets or presentations to an authority including the tomb owner, would not have been confined to a specific geographical location as fishing and thus the transportation of fish occurred along the length of the Nile. Therefore, the use of this theme in tombs was to showcase the bountiful supply caught and possessed by the tomb owner in life and forever in death and was at the artist's and tomb owner's discretion.

The Minor Details

Methods of transportation of fish

Fish are carried from one location to another by hand, pole or basket. The standard techniques and variations are as follows:



Mereruka [103]

- a) *By hand*: The bearer holds the fish in both hands across his body or over his shoulder. The bearer may use one hand (directly or by rope) to hold the fish vertically by the mouth or tail.
- b) *By pole*: Two types of bearing poles are depicted. The long pole was carried across the shoulders of two figures or across the back of the shoulders/neck of a single figure. The short pole was usually placed over one shoulder of one bearer. The fish may be directly attached to the pole being speared through the lips/tail or have rope strung in its mouth/gills and attached to the pole.

¹¹⁵¹ Kanawati-Woods, *Artists in the OK*, 14, 19; Kanawati, *Governmental Reforms*, 5.

¹¹⁵² See use of a sling in Kagemni [94], Mehu [121], and Wedjahateti/ Neferseshemptah/ Sheshi [112]. The unusual arm position, mostly referring to figures carrying poles, is discussed in 'Arm Positions' later in this chapter.

- c) *By basket*: The basket may be hung over a pole or carried by hand. The most frequent type of basket used is the inverted round basket trap.¹¹⁵³ The artist also uses the standard trapezoidal basket¹¹⁵⁴ that is featured in other scenes or a rectangular box-like vessel.¹¹⁵⁵

Rahotep [5] depicts Type b) with two male figures balancing an oar between them on their shoulders; the *Lates* is speared through the head. Following this example, the scene from Akhethotep (G7650) [14] depicts Type a): the men holding the fish strung up by ropes, and a fish carried over the shoulder of a bearer. Nebemakhet [8] uses both Type a) and b). The fish carried via Type b) appears to have been tied to the pole with rope attached to their mouths.

The Fifth Dynasty artists continue to use these two primary methods, Type a) and b). Type a) is by far the most frequent type utilized in this dynasty¹¹⁵⁶ with Type b) occurring in 13 examples.¹¹⁵⁷ Persen [9], Nefer and Kahay [18] and Iymery [20] depict figures presenting fish to the tomb owner directly from the dragnet; while Iymery [20] and Akhethotep (Louvre) [31] depict the principle fisherman using his hands to restrain a catfish by the spines. A figure carrying a fish on the shoulders, Type a), occurs in the tomb of Iynofret [19], followed by Irenkaptah [22] and Ptahshepses [41], which also appears to depict a figure draping a fish along the length of the bearer's back.

Rare attestations of a fish on a platter are depicted in the tombs of Iymery [20] and Irenkaptah [22]. The example from the tomb of Ramaka [28] is the first to make use of Type c), the basket, for the transportation of fish. This is also attested in the scene from Akhethotep (Louvre) [31], Hotepherakhti [34], Kayemnofret (D23) [51], and Nebet [62].

Type a) is clearly the standard method for the Sixth Dynasty also.¹¹⁵⁸ Type b) is significantly more frequent than in the previous dynasty with 50 individual fish transported in this manner compared

¹¹⁵³ The inverted round basket trap appears in the tombs of Ramaka [28], Hotepherakhti [34], Kayemnofret (D23) [51], Mereruka [103] and Meryteti/Meri [116].

¹¹⁵⁴ The standard trapezoidal basket appears in the tombs of Hotepherakhti [34], Nikauisesi [101] and Pepyankh/ Henykem [146].

¹¹⁵⁵ The rectangular box-like vessel appears in the tombs of Kayemnofret (D23) [51] and Nebet [62].

¹¹⁵⁶ Type a) is portrayed in the tombs of Persen [9], Nefer and Kahay [18], Iymery [20], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], CG 1535 [36], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62]. Type B is attested in Persen [9], Rakhaefankh [26], Akhethotep (Louvre) [31], Kayemnofret (D23) [51]. Type C is attested in Ramaka [28], Hotepherakhti [34], Kayemnofret (D23) [51], Akhmerutnesut [82].

¹¹⁵⁷ Type b) appears in the tombs of Persen [9], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], CG 1535 [36], Ptahshepses [41], Inti [45], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63] and Kairer [66].

¹¹⁵⁸ Type a), the standard method, is seen in the tombs of Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Niankhnesut [99], Watetkhet-Hor/Seshseshet [104], Remni/ Merwi [109], Wedjahateti/ Neferseshemptah/ Sheshi [112], Meryteti/Meri [116], Merefnebef [117], Idu 1 [128], Meryrenefer/ Qar [133], and Pepyankh/ Henykem [146].

with only 13 in the Fifth Dynasty.¹¹⁵⁹ Type c) also increases but only slightly.¹¹⁶⁰ The example from Nikauisesi's [101] tomb is unique in its depiction of fish in baskets, placed in the hull of the boat of returning boatmen amongst other spoils from the marshlands. Two other figures in the boats carry a large *Mugil sp.* and *Tilapia sp.* by hand, an instance of Type a).

In the majority of cases the fish are held by the mouth, a feature of Type a), with a rope threaded through the mouth and gills for ease of grip. This feature is consistent in the Fifth and Sixth Dynasties.¹¹⁶¹ However, there are rare scenes showing the figure holding the barbels or other features of the fish instead. Examples of this may be seen in the tombs of Akhetotep (Louvre) [31], where a *Clarias sp.* is held by the barbels, a *Tilapia sp.* by the gills in the scene from Niankhkhnum and Khnumhotep [27] and a figure holding the snout of a *Mormyrus Kannume* in Watetkhet-Hor/Sesheshet [104]. Other scenes from Irenkaptah [22], Niankhkhnum and Khnumhotep [27] and Iynofert/ Shanef [63] depict the figures holding the catch by the tail.

The use of rope for fish being transported by poles (Type b) is significantly higher in the Sixth Dynasty. In the Fifth Dynasty there were only six identifiable examples yet in the Sixth Dynasty there are 36.¹¹⁶² Baskets with rope attached to their handles were only slightly more frequent in the Sixth Dynasty compared to the Fifth with nine versus 12 occurrences.¹¹⁶³ Round basket traps appeared to be the most favoured type of basket to use with examples found in the tombs of Ramaka [28], Hotepherakhti [34], Kayemnofret (D23) [51], Mereruka [103], and Meryteti/Meri [116]. The trapezoidal basket is slightly less frequent as attested in Hotepherakhti [34], Nikauisesi [101], and Pepyankh/ Henykem [146]. Only two scenes depict the rectangular box as seen in the tombs of Kayemnofret (D23) [51] and Nebet [62].

Fish Species

This section considers the frequency of fish species that are being transported and the manner in which they are carried. The attestations of the *Tilapia sp.* and *Lates* speared by the major figure (or

¹¹⁵⁹ The 13 Sixth Dynasty instances of Type b) appear in the tombs of In-Snefru-Ishtef [96]? Mereruka [103], Meryteti/Meri [116], GL.115 [126], Ibi [130], Idu 1 [128], Khenty [132], and Mery Aa [158].

¹¹⁶⁰ Type c) appears in the tombs of In-Snefru-Ishtef [96], Mereruka [103], Meryteti/Meri [116].

¹¹⁶¹ Type a) with a rope threaded through the mouth and gills appears in Akhetotep (G7650) [14], Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Ptahshepses [41], Kayemnofret (D23) [51], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62], Kagemni [94], Mereruka [103], Wedjahateti/ Neferseshemptah/ Sheshi [112], Meryteti/Meri [116] and Pepyankh/ Henykem [146].

¹¹⁶² Fifth Dynasty examples: Rakhaefankh [26], Inti [45]; Sixth Dynasty Examples: Mereruka [103], Meryteti/Meri [116], GL.115 [126], Ibi [130], Idu 1 [128], Khenty [132], Mery Aa [158].

¹¹⁶³ Fifth Dynasty examples: Ramaka [28], Hotepherakhti [34], Kayemnofret (D23) [51]. Sixth Dynasty: Mereruka [103], Meryteti/Meri [116] and Pepyankh/ Henykem [146].

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his son) have not been included in this section. They are discussed at length in Chapter 11: Spearfishing.¹¹⁶⁴

A large variety of species are represented in these scenes.¹¹⁶⁵ The most frequently depicted species of fish is the *Mugil sp.* It has 40 identifiable attestations, two in the Fourth Dynasty, 21 in the Fifth Dynasty and 17 in the Sixth,¹¹⁶⁶ indicating that it remained popular throughout the Old Kingdom. Its popularity may have been due to the frequency with which it was caught or because the fish was well liked as a dish. These factors may also apply to the *Tilapia sp.* as it also appears frequently in these scenes with 37 examples in total. In the Fourth Dynasty, it is shown twice¹¹⁶⁷ but there are eleven examples in the Fifth Dynasty¹¹⁶⁸ and 24¹¹⁶⁹ in the Sixth Dynasty.¹¹⁷⁰

The *Lates* is attested 32 times with two examples in the Fourth Dynasty, four in the Fifth and 26 in the Sixth Dynasty,¹¹⁷¹ a significant increase which may be partially explained by the depiction of no less than eleven *Lates* being held by offering bearers in the scene from Meryteti/Meri [116]. Fish species found in lesser numbers include the *Clarias sp.* and the *Mormyrus Caschive/Kannume*. Both species have between 15 - 20 examples each with the *Mormyrus Caschive* and *Mormyrus Kannume* amalgamated as the definition of the renderings of their snout and fin length is typically unclear. The *Mormyrus Caschive/Kannume* appears frequently in the Fifth Dynasty with twelve compared to seven examples in the Sixth Dynasty.¹¹⁷² The *Clarias sp.* is attested once in the Fourth Dynasty and appears most frequently in the Fifth Dynasty with 16 examples but only three in the Sixth.¹¹⁷³

¹¹⁶⁴ See Chapter 11: Spearfishing: Fish Species.

¹¹⁶⁵ See Appendix 2: Fish Bearing Detail Table B, C.1 and C.2.

¹¹⁶⁶ The identifiable attestations are in the tombs of Nebemakhet [8], Iymery [20], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ramaka [28], Kayemnofret (D23) [51], Neferirtenef [52], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62], Kairer [66], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Niankhnesut [99], Watetkhet-Hor/Seshseshet [104], Wedjahateti/ Nefereshemphah/ Sheshi [112], Meryteti/Meri [116], Merefnebef [117] and Meryrenefer/ Qar [133].

¹¹⁶⁷ The *Tilapia sp.* appears in the tombs of Akhetotep (G7650) [14] and Nebemakhet [8].

¹¹⁶⁸ The eleven examples are found in Persen [9], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Akhetotep (Louvre) [31], Hotepherakhti [34], CG 1535 [36], Kaiemankh [57] and Nebet [62].

¹¹⁶⁹ The Sixth Dynasty instances are in the tombs of Mereruka [103], Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116], Ibi [130], Idu 1 [128], Pepyankh/ Henykem [146] and Mery Aa [158].

¹¹⁷⁰ The artists responsible for the scene in Meryteti/Meri [116] depict seven within the same scene.

¹¹⁷¹ The *Lates* is attested in Rahotep [5], Nebemakhet [8], Irenkaptah [22], Akhetotep (Louvre) [31], Inti [45], Hesimin (M22) [56], Kagemni [94], Mereruka [103], Watetkhet-Hor/Seshseshet [104], Niankhnesut [99], Wedjahateti/ Nefereshemphah/ Sheshi [112], Meryteti/Meri [116] and Idu 1 [128].

¹¹⁷² The *Mormyrus Caschive/Kannume* appears in the tombs of Persen [9], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhetotep (Louvre) [31], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Kaiemankh [57], Iynofert/ Shanef [63], Nikauisesi [101], Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116] and Idu 1 [128].

¹¹⁷³ The *Clarias sp.* appears in the tombs of Nebemakhet [8], Persen [9], Rakhaefankh [26], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhetotep (Louvre) [31], Hotepherakhti [34], CG 1535 [36], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Wedjahateti/ Nefereshemphah/ Sheshi [112], Idu 1 [128] and Pepyankh/ Henykem [146].

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The *Gnathonemus*, *Petrocephalus* and *Hyperopisus* have been combined due to lack of defining characteristics in their artistic representations. These fish are attested thirteen times, with the majority found in the Sixth Dynasty.¹¹⁷⁴ The *Synodontis sp.* is known from seven examples, two of which are when the head fisherman presents to the tomb owner or other authority with a specimen of this species from the dragnet catch.¹¹⁷⁵ The Moon fish or *Citharinus sp.* is depicted four, possibly five times during and after the reign of Djedkare (V.8).¹¹⁷⁶ The *M. electricus* is attested once¹¹⁷⁷ and the *Barbus bynni* is depicted four times, both only within the late Sixth Dynasty.¹¹⁷⁸

Methods of transportation for individual species¹¹⁷⁹

One of the three aforementioned methods of transportation a) by hand, b) by pole or c), by basket was favoured for different species. In all Old Kingdom dynasties, the *Mugil sp.* is more frequently carried by hand with only three examples of any other means of conveyance.¹¹⁸⁰ The *Mugil sp.* can reach lengths of up to 120cm and would have been a good candidate for suspension from a pole or oar, yet it is noticeably excluded from this form of transportation.¹¹⁸¹ The fish is primarily shown carried in two hands across the body of the bearer as seen in Watetkheth-Hor/Seshseshet [104].

The *Tilapia sp.* is most frequently shown carried by hand in the Fourth and Fifth Dynasties.¹¹⁸² The fish are mostly held by a rope threaded through the mouth and gills as seen in Akhethotep (G7650) [14], Rakhaefankh [26], Neferirtenef [52], and Nebet [62]. Interestingly, the *Tilapia sp.* in the tomb of Niankhkhnum and Khnumhotep [27] is clearly being held by the gills with the fingers and hand of the bearer inserted into them. This method changed in the Sixth Dynasty with the number of *Tilapia sp.* strung up on poles increasing significantly; multiple examples are found in Meryteti/Meri [116], Idu 1 [128], and Mery Aa [158]. However, generally the fish is most likely to have been carried by hand.¹¹⁸³

¹¹⁷⁴ The *Gnathonemus*, *Petrocephalus* and *Hyperopisus* appear in the tombs of Niankhkhnum and Khnumhotep [27], Kayemnofret (D23) [51], Nebet [62], Mereruka [103], Wedjahateti/ Nefereshemptah/ Sheshi [112], Meryteti/Meri [116], Merefnebef [117], Ibi [130] and Khenty [132].

¹¹⁷⁵ These are seen in Nefer and Kahay [18] and Akhethotep (Louvre) [31]. Others are attested in Iymery [20], Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Nikauisesi [101], Wedjahateti/ Nefereshemptah/ Sheshi [112] and Khenty [132].

¹¹⁷⁶ Kayemnofret (D23) [51], Nebet [62], Meryteti / Meri [116], Idu 1 [128] and Khenty [132].

¹¹⁷⁷ Ibi [130].

¹¹⁷⁸ Idu 1 [128], Khenty [132] and Pepyankh/ Henykem [146].

¹¹⁷⁹ The species used in this analysis were the *Mugil sp.*, *Tilapia sp.*, *Lates*, *Clarias sp.*, *Mormyrus*.

Caschive/Kannume, *Synodontis* and *Gnathonemus/ Petrocephalus/Hyperopisus* groups as they presented a large number of individual examples from which any pattern of transportation method could be discerned.

¹¹⁸⁰ See Appendix 2: Fish Bearing Detail Table C.1; Other transportation methods are attested in Ramaka [28] (Basket strung to pole), Kayemnofret (D23) [51] (Carried in basket), and Mereruka [103] (Carried in basket).

¹¹⁸¹ See Appendix 3: Fish Profile: *Mugil sp.*

¹¹⁸² See Appendix 2: Fish Bearing Detail Table C.1.

¹¹⁸³ See Appendix 2: Fish Bearing Detail Table C.1.

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The first depiction of a *Lates* in the tomb of Rahotep [5] represents a large specimen impaled on an oar. This image reflects the large size and weight that the fish can reach.¹¹⁸⁴ The transportation of the *Lates* in this manner is rare in comparison to those that are carried by hand. In the Fifth Dynasty it is shown once on a pole in the example from Inti [45] and once in a basket hanging from a pole in the scene from Akhethotep (Louvre) [31]. The two remaining examples show the fish either slung over the shoulder, as seen in Irenkaptah [22], and carried by a rope through the gills as in the tomb of Hesimin (M22) [56]. The examples of the *Lates* carried by pole do increase in the Sixth Dynasty, yet those which are carried by hand still significantly outnumber them.¹¹⁸⁵ The *Lates* is also frequently shown across the shoulders of the bearer as a method of efficiently carrying such a large species.¹¹⁸⁶

The majority of depictions of the remaining fish species, the *Clarias sp.*, *Synodontis*, *Caschive/Kannume* group and the *Gnathonemus/Petrocephalus/Hyperopisus* group also all show them being carried by hand.¹¹⁸⁷ The *Clarias sp.* is only shown on a pole in the Fourth Dynasty.¹¹⁸⁸ While it is depicted four times in this manner and three times in a basket strung from a pole in the Fifth Dynasty,¹¹⁸⁹ in eleven instances the species is depicted being carried by hand.¹¹⁹⁰ The *Caschive/Kannume* group appears being carried by hand seven times in the Fifth Dynasty with two examples being strung on a pole and two held in baskets.¹¹⁹¹ In the Sixth Dynasty there are less identifiable examples although this fish is still slightly more frequently depicted being carried by hand than either by the pole or basket methods.¹¹⁹² In the tomb of Watetkhet-Hor/Seshseshet [104] a bearer holds the carcass of the species by the elongated snout. For both the *Synodontis* and the *Gnathonemus/Petrocephalus/Hyperopisus* group examples attached to poles are only found in the Sixth Dynasty.¹¹⁹³

¹¹⁸⁴ See Appendix 3: Fish Profile: *Lates*.

¹¹⁸⁵ *Lates* carried by hand: Kagemni [94], Mereruka [103], Niankhnesut [99], Watetkhet-Hor/Seshseshet [104], Wedjahateti/ Neferseshemptah/ Sheshi [112], Meryteti/Meri [116], Idu 1 [128]; *Lates* on Pole as seen in Mereruka [103], Meryteti/ Meri [116], Idu 1 [128]. See Appendix 2: Fish Bearing Detail Table C.1

¹¹⁸⁶ *Lates* carried across the shoulders of bearer: Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116] (x5), Idu 1 [128] (x3).

¹¹⁸⁷ See Appendix 2: Fish Bearing Detail Tables C.1 and C.2.

¹¹⁸⁸ *Clarias sp.* is only shown on a pole: Nebemakhet [8].

¹¹⁸⁹ *Clarias sp.* carried by pole or by basket hung from a pole: in Nebemakhet [8], Persen [9], Rakhaefankh [26], Ramaka [28], Hotepherakhti [34], Ptahshepses [41], and Kayemnofret (D23) [51].

¹¹⁹⁰ Carried by hand: in Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31], CG 1535 [36], Ptahshepses [41], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Wedjahateti/ Neferseshemptah/ Sheshi [112], Pepyankh/ Henykem [146].

¹¹⁹¹ Carried by hand: Persen [9], Niankhkhnum and Khnumhotep [27], Ptahshepses [41], Kaiemankh [57], Iynofert/ Shanef [63]. By pole: Rakhaefankh [26], Inti [45], Kayemnofret (D23) [51]; Carried in a basket: Ramaka [28], Akhethotep (Louvre) [31].

¹¹⁹² Carried by hand: Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116]; By pole: Meryteti/Meri [116], Idu 1 [128]; By basket: Nikauisesi [101].

¹¹⁹³ *Synodontis*: in Khenty [132]; *Gnathonemus/Petrocephalus/Hyperopisus*: in Meryteti/Meri [116], Ibi [130], and Khenty [132].

Minor Figures

Leg Positions

The posture of the legs and torso of fish bearers are standardized and their leg positions follow Types A (open stance) and B (stride).¹¹⁹⁴

The torso is depicted as vertical for the majority of the figures.¹¹⁹⁵ The bearer is rarely shown leaning forwards slightly, as is seen in the tomb of Rahotep [5], followed by Persen [9], Ptahshepses [41], and in Mery Aa [158]. Most individual bearers are depicted with an open stance leg position (Type A) which has both feet firmly placed on the register base.¹¹⁹⁶ Those with the striding leg position (Type B)¹¹⁹⁷ also have a vertical torso.

There are two unique foot positions that occur in the early Sixth Dynasty tombs of In-Snefru-Ishtef [96] and Nikauisesi [101]. Both figures are placed in a boat with one leg positioned on top of the prow causing the leg to be bent at an almost 90° angle; the other foot is within the boat. Nikauisesi's [101] figure has his back foot raised to the ball of the foot whereas the same foot in In-Snefru-Ishtef [96] is not raised. The replication of this detail in these two tombs may suggest some relationship between them. This leg position is seen in other themes which involve boats such as Lave net fishing, Men returning and Boat fighting scenes.¹¹⁹⁸

¹¹⁹⁴ See Appendix 4: Typology: Basic Leg Positions.

¹¹⁹⁵ Vertical torso: Nebemakhet [8], Akhetotep (G7650) [14], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhetotep (Louvre) [31], Hotepherakhti [34], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116], Merefnebef [117], GL.115 [126], Ibi [130], Idu 1 [128], Khenty [132] and Pepyankh/ Henykem [146].

¹¹⁹⁶ For both feet on register base see: Nebemakhet [8], Persen [9], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhetotep (Louvre) [31], Hotepherakhti [34], CG 1535 [36], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Neferirtenef [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62], Kairer [66], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Watetkhet-Hor/Seshseshet [104], Remni/ Merwi [109], Wedjahateti/ Nefereshemphah/Sheshi [112], Meryteti/Meri [116], Merefnebef [117], GL.115 [126], Ibi [130], Idu 1 [128], Meryrenefer/ Qar [133], Khenty [132], Pepyankh/ Henykem [146], Mery Aa [158].

¹¹⁹⁷ As attested in Akhetotep (G7560) [14], Hotepherakhti [34], Neferirtenef [52], Nebet [62], Mereruka [103], Meryteti/Meri [116], and Khenty [132].

¹¹⁹⁸ Some examples may be observed in scenes from Ty [35], CG 1535 [36], Ptahhotep/Thefu [75], Ihy/ Seshseshet/ Idut [72], Mereruka [103] and Hesi [110]. In some cases, the feet may be switched. i.e. the back foot is the one positioned on the prow.

Chapter 15: Fish Bearing

Arm Positions

The arm positions of these figures are extremely varied and have been arranged into six groups. They are: BA. 1-6.¹¹⁹⁹

BA.1: This type refers to both arms bent at the elbow at forty-five degrees reaching up to hold onto the end of the pole.

BA.2: This type includes figures with one arm straight along the body holding a fish either by rope or its body with the other arm at waist height or lower.

BA.3: in opposition to BA.2, this type refers to the figure with one arm along the side of his body holding a fish while the other arm is bent up from waist height or higher. This type included figures holding a fish that is slung over his shoulder, held up in his hand/platter or in a basket balanced on the shoulder.

BA.4: Figures are holding a large fish across the torso with the vertical arm holding the tail and the bent arm in front supporting the head of the fish. The vertical arm may be bent upwards slightly or across the waist at ninety degrees.

BA.5: One arm of the figure is depicted in front of the chest while the other is raised and bent at ninety degrees with the elbow turned out facing the top of the register; and

BA.6: The arms are depicted at either side of the body and slightly raised, each showing a bend to the elbow at various degrees.

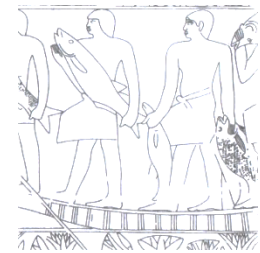
Approximately 138 figures have been used for the study of arm positions of fish bearers. In general, Type BA.1 is the most frequent with 40 known examples; Type BA.4 has 35 attestations. Rahotep [5] has two figures with Type BA.1 position, while Nebemakheth [8] has a variant of Type BA.1¹²⁰⁰ and three examples of Type BA.4. Akhethotep (G7650) [14] depicts the first known occurrence of Type BA.6.



Mereruka [103]
BA.1

¹¹⁹⁹ See Appendix 4: Typology: Arm Positions: Fish Bearers: See also Appendix 2: Fish Bearing Detail Table D.
¹²⁰⁰ The figure is shown with one arm holding the pole and the other hanging vertically at his side.

Type BA.1, BA.2 and BA.4 are the most common arm positions for the Fifth Dynasty, only separated by one example with Type BA.1 known in 16 depictions,¹²⁰¹ Type BA.2¹²⁰² in 14 and Type BA.4 in 15.¹²⁰³ Type BA.1 has a variation that occurs in Rakhaefankh [26], Akhethotep (Louvre) [31], Inti [45] and Kayemnofret (D23) [51], which shows the figure with one arm raised holding the pole and the other alongside the body either empty-handed¹²⁰⁴ or holding fish and/or birds.¹²⁰⁵ A second variation is seen twice in this dynasty. In the tombs of Rakhaefankh [26], and Kayemnofret (D23) [51], a bearer casually suspends his second arm over the pole he is holding. This is attested twice more in the Sixth Dynasty tombs of Meryteti/Meri [116] and Ibi [130]. Type BA.3 is attested nine times and of these, only one figure is depicted with the fish carried over his shoulder.¹²⁰⁶



**Watetkhet-
Hor/Seshseshet [104]
BA.2 and BA.4**

Type BA.1 becomes the usual feature in the Sixth Dynasty with 22 examples,¹²⁰⁷ compared to 17 Type BA.4's¹²⁰⁸ and only eight Type BA.2.¹²⁰⁹ Two scenes, one from Mereruka [103] and another from Meryteti/Meri [116], depict a variation of Type BA.1, with the figures holding a pole with one hand, and a basket which has rope tied to the handles in the other. Type BA.3 is the third most common position with nine of the 16 examples depicting the figure carrying a fish across the back of their shoulders.¹²¹⁰ Idu 1's [128] scene has a unique variation of this type with two figures holding the fish (with two hands) above their heads. Two further men appear to have balanced the fish on their heads, the second hand holding another fish by their sides.

¹²⁰¹ Type BA.1: Persen [9], Rakhaefankh [26], Akhethotep (Louvre) [31], Ramaka [28], Hotepherakhti [34], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Nebet [62].

¹²⁰² Type BA.2: Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Ptahshepses [41], Neferirteneb [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63] and Nebet [62].

¹²⁰³ Type BA.4: Persen [9], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Kaiemankh [57], Iynofert/ Shanef [63] and Nebet [62].

¹²⁰⁴ See Rakhaefankh [26], Akhethotep (Louvre) [31], Inti [45].

¹²⁰⁵ See Kayemnofret (D23) [51].

¹²⁰⁶ Type BA.3: Iymery [20], Iynofret [19], Niankhkhnum and Khnumhotep [27], Ptahshepses [41], Hesimin (M22) [56], Kaiemankh [57] and Iynofert/ Shanef [63]. Ptahshepses [41] is the only example with the fish over the shoulders of a bearer.

¹²⁰⁷ Type BA.1: Mereruka [103], Meryteti/Meri [116], GL.115 [126], Ibi [130], Idu 1 [128], Khenty [132], Pepyankh/ Henykem [146] and Mery Aa [158].

¹²⁰⁸ Type BA.4: Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Niankhnesut [99], Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116], Merefnabef [117] and Meryrenefer/ Qar [133].

¹²⁰⁹ Type BA.2: Watetkhet-Hor/Seshseshet [104], Wedjahateti/ Neferseshemtpah/Sheshi [112], Meryteti/Meri [116] and Pepyankh/ Henykem [146].

¹²¹⁰ Figure carrying a fish across back of shoulders: In-Snefru-Ishtef [96], Niankhnesut [99], Mereruka [103], Watetkhet-Hor/Seshseshet [104] and Meryteti/Meri [116] (5 examples in this scene).

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Type BA.6 is very rare with only three examples found in the Fifth Dynasty. These are seen in the tombs of Niankhkhnum and Khnumhotep [27], Akhethotep (Louvre) [31] and Iynofert/ Shanef [63], followed by one example in the Sixth Dynasty in the tomb of Mereruka [103]. Type BA.5 is also rare, only attested three times over the Fifth and Sixth Dynasties in the tombs of Nefer and Kahay [18], Iymery [20], and In-Snefru-Ishtef [96]. In these examples the



Mereruka [103]
BA.6

figures are handling a *Synodontis*. A unique example is known in the tomb of Ptahshepses [41]; the fragmented image appears to show the figure carrying the fish over the shoulder, its body lying vertically along the man's back.

Type BA.1 is the most typical arrangement for arms in this scene and is just barely dominant in all dynasties, followed by BA.4.

Individual Characteristics

It is immediately clear from looking at the tabulated statistics for both hair and body type that these figures involved in bearing fish are highly standardized in terms of their appearance.¹²¹¹ The artist has used both Type A (Full) and B (Receding) hair and Type A (Athletic) and B (Non-Athletic) body conditions to represent these figures.¹²¹²

The Fourth Dynasty tombs of Rahotep [5], Akhethotep (G7650) [14] and Nebemakhet [8], as well as Persen [9] which was constructed at the beginning of the Fifth Dynasty, depict figures with Type A hair and body condition only. The solitary figure in Nefer and Kahay [18] appears to have Type B hair, while the body is Type A. Type B hair only occurs twice more in this dynasty in the tombs of Irenkaptah [22] and Kayemnofret (D23) [51] both with Type A bodies. All other examples in this dynasty follow the standards set by the earlier tombs for Type A hair and bodies.¹²¹³ Dynasty Six artists continued these standards with all but one example.¹²¹⁴ The scene from Watetkhet-Hor/Seshseshet [104] depicts one figure with a Type B body and Type A hair, the other figures in this scene follow the standards.

In summary, there are 96 surviving images of the heads of bearers which can be used for this discussion, of which 93 are Type A. This is a clear standard across the entire date range of the scene.

¹²¹¹ See Appendix 2: Fish Bearing Detail Table F.

¹²¹² See Appendix 4: Typology: Individual Characteristics and Clothing: Individual Characteristics.

¹²¹³ Rakhaefankh [26], Iymery [20], Iynofret [19], Irenkaptah [22], Niankhkhnum and Khnumhotep [27], Ramaka [28], Akhethotep (Louvre) [31], Hotepherakhti [34], Ptahshepses [41], Inti [45], Neferirtenefer [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62].

¹²¹⁴ Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Niankhnesut [99], Watetkhet-Hor/Seshseshet [104], Meryteti/Meri [116], Merefnebef [117], GL.115 [126], Ibi [130], Khenty [132], Pepyankh/ Henykem [146].

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This standardization is also present for the body type. With 129 bodies, available for study, 128 are identified as Type A.¹²¹⁵

Clothing

The minor figures in this theme are represented with three types of clothing: Type A (Naked), B (Belt) and C (Kilt).¹²¹⁶

Type B or the belt is the earliest form of clothing presented. It is seen in the tomb of Rahotep [5] and is attested a further nine times in the Old Kingdom with occurrences in Akhethotep (G7650) [14], Irenkaptah [22], Akhethotep (Louvre) [31], and Ptahshepses [41].¹²¹⁷ Naked figures (Type A) are rare with only three examples known, two in the Fifth Dynasty scenes from Irenkaptah [22] and Ptahshepses [41], followed by a late Sixth Dynasty example in the tomb of Mery Aa [158].

The most common type is the Kilt (Type C) with a total of 110 figures identified.¹²¹⁸ There are three different styles of this kilt in these scenes. The standard wrap around kilt which is a length of material around the waist of the figure and overlapped and tied at the front is the most common.¹²¹⁹ Another type of kilt is the drop kilt which is attested on 17 individuals, primarily from the Fourth and Fifth Dynasty in the tombs of Nebemakhet [8], Nefer and Kahay [18], Iymery [20] and Niankhkhnum and Khnumhotep [27]. Only one scene in the Sixth Dynasty represents this style, tomb of Watetkhet-Hor/Seshseshet [104], with eight individual bearers wearing it. In the Sixth Dynasty, the pointed kilt is attested three times, in the tombs of Nikauisesi [101], Remni/ Merwi [109], and Meryrenefer/ Qar [133]. A unique addition to a Sixth Dynasty figure is a hat which is donned by a bearer in the scene from the tomb of Nikauisesi [101].

Genitalia are not frequently portrayed in this scene, with only five known attestations in Ptahshepses [41] (two figures), and Kayemnofret (D23) [51] (three figures). In general, the use of the kilt may have prevented the artists from commonly including the genitalia. The presentation of the fish to an authority figure or the tomb owner may have called for the men to be suitably dressed and not exposing themselves.

¹²¹⁵ See Appendix 2: Fish Bearing Detail Table F.

¹²¹⁶ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing: See also Appendix 2: Fish Bearing Table G.

¹²¹⁷ These tombs have multiple examples of the belts; See Appendix 2: Fish Bearing Detail Table G.

¹²¹⁸ See Appendix 2: Fish Bearing Detail Table G.

¹²¹⁹ 89 examples found in; Persen [9], Rakhaefankh [26], Iynofret [19], Niankhkhnum and Khnumhotep [27], Ramaka [28], Hotepherakhti [34], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Neferirtenefer [52], Hesimin (M22) [56], Kaiemankh [57], Iynofert/ Shanef [63], Nebet [62], Kagemni [94], In-Snefru-Ishtef [96], Nikauisesi [101], Mereruka [103], Wedjahateti/ Neferseshemptah/Sheshi [112], Meryteti/Meri [116], Merefnepf [117], Ibi [130], Idu 1 [128], Khenty [132], Pepyankh/ Henykem [146].

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Captions

There are fifteen examples of captions accompanying this scene.¹²²⁰ The first is attested in the Fourth Dynasty tomb of Rahotep [5], the last in the later Sixth Dynasty tomb of Pepyankh/ Henykem [146]. The inscriptions vary in length and in the information, they provide; yet themes of 'bringing the fish' or a 'procession' of the fish were frequent.

There is no standard inscription found in these scenes yet a common theme is the notion of transporting or *bringing (Int)* the fish from the marshlands to present them to the tomb owner. The men involved in this are primarily identified as *Kꜣ* servants as in the inscriptions from Hotepherakhti [34], Hesimin (M22) [56] and Ankhmahor [102].

A word used in two inscriptions is *wšnw*, which translates as 'poultry'.¹²²¹ This appears an odd term to use in scene where only fish are depicted such as in Nebet [62]. It may be that this term can be extended to other animals that have been brought from the marshes and/or that it is typical wording of the offering scene which in the majority of cases depicts poultry. Indeed, the scene in Nebet [62], may have been intended to include poultry. Interestingly, the second inscription in the tomb of Nebet [62] specifically mentions fish and poultry.

Summary

Bearing fish is one of the earliest non-fishing related tasks in tomb art. It is primarily found in the Memphite region until the latter Sixth Dynasty with the movement of official and burials to provinces. There is a peak in their attestation during the Fifth Dynasty.¹²²² It would appear that the theme of transporting fish was used to show the progression of fish from the water to other activities such as gutting or for presentation to the tomb owner.

This theme is highly individualised yet has a standard framework in which the artist could choose to compile the scene. We have seen that there was no restriction on the types of fish depicted, only that the most popular fish, the *Mugil sp.*, *Tilapia sp.* and *Lates*,¹²²³ which are present in other marsh scenes also feature frequently in this theme.

The equipment used was specific to three methods of transporting fish, by hand, pole or basket. Those carried by hand often had a piece of rope threaded through gills for ease of transportation. This rope

¹²²⁰ See Appendix 2: Fish Bearing Detail Table H.

¹²²¹ Faulkner, *Dictionary*, 70; seen in Nebet [62] and Nikauisesi [101].

¹²²² See Appendix 2: Fish Bearing Table A.

¹²²³ See Appendix 2: Fish Bearing Table C.1-C.2.

is also used to attach the fish to a long or short pole used by bearers.¹²²⁴ The basket was typically a round basket trap which had been inverted, however there is examples of the typical trapezoidal basket with is common to all scenes.¹²²⁵ The method of carrying the fish by hand is the most consistently attested in all dynasties.

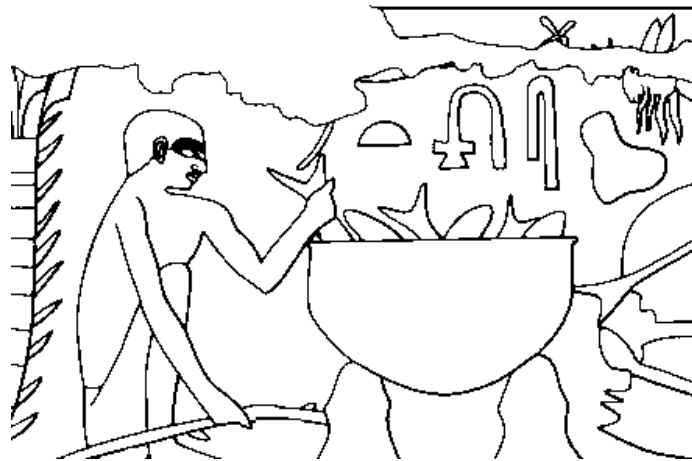
The arm positions of the minor figures are varied yet fit within six types used through the Fourth to the Sixth Dynasty. The standard type is BA.1 which depicted the figure with both arms bent at the elbow and reaching up to grasp a pole or carry a fish.¹²²⁶ Standards have been recognised for the positions of minor figures, their clothing and individual characteristics. The majority of them shown with Type A hair (Full) and wearing a Kilt (C). Captions suggests that the main emphasis of the theme was the bringing or *int* of the fish from the field and marshlands.

¹²²⁴ See Appendix 2: Fish Bearing Table B.

¹²²⁵ See Appendix 2: Fish Bearing Table B.

¹²²⁶ See Section: Arm Positions, in this Chapter.

Chapter 16: Preparing Fish for Consumption



Introduction

Scenes of men cooking fish rarely occur in Old Kingdom tombs. Typically, they show men seated amongst others engaged in cooking and food preparation activities,¹²²⁷ perhaps preparing meals for workers and supervisors.¹²²⁸ The following outlines the appearance, distribution and intricacies of the scenes. It also includes a brief discussion on the consumption of fish, a controversial topic that has been discussed by many scholars, some of whom consider it as taboo.

Taboo or not Taboo?

Archaeological, textual and pictorial evidence infer that the subject of taboo foods is not as apparent as once theorised. For ancient Egypt, taboo can be defined as a '*phenomenon that posed a threat to the structure of the universe...*' or '*the means by which the social and metaphysical framework was preserved and reinforced*'.¹²²⁹ Many factors can be construed to both negate and support the theory that fish consumption was taboo. Ikram states that the perpetuation of the concept that some animals, including fish, were taboo is mainly due to the writings of such classical authors as Diodorus Siculus and Herodotus.¹²³⁰ Both advocate the taboo of fish within Egypt for all or part of the population, and especially for priests. It is evident that geographical and individual factors were important, with some taboos being confined to certain persons and areas, in some cases correlating with the worship of local deities.¹²³¹

The only clear evidence for a taboo on fish consumption, however, occurs in late Egyptian textual sources. The New Kingdom 'Book of the Dead', for instance, mentions the taboo in Spell 64.¹²³² Such a taboo seemingly continued into the Third Intermediate Period, with the Twenty-Fifth Dynasty stele of Piye mentioning that fish eaters were '*an abomination...*' and that the king could enter the palace because '*he was clean and did not eat fish...*'.¹²³³

Within the Egyptian hieroglyphic script itself, one particular glyph has been utilised as evidence supporting the taboo. The term *bwt* is represented with the glyph of the *Barbus bynni* fish and is

¹²²⁷ The scenes are portrayed in a natural setting on the river banks, as indicated by the inclusion of papyrus stalks, reeds and bushes. See Niankhkhnum and Khnumhotep [27], CG 1535 [36] and Werirni [70].

¹²²⁸ Van Elsbergen, *Fischerei*, 84.

¹²²⁹ Shaw- Nicholson, *Dictionary*, 281.

¹²³⁰ Ikram, *Choice Cuts*, 36.

¹²³¹ Shaw- Nicholson, *Dictionary*, 281; Wilson, *Food and Drink*, 35.

¹²³² Spell 64's Rubric; *THIS CHAPTER SHALL BE RECITED BY A MAN WHO IS CEREMONIALLY CLEAN AND PURE, WHO HATH NOT EATEN THE FLESH OF ANIMALS fish*'; Budge, *The Chapters of Coming Forth by Day*, 119.

¹²³³ The mention of 'cleanliness' is likely related to circumcision. Ikram, *Choice Cuts*, 35.

translated as ‘abomination’ or ‘taboo’.¹²³⁴ However, there is much discussion over whether the hieroglyph for *bwt* represents this particular fish as ‘taboo’ or if it is simply a phonogram.¹²³⁵ While the word is not attested as an identification for the fish species, Egyptians did use the hieroglyph to denote strong negative connotations. Yet, conversely, the fish in amulet form was considered a lucky charm, especially when tied to a side-lock of hair on a child, as it was thought to prevent drowning.¹²³⁶ Moreover, Early Dynastic archaeological evidence from Tell el Farkha suggests that the *Barbus bynni* was attributed to the goddess Hat-Mehit, the ‘fish of the fishes’ and ‘the foremost of the fishes’.¹²³⁷ This positive attitude towards the capture and possible representation of the *Barbus bynni* thereby opposes the notion of abomination.

Old Kingdom tomb scenes indicate that fish were consumed by both the elite echelon as well as the general populace. Scenes of the trade in and consumption of fish clearly demonstrate that the wider population enjoyed it as a foodstuff. Workers were evidently paid with fish, signifying that the product retained some value as a commodity. The depiction of fish being caught, carried and presented to tomb owners of high rank further suggests that fish could be portrayed as a food item for the elite.¹²³⁸ Another point to consider is that, as fish were likely available to all social echelons, an association with commoners was perhaps inferred.¹²³⁹ Consequently, the inclusion of fish in offering scenes of the elite may have been restricted, with representations of larger cuts of meat favoured for their more direct reflection of a tomb owner’s wealth.¹²⁴⁰ In other words, the depiction of fish consumption was likely not taboo but could have been associated with the representation of affluence or lack of it.

Nevertheless, it remains possible that people in certain areas of Egypt held a taboo against the consumption of particular species of fish while those in other areas continued to eat fish without

¹²³⁴ Faulkner, *Dictionary*, 82. The word *bw* ‘detest’ is considered an older version of *bwt* and occurs with the same determinative.

¹²³⁵ Shaw- Nicholson, *Dictionary*, 281; Ikram, *Choice Cuts*, 36; Wilson, *Food and Drink*, 35-6; Chłodnicki-Makowiecki, ‘The Archaeology and Archaeoichthyology of Fish and Fishing at Tell el Farkha, Egypt—Pre-dynastic and Early Dynastic Times’ .in *Fishes—Culture—Environment*. (2009, Poland), 136; De Moor, ‘In the Beginning’, 89; Radcliffe, *Fishing from the Earliest Times*, 319-326; Gamer-Wallart, *Fische*, 62-74; Sahrhage, ‘Fishing in Ancient Egypt’ (2008), 922-927; Dodson-Ikram, *The Tomb*, 96-97; Handoussa, ‘Fish offering in the Old Kingdom’, *MDAIK* 44, 105-109.

¹²³⁶ Wilson, *Food and Drink*, 35-6.

¹²³⁷ The goddess enjoyed an elevated position and a large cultic following, likely due to the importance of fishing activity during this period. The fish used for the identification of Het-Mehit may also be a *Schilbe*, which later became representative of Mendes, the only nome to be identified by a fish. Chłodnicki-Makowiecki, ‘Tell el-Farkha’, in *Fishes—Culture—Environment*. (2009, Poland), 136ff. For evidence dating to the Predynastic Period from Hierakonpolis, see Wilson, *Food and Drink*, 35-6.

¹²³⁸ Wilson, *Food and Drink*, 35.

¹²³⁹ Wilson, *Food and Drink*, 35.

¹²⁴⁰ Wilson, *Food and Drink*, 35.

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reprimand.¹²⁴¹ A generalised ban on a type(s) of fish may have also been in effect on certain days or events.¹²⁴² This idea of local or regional taboo could also explain the inclusion or exclusion of fish within offering lists, on offering tables or in scenes with other religious or funerary connotations.¹²⁴³ It is similarly conceivable that the king, priesthood, and other religious personnel would be subjected to some of these taboos.¹²⁴⁴ Overall, the evidence strongly indicates that the consumption of fish was not widely considered taboo in the Old Kingdom.

Occurrence of Scene

Fourth Dynasty

Tomb	Location	Date
Nebemakhet [8]	Giza	IV.4-6

Table 16.1 Fourth Dynasty Attestations

The first identified scene of fish preparation occurs in the tomb of Nebemakhet [8] and represents a seated figure before a pot. As the scene is associated with the gutting of a fresh catch of fish as well as its transportation, the figure could either be cooking fish for immediate consumption or, as Hassan suggests,¹²⁴⁵ preserving it in salt for its effective transportation. As it is unclear what the figure holds in his hands, either possibility is likely.

Fifth Dynasty

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
CG 1535 [36]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Neferirtenef [52]	Saqqara	V.8-9
Werirni [70]	Sheikh Said	V.9
Kairer [66]	Saqqara	V.9

Table 16.2 Fifth Dynasty Attestations

¹²⁴¹ Chlodnicki-Makowiecki, 'Tell el Farkha', 136; De Moor, *Food from the Waters*, 89; Ikram, *Choice Cuts*, 36; Shaw-Nicholson, *Dictionary*, 281.

¹²⁴² De Moor, 'In the Beginning', 89.

¹²⁴³ Ikram, *Choice Cuts*, 36.

¹²⁴⁴ Chlodnicki-Makowiecki, 'Tell el Farkha', 136; Ikram, *Choice Cuts*, 36.

¹²⁴⁵ Hassan, *Giza IV*, 135.

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The mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27] depicts intricate details with a minor figure placed amid three fish gutters. He is seated near two mounds of earth bearing a large pot full of fish. Carrying a striped palm frond, he is likely stoking a fire placed under the pot, which clearly indicates that he is cooking or boiling fish.¹²⁴⁶

The tomb of Ptahshepses [41] yielded a fragment marked with the hieroglyphic inscription *šrt mhyt* ‘roasting fish’. The term *mhyt* ends with a determinative of a *Synodontis* fish, perhaps indicating that it is this fish being cooked. The fragment’s scene is incomplete, only outlining a minor figure holding an implement raised above a now missing fish being roasted. It is the first to mark this alternative cooking method, with later examples only depicting the roasting rather than the boiling of fish.

The cooking of fish also occurs in Neferirteneb [52], with a pot placed in a sub register above the activity. The skewered fish is held over a slab near a figure with a fanning instrument, perhaps for a nearby heat source. Such a fan is similarly held by a figure in the tomb of Werirni [70], who utilises it to cook fish over coals.

The tomb of Kairer [66] may also include a scene of the cooking or preparation of fish.¹²⁴⁷ Yet, as the scene remains unpublished, its details are not included here.

Distribution

The cooking or preparation of fish is primarily attested at Memphite cemeteries, particularly those of Saqqara. Occurring in principle cemeteries of the Fourth and Fifth Dynasties, the theme was evidently not portrayed in Sixth Dynasty tombs. All scenes are typically contextually positioned in association with river banks or near miscellaneous fishing activities. Geographical changes from the low-lying Delta to the harsher banks of the Nile in Upper Egypt did not likely affect the scenes’ distribution as fish were caught at all locations. Instead, it is more feasible that the theme’s inclusion is due to artistic choice, with its reappearance in mid-Fifth Dynasty tombs suggestive of influence from the Fourth Dynasty tomb of Nebemakhet [8]. The perpetuation of the theme in these tombs also points to the same group of artists or school executing the works.

¹²⁴⁶ Hassan, *Giza IV*, 135.

¹²⁴⁷ As inferred in OEE Database; PM, III.631 [5].

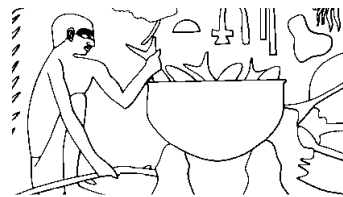
Chapter 16: Preparing Fish for Consumption

The Minor Details

Cooking Equipment

Old Kingdom scenes indicate that fish could be cooked for immediate consumption in one of two ways, either roasting or boiling. Roasting appears to be more frequent, with five attestations, while boiling only occurs in two scenes.¹²⁴⁸ A variety of equipment is utilised in both methods.¹²⁴⁹

The two scenes of boiling share one main piece of equipment in common: a vessel within which fish are placed. The scene in Nebemakhet [8] depicts a seated figure holding a fish near a large globular pot with a thick lip at the rim. That in Niankhkhnum and Khnumhotep [27] illustrates a larger, semi-spherical cauldron without a lip, bearing a minimum of five fish. Other pieces of equipment utilised



Niankhkhnum and Khnumhotep [27]

in the boiling method include a stool upon which the cook is seated, as in Nebemakhet [8], and a striped palm frond with which the cook in Niankhkhnum and Khnumhotep [27] presumably stokes a fire. The fire is situated beneath the cauldron and between two deliberately shaped mounds of earth.

The roasting of fish is illustrated in CG 1535 [36], Ptahshepses [41], Neferirtenef [52] and Werirni [70]. The method typically utilises two types of cooking equipment: a stoker and a long pole or skewer for holding the fish. The stoker is depicted as a fan-shaped item made from palm frond or weaved stalks. It is commonly wide and approximately over half the size of the depicted fish, as in CG 1535 [36], Neferirtenef [52] and Werirni [70], although it appears narrower in Ptahshepses [41]. The former three scenes also include a long pole or skewer. The end near the tail of the fish is grasped by a cook who holds the skewer over coals.



Ptahshepses [41]

The heat source for the roast is represented in CG 1535 [36] and Werirni [70] as a rectangular construct, while that in Neferirtenef [52] resembles a slab used by gutters in an adjacent scene. Davies proposes that these constructs contain coal or a similar material strong enough to heat the fish in this manner.¹²⁵⁰

¹²⁴⁸ Scenes of roasting occur in CG 1535 [36], Ptahshepses [41], Werirni [70], Neferirtenef [52] and Kairer [66]. Scenes of boiling occur in Nebemakhet [8] and Niankhkhnum and Khnumhotep [27].

¹²⁴⁹ See Appendix 2: Preparing Fish for Consumption Detail Table D.

¹²⁵⁰ Davies, *Sheikh Said*, 24.

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Associated scenes

Scenes of cooking fish are associated with those portraying the preparation of fish and/or the cooking of additional foodstuffs.



Werirni [70]

All but one attestation of cooking fish are represented in close proximity to minor figures gutting fish.¹²⁵¹ The latter is only absent in Ptahshepses [41] which is fragmentary. The baking of bread is also associated with roasting scenes. Neferirtenef [52] and Werirni [70] portray a minor figure tending to small circular objects, possibly in a hearth or makeshift oven for the baking of bread or cakes.¹²⁵² As bread was a staple of the Egyptian diet, it was likely produced at the same site where fish-based meals were prepared for workers.¹²⁵³

Fish Species

The inclusion of fish is essential in scenes of cooking, however not all fish are identifiable.¹²⁵⁴

The boiling scenes of Nebemakhet [8] and Niankhkhnum and Khnumhotep [27] possibly show both gutted and whole fish. The species of fish cannot be determined due to a lack in depicted details. Nebemakhet [8] depicts a cook that could be holding either a whole or flayed fish over the opening of his pot. The cook in Niankhkhnum and Khnumhotep [27] evidently grasps a whole fish, with those placed in the pot only shown by their tails or heads.

Scenes of roasting fish typically depict a whole carcass skewered onto a stick. The fish is long and streamlined in shape, thereby excluding such species as the *Tetraodon fahaka* or *Citharinus*. That in CG 1535 [36] is portrayed with a dorsal fin and perhaps a small anal fin, indicating a possible identification with a *Mugil sp.* The *Mugil sp.* is also clearly represented in Werirni [70]. The fish in Neferirtenef [52] bears few identifying characteristics, the roundness of its head pointing to a fish of the *Mormyridae* family, perhaps a *Petrocephalus* or *Gnathonemus*.

¹²⁵¹ Nebemakhet [8], Niankhkhnum and Khnumhotep [27], CG 1535 [36], Neferirtenef [52] and Werirni [70]. The scene from Kairer [66] is also described to include fish gutters in close proximity (see PM, III. 631 [5]).

¹²⁵² These are depicted in various shapes, including oval, triangular and square loafs. Wilson, *Food and Drink*, 16.

¹²⁵³ Van Elsbergen, *Fischerei*, 84.

¹²⁵⁴ See Appendix 2: Preparing Fish for Consumption Detail Table C.

Minor Figures

Body and limb positions

Cooks are portrayed in a posture directly related to the task they are performing.¹²⁵⁵

All cooks are seated. Those in Nebemakhet [8] and Werirni [70] are shown with vertical torsos whereas those in Niankhkhnum and Khnumhotep [27] and Neferirtenef [52] slightly lean forward. This can be explained by the placement of their limbs and the position of their equipment, with both cooks at a slight distance to the pots before them, thereby leaning to better stoke the fire with their fans. The cook in Neferirtenef [52] also folds one leg under his body (Type E leg position),¹²⁵⁶ the toes curled under the foot to push the body forwards.

The leg positions of the figures slightly change over time.¹²⁵⁷ The cook in Nebemakhet [8] is uniquely shown seated on a low stool allowing his legs to be bent at a 90° angle, the feet flat on the ground. Those in Niankhkhnum and Khnumhotep [27] and CG 1535 [36] are seated on the ground with both legs drawn to the chest (Type F.1),¹²⁵⁸ and those in Neferirtenef [52] and Werirni [70] are semi kneeling (Type E).¹²⁵⁹ As aforementioned, the cook in Neferirtenef [52] curls the toes under his foot. Werirni's [70] figure has the top of the foot flat against the base of the register with his second leg drawn up to the chest (Type E).

The figure in Nebemakhet [8] has only one arm visible, extending it in front of the body with the hand holding a fish over his pot. Niankhkhnum and Khnumhotep's [27] cook has one arm positioned downwards, the hand grasping a stoker; the other arm extends forwards and is bent at the elbow, its hand holding the tail of a fish placed in a cauldron. The roasters in Ptahshepses [41], Neferirtenef [52] and Werirni [70] all have one arm extended forwards and bent at the elbow at approximately 45°, the hand grasping a stoker. The other arm is shown placed along the side of the body in a downwards diagonal direction, the hand holding a skewer.¹²⁶⁰

From the above assessment, roasting scenes are evidently more structured than those of boiling, with body and arm positions following a more standardised framework. This can perhaps be explained by their greater number as well as the relatively short time span within which they were executed.

¹²⁵⁵ See Appendix 2: Preparing Fish for Consumption Detail Table F.

¹²⁵⁶ See Appendix 4: Typology: Basic leg Positions: Type E.

¹²⁵⁷ See Appendix 4: Typology: Basic Leg Positions.

¹²⁵⁸ See Appendix 4: Typology: Basic leg Positions: Type F.2.

¹²⁵⁹ See Appendix 4: Typology: Basic leg Positions: Type E.

¹²⁶⁰ Ptahshepses [41], Neferirtenef [52] and Werirni [70].

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Individual Characteristics

Cooks are portrayed with body Types A (athletic) and B (non-athletic).¹²⁶¹ They are also attested with either a full head of hair (Type A) or a receding hairline (Type B).¹²⁶²

In general, cooks are frequently shown with a Type A body and Type A hair. These include the figures from the tombs of Nebemakhet [8], Niankhkhnum and Khnumhotep [27] and Werirni [70]. Those in remaining attestations are unfortunately damaged and only bear one of these characteristics. For instance, the cook in CG 1535 [36] has a Type A body while that in Ptahshepses [41] has Type A hair. The only figure with both a Type B body and Type B hair occurs in Neferirtenef [52].

Clothing

All preserved minor figures are dressed in a kilt (Type C clothing).¹²⁶³

The type of clothing is difficult to ascertain in Nebemakhet [8] and Niankhkhnum and Khnumhotep [27]. The material band around the waist of the figures is, however, suggestive of Type C clothing. The loop of material around the waist of the boiler in Niankhkhnum and Khnumhotep [27] additionally points to a kilt, its characteristics like that worn by a gutter seated in a similar manner and in close proximity.

No genitals are portrayed in any attestations. This is likely due to the choice of clothing, the seated positions of the cooks, and their general lack of movement.


Captions

Captions are included in two of the seven scenes of cooking fish.¹²⁶⁴ They occur in both roasting and boiling scenes.¹²⁶⁵ The earliest is attested in Niankhkhnum and Khnumhotep [27] and, despite being damaged, features the word *sd̄t* ‘fire’. The second is in Ptahshepses [41] and refers to *šrt mhyt*

¹²⁶¹ See Appendix 4: Typology: Individual Characteristics and Clothing: Individual Characteristics for a full explanation of Types.

¹²⁶² See Appendix 4: Typology: Individual Characteristics and Clothing: Individual Characteristics for a full explanation of Types. See Appendix 2: Preparing Fish for Consumption Detail Table D.

¹²⁶³ See Appendix 4: Typology: Individual Characteristics and Clothing Typology: Clothing: Type C.

¹²⁶⁴ The caption in Neferirtenef [52]  refers to *skfn* ‘cause to bake’ or ‘Moulding (and cooking) wafers’ according to Van de Walle. Due to its translation as well as its placement over a scene portraying the cooking of bread, it more likely refers to the baking of bread rather than the cooking of fish. The OEE database associates this caption with the cooking of fish. However, it more likely belongs to the baking of bread and accompanying foodstuffs. See also Davies, *Sheikh Said*, 24; Van de Walle, *Chapelle Funéraire de Neferirtenef*, 71.

¹²⁶⁵ See Appendix 2: Preparing Fish for Consumption Detail Table G.

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‘roasting fish’, thereby identifying the type of cooking taking place. The use of a *Synodontis* glyph in Ptahshepses [41] may indicate the type of fish being roasted.

Summary

These scenes indicate that fish was a common foodstuff for the ancient Egyptian populace, regardless of the notion of taboo. In bearing scenes, this animal is carried towards the tomb owners and presented to them as offerings.¹²⁶⁶ The theme of cooking fish has a very limited date and geographical range, occurring only in Fourth and Fifth Dynasty tombs at Giza and Saqqara. Nebemakhet [8] was possibly the source of inspiration for later mid-Fifth Dynasty examples, all of which were likely constructed and decorated between V.6-9, if not within the same generation. It may be proposed that the same group(s) of artists worked on these tombs, thus perpetuating the theme, albeit infrequently. This is also supported by the standardisation in portrayed equipment, positions, and overall composition of attested scenes, particularly those of roasting fish. The type of cooking changed between the Fourth Dynasty and the later Fifth Dynasty examples. Nebemakhet [8] and Niankhkhnum and Khnumhotep [27] representing the boiling of fish, while CG 1535 [36], Ptahshepses [41], Neferirtenef [52] and Werirni [70] all indicate the fish is being roasted. This development may indicate a change in the preferred method of consumption of the fish or that the roasted fish was more versatile and remained edible for longer. The scenes of Neferirtenef [52] and Werirni [70] are paired with bread baking scenes. The placement of fish on the fire used for baking of bread may have been a convenient option.¹²⁶⁷

The lack of portrayal of this theme is curious after the late Fifth Dynasty. Perhaps the tomb owners wished to not have such a common food stuff shown prepared in their tomb scenes, preferring the preparation more luxurious meats such as ox or poultry. It is also possible that this uncommon theme fell out of favour during this time.

¹²⁶⁶ Meryteti/ Meri [116]: See Chapter 15: Fish Bearing: Introduction.

¹²⁶⁷ CG 1535 [36] and Ptahshepses [41] are incomplete.

Chapter 17: *SPT SMH*

Papyrus boat construction



Nebemakhet [8]

Introduction

Boats of varying types were relatively common in the Old Kingdom, with papyrus skiffs being the most featured in marsh scenes.¹²⁶⁸ Scenes of boat construction typically focus on either: (1) wooden boats, of which there are many associated details;¹²⁶⁹ or (2) papyrus skiffs. The latter is the focus of this chapter, which discusses the appearance and distribution of the theme, as well as the development of its details. The chapter additionally includes a brief discussion on the associated scene of papyrus hauling.

Occurrence of Scene

Fourth Dynasty

Tomb	Location	Date
Atet [3]	Maidum	IV.1M
Nebemakhet [8]	Giza	IV.4-6

Table 17.1 Fourth Dynasty Attestations

There are 31 known representations of papyrus boat construction, the earliest occurring in the Fourth Dynasty tombs of Atet [3] at Maidum and Nebemakhet [8] at Giza. Although varying in detail, the two set the standard for the general composition of the theme throughout the Old Kingdom. The scene in Nebemakhet [8] is also the first known to include papyrus haulers.

Fifth Dynasty

Tomb	Location	Date
Khnumhotep (D49) [15]	Saqqara	V.2-6
Nefer and Kahay [18]	Saqqara	V.6E
Rakhaefankh [26]	Giza	V.6?
Iymery [20]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Kapi [30]	Giza	V.6-8E
CG 1697 [37]	Saqqara	V.6-8
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9

¹²⁶⁸ These scenes include fishing, fowling, hippopotami hunting and leisure scenes.

¹²⁶⁹ The OEE Database lists 14 associated scenes and details with the construction of wooden boats. OEE Database.

Tomb	Location	Date
Inti [45]	Deshasha	V.8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Hesimin (M22) [56]	El Hawawish	V.8L-9E
Senedjem-Ib/ Inti [59]	Giza	V.8L-9
Nebet [62]	Saqqara	V.9
Khenut [68]	Saqqara	V.9
Khunes [67]	Zawyet el-Maiyetin	V.9
Werirni [70]	Sheikh Said	V.9
Ptahhotep II/Thefi [74]	Saqqara	V.9 M-L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1

Table 17.2 Fifth Dynasty Attestations

Papyrus boat construction is most popular in the Fifth Dynasty, with 24 recorded attestations. Although found in such early Fifth Dynasty tombs as that of Khnumhotep (D49) [15], the theme is common during and after the reign of Niuserre (V.6). Geographically, it is frequently featured at Saqqara, likely because the majority of burials were located at this site during the Fifth Dynasty. The theme also occurs at Giza, particularly in the earlier half of the dynasty. It is also sporadically attested at Abusir, Deshasha, El-Hawawish, Sheikh Said and Zawyet el-Maiyetin. Provincial examples only date to the latter half of the dynasty, reflecting the political policies of the time.¹²⁷⁰

Sixth Dynasty

Tomb	Location	Date
Kagemni [94]	Saqqara	VI.1E
Niankhnesut [99]	Saqqara	VI. 1-2
Seshemnofer/ Ifi [134]	Saqqara	VI.3-4
Kahep/ Tjeti-Iker [140]	El Hawawish	VI.4M
Neheri [151]	Zawyet el-Maiyetin	VI

Table 17.3 Sixth Dynasty Attestations

Only five scenes occur in Sixth Dynasty tombs; two date to the reign of Teti, one dates to that of Merenre and one to the reign of Pepy II. The majority are attested at Saqqara, with one found in each of the provincial cemeteries at El-Hawawish and Zawyet el-Maiyetin.

¹²⁷⁰ Kanawati, *Governmental Reforms*, 5; See also Chapter 20: Artistic Transference: Introduction: Political and Administrative Factors.

Distribution

The relative infrequency of the theme suggests that it was not an essential inclusion in the decoration programme of Old Kingdom tombs. Some influence is likely between tombs in close proximity, especially at Saqqara. Based on the association of marsh activities with all scenes, papyrus boat construction almost certainly took place at the banks or shore of the Nile River.¹²⁷¹ While attested along the entire length of the river, the papyrus plant is prolific in the Delta region, where conditions are optimal for its growth.¹²⁷² Its abundance and ease of access in this area may have led to workshops in or around the capital and, consequently, the more frequent inclusion of scenes of papyrus gathering and boat construction in Lower Egyptian tombs.

The Minor Details

Number of Boats under Construction

Scenes of papyrus boat construction include either one or more skiffs. Tombs dating from the Fourth to mid-Fifth Dynasty depict only one papyrus skiff under construction.¹²⁷³ The earliest confirmed occurrences of two papyrus skiffs can be found in the tombs of Kapi [30] and Ty [35]. The depiction of two boats remains infrequent until the reign of Djedkare (V.8), during and after which it is more commonly found.¹²⁷⁴ The portrayal of one boat under construction also continues in Fifth and Sixth Dynasty tombs, namely those of Kayemnofret (D23) [51], Nebkauhor/ Idu [73] and possibly Neheri [151].

Overall, scenes dating from the Fourth to the mid-Fifth Dynasty evidently depict one papyrus skiff under construction, while those of the mid-Fifth and Sixth Dynasties more commonly represent the construction of multiple boats.¹²⁷⁵

¹²⁷¹ Nebemakhet [8], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], Hotepherakhti [34], Inti [45], Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Seshemnofer/ Ifi [134] and Kahep/ Tjeti-Iker [140].

¹²⁷² Partridge, *Transport in Ancient Egypt*, 13; Lucas, *Ancient Egyptian Material and Industries*, 162-163.

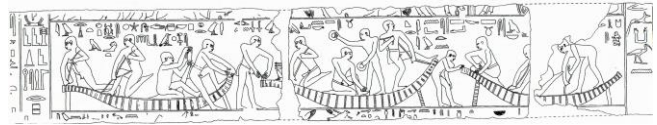
¹²⁷³ These are found in Atet [3], Nebemakhet [8], Khnumhotep (D49) [15], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], CG 1697 [37], Hotepherakhti [34] and Ptahshepses [41], although damaged scenes in Khnumhotep (D49) [15], Rakhaefankh [26], Irenkaptah [22] and Ptahshepses [41] may have originally included a second boat.

¹²⁷⁴ Fifth Dynasty: Inti [45], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Werirni [70], Khunes [67], Nebet [62] and Ptahhotep II/Thefi [74]. Sixth Dynasty: Kagemni [94], Seshemnofer/ Ifi [134] and Kahep/ Tjeti-Iker [140].

¹²⁷⁵ See Appendix 2: Papyrus Boat Construction Detail Table B.

Boat Structure

Of the three common types of boats illustrated in marsh scenes, Types A (Horizontal Position) and structure combination of A and B (one horizontal end and other vertical) are portrayed in scenes of papyrus boat construction.¹²⁷⁶



Kagemni [94]

Type A/B skiffs are the most frequent. First attested in the tomb of Atet [3], they are featured in all but nine scenes of the Old Kingdom.¹²⁷⁷ The earliest known occurrence of a Type A skiff is in Khnumhotep (D49) [15], after which it is found in the Fifth Dynasty tombs of Ty [35], Hotepherakhti [34], Senedjem-Ib/ Inti [59], Khenut [68] and Ihy r/u Seshseshet/ Idut [72]. Type A is also observed in three Sixth Dynasty tombs, namely those of Niankhnesut [99], Kahep/ Tjeti-Iker [140] and Neheri [151]. As these three constitute 60% of all known Sixth Dynasty attestations, it is possible that the standard type of boat structure had shifted in this period.

Boat Detailing

Boat detailing Types A (*lashing and reed*), B (*lashing only*), and C (*no details*) are observed.¹²⁷⁸

Six skiffs are decorated with Type A, 27 feature Type B and 19 display Type C.¹²⁷⁹ In the Fourth Dynasty, Types B and C each occur in Nebemakhet [8] and Atet [3] respectively. Early Fifth Dynasty scenes favour Type B detailing, with five examples,¹²⁸⁰ while those of the mid-Fifth Dynasty and later (V.6-9) depict skiffs with a greater variety of detailing. Type C is most usual with 9 occurrences,¹²⁸¹ followed by Type B with 8 attestations.¹²⁸² Type A occurs in Akhethotep (Louvre) [31], CG 1697 [37], Ptahshepses [41] and Werirni [70]. During the Sixth Dynasty, Type A only occurs in Kahep/ Tjeti-Iker [140], Type B is attested twice in Kagemni [94], and Type C is found on the boats of Niankhnesut [99], Seshemnofer/ Ifi [134] and Neheri [151]. It should be noted that the boat detailing in tombs with

¹²⁷⁶ See Appendix 4: Typology: Boat Structure for a full explanation of this type; See Appendix 2: Papyrus Boat Construction Detail Table C.

¹²⁷⁷ Iymery [20], possibly Irenkaptah [22], Akhethotep (Louvre) [31], Kapi [30], CG 1697 [37], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Hesimin (M22) [56], Werirni [70], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73] and Kagemni [94].

¹²⁷⁸ See Appendix 4: Typology: Boat Detailing for a full explanation of this type.

¹²⁷⁹ See Appendix 2: Papyrus Boat Construction Detail Table C.

¹²⁸⁰ See Khnumhotep (D49) [15], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20] and Irenkaptah [22].

¹²⁸¹ Type C is shown in Kapi [30], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72] and Nebkauhor/ Idu [73].

¹²⁸² Found in Hotepherakhti [34], Ty [35], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Werirni [70], Nebet [62] and Ptahhotep II/Thefi [74].

multiple types (Kahep/ Tjeti-Iker [140], Werirni [70] and Ptahhotep II/Thefi [74]) is difficult to ascertain due to the possibility that the applied decoration had not been completed or is not wholly preserved.

Equipment: Construction

Two main types of equipment are featured in scenes of papyrus boat construction: ropes and wooden wedges.¹²⁸³ Ropes were used at varying points along the hull to bind papyrus stems into the required shape, and to create a more water-resistant vessel. Most scenes show workmen tightening ropes along a boat's hull,¹²⁸⁴ often looping them and keeping them in place by stepping on them,¹²⁸⁵ or looping them over/around their shoulders for added leverage.¹²⁸⁶ Typically, each boat is shown being bound with three or four lengths of rope.¹²⁸⁷ Some skiffs are only shown with



Ty [35]

two ropes or less¹²⁸⁸ while that in Ihy r/u Seshseshet/ Idut [72] has five. There does not appear to be a pattern for this detail, which is most likely based on the artist's choice or the availability of wall space.

Out of the 31 known attestations of papyrus boat construction, 12 feature large, thick coils of ropes detached from the boats under construction.¹²⁸⁹ The earliest occurs in the tomb of Nefer and Kahay [18], wherein two coils are held by a workman standing inside a boat's hull. The majority of scenes depict two or three rolls of rope,¹²⁹⁰ with only four scenes from the reigns of Djedkare (V.8) and Unis

¹²⁸³ See Appendix 2: Papyrus Boat Construction Detail Table D.

¹²⁸⁴ Atet [3], Nebemakhet [8], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], Kapi [30], CG 1697 [37], Hotepherakhti [34], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99], Seshemnofer/ Ifi [134] and Kahep/ Tjeti-Iker [140].

¹²⁸⁵ Atet [3], Nebemakhet [8], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], Kapi [30], CG 1697 [37], Hotepherakhti [34], Ty [35], Ptahshepses [41], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99], Seshemnofer/ Ifi [134] and Kahep/ Tjeti-Iker [140].

¹²⁸⁶ Nebemakhet [8], Akhethotep (Louvre) [31], Hotepherakhti [34], Ty [35], Inti [45], Akhethotep (D64) [58], Werirni [70], Khunes [67], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73] and Kagemni [94].

¹²⁸⁷ Nebemakhet [8], Iymery [20], Akhethotep (Louvre) [31], Kapi [30], Hotepherakhti [34], Ty [35], Inti [45], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Nebet [62], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99] and Kahep/ Tjeti-Iker [140].

¹²⁸⁸ Atet [3], Nefer and Kahay [18], CG 1697 [37], Kayemnofret (D23) [51], Werirni [70] and Khenut [68].

¹²⁸⁹ Nefer and Kahay [18], Irenkaptah [22], CG 1697 [37], Hotepherakhti [34], Inti [45], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khunes [67], Kagemni [94] and Niankhnesut [99]. The coils are distinctively different to those in dragnet scenes (See Chapter 3: Dragnet: Rope Ends). One exception is that in Hotepherakhti [34].

¹²⁹⁰ Nefer and Kahay [18], Irenkaptah [22], CG 1697 [37], Hotepherakhti [34], Hesimin (M22) [56], Kagemni [94] and Niankhnesut [99]. Khunes [67] depicts four coils.

(V.9) showing in excess of five.¹²⁹¹ Those in Inti [45], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70] and Khunes [67] are in neatly ordered rows, while those in all remaining examples are held by workmen.¹²⁹² Direct influence may be inferred between the scene from Kagemni [94] and that of Niankhnesut [99], both of which show this figure holding coiled ropes. The ropes can additionally be positioned under or inside boats, as portrayed in Akhethotep (D64) [58], Werirni [70] and Niankhnesut [99].

Wooden wedges were used to keep hulls, prows or sterns stable while boats were under construction. Their use is evident in 18 scenes,¹²⁹³ with only Atet [3] and Rakhaefankh [26] showing the prow/stern of the boat being stabilised by a figure bent at the waist under prow/stern. While the two-dimensional nature of scenes favours the depiction of two wedges per vessel, one under the prow and the other under the stern, eight scenes bear an odd number of wedges.¹²⁹⁴ The objects can also be detailed with horizontal lines, as seen in Ptahhotep II/Thefi [74] and Kagemni [94].

Equipment: Other

In a commentary on the papyrus boat construction scene of Akhethotep (D64) [58], Davies proposes that a figure is performing caulking or daubing on the hull of a depicted boat.¹²⁹⁵

While both involve the coating of a vessel's surface with some substance, caulking could also feature the insertion of a material into the joins of a boat to make it watertight. Some write that caulking was either widely practiced in the construction of wooden boats¹²⁹⁶ or a necessity for their durability,¹²⁹⁷ but



Khunes [67]

Haldane and Shelmerdine argue that, based on the lack of archaeological evidence, papyrus boats were not caulked at all.¹²⁹⁸ In either case, the artistic evidence does point to the use of tools and other equipment on the surface of papyrus boats.

¹²⁹¹ Inti [45], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59] and Werirni [70].

¹²⁹² CG 1697 [37], Hotepherakhti [34], Kagemni [94] and Niankhnesut [99].

¹²⁹³ Nebemakhet [8], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], CG 1697 [37], Hotepherakhti [34], Ty [35], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99] and Neheri [151].

¹²⁹⁴ Iymery [20], Irenkaptah [22], Hotepherakhti [34], Akhethotep (D64) [58], Hesimin (M22) [56], Werirni [70], Nebet [62], Nebkauhor/ Idu [73] and Neheri [151].

¹²⁹⁵ Davies, *Ptahhotep II*, 15-16.

¹²⁹⁶ *Herodotus*, 2:96.1-2. *Trans*: G. Rawlinson, *The History of Herodotus*, (1858).

¹²⁹⁷ Clarke, 'Nile Boats and Other Matters', Petrie (eds) *Ancient Egypt*, (1920), 44.; Boreux., 'Etudes de nautique égyptienne', *MIFAO 50* (Cairo, 1925), 239.; Edgerton, 'Ancient Egyptian Ships and Shipping', *American Journal of Semitic Languages 39* (1923), 109ff., esp. 120.

¹²⁹⁸ Haldane- Shelmerdine, 'Herodotus 2.96 1-2 Again', *The Classical Quarterly 40* (1990), 535-539; Vinson, 'Πακτούν and πᾶκτωσις as Ship-Construction Terminology in Herodotus, Pollux and Documentary Papyri,' 197.

The depiction of such tools can be found in five scenes, namely those in Ty [35], Akhethotep (D64) [58], Khunes [67], Ptahhotep II/Thefi [74] and Kagemni [94].¹²⁹⁹ Their limited number suggests that they were not a necessary detail in scenes of papyrus boat construction. Artistic influence between attestations, aided by their location at Saqqara, is also possible. The scene in Ty [35] is heavily damaged but depicts one boat with a figure at its edge holding in one hand both a rope as well as an oval-shaped object. This object may be a handheld axe-head or another implement for cutting rope. Akhethotep (D64) [58] portrays a figure positioned similarly to others nearby binding the vessel with ropes.¹³⁰⁰ He holds an oval-shaped tool in his hand and uses its broad side, perhaps to apply a solution to the hull. The scene in Khunes [67] does not show a figure manipulating a particular tool, but depicts an oval-shaped object placed on the hull. Its shape is distinctively different from that of a coiled rope and is not shown with an inner circle. Ptahhotep II/Thefi [74] portrays a figure raising an oval-shaped object to his face, perhaps implying a hammering motion. The artist(s) decorating Kagemni [94] opted for a long rectangular object instead, depicting it in the hands of a workman who extends it from his face to the hull. It is evidently flexible, bent at the point where it is being held, and is bound at the top with a small amount of rope that hangs loose under the figure's wrist. Based on its characteristics, it may be a papyrus stalk prepared for the hull.

Still, the tools in Akhethotep (D64) [58], Khunes [67] and Ptahhotep II/Thefi [74] remain to be identified. They may represent objects that spread sealing agents, such as resin, at the surfaces of hulls to ensure that they were water tight. Yet, as aforementioned, such items have not been evidently found in the archaeological record, and neither are containers for sealants depicted in scenes of boat construction. However, as sealants were used on wooden boats in the Early Dynastic Period, their use during the Old Kingdom is feasible.¹³⁰¹ Another possibility is that the tools were used for cutting, shaping or smoothing the interior of hulls, much like adzes. Such tools are found in scenes of wooden boat construction, however they are used by figures in more versatile positions, standing and propelling handled adzes forwards to cut into wood.¹³⁰² Without handles, though, the objects portrayed in scenes of papyrus boat construction are better suited for smoothing and shaping hulls, perhaps to fit the removable wooden decks seen in some marsh scenes. A third possibility is that the tools were used to apply finishing touches to rope bindings. Nevertheless, without further examples, the exact use of these tools is difficult to pinpoint. Their characteristics, however, imply that the objects were more likely related to the application of finishing touches to hulls or ropes.

¹²⁹⁹ See Appendix 2: Papyrus Boat Construction Detail Table D.

¹³⁰⁰ See following sections on Minor Figure Positions.

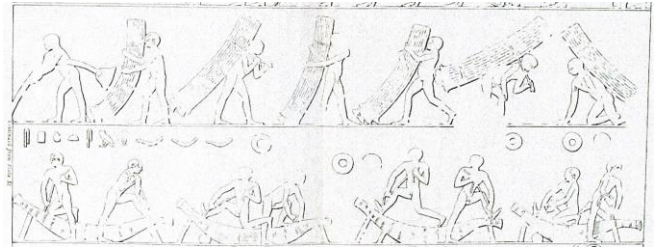
¹³⁰¹ Ward, 'Sewn planked boats from early dynastic Abydos, Egypt'. 21-2.

¹³⁰² Jones, 'The Phrase *šd dšr*, *šd m dšr* in Boat-Building Scenes', *JEA*, Vol. 7 2 (1986), 185-18.

Chapter 17: *SPT SMH* Papyrus Boat Construction

Associated Scene: Papyrus Haulers

From the mid-Fifth Dynasty, scenes of papyrus boat construction became commonly associated with those of papyrus haulers¹³⁰³ Papyrus haulers are typically shown in motion, walking towards boats under construction while carrying bundles of papyri.



Werirni [70]

The earliest tomb linking papyrus haulers with papyrus boat construction is that of Nebemakhet [8]. It is also the only Fourth Dynasty tomb to feature both scenes, after which associated scenes of papyrus boat construction and papyrus haulers are attested in 16 of the 18 collated examples from the Fifth Dynasty.¹³⁰⁴ They are most frequent in tombs dating between the reigns of Djedkare and Unis (V.8-9),¹³⁰⁵ which suggests that they were perhaps inspired by earlier scenes in Nebemakhet [8], Nefer and Kahay [18] or Irenkaptah [22]. The sole Sixth Dynasty tomb to feature both scenes is that of Niankhnesut [99].

Papyrus bundles generally contain four to eight papyrus stems each,¹³⁰⁶ the earliest in Nebemakhet [8] portraying six stems. Khunes [67] includes the largest total number per bundle, with 17 stems. The stems can be grouped in a variety of ways and are depicted: (1) tied at the top and bottom, as in Nebemakhet [8]; (2) roped at the top and collated in a sack at the bottom, as in Nefer and Kahay [18]; (3) placed in a sack, which is most frequent with 8 examples¹³⁰⁷ or (4) bundled without any apparent covering, as in Akhethotep (Louvre) [31], Werirni [70] and Khunes [67].

Generally, three to four minor figures are shown to carry the bundles, with five attested in Khunes [67] and six in Akhethotep (D64) [58] and Werirni [70].¹³⁰⁸ Nebemakhet [8] first depicts three men

¹³⁰³ A total of 18 out of 27 scenes include papyrus haulers. See Appendix 2: Papyrus Boat Construction Detail Table E.

¹³⁰⁴ See Appendix 2: Papyrus Boat Construction Detail Table E.

¹³⁰⁵ Including: Inti [45], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74] and Ihy r/u Seshseshet/ Idut [72]; Earlier examples are found in Nefer and Kahay [18], Irenkaptah [22], Akhethotep (Louvre) [31] and Hotepherakhti [34].

¹³⁰⁶ Irenkaptah [22], Akhethotep (Louvre) [31], Ty [35], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Nebet [62] and Niankhnesut [99].

¹³⁰⁷ In Irenkaptah [22], Ty [35], Inti [45], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Nebet [62], Ihy r/u Seshseshet/ Idut [72], and Niankhnesut [99].

¹³⁰⁸ Irenkaptah [22], Akhethotep (Louvre) [31], Ty [35], Inti [45], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Khenut [68], Nebet [62], Ihy r/u Seshseshet/ Idut [72] and Niankhnesut [99].

moving towards boats with large bundles of papyrus reeds slung over their backs.¹³⁰⁹ Nefer and Kahay [18] also shows three papyrus haulers, two carrying loads and a third pulling papyrus. Bundles illustrated with stalks inverted towards the base of the register are first attested in Akhethotep (Louvre) [31], with one of its two bundles portrayed this way. The scenes from Werirni [70] and Khunes [67] depict a total of 11 bundles upside down, while the Sixth Dynasty example from Niankhnesut [99] shows one bundle in this manner. Haulers primarily carry the bundles along the lengths of their backs,¹³¹⁰ although some tuck them under the arms and carry them at their side.¹³¹¹ The tombs of Hesimin (M22) [56], Khenut [68] and Niankhnesut [99] portray the rare detail of men tying bundles for transportation.

All examples depict the haulers walking towards one destination. Ty [35] uniquely depicts one figure who, heavily burdened by a papyrus bundle, has fallen to his knee. Two men evidently rush to his aid; the man in front places a hand to his chest while the one behind him lifts the bundle to lessen the load. The fallen man does not appear to be in the greatest of health as evident by his non-athletic body (Type B body)¹³¹² and a possible scrotal hernia. His receding hairline (Type B hair)¹³¹³ may also indicate his advancing years. The only one other scene to similarly depict a fallen gatherer is found in Werirni [70], although this man is not offered help by his comrades.

Six scenes include a minor figure pulling a stem of papyrus from the ground,¹³¹⁴ the earliest occurring in Nefer and Kahay [18]. All are pulled from the register beneath.¹³¹⁵ The stems in Hotepherakhti [34] and Niankhnesut [99] are unusually curved, with the umbel of the latter almost reaching the feet of the figure.

¹³⁰⁹ A fourth figure now partially destroyed by an intersecting doorway indicates that further details may have been lost.

¹³¹⁰ Nebemakhet [8], Nefer and Kahay [18], Irenkaptah [22], Akhethotep (Louvre) [31], Ty [35], Inti [45], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ihy r/u Seshseshet/ Idut [72] and Niankhnesut [99].

¹³¹¹ Ty [35], Inti [45], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Werirni [70] and Khunes [67].

¹³¹² See Appendix 4: Typology: Individual Characteristic and Clothing: Individual Characteristics.

¹³¹³ See Appendix 4: Typology: Individual Characteristic and Clothing: Individual Characteristics.

¹³¹⁴ Nefer and Kahay [18], Akhethotep (Louvre) [31], Hotepherakhti [34], Inti [45], Werirni [70] and Niankhnesut [99].

¹³¹⁵ At first sight, the scene from Werirni [70] appears to show a figure pulling a stem from the same register, however when placed in context, it is apparent that the stem is indeed from the adjacent marsh scene which originates two registers underneath. See Davies, *Sheikh Said*, pl. XI and XII.

Minor Figures

Supervisors

Supervisors are attested in Nebemakhet [8], Ty [35], Kayemnofret (D23) [51] and possibly Iymery [20].¹³¹⁶ The men are portrayed in a variety of stances, body types, characteristics and clothing.¹³¹⁷

Nebemakhet's [8] depiction of a supervisor was likely a source of inspiration in the portrayal of those in Kayemnofret (D23) [51] and Ty [35]. The figures in Nebemakhet [8] and Kayemnofret (D23) [51] wear a strip of linen across the shoulders and a full kilt (Type C clothing).¹³¹⁸ Leaning on a staff, each is shown with a full head of hair (Type A) and an athletic body (Type A).¹³¹⁹ One arm is across the chest, the hand holding onto the tip of the staff, and the other is diagonally placed along the staff, although Nebemakhet's [8] supervisor slightly raises one hand off the staff, turning the palm to face a nearby skiff under construction. The two's feet positioning vary, with Nebemakhet's [8] figure placing one foot at the register, the other slightly lifted onto the toes. In contrast, Kayemnofret's (D23) [51] figure is in an open stance, Type A, position.¹³²⁰

The two remaining attestations in Ty [35] and possibly Iymery [20] are fragmentary. Ty's [35] scene is partially preserved, depicting a man in an open stance (Type A) with one hand grasping a staff. Iymery [20] retains the lower body of a male figure evidently not involved in the actual construction of a nearby skiff; instead, his foot position (Type A) points to a supervisory role.¹³²¹

Workers

Workers constructing papyrus boats are situated at five main locations in the proximity of the vessels:¹³²²

Type 1: working on the prow and stern;

Type 2: leaning against or placing one foot within the hull;

Type 3: standing completely outside a boat;

Type 4: standing within a boat, and

¹³¹⁶ Supervisors are often shown in Dragnet Scenes; See Appendix 2: Dragnet Detail Table H, N.

¹³¹⁷ See Appendix 2: Papyrus Boat Construction Detail Table R.

¹³¹⁸ See Appendix 4: Typology: Individual Characteristic and Clothing: Clothing.

¹³¹⁹ See Appendix 4: Typology: Individual Characteristic and Clothing: Individual Characteristics.

¹³²⁰ See Appendix 4: Typology: Basic Leg Positions: Type A.

¹³²¹ See Appendix 4: Typology: Basic Leg Positions: Type A.

¹³²² See Appendix 2: Papyrus Boat Construction Detail Table G.

Type 5: seated, kneeling or lunging at the centre of a boat.



lymery [20]

The various limb positions and characteristics for each type are examined below.

Arm Positions for all types are as follows:¹³²³

PB.A1- The arms are in front of torso, one extended in a downward direction grasping rope, other arm is pulled towards the chest, bent at elbow (45°) holding rope closer to torso. The elbows can vary:

Type O-elbow is facing outwards,

Type U- elbow is towards the torso; and

PB.A2 - The arms are in front of the torso and both bent at the elbow drawn into the chest; and

PB.A3- Refers to the arms fully extended downwards or with a slight bend to the elbow

In addition to the leg positions A (open stance), B (stride), C (leaning), D (kneeling), E (semi-kneeling), F.2 (seated with one extended leg) and G (lunge),¹³²⁴ there are several leg positions which are specific to this theme. That have been categorized into five positions as outlined below:¹³²⁵

PB. L1- The foot of the figure is over the side of the boat and has the rope looped around the foot. The second leg is typically bent and placed on the prow or stern;

PB.L2 –One foot is on the register, the other flat in boat; bent at the knee;

PB.L3 – One foot is on the register, the other foot is in the boat on heel or toes, bent at the knee;

PB.L4 – One foot is on the register, the other leg folded under the buttocks resting on the boat;

PB.L5 – One foot is in the register, the other leg lifted and bent at 90° leaning against boat hull.

¹³²³ See also Appendix 4: Typology: Arm Positions: Arm Positions for Papyrus Boat Construction Workers.

¹³²⁴ See Appendix 4: Typology: Basic Leg Positions.

¹³²⁵ See Appendix 4: Typology: Leg Positions for Papyrus Boat Construction Workers.

Type 1 Workers

Limb Positions¹³²⁶

The typical arm position for Type 1 workers is Type PB.A1 with Type O elbows. Only one variance found in Hesimin (M22) [56] shows a figure with one arm extended downwards with a Type O elbow, the hand grasping a rope; the second arm is extended behind the torso, its hand pulling taut the rope. Type PB.A2 is attested five times in Atet [3], Inti [45], Akhethotep (D64) [58] and Seshemnofer/ Ifi [134] (twice).

Leg positions vary considerably, with Types A,¹³²⁷ B, C, D, E, F.2, G and PB. L1¹³²⁸ represented. Open stance or Type A is infrequent with only four known attestations¹³²⁹ Type B is slightly more common with attestations from the Fourth Dynasty tomb of Atet [3] and five others, primarily dated to the Fifth Dynasty.¹³³⁰ Type C is infrequently portrayed, occurring in only one scene. CG 1697 [37] depicts a figure leaning back, his feet positioned together on the hull, as is observed for figures in dragnet scenes.¹³³¹

Type D is attested in four scenes. One worker in Nebemakhet [8] kneels, tucking one foot across the back of the knee of the other leg. Two others in Akhethotep (Louvre) [31] also kneel, but the legs don't overlap. Inti [45] and Kagemni [94] each portray a worker kneeling with legs parallel to the thighs, the knees touching the hull. The legs for the worker in Kagemni [94] are shown lifted; calf touching the thigh and toes pointing towards the top of the register. Two figures in Ptahhotep II/Thefi [74] are seated in the hull with both legs extended forwards, this is a variation of leg position Type F.2.

Type E is the second most common leg position. Its earliest attestation occurs in Nebemakhet [8], wherein one figure has a leg folded under the buttocks, the other extended forwards.¹³³² Men in a

¹³²⁶ See Appendix 4: Typology: Basic Leg Positions, Leg Positions for Papyrus Boat Construction Workers; See also Appendix 4: Typology: Arm Positions: Arm Positions for Papyrus Boat Construction Workers. See Appendix 2: Papyrus Boat Construction Detail Table H.

¹³²⁷ A small modification for this type shows the front knee bent due to the leg's placement on the prow or stern of a boat.

¹³²⁸ See Appendix 4: Typology: Leg Positions for Papyrus Boat Construction Workers.

¹³²⁹ As seen in CG 1697 [37], Kayemnofret (D23) [51], Akhethotep (D64) [58], and Seshemnofer/ Ifi [134].

¹³³⁰ In the scenes of Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Hesimin (M22) [56], and Kagemni [94].

¹³³¹ See Appendix 2: Dragnet Detail Table I, J.

¹³³² Further attestations are found in Nefer and Kahay [18], Ty [35], Inti [45], Senedjem-Ib/ Inti [59], Werirni [70], Nebet [62] and Ptahhotep II/Thefi [74].

lunge (Type G) position are the most common, the figure features the front leg forwards and bent at a 90° angle, the other knee resting at the hull.¹³³³

PB.L1 is observed in seven scenes. It features a standing figure with one foot placed on a loop of rope to tighten or hold it in place. Examples are found once in Iymery [20], three times in Ty [35], and once each in Hesimin (M22) [56], Akhethotep (D64) [58], Ihy r/u Seshseshet/ Idut [72] and Niankhnesut [99].

Individual Characteristics ¹³³⁴

Type 1 workers are most frequently shown with Type A hair (Full).¹³³⁵ Both Types A (Full) and B (Receding) hair occur in almost equal numbers in Fourth to mid-Fifth Dynasty scenes,¹³³⁶ however, from the reign of Djedkare (V.8), Type A (Full) becomes more common and is found in all but five figures.¹³³⁷

Athletic, Type A bodies are also more common than Type B (Non-athletic) bodies, with 43 attestations compared to two workers with non-athletic physiques.¹³³⁸

Regarding their clothing, 17 workers wear Type A (Naked), nine are in Type B (Belt) and nine are dressed in Type C (Kilt).¹³³⁹ The first recorded form of clothing is Type C, which is found in both Atet [3] and Nebemakhet [8]. Type B, on the other hand, occurs only from the mid-Fifth Dynasty onwards, its earliest attestation occurring in Akhethotep (Louvre) [31]. Genitalia are shown on 32% of Type 1 workers, perhaps due to the frequent depiction of leg positions Type E and G.

¹³³³ As seen in Ty [35], Akhethotep (D64) [58]. Werirni [70] (x2), Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/ Thefi [74], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Niankhnesut [99] and Neheri [151].

¹³³⁴ See Appendix 4: Typology: Individual Characteristics and Clothing. See Appendix 2: Papyrus Boat Construction Detail Table I.

¹³³⁵ See Appendix 2: Papyrus boat Construction Detail Table I.

¹³³⁶ Type A (five attestations): Atet [3], Nebemakhet [8], Iymery [20] and CG 1697 [37]. Type B (six attestations): Nefer and Kahay [18], Akhethotep (Louvre) [31], CG 1697 [37] and Ty [35].

¹³³⁷ Type A hair: Inti [45], Akhethotep (D64) [58], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Kagemni [94] and Seshemnofer/ Ifi [134]. Type B hair: Akhethotep (D64) [58], Hesimin (M22) [56], Werirni [70], Ptahhotep II/Thefi [74] and Ihy r/u Seshseshet/ Idut [72].

¹³³⁸ Type A body: Atet [3], Nebemakhet [8], Nefer and Kahay [18], Iymery [20], Akhethotep (Louvre) [31], CG 1697 [37], Ty [35], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Khenut [68], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Niankhnesut [99], Seshemnofer/ Ifi [134]. Type B body: Ty [35] and Ptahhotep II/Thefi [74].

¹³³⁹ Type A clothing: Nebemakhet [8], CG 1697 [37], Ty [35], Akhethotep (D64) [58], Hesimin (M22) [56], Werirni [70], Khenut [68], Khunes [67], Ihy r/u Seshseshet/ Idut [72], Kagemni [94] and Seshemnofer/ Ifi [134]. Type B clothing: Akhethotep (Louvre) [31], CG 1697 [37], Akhethotep (D64) [58], Ptahhotep II/Thefi [74] and Kagemni [94]. Type C clothing: Atet [3], Nebemakhet [8], Nefer and Kahay [18], Inti [45], Senedjem-Ib/ Inti [59], Nebet [62] and Ptahhotep II/Thefi [74].

Type 2 Workers

Limb Positions ¹³⁴⁰

While torso positions vary according to artistic choice, arm positions are attested in three types: (1) the standard Type PB. A1 with Type O elbow, which occurs for 14 men in seven tombs.¹³⁴¹ One variation in Werirni [70] depicts a worker with Type U elbows; (2) Type PB.A2, which is attested four times in two scenes;¹³⁴² and (3) Type PB.A3, which can be observed for five men. Two in Hotepherakhti [34] and Ptahhotep II/Thefi [74] have their arms extended vertically, while those in Kagemni [94] and Kahep/ Tjeti-Iker [140] slightly bend their extended arms. Leg positions occur in Types PB.L2, PB.L3 and PB.L4.¹³⁴³ Type PB.L3 is most typical in the first half of the Fifth Dynasty,¹³⁴⁴ after which Types PB.L2 and PB.L4 became more frequent.¹³⁴⁵ Type PB.L5 is attested once in Nefer and Kahay [18] wherein a figure leans against a hull.

Individual Characteristics ¹³⁴⁶

Type 2 workers typically have a Type A (Athletic) physique and Type A (Full) hair. None are represented with a Type B (Non- Athletic) body.¹³⁴⁷ Type B (Receding) hair is only attested three times, all of which are in Fifth Dynasty scenes.¹³⁴⁸

The clothing worn by these men changes over time. Scenes from the early Fifth Dynasty to the reign of Djedkare (V.8) typically represent naked workers (Type A), as in Nefer and Kahay [18], Iymery [20], Kapi [30] and Hotepherakhti [34]. Later examples can be observed in Werirni [70] and Nebkauhor/ Idu [73]. Type B (belts) are first worn by workers in Senedjem-Ib/ Inti [59], and also occur in Ptahhotep II/Thefi [74] as well as two Sixth Dynasty attestations.¹³⁴⁹ Type C (Kilt) clothing is only represented in Ptahhotep II/Thefi [74]. Genitalia are depicted in later Fifth Dynasty scenes, including those of

¹³⁴⁰ See Appendix 4: Typology: Leg Positions: Papyrus Boat Construction Leg Positions: Papyrus Boat Construction Workers Arm Positions; See Appendix 2: Papyrus Boat Construction Detail Table J.

¹³⁴¹ Iymery [20], Kapi [30], Hotepherakhti [34], Senedjem-Ib/ Inti [59], Werirni [70], Ptahhotep II/Thefi [74] and Nebkauhor/ Idu [73].

¹³⁴² Nefer and Kahay [18] and Hotepherakhti [34].

¹³⁴³ See Appendix 2: Papyrus Boat Construction Detail Table J.

¹³⁴⁴ Nefer and Kahay [18], Hotepherakhti [34] and Werirni [70]. Types A and C are attested in Iymery [20] and Kapi [30].

¹³⁴⁵ Werirni [70], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73], Kagemni [94] and Kahep/ Tjeti-Iker [140]. One example of Type B is found in Kahep/ Tjeti-Iker [140].

¹³⁴⁶ See Appendix 4: Typology: Individual Characteristics and Clothing; See Appendix 2: Papyrus Boat Construction Detail Table K.

¹³⁴⁷ Type A body: Nefer and Kahay [18], Iymery [20], Kapi [30], Hotepherakhti [34], Senedjem-Ib/ Inti [59] Werirni [70], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73] and Kagemni [94].

¹³⁴⁸ Type A hair: Iymery [20], Kapi [30], Hotepherakhti [34], Senedjem-Ib/ Inti [59] Werirni [70], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73] and Kagemni [94]. Type B hair: Nefer and Kahay [18] and Werirni [70].

¹³⁴⁹ Kagemni [94] and Kahep/ Tjeti-Iker [140].

Hotepherakhti [34], Werirni [70], Ptahhotep II/Thefi [74], Nebkauhor/ Idu [73] and Kagemni [94].¹³⁵⁰ While Type A clothing allows for the inclusion of genitalia, they are not portrayed for the men in Nefer and Kahay [18], Iymery [20] and Kapi [30], perhaps due to their leg positions.

Type 3 Workers

Limb Positions¹³⁵¹

As the main task of Type 3 workers is to help complete the prow or stern, their arm positions slightly vary. Scenes dating from the Fourth to the first half of the Fifth Dynasty exclusively depict the workers with Type PB.A3 arm position.¹³⁵² One variation in Rakhaefankh [26] that shows a worker beneath a boat's hull represents his arms reaching up and touching it to support some of the weight. Examples dating from Irenkaptah [22] onwards commonly portray Type PB.A1 with Type O elbows,¹³⁵³ with one figure in Kagemni [94] bearing Type U elbows. Type PB.A2 is only depicted twice in CG 1697 [37] and Kahep/ Tjeti-Iker [140] whereas the only late Fifth Dynasty attestation of Type PB.A3 is in Khunes [67].

Men with Type PB.A1 or PB.A3 arms positions are typically portrayed with a torso that is either bent at the waist or in a near horizontal position, leaning forwards.¹³⁵⁴ This is likely related to their task of binding or bracing the prow or stern. Scenes that illustrate figures supporting the hull from underneath, in Atet [3] and Rakhaefankh [26], also depict the men bent at the waist, so that their backs appear to support the curving hulls. Less common are torsos depicted in a vertical position, all examples of which date from and after the reign of Niuserre (V.6).¹³⁵⁵

Leg position Types A (open stance), B (stride) and C (leaning) are represented. Type A is the most common, with 13 of the 17 figures exhibiting this position.¹³⁵⁶ Type B is only found twice, both attestations in the Fifth Dynasty scenes of Rakhaefankh [26] and Ptahshepses [41]. One variation of Type C is shown in Irenkaptah [22] and depicts a worker turned away from the boat with one leg bent and lifted off the register's baseline.

¹³⁵⁰ They are not depicted for men in Nefer and Kahay [18], Iymery [20], Kapi [30], Kahep/ Tjeti-Iker [140], one figure in Werirni [70] and two in Ptahhotep II/Thefi [74].

¹³⁵¹ See Appendix 4: Typology: Basic Leg Positions: Papyrus Boat Construction Workers Arm Positions: See Appendix 2: Papyrus Boat Construction Detail Table L.

¹³⁵² Atet [3], Nefer and Kahay [18] and Iymery [20].

¹³⁵³ Senedjem-Ib/ Inti [59] Kagemni [94] and Seshemnofer/ Ifi [134].

¹³⁵⁴ Khunes [67], Kagemni [94], Nefer and Kahay [18], Iymery [20], Kapi [30] and Kahep/ Tjeti-Iker [140].

¹³⁵⁵ Nefer and Kahay [18], Irenkaptah [22], Senedjem-Ib/Inti [45] and Niankhnesut [99]. It is interesting to note that some Type 3 workers do not appear to be working on the hull; those in Nefer and Kahay [18] and Niankhnesut [99] carry coils of rope while that in Irenkaptah [22] faces away from the boats.

¹³⁵⁶ Atet [3], Khnumhotep (D49) [15], Nefer and Kahay [18], Iymery [20], Kapi [30], Khunes [67], Kagemni [94], Niankhnesut [99] and Kahep/ Tjeti-Iker [140].

Individual Characteristics¹³⁵⁷

All Type 3 workers have a Type A (athletic) body.¹³⁵⁸ Most are shown with Type A (Full) hair,¹³⁵⁹ with only two examples of Type B (Receding) hair found in Nefer and Kahay [18] and Kagemni [94].

The men are frequently represented without clothing (Type A), yet there are also significant numbers dressed in Type B (Belt) and C (Kilt) clothing. Seven workers are shown naked, (Type A)¹³⁶⁰ four wear Type B,¹³⁶¹ and four are clothed in Type C.¹³⁶² Despite the portrayal of nude men, the depiction of genitals is rare; only one man in Khunes [67] and two in Kagemni [94] are represented with genitalia.

Type 4 Workers

Limb Positions¹³⁶³

Type 4 workers are portrayed with arm position Types PB.A1 (14 men), PB.A2 (three men) and PB.A3 (three men).¹³⁶⁴ Three variations are attested. The first, in Akhethotep (D64) [58], shows a worker with one arm extended in front, as with Type PB.A1, however the other is fully extended behind the torso, the hand pulling a rope. The second variation is found in Ptahhotep II/Thefi [74] and represents a figure gesturing with one arm horizontally extended before him. The third variation occurs in Kagemni [94] and depicts a man with one arm vertically extended and the other horizontally extended, both hands grasping a coiled rope.

¹³⁵⁷ See Appendix 4: Typology Individual Characteristics and Clothing; See Appendix 2: Papyrus Boat Construction Detail Table M.

¹³⁵⁸ Atet [3], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Irenkaptah [22], Kapi [30], Senedjem-Ib/Inti [59], Khunes [67], Kagemni [94] and Niankhnesut [99].

¹³⁵⁹ Atet [3], Nefer and Kahay [18], Rakhaefankh [26], Iymery [20], Kapi [30], Senedjem-Ib/Inti [59], Khunes [67] and Kagemni [94].

¹³⁶⁰ Nefer and Kahay [18], Iymery [20], Irenkaptah [22], Khunes [67] and Kagemni [94].

¹³⁶¹ Kapi [30], Senedjem-Ib/Inti [59], Kagemni [94] and Niankhnesut [99].

¹³⁶² Atet [3], Senedjem-Ib/Inti [59] and Niankhnesut [99].

¹³⁶³ See Appendix 4: Typology; Basic Leg Positions: Papyrus Boat Construction Workers Arm Positions; See Appendix 2: Papyrus Boat Construction Detail Table N.

¹³⁶⁴ Type PB.A1: Nebemakhet [8], Iymery [20], Kapi [30], Kayemnofret (D23) [51], Akhethotep (D64) [58], Senedjem-Ib/Inti [59], Khunes [67], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/Idut [72], Nebkauhor/Idu [73] and Niankhnesut [99]. Type PB.A2: Ty [35], Inti [45] and Nebkauhor/Idu [73]; Type PB.A3: CG 1697 [37], Kayemnofret (D23) [51] and Seshemnofer/Ifi [134].

Most figures are shown pulling on ropes as they bind papyrus together. Their torsos are shown in three positions: 13 men have vertical torsos,¹³⁶⁵ eight are shown either leaning forwards or bent at the waist;¹³⁶⁶ and five lean back, as if pulling with great effort.¹³⁶⁷

The workers are shown with Types A (open stance), B (stride), C (leaning) and G (lunge) leg positions. Type A which is frequently attested in the early Fifth Dynasty,¹³⁶⁸ slightly declines in number in examples of the second half of this dynasty, and is represented for all but one Sixth Dynasty worker.¹³⁶⁹ Type B is more common in scenes of the latter half of the Fifth Dynasty, and occurs only once in the Sixth Dynasty, in Niankhnesut [99].¹³⁷⁰ Type C is attested in four examples, in Atet [3], Ty [35], Khunes [67] and Seshemnofer/ Ifi [134]. Representations of figures in this role lunging (Type G) is relatively short lived with only four examples dating from the late Fifth Dynasty till the Sixth.¹³⁷¹

Individual Characteristics¹³⁷²

All but two figures are represented with an athletic body (Type A).¹³⁷³ A full head of hair (Type A) is also commonly and consistently depicted throughout the Fourth, Fifth and Sixth Dynasties.¹³⁷⁴

The majority of figures are depicted naked (Type A clothing).¹³⁷⁵ Only one, in Senedjem-Ib/ Inti [59], wears a belt (Type B), whereas six are dressed in Type C clothing.¹³⁷⁶ Approximately 56% of men are shown with genitalia, likely because of their standing position and type of clothing.

¹³⁶⁵ Iymery [20], CG 1697 [37], Ty [35], Kayemnofret (D23) [51], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94] and Niankhnesut [99].

¹³⁶⁶ Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Khunes [67], Seshemnofer/ Ifi [134] and Neheri [151].

¹³⁶⁷ Nebemakhet [8], Kapi [30], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59] and Nebkauhor/ Idu [73].

¹³⁶⁸ Iymery [20], Kapi [30], and CG 1697 [37].

¹³⁶⁹ Kayemnofret (D23) [51], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Kagemni [94], Seshemnofer/ Ifi [134] and Neheri [151].

¹³⁷⁰ Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], and Khunes [67].

¹³⁷¹ Senedjem-Ib/ Inti [45], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], and Nebkauhor/ Idu [73].

¹³⁷² See Appendix 4: Typology: Individual Characteristics and Clothing; See Appendix 2: Papyrus Boat

Construction Detail Table O.

¹³⁷³ Type A body: Nebemakhet [8], Iymery [20], Kapi [30], CG 1697 [37], Ty [35], Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Khunes [67], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99], Seshemnofer/ Ifi [134] and Neheri [151]. Type B body: Ty [35] and Kayemnofret (D23) [51].

¹³⁷⁴ Type A hair: Nebemakhet [8], Iymery [20], Kapi [30], Kayemnofret (D23) [51], Senedjem-Ib/ Inti [59], Khunes [67], Ptahhotep II/Thefi [74], Kagemni [94] and Niankhnesut [99]. Type B hair: CG 1697 [37], Ty [35], Akhethotep (D64) [58], Ihy r/u Seshseshet/ Idut [72] and Kagemni [94].

¹³⁷⁵ Nebemakhet [8], Iymery [20], Kapi [30], CG 1697 [37], Ty [35], Kayemnofret (D23) [51], Akhethotep (D64) [58], Khunes [67], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73] and Kagemni [94].

¹³⁷⁶ Senedjem-Ib/ Inti [59], Ptahhotep II/Thefi [74], Niankhnesut [99], Seshemnofer/ Ifi [134] and Neheri [151].

Type 5 Workers

Limb Positions¹³⁷⁷

Arm position Types PB.A1 and PB.A2 are associated with Type 5 workers. Type PB.A1 is the most common, represented for 17 men, while four are shown with Type PB.A2.¹³⁷⁸ The scene from Kagemni [94] depicts two figures with Type PB.A1, however one is shown with Type O elbows, and the other has Type U elbows, the only occurrence of this type in all surviving examples.

Legs are also displayed in one of two positions: Type G (lunge) or E (semi-kneeling). Two thirds of workers are represented with Type G,¹³⁷⁹ with one variation in Kagemni [94] depicting a figure with one of his legs lifted, the foot pointed upwards.¹³⁸⁰ Type E leg position first occurs in the Fourth Dynasty example from Atet [3] and is not depicted again until the mid-Fifth Dynasty, in Kapi [30]. It is also attested in Ptahhotep II/Thefi [74] and Kagemni [94].

Individual Characteristics¹³⁸¹

All identified figures have an athletic body (Type A).¹³⁸² They are typically represented with Type A (Full) hair, Type B (Receding) hair is only attested for three men from the mid-Fifth Dynasty onwards.¹³⁸³

Various types of clothing are worn by Type 5 workers. Eight are nude (Type A),¹³⁸⁴ six wear Type B (belt),¹³⁸⁵ and four are dressed in a Type C or kilt.¹³⁸⁶ No genitalia are depicted on these figures which may be partly explained by the associated use of leg position Type G, which does not allow for the incorporation of this detail due to the thigh of the front leg typically in front of the genital area.

¹³⁷⁷ See Appendix 4: Typology: Arm Position: Papyrus Boat Construction Workers Arm Positions and Basic Leg Positions E, G; See Appendix 2: Papyrus Boat Construction Detail Table P.

¹³⁷⁸ Type PB.A1: Iymery [20], Akhethotep (Louvre) [31], Kapi [30], Hesimin (M22) [56], Nebet [62], Ptahhotep II/Thefi [74] and Kagemni [94]. Type PB.A2: Atet [3], Hotepherakhti [34], Senedjem-Ib/ Inti [59] and Kagemni [94].

¹³⁷⁹ See Appendix 2: Papyrus Boat Construction: Detail Table P. Iymery [20], Ty [35], Akhethotep (Louvre) [31], Hotepherakhti [34], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Nebet [62], Ptahhotep II/Thefi [74] and Kagemni [94].

¹³⁸⁰ This unusual manipulation is similarly seen in surrounding figures in the scene: Type 1 Workers.

¹³⁸¹ See Appendix 4: Typology: Individual Characteristics and Clothing; See Appendix 2: Papyrus Boat Construction Detail Table Q.

¹³⁸² Atet [3], Iymery [20], Akhethotep (D64) [58], Kapi [30], Hotepherakhti [34], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Nebet [62], Ptahhotep II/Thefi [74] and Kagemni [94].

¹³⁸³ Type A hair: Iymery [20], Kapi [30], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Nebet [62], Ptahhotep II/Thefi [74] and Kagemni [94]. Type B hair: Akhethotep (Louvre) [31] and Hotepherakhti [34].

¹³⁸⁴ Iymery [20], Kapi [30], Hotepherakhti [34], Hesimin (M22) [56] and Kagemni [94].

¹³⁸⁵ Akhethotep (Louvre) [31], Senedjem-Ib/ Inti [59], Ptahhotep II/Thefi [74] and Kagemni [94].

¹³⁸⁶ Atet [3], Nebet [62] and Ptahhotep II/Thefi [74].

Captions

The majority of scenes of papyrus boat construction include a caption that alludes to the task of binding or constructing boats.¹³⁸⁷ Captions are attested from the earliest example of the theme, in Atet [3], to the latest, in Neheri [151].¹³⁸⁸ They are most common in Fourth to late Fifth Dynasty scenes, the date and location of which may point to artistic influence or inspiration.

Most captions refer to the binding or construction of a papyrus boat.¹³⁸⁹ The most commonly used term is *spt* 'to bind' or 'to construct'. Its earliest reference in Atet [3], as *spt* 'binding', expands to include a description of what is being bound or what materials are being used. In the captions from Akhethotep (Louvre) [31] we are told of the material the figure is using, *spt smḥ m r ʒḥ* or 'binding the boat with a piece of papyrus'. Kapi [30], Akhethotep (D64) [58] and Hesimin (M22) [56] all give a location of the task i.e. [*s*] *pt smḥ m mḥt*, 'binding a boat in the marshes'.

The boat under construction, *spt smḥ* 'papyrus boat', is mentioned in six Fifth Dynasty examples in Hotepherakhti [34], Akhethotep (D64) [58], Khunes [67], Khenut [68] and Werirni [70], and two Sixth Dynasty texts in Niankhnesut [99] and in Neheri [151].

Communication between workers is first captioned in Ty [35]. Although degraded, the text may include an instruction to pull rope, *stʒ r=k* and emphasises the precision of the work needed *with ʕḳ* *wr.t* or 'great precision'. This is also mentioned in the caption from CG 1697 [37].

Such correspondence also occurs Ihy r/u Seshseshet/ Idut [72] and Kagemni [94], the latter recording eleven lines of dialogue. The inclusion of these dialogues could either be based on the tomb owners' requests or artistic choice.

Summary

Scenes of papyrus boat construction are most common in the Fifth Dynasty, although the first known attestation is found in the early Fourth Dynasty tomb of Atet [3]. Their wide distribution, in both Memphite and Provincial tombs, was not likely affected by geographical limitation but by general trends in the location of contemporary royal cemeteries. Fifth Dynasty provincial attestations may be

¹³⁸⁷ There are several tombs which include caption which are not relevant or are too damaged to include in the table, these are such as Neferirtnef [52] whom lists the names of the construction workers, Nebet's [62] caption is damaged, and several of Kagemni's [94] captions are also damaged.

¹³⁸⁸ See Appendix 2: Papyrus Boat Construction Detail Table S.

¹³⁸⁹ Atet [3], Akhethotep (Louvre) [31], Kapi [30], CG 1697 [37], Hotepherakhti [34], Ptahshepses [41], Akhethotep (D64) [58], Hesimin (M22) [56], Khenut [68], Khunes [67], Ihy r/u Seshseshet / Idut [72], Niankhnesut [99], and Neheri [151].

a result of the employment of Memphite traditions and/or artists in the provinces, with later examples possibly influenced or inspired by scenes in either surrounding tombs or those near the capital.

Regarding the theme's details, the inclusion of one boat is common before the mid-Fifth Dynasty, after which multiple boats are typically represented. Papyrus haulers are additionally mostly associated with scenes from the second half of the Fifth Dynasty and later. Ropes and wedges were evidently utilised to bind and stabilise boats whilst under construction. Rope was an essential piece of equipment that is found in all scenes, while wedges are only known from 18.¹³⁹⁰ In two early scenes there is a figure shown holding the prow/stern of the both in place of the wedges.¹³⁹¹ A curious piece of equipment is also present in this scene. An oval shaped implement that is held in the hand is found in five scenes.¹³⁹² After analysis, the function of the tool is difficult to interpret, however it is clear that the object was used to work or applied the final changes to the boat.

Five types of men can be categorised per their placement near a boat. These are those;

Type 1: working on the prow and stern;

Type 2: leaning against or placing one foot within the hull;

Type 3: standing outside a boat;

Type 4: standing within a boat; and

Type 5: seated, kneeling, or lunging at the centre of a boat.

Each worker has a standard type of position which fits his task, and individual characteristics which vary, yet trends denote certain standardisation in the theme. Such standardisation is also evident in the commonalities among preserved captions, many of which refer to the binding or construction of papyrus boats.

Overall, the standardization of this themes' details is apparent from the mid- Fifth Dynasty, with room for the artist to individualize each scene within this framework.

¹³⁹⁰ Nebemakhet [8], Iymery [20], Irenkaptah [22], Akhethotep (Louvre) [31], CG 1697 [37], Hotepherakhti [34], Ty [35], Akhethotep (D64) [58], Hesimin (M22) [56], Senedjem-Ib/ Inti [59], Werirni [70], Nebet [62], Ptahhotep II/Thefi [74], Ihy r/u Seshseshet/ Idut [72], Nebkauhor/ Idu [73], Kagemni [94], Niankhnesut [99] and Neheri [151].

¹³⁹¹ Atet [3] and Rakhaefankh [26].

¹³⁹² Ty [35], Akhethotep (D64) [58], Khunes [67], Ptahhotep II/Thefi [74], Kagemni [94].

Chapter 18: Drying and Storage

Nets and Baskets



Kagemni [94]

Introduction

Six Old Kingdom scenes depict the storing and drying of fishing equipment, including nets, traps, and baskets.¹³⁹³ No known inscriptions, however, directly label these images.¹³⁹⁴ The following chapter examines all attestations, commenting on observable patterns and variances.

Occurrence of Scene

Fifth Dynasty

Tomb	Location	Date	Scene Type
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7	Funnel trap drying
Ty [35]	Saqqara	V.6-8	Net drying

Table 18.1 Fifth Dynasty Attestations

The first recorded attestation of a drying trap occurs in the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27]. The funnel trap is placed in the top corner of a register occupied by a trapping scene as well as other fishing activities. Of a similar date is the first known case of a drying net. Uncovered in the mid Fifth-Dynasty tomb of Ty [35], the scene depicts a net placed upon several vertical struts.


Sixth Dynasty

Tomb	Location	Date	Scene Type
Kagemni [94]	Saqqara	VI.1E	Net drying
Mereruka [103]	Saqqara	VI.1 M-L	Funnel trap drying
Mehu [121]	Saqqara	VI.2	Funnel and round basket trap drying
Ankhtyfy [148]	Mo'alla	VI.4L-VIII.E	Round basket trap drying?

Table 18.2 Sixth Dynasty Attestations

Four Sixth Dynasty scenes feature the drying of fishing equipment. That in Kagemni [94] depicts the only example of a single drying net, while those in Mereruka [103] and Mehu [121] each show multiple traps being dried and stored for future use. Ankhtyfy's [148] example depicts a small round basket trap in the top corner of a Lave net scene.

¹³⁹³ These are found in Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mereruka [103], Mehu [121] and Ankhtyfy [148].

¹³⁹⁴ The text over the preserved motif in Mehu [121] most likely relates to the fishermen emptying traps on its either side.  *wh3 skt*: see also, Van Elsbergen, *Fischerei*, 245.

Distribution

Fishing activities likely necessitated the drying of equipment to ensure that these costly items were kept in good condition. Such drying would have taken place at any location where fishing was practiced, including those within and outside the capital. The restriction of preserved scenes to cemeteries at Saqqara, with only one exception, suggests that they were most likely perpetuated by local artists or the tomb owners themselves. It is also possible that the same artist(s) was employed to execute the work, especially those of Kagemni [94], Mereruka [103] and Mehu [121], due to the tombs' location and date of construction. The appearance of the trap in Ankhtyfy's [148] example may be due to the artist trying to include as many fishing methods in one scene as there is also a dragnet, and lave net scene shown.

The Minor Details

Positions of the equipment

Nets and traps are represented in different sections of the register. They can also be associated with various fishing activities and related themes.¹³⁹⁵

The two scenes that depict a drying net, found in Ty [35] and Kagemni [94], show the net placed on a rack in the top quadrant of the register. The register is occupied by a registration scene,¹³⁹⁶ with numerous figures carrying fish. The rack appears to have been placed on a horizontal line, creating a sub-register that may indicate an association between the net and nearby baskets, perhaps representing them as part of the inventory in the registration scene.¹³⁹⁷ Although their inclusion in such a scene could infer that they were a standard feature of the registration theme, more examples are necessary to conclusively link the drying of the net with the registration inventory.

The placement of drying funnel traps is not as consistent. The examples from Niankhkhnum and Khnumhotep [27] as well as Mereruka [103] depict the traps in a sub-register at the top quadrant of each scene, possibly indicating that they are placed on a flat surface, perhaps the river bank in the background.¹³⁹⁸ In Mehu [121] are three funnel traps and a round basket trap all placed in the main register among fishermen operating funnel traps. Compared to the traps in the aforementioned scenes, these appear in full scale. Still, however, the drying of funnel traps seems to be directly related

¹³⁹⁵ See Appendix 2: Drying and Storage Detail Tables B and C.

¹³⁹⁶ See Chapter 12: Registering the Catch for a full analysis of theme.

¹³⁹⁷ Robins, *Proportions*, 6, 11.

¹³⁹⁸ Robins, *Proportions*, 11.

Chapter 18: Drying and Storage

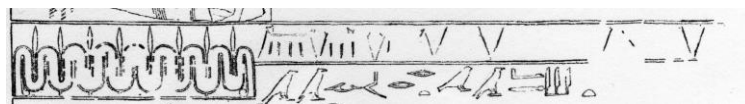
with fishing activities. The small trap in Ankhtyfy's [148] example is unusual as there is no sub register and it is only slightly larger than surrounding inscriptions.

Overall, based on its appearance and distribution, the motif of drying fishing equipment does not appear to be an essential detail in fishing scenes. It is evidently not a central component in the decoration of Niankhkhnum and Khnumhotep [27], Ty [35], Kagemni [94], Mereruka [103], and Ankhtyfy [148] and was most likely included due to the availability of space. The motif also acts as a visual aid in Mehu [121], dividing the mirrored pairs of figures shown emptying funnel traps, and artistically separating the various elements of the scene.

Nets

The net is placed on top of a rack, which allows it to dry in a manner that would prevent tangling and damage.¹³⁹⁹

In each known case of the drying of nets, a rack is shown with vertical struts equally divided from one



Ty [35]

another. That in Ty [35] bears eight individual struts each topped by a spear-like detail while that in Kagemni [94] only has six preserved struts each with the same spear-like detail, although a further two struts may have been originally depicted. The net is shown coiled between and under the individual struts in Ty [35], but between and over those in Kagemni [94]. The latter may also include a horizontal brace placed directly under the net which has sustained damage. The folded portion of the net on top of the rack in Kagemni [94] consists of five to six individual layers. An extremely faded mesh pattern has also been observed to the left of this net.¹⁴⁰⁰

Within the same sub-register alongside the net and rack are two baskets. Although the baskets in Ty [35] are degraded, their overall shape is similar to those in Kagemni [94], but they feature vertical striations, rather than horizontal striations as seen in Kagemni [94]. Such detailing possibly represents the vessels' opaqueness.

¹³⁹⁹ See Appendix 2: Drying and Storage Table B, D.

¹⁴⁰⁰ Harpur, *Kagemni*, 421.

Traps

The drying of traps in Niankhkhnum and Khnumhotep [27], Mereruka [103], Mehu [121] and Ankhtyfy [148] evidently conforms to standardised patterns and elements of the individual types.¹⁴⁰¹

The tomb of Niankhkhnum and Khnumhotep [27] uniquely represents a drying trap horizontally placed upon a block of wood. Another block may also be situated at its mouth to keep it from moving.

The next attested scene of a drying trap occurs in Mereruka [103] and shows two traps vertically arranged and stacked on top of each other.

This slightly differs from those in Mehu [121], wherein three traps are horizontally arranged and stacked on top of each other. As their surface is level (mouth to bases alternatively), further equipment is placed on top. This combined group of equipment is precariously positioned atop the narrow opening of a drying round basket trap. The basket trap is shown in the same position as those in fishing scenes, with its large opening securely placed at the base of the register. The round basket trap in Ankhtyfy [148] is shown in the top corner of a lave net scene with no visible sub-register.



Mehu [121]

The trap is painted with vertical striations and a white line representing the horizontal lashings. It is only marginally larger than the inscriptions in the scene.

Summary

The motif of drying nets and traps is evidently restricted in location and date. Only known from tombs at Saqqara dating between V.6-VI.2, the motif was likely disseminated by artists possibly influenced by the decoration in Niankhkhnum and Khnumhotep [27] and Ty [35]. Indeed, the identical representations of the drying net in Ty [35] and Kagemni [94] highly point to direct artistic influences between the two tombs. The only exception is the late attestation in the tomb of Ankhtyfy [148] the multiple inclusions of other fishing methods may suggest that the artist was inserting multiple methods to enhance the scene and thus individualized it. Due to its limited numbers, the motif may be classified as non-essential. It likely served to fill available space or to add artistic intricacies to a fishing scene.

¹⁴⁰¹ See Chapter 7: Funnel Traps: Trap Detailing and Chapter 8: Round Basket Traps: Round Basket Trap Structure. See Also Appendix 2: Drying and Storage Tables B and C.

Chapter 19: *HSF NWT*

Twisting the cord and the construction of nets



Firth and Gunn: Spinning Cord [93]

Introduction

Scenes of men making cordage and repairing nets are rarely attested in Old Kingdom tombs, with only eight known attestations dating to the Fifth and Sixth Dynasties. They are contextually placed near a variety of scenes featuring (a) crafts, such as statue-making, metallurgy and pottery production,¹⁴⁰² (b) food storage and preparation,¹⁴⁰³ and (c) marsh activities.¹⁴⁰⁴ Such settings suggest that cordage production and net repair could be conducted either in workshops or on site, as needed. This chapter discusses the appearance and distribution of this rare theme, and examines the intricacies of its composition through the development of minor details. While its details of knitting or mending nets and the production of cordage with the use of a spindle are examined here, the construction of papyrus boats can be found in Chapter 17.¹⁴⁰⁵

There is a second type of cord production which is not discussed in this section as it is associated with wooden boats and other non-related fishing scenes.¹⁴⁰⁶

A number of minor figures and a variety of equipment are featured in the construction and repair of nets. The following terms are utilised for their identification:

- The *spindle*, a piece of equipment consisting of a rod with a whorl (a disk or thickened area on the rod);¹⁴⁰⁷
- The *netting needle*, a rectangular length of wood with grooves at each end. A net's cord is attached to each of these grooves for ease of weaving or knotting;¹⁴⁰⁸
- The *spinner*, who holds the spindle and threads the cord from a long pole; and
- The *knitter*, who makes or repairs a net.

¹⁴⁰² See, for instance, the scene in Ankhmahor [102].

¹⁴⁰³ See, for instance, the scenes in Ty [35], Wedjahateti/Neferseshemptah/Sheshi [112] and Mehu [121].

¹⁴⁰⁴ These can be found in Niankhkhnum and Khnumhotep [27], Wedjahateti/Neferseshemptah/Sheshi [112] and Seshemnofer /Ifi [134].

¹⁴⁰⁵ For further reading on cordage making for boats and other equipment, see Teeter, 'Rope making' *JEA* 73 (1987) 71-77, Sahrhage, *Fischfang*, 104-112; Vandier, *Manuel V*, 457- 492; Lucas, *Ancient Egyptian Materials and Industries*. 3rd edition. (London 1948); Ryan - Hansen., 'Egyptian cordage'; Veldmeijer, 'Cordage Production'.

¹⁴⁰⁶ A cordage scene that closely resembles those related to net repair depict the creation of rope and fastenings for boats and other equipment. It is usually portrayed in close proximity to scenes concerning the construction or repair of wooden boats, and presents a different technique for the making of cordage. Teeter describes the scene as having a fairly uniform composition with the steps of collecting, sorting and twisting the fibres shown in great detail (Teeter, 'Rope making', *JEA* 73, 72-5). Indeed, it varies from other scenes in both equipment and tasks performed by minor figures.

¹⁴⁰⁷ 'Textile production and Clothing' at Digital Egypt for Universities UCLA (ed) Quirke, S. (2002) <http://www.ucl.ac.uk/museums-static/digitalegypt/textil/tools.html> (Accessed April, 2015).

¹⁴⁰⁸ 'Textile production and Clothing' at Digital Egypt for Universities UCLA (ed) Quirke, S. (2002) <http://www.ucl.ac.uk/museums-static/digitalegypt/textil/tools.html> (Accessed April, 2015).

Occurrence of Scene

Fifth Dynasty

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8

Table 19.1 Fifth Dynasty Attestations

Three Fifth Dynasty tombs depict the making or repair of nets.¹⁴⁰⁹ The first known attestation occurs in the mid-Fifth Dynasty tomb of Niankhkhnum and Khnumhotep [27]. This scene is also the most detailed,¹⁴¹⁰ comprising the greatest variety of elements, including a workshop for the manufacture of net cordage, a figure attending to a net for its construction or repair, inspectors, as well as an overseer.¹⁴¹¹

In contrast, Hotepherakhti [34]’s scene is damaged and difficult to examine in its entirety. Teeter has tentatively assigned it to the category of ‘*rope making scenes*’,¹⁴¹² even though it does not follow their usual composition.¹⁴¹³ Nevertheless, the position of the minor figure as well as the inclusion of a long pole, a possible spindle and a ball of thread, all suggest that the scene depicts the spinning of cord.

The third Fifth Dynasty tomb that comprises the theme is that of Ty [35], which clearly depicts the two sequential tasks needed for the completion of the net making activity. It features two figures seated in close proximity: the spinner performs his task accordingly, while the knitter, with a ball of thread at his feet, readies a netting needle for use.

¹⁴⁰⁹ A further scene in Kairer [66] has also been identified to depict the spinning of cord. Its publication, however, does not present enough details to classify it as such. Published details instead depict figures evidently involved in playing musical instruments and other entertainment activities, which are not typically shown in conjunction with cord making. As such, due to the ambiguities regarding its context and elements, the scene has been excluded here. In addition; Harpur does not list this detail amongst the scenes, Harpur, *Decoration*, 355, 359; Porter and Moss do not include any mention of this detail either, *PM* III. 631 [7].

¹⁴¹⁰ Other examples are known in Hotepherakhti [34], Ty [35], Kairer [66], Firth and Gunn: Spinning Cord [93], Ankhmahor [102], Wedjahateti/Neferseshemptah/Sheshi [112] and Mehu [121].

¹⁴¹¹ See this Chapter’s section on Captions for further details.

¹⁴¹² Those that relate to rope making for large boats, not net repair or construction.

¹⁴¹³ Teeter, ‘Rope making’, *JEA* 73, 74.

Sixth Dynasty

Tomb	Location	Date
Firth and Gunn: Spinning Cord [93]	Saqqara	VI. E
Ankhmahor [102]	Saqqara	VI.1M
Wedjahateti/Neferseshemptah/Sheshi [112]	Saqqara	VI.1L-2E
Mehu [121]	Saqqara	VI.2
Seshemnofer /Ifi [134]	Saqqara	VI.3-4E

Table 19.2 Sixth Dynasty Attestations

Five Sixth Dynasty scenes portray net construction and repair. A fragment, identified as Firth and Gunn: Spinning Cord [93], presents the earliest recorded Sixth Dynasty attestation of spinning cord. It depicts a spinner seated before a now lost pole while using a spindle to gather and twist thread (see chapter title image). Similar scenes are found in two other Sixth Dynasty tombs, namely those of Ankhmahor [102] and Mehu [121].

Wedjahateti/Neferseshemptah/Sheshi's [112] scene depicts a single figure within the marshland tending to a triangular-shaped net. Due to a fracture in the wall, his hands and any possible equipment are not preserved, but he is clearly placed in the same register as a clapnet scene. This may indicate that he is repairing a clapnet rather than a fishing net, however accompanying inscriptions to this theme point to the net's use for fishing.¹⁴¹⁴

The last attested scene occurs in the tomb of Seshemnofer/ Ifi [134]. Similar to that in Niankhkhnum and Khnumhotep [27], it illustrates both the spinning of cord and the construction/repair of a net. Figures are seated within the same register, the spinner behind the knitter as is typical. The absence of a pole, however, hints at the use of a different spinning technique.

Distribution

As indicated in the above tables, the examined theme is only attested at Saqqara. Although it is highly unlikely that the repair and construction of nets were only performed in the capital, it is possible that the Memphite region had larger workshops for these activities. The tomb owner may have also had some investment in these workshops. In reality, fishing would have taken place at multiple locations along the Nile River, and so the services of a net repairer or net maker would have been required

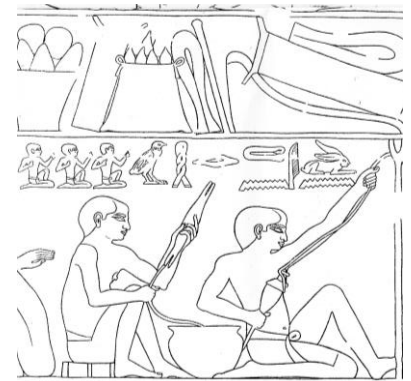
¹⁴¹⁴ See the captions in Niankhkhnum and Khnumhotep [27] which constantly refer to fishermen in relation to the nets.

across the Valley. The process of spinning cord and repairing/constructing a new net is shown in both workshop and marshland locations, thus there is no apparent geographical restriction for the occurrence of the scene in particular tombs. As such, its inclusion is most likely due to either the tomb owner's prerogative or artistic choice, with influence across tombs also possible.

The Minor Details

Equipment

A variety of equipment is employed by the spinner and knitter, but the most common element used by both is the cord. Spinners are typically shown in close proximity to a long pole over which a thread is hung and manipulated into the spindle. They can also have weights, seats and balls of thread. Knitters, on the other hand, primarily use netting needles.¹⁴¹⁵



Ty [35]

Two main items are used by both the spinner and the knitter: (1) the cord; and (2) the pole. The most essential detail for spinning cord, constructing nets and repairing them, is the cord itself. This fibrous thread can be made of several different materials including reeds, flax, various grasses and even camel hair.¹⁴¹⁶ However, no distinguishing features concerning the thickness or type of cord (for instance, pleated, spliced, single or double thread, or 's' or 'z' twist)¹⁴¹⁷ are represented in the selected scenes. Still, the majority of scenes depict the cord as a relatively thick, flexible, thread that hangs from a height equal to or above the head of the spinner.¹⁴¹⁸ Its end is commonly either being manipulated by the toes of a spinner,¹⁴¹⁹ or coiled at the base of another piece of equipment, the pole.¹⁴²⁰

The pole is commonly placed at the feet of the spinner, as seen in Niankhkhnum and Khnumhotep [27], Ty [35], Hotepherakhti [34] and Ankhmahor [102]. It has a concave tip in which the thread is cradled as the spinner pulls it towards him. The resulting diagonal angle of the thread is that which can be gleaned from the preserved traces of the fragment Firth and Gunn: Spinning Cord [93], despite

¹⁴¹⁵ See Appendix 2: *hsf nwt* Detail Table B.

¹⁴¹⁶ Lucas, *Ancient Egyptian Materials and Industries*, 160-1.

¹⁴¹⁷ 'Textile production and Clothing' at *Digital Egypt for Universities UCLA*; Ryan-Hansen, 'Egyptian Cordage', 3-4.

¹⁴¹⁸ See those in Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Ty [35] and Firth and Gunn: Spinning Cord [93].

¹⁴¹⁹ See Hotepherakhti [34] and Ty [35].

¹⁴²⁰ See Niankhkhnum and Khnumhotep [27], Hotepherakhti [34] and Firth and Gunn: Spinning Cord [93].

its missing pole. Although useful and standard, the pole was not always essential for spinning.¹⁴²¹ This is perhaps best reflected in a scene from Seshemnofer /Ifi [134] wherein a spinner seated with one leg extended forwards¹⁴²² pulls the thread by his toes, thereby negating the need for a pole.¹⁴²³ Nevertheless, the instrument is also used by knitters, as in Niankhkhnum and Khnumhotep [27], Wedjahateti/Neferseshemptah/Sheshi [112], Mehu [121] and Seshemnofer /Ifi [134]. In all, the figures tend to a net suspended over a pole in much the same fashion as the cord in spinning scenes. The raised height was most likely advantageous, allowing the net to be worked on easily while preventing tangling.

Other items are specifically only associated with the spinner. The spindle, especially, accompanies all spinners in the available scenes.¹⁴²⁴ Uniform in shape, it is depicted as a length of wood capped with a cone-shaped whorl into which fibres are threaded and wound onto the shaft.¹⁴²⁵ Weights are also employed to create tension, as in fragment Firth and Gunn: Spinning Cord [93], which depicts a weight presumably hanging from an unpreserved pole, counterbalancing the suspended thread. Other weights are represented in the sub-register above the spinner's head, along with circular objects which appear related to spinning. These objects may indeed be balls of fibre or cord that are being made for the use in the construction or repair of nets.¹⁴²⁶ The majority are without decoration, however one partial ball in the fragment has horizontal and vertical lines indicative of wound cord. Similar circular objects are also attested in Niankhkhnum and Khnumhotep [27], wherein they are stacked behind a pole. A cord is additionally depicted as being unravelled from one ball over the top of the pole.

While the spindle is for the spinner, the netting needle is for the knitter. Such needles are first represented in the tomb of Niankhkhnum and Khnumhotep [27], occurring again in Seshemnofer /Ifi [134]. Both scenes similarly show a knitter using the implement at the edge of a net. Another attestation in Mehu [121] depicts the knitter seated in front of a pole with a netting needle in his

¹⁴²¹ The example from Ankhmahor [102] is incomplete.

¹⁴²² See the following section regarding Minor Figures: Spinner positions.

¹⁴²³ Earlier scenes in Ty [35] and Hotepherakhti [34] similarly depict spinners holding the thread's fibres with their toes, but this was likely to create tension before pulling them over a nearby pole. A similar technique may also be demonstrated in Kayemnofret (D23) [51], however, Teeter suggests that the figure is more likely measuring rope lengths (Teeter, 'Rope Making' *JEA* 73, 74). Vandier also lists two other cordage scenes associated with boats, each in Akhetotep (Louvre) [31] and Khaemwaset (Vandier, *Manuel VI*, 76), yet Teeter argues that they also represent a different aspect of the larger rope making scenes (Teeter, 'Rope Making', *JEA* 73, 74).

¹⁴²⁴ See those in Niankhkhnum and Khnumhotep [27], Ty [35], possibly Hotepherakhti [34], Firth and Gunn: Spinning Cord [93], Ankhmahor [102] and possibly Seshemnofer /Ifi [134].

¹⁴²⁵ Middle Kingdom spindles had a cylindrical whorl, while New Kingdom whorls were domed; Hall, *Egyptian Textiles*, 12.

¹⁴²⁶ For examples of balls of flax, see: 'Old Kingdom Textiles' at *Digital Egypt for Universities UCLA*.

hands. Due to this placement, the scene may depict the initial construction of a net, rather than the spinning of cord.

Other items included in the examined theme are the seat upon which a minor figure is seated, the shuttle, as well as the bowl. The seat is represented in approximately 50% of all scenes and can be used by either the spinner or the knitter.¹⁴²⁷ It is also employed by the figure operating a shuttle in Ty [35]. Seats portrayed in Hotepherakhti [34] and Ty [35] are small and box-shaped, whereas that in Wedjahateti/Neferseshemptah/Sheshi [112] has a full seat and back rest, reminiscent to those used by anglers.¹⁴²⁸ Such larger seats are also included in piles of equipment depicted in close proximity to the repair/construction of a net, as in Niankhkhnum and Khnumhotep [27] or Ty [35].¹⁴²⁹ The latter tomb also provides a unique representation of a shuttle and a bowl. One figure positioned behind the scene's spinner holds a shuttle for collecting thread placed in a bowl at the spinner's feet. This bowl is otherwise commonly attested in textile manufacturing scenes from later periods.¹⁴³⁰ Its inclusion, together with the figure and his shuttle, may suggest that the worked thread was not intended for netting but for much finer textiles.

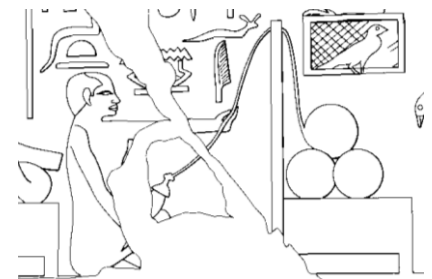
Minor Figures

The Spinner: Positions

The positions of the body, arms and legs of spinners betray a great deal of structure, with very few variances.¹⁴³¹

The spinner is primarily depicted seated at the base of the register.¹⁴³² Only one exception in the tomb of Niankhkhnum and Khnumhotep [27] depicts a standing spinner with legs in an open stance (Type A),¹⁴³³ the one at the fore slightly bent at the knee.

All seated spinners have one leg extended forwards with a slight



Niankhkhnum and Khnumhotep [27]

¹⁴²⁷ Seats are provided for spinners in Hotepherakhti [34] and possibly in Seshemnofer /Ifi [134], where the figure appears to be hovering above the register baseline. A knitter only uses a seat in Wedjahateti/Neferseshemptah/Sheshi [112].

¹⁴²⁸ See Chapter 5: Angling: Equipment: Seat: Type A seats.

¹⁴²⁹ The piles in Niankhkhnum and Khnumhotep [27], Ty [35] and Firth and Gunn: Spinning Cord [93], also include variously shaped vessels for food and drink, baskets, poles, pegs and folded material.

¹⁴³⁰ It is thought that the textile industry primarily employed women not men. For more, see UC 66397 in: 'Old Kingdom Textiles' at *Digital Egypt for Universities UCLA*.

¹⁴³¹ See Appendix 2: *hsf nwt* Detail Table D.

¹⁴³² The attestations are found in Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], Ty [35], Firth and Gunn: Spinning Cord [93], Ankhmahor [102] and Seshemnofer /Ifi [134].

¹⁴³³ See Appendix 4: Typology: Basic Leg Positions: Type A.

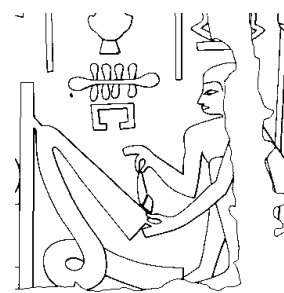
bend at the knee (Type E).¹⁴³⁴ Surviving scenes show the second leg folded under the buttocks, the top of the foot flat against the base of the register.¹⁴³⁵ One spinner in Ankhmahor [102] contrarily has his toes curled under the foot. An unusual seated position occurs in Niankhkhnum and Khnumhotep [27]: the spinner has one leg possibly extended forwards but the second leg is bent and drawn towards the chest, the foot flat along the register base (F.2).¹⁴³⁶ This pose is also attested in Seshemnofer /Ifi [134].

Arm positions are also represented by minor variances. Two spinners in Niankhkhnum and Khnumhotep [27] each have one arm extended diagonally downwards, the hand grasping the base of a spindle. The positioning of the second arm, however, varies. One spinner extends it forwards with a 90° bend at the elbow, the hand holding a ball of flax, while the other spinner extends it straight, guiding a string of flax to a spindle. The latter's arm positions are similar to those represented for spinners in Hotepherakhti [34] and Seshemnofer /Ifi [134], although one arm of each is slightly angled upwards to grasp a string of flax at a higher point. While those in Ty [35] and fragment Firth and Gunn: Spinning Cord [93] each have one arm extended forwards and angled up, the second arm is bent at a 45° angle and pulled backwards resting slightly behind the torso; the hand grasping a spindle. Despite the damage in Ankhmahor's [102] scene, its spinners may each also have one arm positioned diagonally down.

The Knitter: Positions

As with the limb positions of spinners, knitters are represented with consistent body, arm and leg placement, although small variances are observable.¹⁴³⁷

Four attestations of a net knitter are preserved. The earliest, in Niankhkhnum and Khnumhotep [27], is shown seated and facing a net. Both of his arms are in front of the torso: one extends downwards, the hand grasping the edge of the net; and the other extends forwards with a >90° bend at the elbow, the hand holding a netting needle. Legs are both bent and drawn towards the chest with feet flat on the register base (Type F.1).¹⁴³⁸ A similar



Niankhkhnum and
Khnumhotep [27]

¹⁴³⁴ See those in Hotepherakhti [34], Ty [35], Firth and Gunn: Spinning Cord [93], Ankhmahor [102] and Seshemnofer /Ifi [134]. That in Niankhkhnum and Khnumhotep [27] is damaged. See Appendix 4: Typology: Basic Leg Positions: Type E.

¹⁴³⁵ See the spinners in Ty [35], Firth and Gunn: Spinning Cord [93] and Ankhmahor [102]. Those in Niankhkhnum and Khnumhotep [27] and Hotepherakhti [34] are damaged.

¹⁴³⁶ See Appendix 4: Typology: Basic Leg Positions Type F.2.

¹⁴³⁷ See Appendix 2: *hsf nwt* Detail Table C.

¹⁴³⁸ See Appendix 4: Typology: Basic Leg Position: Type F.1.

representation is posited for the damaged knitter in Wedjahateti/Neferseshemptah/Sheshi [112], although he is seated on a cushion (Type F.1).¹⁴³⁹ The third attestation, in Mehu [121], depicts the knitter seated and hunched over. The legs are bent and drawn to the chest but the back foot is slightly raised off the register (Type F.1).¹⁴⁴⁰ The arms are both unusually extended forwards and bent at the elbows, the hands manipulating a net. The last known knitter in Seshemnofer/ Ifi [134] also has both arms forwards but at a lower angle than the other knitters (130° as opposed to 45°). Seated upright, his legs are, as in all other examples, bent and drawn to the chest (Type F.1).¹⁴⁴¹

Other Individuals: Positions

The tombs of Niankhkhnum and Khnumhotep [27] and Ty [35] feature three individuals performing unique roles associated with the making or repair of nets: an overseer, an inspector and a figure holding a shuttle.¹⁴⁴²

Representations of the overseer and inspector can be found in Niankhkhnum and Khnumhotep [27]. Identified by accompanying inscriptions,¹⁴⁴³ their body position and accessories emphasise their duties. The inspector is depicted seated in the same manner as the net knitter (Type F.1),¹⁴⁴⁴ with a vertical torso, legs bent and drawn to the chest, and arms extended to manipulate the net. One arm is shown diagonally downwards, the other is extended in front with a slight obtuse bend at the elbow. The overseer, on the other hand, stands vertically and slightly leans forwards onto a staff. Legs are in an open stance position (Type A). One arm rests vertically by his side, the other holds the staff with a 90° bend at the elbow.

One figure in Ty [35] is shown using a shuttle. Slightly hunched while seated on a cushion, his legs are bent and drawn to the chest (Type F.1),¹⁴⁴⁵ one foot in front of the other. The arms are in front of the body: one is close to the torso and bent at a 90° angle, the hand threading a string into the bottom of the shuttle; and the other is extended forward, also bent at a 90° angle at the elbow, the hand holds the shuttle up to the face of the figure.

¹⁴³⁹ See Appendix 4: Typology: Basic Leg Position: Type F.1.

¹⁴⁴⁰ See Appendix 4: Typology: Basic Leg Position: Type F.1.

¹⁴⁴¹ See Appendix 4: Typology: Basic Leg Position: Type F.1.

¹⁴⁴² See Appendix 2: *hsf nwt* Detail Table E.

¹⁴⁴³ See this Chapter's section on Captions.

¹⁴⁴⁴ See Appendix 4: Typology: Basic Leg Position: Type F.1.

¹⁴⁴⁵ See Appendix 4: Typology: Basic Leg Position: Type F.1.

Individual Characteristics

All minor figures are depicted with one of two hair and body types.¹⁴⁴⁶

A. *A full head of hair; or*

B. *A receding hairline.*

A. *An athletic body; and*

B. *A non-athletic body.*

Of 16 attestations of minor figures, ten are portrayed with an athletic body (Type A).¹⁴⁴⁷ Eight have Type A hair while five have receding hairlines (Type B).¹⁴⁴⁸ Knitters as well as spinners are commonly depicted with Type A hair, and all are shown with Type A bodies.¹⁴⁴⁹ The overseer in Niankhkhnum and Khnumhotep [27] has a receding hairline (Type B) and a non-athletic body (Type B), while the inspector from the same scene has a full head of hair (Type A) and an athletic body (Type A). Contrarily, the figure operating the shuttle in the tomb of Ty [35] has a Type A body and Type B hair.

Clothing

All minor figures evidently wear the kilt, or Type C clothing.¹⁴⁵⁰

Regardless of their role, all figures within these scenes are shown wearing kilts (Type C).¹⁴⁵¹ Nevertheless, a variance occurs in the tomb of Niankhkhnum and Khnumhotep [27], wherein a standing spinner wears a shorter kilt in comparison with those worn by all other spinners. The overseer in this scene also has a drop point kilt, with a fringed apron over the top and vertical detailing. Due to the type of garment, the depiction of genitalia is absent in all attestations.

Captions

Two scenes belonging to this theme are captioned. These can be found in Niankhkhnum and Khnumhotep [27] and Ty [35].

¹⁴⁴⁶ See Appendix 4: Typology; Individual Characteristics and Clothing: Individual Characteristics.

¹⁴⁴⁷ Type A Body: Niankhkhnum and Khnumhotep [27] (x3), Ty [35] (x2), Firth and Gunn: Spinning Cord [93], Wedjahateti/ Neferseshemptah/ Sheshi [112], Mehu [121], and Seshemnofer/ Ifi [134] (x2). Type B: Niankhkhnum and Khnumhotep [27] (overseer). Damaged: Niankhkhnum and Khnumhotep [27] (x1), Hotepherakhti [34] (x2), Ankhmahor [102] (x2).

¹⁴⁴⁸ Type A Hair; Niankhkhnum and Khnumhotep [27] (x3), Hotepherakhti [34], Firth and Gunn: Spinning Cord [93], Wedjahateti/ Neferseshemptah/ Sheshi [112], Seshemnofer/ Ifi [134] (x2). Type B Hair: Niankhkhnum and Khnumhotep [27] (x2), Ty [35] (x2), Mehu [121].

¹⁴⁴⁹ See Appendix 2: *hsf nwt* Detail Table D C, D.

¹⁴⁵⁰ See Appendix 4: Typology; Individual Characteristics and Clothing: Clothing.

¹⁴⁵¹ See Appendix 2: *hsf nwt* Detail Table C, D, E.

Chapter 19: *HSF NWT* Spinning Cord

The scene in Niankhkhnum and Khnumhotep [27] includes five distinct captions, each referring to a certain figure, his role and/or his title. Reading from left-to-right, these are:

Minor figure 1	<i>dsf i3dt in wh^c hr s3-pr</i>	Making splendid the nets by fishermen at the byre (cattle shed)
Minor figure 2 (overseer)	<i>smsw wh^c.w</i>	Eldest of fishermen
Minor figures 3 and 5	<i>hsf nwt in wh^c n pr-dt</i>	Spinning of cord by fishermen of the estate
Minor figure 4	<i>sti.t i3dt in wh^c n pr-dt</i>	Inspecting the nets by fishermen of the estate

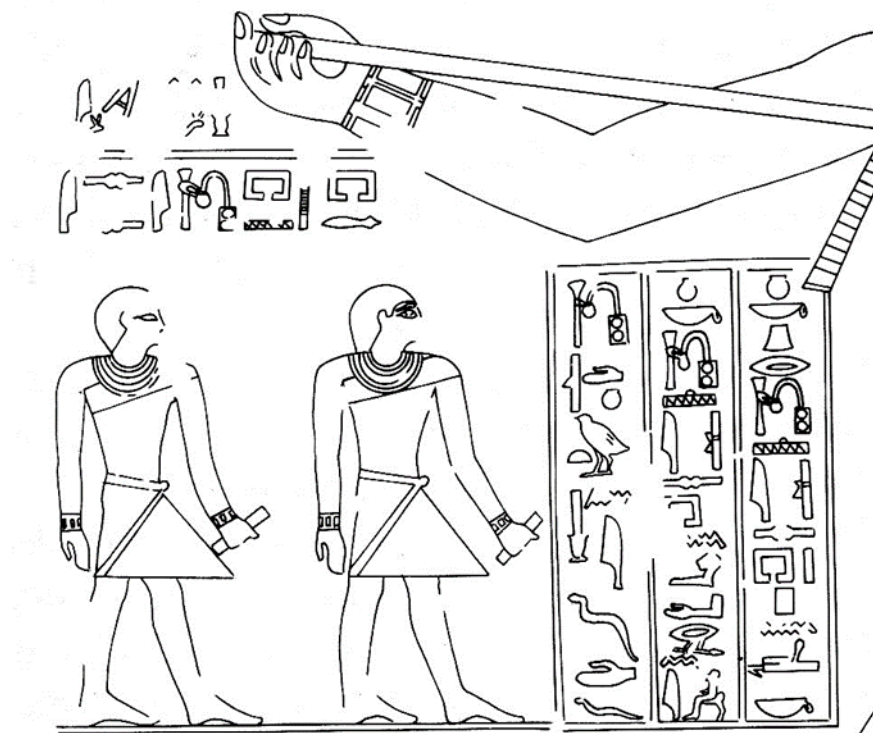
Although incomplete, the caption in the tomb of Ty [35] evidently relates to direct verbal communication among figures. The preserved traces seen above the seated figures reads: *wnni-tn
rhw. w...* ‘Hurry yourselves men...’.

As no similarities can be gleaned from the surviving captions, there appears to be no standardised text that adjoins scenes of making and/or repairing nets. Instead, the text was likely individually selected for particular scenes, perhaps according to the tomb owners’ wishes.

Summary

Scenes of spinning cord and making or repairing nets are restricted to Saqqara. They reflect compositional patterns that are relatively standard for the Fifth and Sixth Dynasties. The observed variances in the depiction of minor figures, their equipment, and other scenic elements, do not alter the essential elements of the theme but convey correct and relevant information to the viewer. They are mostly explained by the scene’s individualisation for the tomb owner or by the tomb’s artist(s). Nonetheless, the amount of space and details dedicated to the theme evidently decreased across time, with the earliest scene in Niankhkhnum and Khnumhotep [27] bearing greater details and more various activities than those in Wedjahateti/Neferseshemptah/ Sheshi [121] and Mehu [121]. While this may indicate that the scene was less significant in Sixth Dynasty tomb decoration programmes, the preserved details from Ankhmahor [102] warn against such a conclusion. Instead, the inclusion of the scene may be tied to the tomb owners’ duties, events witnessed by the tomb owner or artist or most likely artistic influence. The main focus of the themes changes from the Fifth to the Sixth Dynasty with the earlier scenes depicting net repair, while the latter appear to favour the figure spinning cord.

Chapter 20: Artistic Influence and Innovations Part I: Memphite Region



The artists Seni and Ilesi in the tomb of Kahep/ Tjeti-Iker [140]

Introduction

Numerous factors customised a tomb for its owner. The allocation of its plot would have been approved by the king or the central administration,¹⁴⁵² while its size was likely to have been a reflection of the wealth and stability of the ruling government.¹⁴⁵³ The decorative programme was influenced by the tomb's size and the consequent space available for the depiction of wall scenes.¹⁴⁵⁴

Such decoration would have been directed by multiple people, including craftsmen, artists and builders.¹⁴⁵⁵ The tomb owner would have been heavily involved, no doubt visiting his tomb on a regular basis.¹⁴⁵⁶ In addition the selection of scenes and themes was probably affected by certain criteria¹⁴⁵⁷ such as chronological factors, the availability of specific ateliers,¹⁴⁵⁸ religious significance as well as the tomb owner's affinity for certain activities such as hunting or fishing. The decoration could even emphasise aspects of particular duties or events of great importance. Such influential factors inevitably shaped a variety of tombs, with no two tombs presenting the same decoration or architecture.

Influential Factors

The Establishment of Standards

As shown in Chapters 3-19, standards were applied to the majority of scenes. These were the artists' guides for conveying appropriate information regarding a specific activity, probably reproduced from a real-life situation according to the framework of the Egyptian artistic canon and

¹⁴⁵² Woods, *A Day in the Marshes*, 226, n. 7.

¹⁴⁵³ Kanawati, *Administration*, 62-79. Based on the *ḥtp-dī-nsw* offering formula, some have suggested that it is more likely that the pharaoh gave land and/or artists, craftsmen or materials for the completion of their tomb in the early Old Kingdom. Later, tomb owners apparently stress the fact that they were able to afford the construction of their own tomb without any assistance from the king (Dodson-Ikram, *The Tomb in Ancient Egypt*, 24; Aldred, *Egyptian Art*, 85). Yet, some regulatory process for the construction of a tomb is possible and supported by a late Sixth Dynasty inscription from the tomb of Djau [130], which states that Djau was buried with his father for personal rather than practical reasons (Alexanian, 'Tomb and Social Status', 2-5; Kanawati, *The Tomb and its Significance*, 24-5).

¹⁴⁵⁴ Harpur, *Decoration*, 59.

¹⁴⁵⁵ Woods, *A Day in the Marshes*, 225.

¹⁴⁵⁶ Roth, 'The Practical Economics of Tomb Building in the Old Kingdom' in: Silverman (ed.), *For his Ka*, 227-240. See also Aldred, *Egyptian Art*, 85; Dodson-Ikram, *The Tomb in Ancient Egypt*, 31, 51.

¹⁴⁵⁷ Weeks, 'Art, Word, and the Egyptian World View' in: Weeks (ed.), *Egyptology and the Social Sciences*, 60-62; Schäfer, *Principles*, 12, 17-18.

¹⁴⁵⁸ Van Walsem, *Iconography*, 51; van Walsem, 'The Mastaba Project at Leiden University', in: Schoske (ed.), *Akten*: 143-154; van Walsem, 'Iconographic Programmes in Old Kingdom Elite Tombs', in: Eyre (ed.), *Proceedings Seventh International Congress of Egyptologists*, 1205-1213; Kemp, *Anatomy of a Civilization*, 135.

its fundamental perspective to depict all essential elements by their most characteristic details.¹⁴⁵⁹ Standards are typically observable from the first recorded instance of a theme. As stated by Woods and maintained in this study, it is generally the minor details associated with these standard features that vary from scene to scene.¹⁴⁶⁰ Whether these standard features were influenced by royal precedents remains uncertain, as marsh scenes are infrequently represented in the surviving reliefs of royal monuments. The funnel trap scene, for instance, is attested in the Sun Temple of Niuserre at Abu Ghurab¹⁴⁶¹ during the same period of its first known occurrence in a non-royal context in the Saqqara tomb of Niankhkhnum and Khnumhotep [27]. The temple's papyrus boat building scene, however, can be identified in older, Fourth Dynasty elite tombs. Dragnet scenes, which also occur in Pepy II's mortuary temple, are similarly first attested in elite contexts in the tomb of Nefermaat [2] at Maidum in the Fourth Dynasty.¹⁴⁶² While the damage sustained by royal monuments deprives us of crucial information, it is possible that their walls featured the earliest attestations of the more frequent scenes of dragnets or spearfishing, perhaps establishing many of their original standards. Yet, it is also probable that the less frequent fishing and 'other' scenes, like those of round basket traps or registering the catch, originated, or were further modified by artists working on non-royal tombs. As a result of this lack of evidence, the standards examined in this study have been ascertained from elite tomb decoration only.

Political and Administrative Factors

Regardless of position or duty, early officials most likely resided and worked in the capital, feasibly constructing their tomb near that of their ruler.¹⁴⁶³ Shifts in burial customs could have resulted in the reduction of grave goods and an increase in decoration in the Third to early Fourth Dynasties, a reduction in tomb decoration in the tombs of the early to mid-Fourth Dynasty reign of Snefru, and little to no pictorial evidence of farming and daily life from the end of Snefru's reign to that of Khufu's.¹⁴⁶⁴ Such trends thus coincide with the distribution of evidence for fish in these dynasties. The majority of evidence from the Fourth and Fifth Dynasties occurs at Memphite regions. The Sixth Dynasty brought about many new and complicated administrative changes that had a noticeable impact on the distribution of tombs, and consequently, their fishing scenes. Evidence suggests that, in the reign of Teti, political and economic factors motivated the appointment of

¹⁴⁵⁹ Schäfer, *Principles*, 190-193; Robins, *Proportions*, 1-13; Malek, *In the Shadow of the Pyramids*, 111.

¹⁴⁶⁰ Woods, *A Day in the Marshes*, 228.

¹⁴⁶¹ Harpur *Decorations*, 190.

¹⁴⁶² Harpur, *Decoration*, 203.

¹⁴⁶³ Kanawati-McFarlane, *Akhmim*, 23.

¹⁴⁶⁴ Grajetzki, *Burial Customs*, 18.

officials as overlords of provinces.¹⁴⁶⁵ Following the redistribution of resources, smaller tombs began to be constructed in the capital.¹⁴⁶⁶ A number of early Sixth Dynasty tombs are also attested at provincial centres,¹⁴⁶⁷ their numbers steadily increasing into the second half of the Sixth Dynasty. Probably in response to the provincial nomarchs' growing power, Pepy I attempted to recentralise the administration to the capital and away from what were now well-established multi-generational families of nomarchs.¹⁴⁶⁸ Subsequently, a few nobles were once again buried at Saqqara while other provinces relocated their cemeteries, indicating an interruption in family successions.¹⁴⁶⁹ Merenre, however, evidently favoured Teti's administrative structure, with tombs from his reign resurfacing in provincial contexts.¹⁴⁷⁰ Under Pepy II, the central administration's power and control over Egypt began to wane. Recent studies propose that this resulted in provincial officials sourcing their wealth and provisions from more local avenues, such as regional cults.¹⁴⁷¹ Their tombs additionally became larger as they were likely constructed under the sole discretion of the tomb owner. Indeed, the examined scenes from this period are primarily attested in provincial tombs. Eventually, provincial officials became semi-independent rulers, leading Egypt into the First Intermediate Period.¹⁴⁷²

The Tomb and its Owner

In addition to royal monuments, familial relationships may have also facilitated influence and art transfer within the Old Kingdom. In many instances, relatives were buried in close proximity to one another. Some examples include, but are certainly not limited to, those buried in the Senedjem-Ib complex, as well as Serfka [49] and Werirni [70], Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147], Niankhpepy/Khnumhotep/Heti [123] and Khunes [67], Niankhpepy/ Sobekhotep/ Hepi-Kem [136] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Mereruka [103], Watetkhet-Hor /Seshseshet [104] and their son Meryteti/ Meri [116].¹⁴⁷³ Repeated details and themes frequently occur among tombs owned by related individuals; indeed, numerous examples can be identified in all those abovementioned. Such connections suggest that the artists and even the tomb owners

¹⁴⁶⁵ Kanawati-McFarlane, *Akhmim*, 47.

¹⁴⁶⁶ The reasons for this decline in size are ambiguous. Kanawati proposes some connection to religious shifts and/or social and economic stresses. One may also presume that, in royally commissioned cemeteries, the king would have allocated what was thought to be appropriate space for a tomb and its owner. Kanawati-McFarlane, *Akhmim*, 51, 100, n. 528; Kanawati-Woods, *Artists in the OK*, 37.

¹⁴⁶⁷ Iteti/ Shedu [45], Hemre/Isi I [107], Bawi (G126) [113].

¹⁴⁶⁸ Pepy I placed his relatives in high positions of power at Abydos, appointing lower ranking officials under their care to the provinces. Kanawati-McFarlane, *Akhmim*, 87; Shaw, *Oxford History of Egypt*, 107.

¹⁴⁶⁹ Kanawati-McFarlane, *Akhmim*, 87.

¹⁴⁷⁰ Kanawati-McFarlane, *Akhmim*, 87.

¹⁴⁷¹ Kanawati-McFarlane, *Akhmim*, 294.

¹⁴⁷² Shaw, *Oxford History of Egypt*, 107; Kanawati-McFarlane, *Akhmim*, 100, n. 528.

¹⁴⁷³ For further familial connections, see Harpur, *Decoration*, 13-31.

had looked to their predecessors' art programmes in the hopes of emulating them and emphasising the familial link between them.

Even if tomb owners were unrelated, the location of their tombs, and their proximity to others in the same necropolis, could have additionally led to the spread of artistic influences. Harpur stresses the importance of location when considering the repetition of details, as it may be indicative of a family group or workshop that has executed the work in a particular area. On a larger scale, it may show a general trend in minor details at the location or over a particular period.¹⁴⁷⁴

Further sources of influence are notable tombs, often referred to as 'landmark' tombs, which depict the highest quality of tomb art with unique or intricately detailed scenes that have inspired generations of artists decorating later tombs. Typically known from Saqqara, they include the tombs of Niankhkhnum and Khnumhotep [27], Ty [35], Neferirtenefer [52], Ihy r/u Seshseshet/Idut [72], Kagemni [94] and Mereruka [103]. The tomb owners are usually of royal descent, have marital links to the royal family, or hold titles either directly related to the service of a royal member or of high administrative offices.¹⁴⁷⁵ Given their status, the allocation of resources would have been sufficient enough to allow for the highest standard of completion for their tomb.

Innovation and Originality in Marsh Scenes

The seemingly static and repetitious nature of Egyptian art has often been approached with negative connotations.¹⁴⁷⁶ Smith, for example, suggests that Egyptian art is simply the repetition of themes and scenes, with no originality except for the odd addition or exclusion of details.¹⁴⁷⁷ Yet, one must remain objective when examining this style of art and not be restrained by modern standards, or even other ancient cultural standards, for a fair evaluation of the evidence. Indeed, Smith's theory has been met with rebuttal by Kanawati, Woods and others who suggest that artists instead followed a strict canon with traditional guidelines that were in place since the conception of tomb decoration.¹⁴⁷⁸ Furthermore, the tomb should be considered as a canvas for the tomb owner to depict both an ideal lifestyle for the afterlife, as well as the achievements and activities of a rich nobility. It is most likely that such an elite became accustomed to the display of wealth, prowess and status in tombs. Consequently, the royal and elite canons and artistic styles may have eventually displayed a connection to the upper class artistic tradition, their use ensuring that a

¹⁴⁷⁴ Harpur, *Decoration*, 31.

¹⁴⁷⁵ Woods, *A Day in the Marshes*, 231.

¹⁴⁷⁶ Smith, *HESPOK*, 362, 365; Kemp, *Anatomy of a Civilization*, 68.

¹⁴⁷⁷ Smith, *HESPOK*, 362.

¹⁴⁷⁸ Kanawati-Woods, *Artists in the OK*, 8; Vischak, 'Identity in/of Elephantine', 446; Woods, *A Day in the Marshes*, 237-8.

tomb owner was identified as one of the exclusive echelon.¹⁴⁷⁹ The present author agrees, as investigations into fishing themes alone have supported the concept that an artist was able to include and modify details of scenes beyond the traditional to express and add both individuality and depth.

Still, the standards for scenes are indeed fixed as all display certain elements that must be shown to correctly represent a task, object or person. An example may be the constant depiction of a dragnet in dragnet scenes. Another is the seated position of the figure and use of a knife in the gutting and dehydration theme. This rigidity and repetition hint at a reference source(s) from which the artists, under the tomb owner's instruction, copied or recreated themes that were considered necessary (or personal) to both the tomb owner and the afterlife.¹⁴⁸⁰ Evidence of direct copying can be primarily identified from tombs in close proximity or in adjacent necropolises, such as the Teti and Unis Cemeteries. Some examples include the cases for jumping fish in both Ihy r/u Seshseshet/Idut [72] and Mereruka [103], turtles in Hesi [110] and Mehu [121], and hippopotamus-crocodile interactions in Ty [35], Kagemni [94], Mereruka [103], Inumin [111], Mehu [121] and Khentika [124]. While the existence of such a reference source has been discussed by several scholars, there is, as of yet, no known direct evidence confirming its existence.¹⁴⁸¹

Despite such standards, the nature of non-standard and minor details offered artists and tomb owners the ability to enhance scenes as they saw fit. Innovations may be explained by one of two possibilities: the artist completing a scene was either extremely well trained and talented, or inexperienced and lacking training. A well-trained artist may have enhanced the scene with additional motifs and details, or followed the request of the tomb owner to make it unique with elements that could then be emulated by others in their tombs. The detail of a crocodile laying eggs in the Fifth Dynasty tomb of Kairer [66], for example, is found in the late Sixth Dynasty tomb of Pepyankh/Henykem [146] at Meir. The addition of boats in dragnet scenes is also attested in the scenes from Khufukaef II [21], Inti [45], Kaiemheset [84], a fragment from London British Museum No. 994 [135], as well as Djau [141], whose scene additionally features a uniquely malformed net. Such innovative elements likely reflect realistic occurrences or a high degree of attention to detail. On the other hand, an inexperienced artist may have made mistakes or omitted elements that were considered frequent or standard for the time, perhaps because of his ignorance of current trends or insufficient training to compose or complete the scene correctly. In any case, both

¹⁴⁷⁹ Vischak, 'Identity in/of Elephantine', 446.

¹⁴⁸⁰ Aldred, *Egyptian Art*, 65; Kanawati, *The Tomb and its Significance*, 20-22.

¹⁴⁸¹ Kanawati-Woods, *Artists in the OK*, 41; Dodson-Ikram, *The Tomb in AE*, 51. Others include: Schäfer, *Principles*, 336-342; van Walsem, *Iconography*, 51; Hartwig, *Tomb Painting*, 19, 28; Muller, 'Musterbuck', *LÄ* 4, 244-6; Woods, *A Day in the Marshes*, 237.

options could lead to erroneous conclusions by art scholars as the reason for the presence or omission of the new detail would be largely unknown.

This is best reflected in the suggested degeneration of art in the latter half of the Sixth Dynasty, particularly in the provincial centres, a situation which has been attributed to poorly trained artists.¹⁴⁸² Woods correctly states that the ‘poor rendering’ of this art is only due to its interpretation as a reproduction of the pinnacle of Memphite art. Yet it could be explained by differences in time, location and the availability of artists working in provincial tombs.¹⁴⁸³ Kemp additionally proposes that artists of this period did not have to strictly adhere to Memphite traditions,¹⁴⁸⁴ while Vischak finds modifications at Old Kingdom tombs at Qubet el-Hawa to reflect individuality, uniqueness and a possible attempt to reflect the community and contemporary values.¹⁴⁸⁵ If this is correct, then it stands to reason that the notions of individuality and communal values would have also influenced all tomb decoration to some degree. This may explain the variations in scenes and minor details between Upper and Memphite Egyptian tombs, and even the artistic differences observed between cemeteries in the same region.

The Artists

Artists are a significant factor in the study of innovation, and must be considered when investigating the concept of artistic transfer; after all they are executing these valuable images. Our knowledge of artists is somewhat limited as there are no attestations of them in Old Kingdom workshops, nor artistic representations of them decorating tombs.¹⁴⁸⁶ Some artists are, however, known, and include: Seni and his brother Isesi; Rahay and Pepyseneb/Nesi; and Khewienptah, Kaiemtjenenet, Ihyemsapepy/Iri, Heni/Pepy-haishetep, , Rahai and Semerka.¹⁴⁸⁷ These men have all been given the same titles of *sš kḏwt* ‘outline draftsman’ or *sš pr mdḏt-nṯr pr-ꜥ* ‘scribe of the house of the sacred book of the palace’. It appears that the artists enjoyed a high social standing within the Egyptian hierarchy. Some late Sixth Dynasty scenes even depict them enjoying life with tomb owners, as in the case of Seni and his brother Isesi who accompany Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] in a spearfishing scene.¹⁴⁸⁸ The presence of such scenes is likely due to the reduced observance of traditional canon, as well as the expression of individuality by artists in the provinces. The lack of such evidence in Memphite tombs does not automatically void an

¹⁴⁸² Fischer, *Dendera*, 73, n. 297; Smith, *HESPOK*, 226-227; Vandier, *Manuel*, IV, 719.

¹⁴⁸³ Woods, *A Day in The Marshes*, 239.

¹⁴⁸⁴ Kemp, *Anatomy of a Civilization*, 158.

¹⁴⁸⁵ Vischak, ‘Agency’, 259.

¹⁴⁸⁶ Kanawati-Woods, *Artists in the OK*, 5.

¹⁴⁸⁷ Kanawati-Woods, *Artists in the OK*, 9-18.

¹⁴⁸⁸ Kanawati-Woods, *Artists in the OK*, 12. See image on title page Chapter 20.

artist's high status. In fact, many tomb owners, like Mereruka [103] and Khentika [124], engage in artistic endeavours within their scenes or hold the aforementioned titles.¹⁴⁸⁹

Artists were also evidently trained and employed at the palace for a certain period of time, as inferred by the title *sš pr mdꜣt-nṯr pr-ꜥ* 'scribe of the house of sacred book of the palace'.¹⁴⁹⁰ The possibility that they were trained in one central place suggests that they would have all been taught the same methods and guidelines on theme selection. Multiple artists worked within the same tomb and, in some cases, perhaps the same scene, and can be distinguished by differences in the composition of repeated details or variances in quality as, for instance, in Mereruka [103] and Inumin [111].¹⁴⁹¹ Quality was also affected by the positioning of a scene, as those at eye-level were executed with better precision than those above or below,¹⁴⁹² presumably as they were considered to be the most significant according to the artist and tomb owner. It is possible that scenes at and below eye-level were completed by more experienced artists while the less experienced had to work in more difficult and uncomfortable positions, like those above eye-level which required the use of ladders, or those in constrictive spaces.¹⁴⁹³ Nonetheless, such a working environment would have viably affected and furthered artists' proficiency and skills in executing particular details and scenes, perhaps even influencing their selection of themes in later assignments.

Conclusion

Generally, the depiction of tomb art was dependent on the development of royal cemeteries and shifts in administrative policies. At this time, the deployment and burial of officials outside the Memphite capital were likely sanctioned by the king,¹⁴⁹⁴ and could have led to Memphite artists decorating provincial tombs with scenes perceived to be traditional and fashionable. In the late Sixth Dynasty, most of the evidence stems from provincial sites. It is thought that provincial leaders had their own resources and were able to complete their tombs; the tombs' size, architecture and decorative programme completely at their discretion.¹⁴⁹⁵ Yet artists were still connected to the monarch via their titles. Possibly trained in the Memphite centre, they probably moved to the

¹⁴⁸⁹ Kanawati-Woods, *Artists in the OK*, 14-15.

¹⁴⁹⁰ Kanawati-Woods, *Artists in the OK*, 9, 12. For further reading regarding the education of artists, see Drenkhahn, 'Artists and Artisans in Pharaonic Egypt' in: Sasson (ed.), *Civilizations of the Ancient Near East*, 332-334; Peck, 'Craftsman and Artist' in: Turner (ed.), *The Dictionary of Art*, 789-791; Peck, *Egyptian Drawings*, 25-29; Robins, *The Art of Ancient Egypt*, 29; Kanawati, *The Tomb and Beyond*, 72-76.

¹⁴⁹¹ Kanawati-Woods, *Artists in the OK*, 7.

¹⁴⁹² Kanawati-Woods, *Artists in the OK*, 7.

¹⁴⁹³ Kanawati-Woods, *Artists in the OK*, 7.

¹⁴⁹⁴ Kanawati, *Governmental Reforms*, 5.

¹⁴⁹⁵ This is also discussed by Kanawati-McFarlane, *Akhmim*, 100, n. 528.

provinces or were commissioned from the capital to work in the tombs.¹⁴⁹⁶ This, along with encounters with other provincial tomb artists, may have contributed to the perpetuation of some details.¹⁴⁹⁷

Regional Artistic Transference and Influence: Tracking Minor Details

The distribution of a scene, minor scenes or minor details within scenes may show possible patterns of influence between tombs and sites, highlighting overall artistic trends. This section investigates the possible links between tombs depicting similar minor details or the replication of certain themes. Larger themes such as those with dragnets, angling, gutting or fish-bearing are so well attested that the possibility of tracking influence by theme is inconclusive. Therefore, their minor details are instead analysed for evidence of influence. Discussions examining the possible correlation between tombs are provided. It must be emphasised that this study only focusses on marsh scenes or those related to fishing. It is not a full assessment of the entire tomb's decoration programme; yet, depending on its results, the identification of such signatures in other scenes could be an avenue for further research.

Overall, the development of marsh scenes appears to coincide with the establishment of royal cemeteries throughout the Old Kingdom. While the appearance and distribution of scenes are provided in Chapters 4-19, minor details can be chronologically traced to analyse direct influence between tombs.

Maidum Fourth Dynasty

Dragnet Scene

The dragnet scenes from the early examples in the tombs of Nefermaat [2], Nefer...w [4] and Rahotep [5] are each quite different. The example from Nefermaat [2] is fragmentary, yet it may be inferred that the net shape would become the standard as it is found across all three of these examples. Fish were also shown swimming in all three scenes and haulers were on the shore. The number of haulers vary with several proposed in Nefermaat [2] and Nefer...w [4] while Rahotep [5] only included three.¹⁴⁹⁸ The stance of the men also differ with rigid figures bent at the waist found in Nefermaat [2] and Rahotep [5] and vertical and duplicated postures in Nefer...w [4]. Sinkers are visible in all three scenes, although only Nefer...w [4] had floats on his dragnet.

¹⁴⁹⁶ Kanawati-Woods *Artists in the OK*, 14.

¹⁴⁹⁷ Kanawati-Woods, *Artists in the OK*, 11.

¹⁴⁹⁸ Although this appears to be due to space constraints.

Observations

The general composition and commonalities between the scenes of Nefermaat [2] and Rahotep [5] indicate that these two tombs were associated by influence. Furthermore, Harpur suggests that factors of location, date and a possible familial bond make it likely that the tombs were constructed by the same workmen,¹⁴⁹⁹ with the possible inference that the same artist(s) were used in both tombs. This judgement may be marginally strengthened by the appearance of the gutting scenes in both tombs.

Maidum and Giza in the Fourth Dynasty

Papyrus Boat Construction

While the theme of papyrus boat building is found in both Atet [3] and Nebemakhet [8] the scenes differ significantly. The artists in the tomb of Nebemakhet [8], used this theme and revitalized it. The standard details remain between them, for example the boat, the curvature or the prow/stern, and the use of rope binding. However, the newer scene in Nebemakhet [8] also incorporates a papyrus gathering scene, wedges under the prow/sterns, and different positions for the minor working figures. The wedges in this scene replace the figure found under the bow of the boat in Atet [3], which is only seen in one further representation in the tomb of Rakhaefankh [26] in the mid Fifth Dynasty (V.6).

Observations

At this stage, it appears most likely that the marsh themes found at Giza were inspired by those attested at Maidum. The movement of the royal cemeteries merely meant that the tomb locations shifted, not the artistic inclusions. The minimal depictions in the earlier half of this dynasty due to the artistic developments under Snefru and Khufu¹⁵⁰⁰ may have led to the artist using all the resources available to them, thus using themes from multiple tombs and locations.

¹⁴⁹⁹ Harpur, *Maidum*, 27.

¹⁵⁰⁰ See above under: Political and Administrative factors.

The early Fifth Dynasty at Giza, Abu Rawash and Saqqara

Dragnet Scene

The most frequently attested theme at this stage is that of the dragnet, found in the early Fifth Dynasty tombs of Persen [9], Iteti [12], and Sekhemkare [13]¹⁵⁰¹ and one scene in Saqqara in the tomb of Ka-Aper [10]. A study of these scenes provides two possible points of influence: firstly, the scene from Persen [9] shows the men bent at the waist over a large dragnet and bearers to the right with fish on a pole, reminiscent of the scene from Rahotep [5]. The absence of floats also supports a connection. The tombs of Kaseuza (F7) [11] and the Saqqara tomb of Ka-Aper [10] all include floats which may be seen in the earlier examples of Akhethotep (G7650) [14] (IV.2-4), the fragment in Kawab [6] (IV.2L-3L) and when traced further back, seen in the tomb of Nefer...w [4] (IV.1-2). The haulers in Ka-Aper [10] are positioned freely with various leg, arm and torso poses making the scene more dramatic. This is not seen in the previous tombs, nor in Persen [9] and unfortunately it is incomparable with the likes of Kaseuza (F7) [11], and Iteti [12] due to their state of preservation. It is possible that the haulers in Sekhemkare [13] follow Ka-Aper [10], with various positions still visible.

Papyrus Boat Construction

The theme of papyrus boat construction is attested in the early Saqqara tomb of Khnumhotep (D49) [15]. The scene is partial, showing a boat hull with feet appearing both at the bows and on the surface of the boat. The position of the feet is reminiscent of those found in Nebemakhet [8] and as seen in Atet [3].

Observations

It is extremely difficult to assess any influence between tombs when the surviving visual evidence is so fragmented. Therefore, the links between tombs and these details, some of which are still in the development stage, are tentative at best. It is a possibility that there were two lines of influence out of Maidum, which were implemented in Saqqara and Giza as seen with the varying details in the dragnet theme.

¹⁵⁰¹ In relation to influence on these scenes, those of Kawab [6] and Debehen [7] would have been the closest in date and proximity. However, the scenes are so far degraded that there is no possibility of comparison.

Mid Fifth Dynasty at Saqqara and Giza

Marsh themes are attested at both Giza and Saqqara during the mid-Fifth Dynasty. Examples from Giza are more frequent until the reign of Menkauhor (V.7), after which tombs dated from V.6-8 primarily appear in Saqqara.¹⁵⁰²

Dragnet Scene

The scene attested in Nefer and Kahay [18] is vibrant with men shown in the leaning (Type C leg position)¹⁵⁰³ and bent at the waist as seen earlier but it also incorporates the two end haulers in a lunge position (Type G),¹⁵⁰⁴ only seen previously in Nefer...w [4]. Here, the leaning men have their legs together for the first time, unlike in Ka-Aper [10] where the feet are still in an open stance position (Type A). They share other common factors,¹⁵⁰⁵ yet the artists have included additional details such as the supervisors holding a *Synodontis*, fish swimming vertically, sinkers, clothing and line ends that are tangled.

The example in Iynofret [19] is different again with the haulers all standing vertical, shown either leaning with their legs together (Type C), in lunge positions (Type G) at the edges of the net or in an open stance (Type A). While these are seen in the tomb of Nefer and Kahay [18] the composition of the haulers differs, being more comparable to Ka-Aper [10].¹⁵⁰⁶ Iymery [20], Khufukaef II [21], and Nikauhathor [23] present a set of similar dragnets however their influence may have come from different sources. The haulers from the scene found in Iymery [20] are like that of Ka-Aper [10] with the men found in a variety of positions yet not as exaggerated as those seen in Nefer and Kahay [18]. Other details such as the inclusion of sinkers and the presence of the supervisors holding fish from the nets point to links with Nefer and Kahay [18]. The scene from Nikauhathor [23] resembles Iynofret [19] in general composition.¹⁵⁰⁷

¹⁵⁰² V.6-7: include Nefer and Kahay [18] (Saqqara), Iynofret [19] (Giza), Iymery [20] (Giza), Khufukaef II [21] (Giza), Irenkaptah [22] (Saqqara), Nikauhathor [23] (Giza), Itisen [24] (Giza), Rakhaefankh [26] (Giza), Niankhkhnum and Khnumhotep [27] (Saqqara), Ramaka [28] (Saqqara), Nimaatre [29] (Giza). V.6-8 include; Kapi [30] (Giza), Akhethotep (Louvre) [31] (Saqqara), Pehenuika [32] (Saqqara), Neferseshemptah and Sekhentiu [33] (Saqqara), Hotepherakhti [34] (Saqqara), Ty [35] (Saqqara), CG 1535 [36] (Saqqara), Khnumhotep Fragment [38] (Saqqara), Tepemankh [39] (Abusir), Sopedhotep (D15) [40] (Saqqara), Ptahshepses [41] (Abusir), Kayemnofret II [43] (Giza), and Irukaptah/ Khenu [44] (Saqqara).

¹⁵⁰³ See Appendix 4: Typology: Basic Leg positions: Type C.

¹⁵⁰⁴ See Appendix 4: Typology: Basic leg positions: Type G.

¹⁵⁰⁵ Other common factors include a large dragnet with multiple rows of fish swimming in both directions, as well as the use of triangular floats.

¹⁵⁰⁶ It also includes the large net with multiple rows of fish, floats, loose rope ends and no sinkers.

¹⁵⁰⁷ The men are positioned similarly and include such details such as the coiled rope ends, floats and lunging (Type G Leg Position) end haulers. See Appendix 4: Typology Basic Leg Positions: Type G.

Khufukaef II's [21] artist incorporated a boat into the task of dragnetting, the first known attestation of this detail in elite tombs. A contemporary royal example is found in the Sun Temple of Niussera (V.6).¹⁵⁰⁸ The occurrence of this detail in both a royal and elite example suggests that influence from the royal monument may have played a role. It is also possible that the artist worked on both sites transferring the detail. The composition does not conform to the layouts previously used in elite tombs; yet, there is a supervisor holding a fish like those seen in Nefer and Kahay [18] and Iymery [20]. The scene from Rakhaefankh [26] is interesting and is clearly linked to some of the earlier Fifth Dynasty tombs. The men are positioned freely like those in Nefer and Kahay [18], sharing other details such as a supervisor and vertically swimming fish. However, the supervisor is shown leaning on a staff and a hauler is depicted leaning in and grasping the top rope from the water's surface. The sinkers attached to this net are the same as those found in Persen [9].

Bearers and Transport of Fish

The transportation of fish is primarily accomplished via two methods: (1) the fish is attached to a pole, or (2) it is held in the hand of a minor figure. The earliest attestations of this theme are found in Rahotep [5], Akhethotep (G7650) [14], Nebemakhet [8], and Persen [9] all of which use the pole for transportations of various species. The example from Rakhaefankh [26] depicts the pole method, linking it to the earlier representations, especially that of Persen [9] with which it shares the unusual sinkers on the dragnet. In Ramaka [28] a pole was also used, yet the fish is carried in a basket trap instead of being directly attached to the pole. Iymery [20], Iynofret [19], Irenkaptah [22], and Niankhkhnum and Khnumhotep [27] all show the fish carried by hand as seen earlier in Akhethotep (G7650) [14] and Persen [9].

Papyrus Boat Construction

Last seen in the tomb of Khnumhotep (D49) [15] dating to the first half of the Fifth Dynasty, the images of papyrus boat construction are then attested in the mid Fifth Dynasty tombs of Nefer and Kahay [18], Iymery [20], Irenkaptah [22], and Rakhaefankh [26].¹⁵⁰⁹ The example in Nefer and Kahay [18] closely resembles that of the earlier scene from Nebemakhet [8]. It includes the men constructing the boat and the gathering of the papyrus stalks. There are two minor figures holding the bows of the hull at each end, like Nebemakhet's [8] figure. The other men also appear in similar positions but are not clothed as with the previous example. It is possible that Irenkaptah's [22]

¹⁵⁰⁸ Smith, *Interconnections with the Near East*, fig.178; Brewer- Friedman *Fish and Fishing*, Chap. 2 ft. [86].

¹⁵⁰⁹ Unfortunately, the scenes from Irenkaptah [22] and Rakhaefankh [26] have sustained damaged, thus restricting the ability to make comment on general composition.

image is similar as the remaining details show a boat with an attending standing figure and a partial papyrus gatherer. It has a wedge under the bow, a detail linked to Nefer and Kahay [18]. The artist executing the scene in Iymery [20] has extended the scene with two boats, four or five men working on each. New poses are observed with the men lunging in the boat and swinging feet off the side of the hull.¹⁵¹⁰ It appears that a supervisor is present, yet it is missing the accompanying papyrus gatherers. Nebemakhet [8] may be inferred as the source for the later representations during this period, the details resembling this example rather than the earlier Rahotep [5]. Yet, Rakhaefankh [26] includes a figure under the bow of the boat holding it up with his back which is otherwise only attested in Rahotep [5].

Observations

During this period, it seems that the older tombs of the Fourth Dynasty were a direct influence on many of the themes. Examples include the dragnet scenes from Nefer...w [4] and Ka-Aper [10] and Nefer and Kahay [18] which in turn becomes a source during this period. Persen [9] was likely another influential tomb, specifically on the tomb of Rakhaefankh [26] with common features of the dragnet sinkers and the methods of fish transportation. The theme of papyrus boat building that appears during this period may have been perpetuated from one source, namely Nebemakhet [8]. While each scene evolves slightly from the last, the inclusions of the key elements¹⁵¹¹ are all present in the Fourth Dynasty example. An exception is the detail of the man under the boat repeated from Rahotep [5] to the later scene in Rakhaefankh [26]. In general, it appears that there is no preference given to tombs from certain sites or time periods as they are all used as references. As will be seen this appears to change with details becoming influenced and in some cases restricted by location.

The 'land mark' tombs of the Fifth Dynasty at Saqqara and their influence.

It is apparent three tombs in the mid Fifth Dynasty are closely linked by themes and minor details. Niankhkhnum and Khnumhotep [27], Ty [35] and Ptahshepses [41] share many of the more common and rarer marsh themes, as outlined below.

¹⁵¹⁰ See Appendix 4: Typology Basic Leg Position G and Leg Positions Other: Papyrus Boat Construction Workers Leg Positions PB.1.

¹⁵¹¹ Such as the boats, position of figures, and the papyrus gatherers.

Gutting and Dehydration

Niankhkhnum and Khnumhotep [27] and Ty [35] have preserved scenes which demonstrate many similar characteristics. Multiple gutters are shown within a natural setting and are cutting a whole fish with fish carcasses depicted within the register in front of them. The carcasses are highly detailed, scales are included in Niankhkhnum and Khnumhotep's [27] scene and defining characteristics such as the dorsal fins, body shape and heads of known fish species are seen in Ty [35]. Roe is also depicted in both scenes amongst the fish carcasses. A board and knife are used and the gutters are shown with similar positions (Type F.1 Leg position) and clothing (Type C: Kilt). In general, the scenes are composed slightly different: that in Niankhkhnum and Khnumhotep [27] depicts the gutters at the opposite ends of the scene with the gutting activity occurring between them. Ty [35], conversely, has the gutters sitting back to back, a papyrus thicket between them. The scene in Ptahshepses [41] is fragmented yet shows gutted fish with detailed characteristics, much like the two aforementioned tombs.

Scenes from Akhethotep (Louvre) [31] and Pehenuika [32] all in composition resemble Niankhkhnum and Khnumhotep [27]. Roe is also found in both scenes and the fish are remarkably detailed as seen in both Niankhkhnum and Khnumhotep [27] and Ty [35]. Hotepherakhti [34] shows a single gutter with the scene paired with a tent upon which fish are hung to dry. This is like an image found in Ty [35] depicting fish carcasses hung to dry with bird carcasses and other objects.

Weir Fishing

Another theme that shows a strong connection between Ty [35] and Niankhkhnum and Khnumhotep [27] appears in the weir scenes. Each weir is shown attached to the banks of the river and has sections highlighted in the netting along the body defined by rope.¹⁵¹² The mouth of the trap covers the entire width of the water band and no fish are shown within the nets, a standard feature of the theme across its date range.¹⁵¹³ The weir is operated by multiple figures in boats shown with the same structure and decoration in both examples. In addition, the paddlers are positioned similarly. These two scenes are similar in composition, even though the minor figures are shown in different positions and the weir is a different shape. There is a proposed weir theme in Ptahshepses [41]; however, the surviving fragment does not lend to any comparisons.¹⁵¹⁴

¹⁵¹² It is clearer to see these chambers in the scene from Ty [35], yet the lower portions of the net in Niankhkhnum and Khnumhotep [27] also depict this feature.

¹⁵¹³ See Chapter 9, Weirs: Shape.

¹⁵¹⁴ See Chapter: Weirs 9: Fifth Dynasty, for further details.

Round Basket Trap Fishing

Unfortunately, many of the details from Ptahshepses [41] are lost, although what remains of the scene is like that of Niankhkhnum and Khnumhotep [27]. Commonalities include the weave on the baskets with no fish are visible within it, the traps attended by two men with similar arm positioning and similar individual characteristics. The example from Ptahshepses II [142] may have been similar to the damaged scene in his fathers' chapel (Ptahshepses [141]). It depicts a similar scene composition to that of Niankhkhnum and Khnumhotep [27] indicating possible influence or indeed the same artist(s) were responsible for the motif in all three tombs.

Funnel Trap Fishing

Interestingly, the funnel trap scenes in Ty [35] and Niankhkhnum and Khnumhotep [27] are very different. The artist executing the scene in Ty [35] has incorporated the entire process of setting the traps, trapping, and emptying the fish into baskets. Niankhkhnum and Khnumhotep [27] conversely only shows the traps which have been set.¹⁵¹⁵ This sequence of events is attested in all the remaining examples, suggesting that Ty [35] was the inspiration for future depictions occurring in Kagemni [94], Mereruka [103], Hesi [110] and Mehu [121]. In addition, while Ty [35] depicts one trap within the water, Niankhkhnum and Khnumhotep [27] shows them set in a series of three.

Papyrus Boat Construction

This theme occurs six times during the mid-Fifth Dynasty.¹⁵¹⁶ Most examples are found in Saqqara, except Kapi [30] who belongs to the Giza necropolis. The tombs of Kapi [30] and Akhethotep (Louvre) [31] are contemporary with suggested dates ranging from V.6-8E. Kapi's [30] example closely resembles that found in the earlier tomb of Iymery [20] at Giza.¹⁵¹⁷ That of Akhethotep (Louvre) [31], resembles the Saqqara example of Nefer and Kahay [18], with the inclusion of the papyrus gatherers, the minor figure pulling an individual stalk. Yet, other details may be sourced from the tomb of Iymery [20] with such inclusions as the use of Type G leg position for a figure in the boat and the appearance of a rope maker to the left of the boats. Ty's [35] date range extends slightly longer into the reign of Djedkare and shows the additions of wedges, and lunging middle constructors (Type G Leg position).¹⁵¹⁸ It is possible that the artists from these two tombs at

¹⁵¹⁵ Further details which are dissimilar include but are not limited to the weave on the traps, with fish swimming in and out of the traps.

¹⁵¹⁶ They are attested in the tombs of Kapi [30], Akhethotep (Louvre) [31], Hotephehaki [34], Ty [35], CG 1697 [37], and Ptahshepses [41].

¹⁵¹⁷ Both tombs share similar details of multiple boats worked on by several figures. Additionally, one of the prow/stern of the boats is shown as vertical in both scenes.

¹⁵¹⁸ See Appendix 4: Typology: Basic Leg Positions: Type G.

Saqqara, Ty [35] and Akhethotep (Louvre) [31], knew of each other's work or were colleagues. Regardless, it appears that the original source of the addition feature stems from the Giza tombs of Iymery [20] and Nebemakhet [8].

Coils of rope first appear in the scene from Nefer and Kahay [18], placed in the hull of the boat and held by a figure. They appear again in Hotepherakhti [34], CG 1697 [37] and in the scene from Akhethotep (Louvre) [31] but only in an adjacent rope making scene. The example in Hotepherakhti [34] is less extensive than previous scenes, with only one boat and three figures attending to it. It includes a papyrus puller grasping a single stalk as seen in Nefer and Kahay [18], Akhethotep (Louvre) [31] and Ty [35].

Spinning Cord

This rare minor theme is found in the tombs of Niankhkhnum and Khnumhotep [27], Hotepherakhti [34], and Ty [35] during this period. The examples are all situated within industrial or workshop activities. The image from Niankhkhnum and Khnumhotep [27] is elaborate, the artist depicting a minimum of five men working within the spinning cord scene; one of these is a seated spinner, another a unique standing spinner. Two other seated men appear to be knitting or repairing a net. The damaged scene from Hotepherakhti [34] shows a spinner with one leg extended forwards toward the pole that the cord is hooked over. This position is standard in many of the scenes, including Ty [35], for a spinner's toes are used to keep tension on the material.¹⁵¹⁹ The compositions of the scene however are different. As an example, Niankhkhnum and Khnumhotep [27] shows both spinning and knitting (net or otherwise) all overlooked by a supervisor. The smaller scenes in Hotepherakhti [34] and Ty [35] only show spinners, with Ty [35] also including a figure loading cord onto a shuttle. The unique elements in the scene suggests that while there may have been influence for the inclusion of the theme, the artists have both used the standards and individualised other details to create a unique scenario.

Observations

It appears there was competition between the artists of Niankhkhnum and Khnumhotep [27] and Ty [35] with the artists of Ty [35] trying to improve upon that of the slightly earlier tomb of Niankhkhnum and Khnumhotep [27]. The differences between the details of the common scenes suggests that there was a different workshop or artist(s) employed for each tomb, although there was great influence between them. It also appears that the scenes in Niankhkhnum and Khnumhotep [27] were a great inspiration at the time, which may have been superseded by Ty [35]

¹⁵¹⁹ See Chapter 19: *hsf nst* Spinning Cord: Spinner Limb Positions for analysis of this detail.

as the decoration was completed.¹⁵²⁰ While these tombs are the landmark tombs of this period, other influences were also occurring among other tombs. As seen in the section discussing papyrus boat construction the theme continues in both locations of Giza and more extensively at Saqqara. The scene from Kapi [30] is influenced by the pre-existing example found at Giza, and so too are the scenes from Saqqara influenced now by the previous occurrence in Nefer and Kahay [18]. Ty [35] however seems to draw inspiration from both locations and this perpetuates the key details of both sites for future attestations. It is clear that while smaller lines of influence are noticeable, it is the larger landmark tombs that push the continuation of the details into the next periods of the late Fifth and Sixth Dynasties.

The Late Fifth Dynasty

Scenes from the late Fifth Dynasty are inclusive of those that have been dated to the reigns of Djedkare and Unis (V.8-9). This period provides a considerable number of marsh and fishing themes.

Lave Net Fishing

Attested previously in the tomb of Niankhkhnum and Khnumhotep [27], this theme is also found in several later Fifth Dynasty tombs.¹⁵²¹ The scene in Niankhkhnum and Khnumhotep [27] depicts a singular lave net fisherman bent at the waist and scooping the net into the water. This basic motion is replicated in Nimaatre [60], Senedjem-Ib/ Mehi [76], Ptahhotep/ Thefu [75], and Ihy r/u Seshseshet/Idut [72]. However, others such as Kayemnofret (D23) [51], Akhethotep (D64) [58], Nimaatre [60], and Ihy r/u Seshseshet /Idut [72] have fisherman that stand vertically or lean backwards indicating the raising or the hauling of the net from the water's surface. Singular fishermen are present in the first few examples of the theme, as seen in Kayemnofret (D23) [51] Akhethotep (D64) [58], Senedjem-Ib/Inti [59]. Yet towards the latter half of the reign of Djedkare multiple figures appear in Nimaatre [60], Ptahhotep/ Thefu [75], and Ihy r/u Seshseshet/Idut [72]. Interestingly, there is still only a single figure in Senedjem-Ib/ Mehi [76] dated to the end of V.9, this may have been due to influence from the adjoining family tomb of Senedjem-Ib/ Inti [59]. Nimaatre's [60] scene is the point of development for both the addition of another lave net

¹⁵²⁰ This is evident in the correlations between the earlier themes in Niankhkhnum and Khnumhotep [27], Ptahshepses [41] and Ty [35], Pehenuika [32], Akhethotep (Louvre) [31] and Hotepherakhti [34]. Yet, similarities are also present between Akhethotep (Louvre) [31], Hotepherakhti [34] and Ty [35].

¹⁵²¹ Tombs of Kayemnofret (D23) [51], Akhethotep (D64) [58], Senedjem-Ib/ Inti [59], Nimaatre [60], Senedjem-Ib/ Mehi [76], Ptahhotep/ Thefu [75] and Ihy r/u Seshseshet/Idut [72].

fisherman to the boat and the other hauling positions for the figure, influencing examples both during this period and beyond.

There are no remains of any netting visible in Niankhkhnum and Khnumhotep [27], a detail that remains true for the remaining nets in this period, except that of Akhethotep (D64) [58]. In addition, there are only two examples that show fish inside the net; Kayemnofret (D23) [51] possibly has a single fish, and that of Ihy r/u Seshseshet/Idut [72] displays multiple fish filling two of its four nets.

Fish Preparation for Consumption Scenes

The example of this theme in Neferirtenef [52] may have been influenced by Niankhkhnum and Khnumhotep's [27] cooking scene.¹⁵²² They both show similar details: both scenes are associated with gutting and dehydration themes with similar accessories such as the seat, clothing, lack of genitalia and the artist has included similar captions. Yet, the method of cooking is different.¹⁵²³ The fan like cooking instrument seen in Neferirtenef [52] is more comparable to the fragmented scene in Ptahshepses [41], where it is assumed that the figure is roasting the fish rather than boiling it. If this is indeed the case, the use of the theme may have been influenced by Ptahshepses [41] instead, whose dating ranges to the end of the reign of Unis (V.9). Unfortunately, without more complete reliefs from Ptahshepses [41] this line of inquiry cannot proceed. The theme of roasting fish is again found in the tomb of Werirni [70], which may have been directly influenced by Neferirtenef [52] as the scenes are nearly identical. Compositionally the scenes from Neferirtenef [52] and Werirni [70] match with elements such as the combination of gutting and dehydration scenes, another figure cooking bread cakes and the method of cooking the fish.¹⁵²⁴ The placement of the figures in combination with these other elements close to a papyrus thicket also suggests the cooking was completed outside in a natural setting.

Gutting and Dehydration

This theme is found in several tombs during this period, mostly located at Saqqara.¹⁵²⁵ Neferirtenef [52] shares common details with the previous tombs of Niankhkhnum and Khnumhotep [27] and

¹⁵²² The closest in both time and location to Niankhkhnum and Khnumhotep [27]. Ptahshepses [41] is contemporary with Niankhkhnum and Khnumhotep [27] and is located at Abusir.

¹⁵²³ In the scene from Niankhkhnum and Khnumhotep [27] the figure is shown boiling the fish in a large cauldron; previously seen in the tomb of Nebemakhet [8].

¹⁵²⁴ The fish in both examples is held over a vessel or area containing possible hot coals or fire with the figure shown fanning the fish.

¹⁵²⁵ Inti [45], Neferirtenef [52], CG 1562 [53], Iynofert/ Shanef [63], Nikauhor [64], Khunes [67], Werirni [70], Nebkauhor/ Idu [73], Ptahhotep II/ Thefi [74], Mereri (Hassan Gutting) [79], Ptahhotep/ Iyniankh [80].

Ty [35], and the continuation of the standard features.¹⁵²⁶ Details which show a higher level of influence between the scenes include the associated cooking scene in Niankhkhnum and Khnumhotep [27] and the inclusion of fish within baskets in the gutting scene that is attested in Ty [35].

Werirni [70] and Neferirteneb [52] share many similarities in this theme. Details such as the natural setting, the use of a board and knife, as well as the arrangement of the fish carcasses in front of the gutter. The fish in both are highly detailed with spines, dorsal and caudal fins. Other scenes from this period include the fragmented images from Nikauhor [64], Khunes [67], Iynofert/ Shanef [63] and Ptahhotep/ Iyniankh [80], each showing a large seat beneath the gutter. This type of seat is used often in the latter Fifth Dynasty, yet not frequently either before or after.¹⁵²⁷ This may suggest that there was influence between these tombs at this stage, and that the detail came into and fell out of fashion.

Three examples, CG 1562 [53], Nikauhor [64], and Nebkauhor/ Idu [73] all contain extra figures that appear to be inspecting or buying the freshly dehydrated fish. The figure is shown standing and holding the fish carcasses in each hand. The examples CG 1562 [53] and Nebkauhor/ Idu [73] also include a seated figure with a staff possibly in charge of inspecting the gutters' work. Interestingly, this detail is found twice in Saqqara and once at Giza, where it may be possible that the same artist was working on Nebkauhor/Idu's [73] tomb or knew of the detail in the Saqqara tombs.

Papyrus Boat Construction

The inclusion of papyrus boat construction scenes soared during this period with eleven known examples.¹⁵²⁸ The majority of these are found in Saqqara, but there are several known from sites such as Giza, Deshasha, Zawyet el-Maiyetin, Sheikh Said and El- Hawawish. A scene from the tomb of Kayemnofret (D23) [51] is damaged possibly due to alterations made to the scene in antiquity.¹⁵²⁹ A singular boat is represented with four men shown in a variety of positions with a supervisor overseeing the task. The composition is slightly different, as there are no men shown

¹⁵²⁶ These include a combined scene of gutting and dehydration, gutting and whole fish presentation; and randomly placed fish carcasses (Neferirteneb [52] does not include roe). The gutters are in a similar position.

¹⁵²⁷ See Chapter 13: Gutting and Dehydration: Seats and Appendix 2: Gutting and Dehydration Detail Table H.

¹⁵²⁸ Inti [45], Kayemnofret (D23) [51], Hesimin (M22) [56], Akhetotep (D64) [58], Senedjem-Ib/ Inti [59], Nebet [62], Khunes [67], Werirni [70], Ihy r/u Seshseshet/Idut [72], Nebkauhor/ Idu [73], and Ptahhotep II/ Thefi [74].

¹⁵²⁹ Simpson, *Kayemnofret*, 6, Fig. 3 and 4.

with legs outside the boats, nor evidence of papyrus gatherers. The supervisors are the only common factor aside from other standard features. They are found in examples from Ty [35] (partial) and Nefer and Kahay [18], Iymery [20] and Nebemakhet [8].

A standard of scene composition developed in this period with the boat construction scene and the papyrus gatherers shown on separate registers.¹⁵³⁰ This separation may stem from the scene in Ty [35] which depicts the papyrus pullers in the register on top of the boat construction scene. Memphite scenes from Akhethotep (D64) [58] and Nebet [62], are located at Saqqara near the tomb of Ty [35]. The other examples are from provincial sources, which suggests that the scenes from Ty [35] and most likely Akhethotep (D64) [58] were sources of inspiration for tombs outside of the Memphite capital.

A few scenes, in Hesimin (M22) [56], Senedjem-Ib/ Inti [59], and Ihy r/u Seshseshet/Idut [72], continued to depict the construction and gathering of papyrus combined. These perhaps drew inspiration from the older scenes of Akhethotep (Louvre) [31], Nefer and Kahay [18], or Irenkaptah [22]. Hesimin (M22) [56] particularly may have been directly influenced by Akhethotep (Louvre) [31] as there are minor figures tying cord in the centre of the hulls positioned like those found in Akhethotep (Louvre) [31] and also in the earlier tomb of Iymery [20].

The compositional similarities between Werirni [70] and Khunes [67]¹⁵³¹ suggest direct influence between these tombs as there are a number of replicated details. These include the bunches of papyrus all depicted upside down.¹⁵³² The bearing with which these bunches are carried is also similar with the men not only carrying the papyrus on their back but also alongside the body with arms wrapped around the bunch. The postures of the men themselves are slightly dissimilar with the men in Khunes [67] mostly vertical, while those in Werirni [70] show similarity to the men in

¹⁵³⁰ Attested in the tombs of Akhethotep (D64) [58], Werirni [70], Khenut [68], Khunes [67], and Nebet [62].

¹⁵³¹ In the excavation report Davies (Davies, Sheikh Said, 15) suggests that the tomb decoration programme of Werirni [70] at Sheikh Said (V.9) is almost an exact replica of that of Khunes [67] (V.9) located at Zawyet el Maiyetin, approximately 49 kilometres away. These two tombs share four common themes; a Fishing / Fowling scene, Gutting and Dehydration Scene, a Dragnet scene and a Papyrus Boat Construction scene. Davies statement on the possibility that the same decoration programme was used for both tombs and that the artists was the same, a sculptor by the name of Ptahkhuu, is tentative. The expectation of more common details is greater than what has been identified. This may suggest that the artists that worked on the tomb were closely linked, even a part of the same team or workshop, sharing the ideas and the decoration programme between them. There are other scenes in this tomb that appear more convincing, such as the harvest scenes, however the author at this stage has not completed a minor detail analysis to definitively prove that they contain any signature for a specific artist.

¹⁵³² Single upside-down bunches of papyrus are attested in Akhethotep (Louvre) [31], Senedjem-Ib/ Inti [59], Niankhneseut [99].

Ty [35], bent at the waist and less rigid. Coils of rope are depicted beneath the captions in both scenes.

Bearers and Transportation of Fish

The complexity and fluctuating compositions of this theme cause the many variations within the scenes considered to be standards. Yet a few details show individualising and some influence among tombs. One of these, the use of a basket hung upon a pole, seen in the earlier scenes of Ramaka [28] and Akhethotep (Louvre) [31], is again attested in the late Fifth Dynasty tombs of Kayemnofret (D23) [51] and Nebet [62]. Kayemnofret (D23) [51] also depicts two unusual arm variations, the first showing one arm raised to hold a short pole, a position attested in the earlier scenes of Rakhaefankh [26], Akhethotep (Louvre) [31] and the contemporary tomb of Inti [45]. The second depicts the figure casually suspending an arm over the pole on his shoulders (BA.1). This is only attested once before in the tomb of Rakhaefankh [26] and again in the Sixth Dynasty tombs of Meryteti/ Meri [116] and Ibi [130].

Dragnet Scene

Floats positioned on their sides are found in the earlier tombs of Niankhkhnum and Khnumhotep [27], and Pehenuika [32], but also appear in Nikauhor [64] dated to the reign of Unis. All of these tombs are located at Saqqara with a date range of V.6 – 9 (approx. 60 yrs.). The use of this detail in Nikauhor [64] suggests that the artists drew inspiration from one or both of the pre-existing tombs. It is most likely that the inspiration was drawn from the tomb of Pehenuika [32] as they are both located in the same cemetery (north of the Step Pyramid) and depict other similar details.¹⁵³³ Further modification to the floats is depicted in the tombs of Akhethotep (Louvre) [31], Ty [35], Kaemrehu [47] and Sekhemka [48]. In these depictions, the float is shown upside down encroaching on the dragnet, the latter two scenes probably influenced by the earlier grand tombs of the mid Fifth Dynasty. The scenes of Akhethotep (Louvre) [31] and Sekhemka [48] have almost identical details although these are not limited to the structure of the scene. Minor details include the type of kilt (pleated),¹⁵³⁴ the interactive rope around the head of the supervisors, coiled rope ends, and an absence of fish in the tips of the net.

The inclusion of tips of the net above water is standard for this period and the inclusion of a *Mugil* sp. within the theme is frequent among the late Fifth Dynasty scenes. The earlier attestation of this

¹⁵³³ Such as a gutting scene within the same register, end hauler in a lunge position (Type G), team members shown in opposition to each other, and a *Mugil* sp. entering the tip of the net.

¹⁵³⁴ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

is found in the tomb of Pehenuika [32] (V.6-8E) and then replicated in Werirni [70], Nikauhor [64], Kairer [66], and Ihy r/u Seshseset/Idut [72]. As mentioned above there appears to be some influence from Pehenuika [32] in Nikauhor [64] with regard to floats and therefore it may have inspired the appearance of a *Mugil sp.* in the tips of nets, along with other artistic factors as discussed in the main chapter.¹⁵³⁵

As mentioned earlier, in the tomb of Khufukaef II [21] (dated to V.6) a boat is shown as an aid for the hauling of the dragnet. This addition is again attested in the tombs of Inti [45] and Kaiemheset [84] during the latter half of the dynasty. The example from Inti [45] depicts a clear division between the boat and the onshore haulers. The boat is occupied by two haulers and several paddlers, all being directed by a team leader or supervisor. This is the same composition as in Kaiemheset [84]. Three of the oarsmen depicted in Inti's [45] example and two in Kaiemheset's [84] are shown positioned in the same way, standing with one knee lifted perpendicular to the body. This similarity implies direct influence between these two tombs, which may have been decorated at the same or similar times.¹⁵³⁶

Hippopotamus and Crocodile Interactions

A scene from Nebkauhor/ Idu [73] depicts a crocodile being attacked by a hippopotamus. This is not the first attestation as this motif is found in the earlier tomb of Ty [35].¹⁵³⁷ Its rare use, however, especially during the Fifth Dynasty suggests that there was influence between the tombs of Ty [35] and Nebkauhor/ Idu [73].

Observations

The above analysis is but a small sample group of the possible interactions and influences among the tombs of this period. The key tombs that appear are Neferirtenef [52] and Kayemnofret (D23) [51], with Neferirtenef [52] often regarded of as a landmark tomb. The details in this tomb certainly show that it drew strong influences from the earlier tombs such as Niankhkhnum and Khnumhotep [27] and Ty [35], and that it too incorporated many of the less common themes and details. Suddenly the scenes from Akhethotep (Louvre) [31], Pehenuika [32], and others appear to be just as influential or, at least, as much a stepping stone for the perpetuation of details as Niankhkhnum and Khnumhotep [27] and Ty [35] were. There is a grouping of tombs where all seem to exhibit

¹⁵³⁵ See Chapter Dragnets 4: Fish in the tips.

¹⁵³⁶ This similarity may help to further define Kaiemheset's [84] date range. Inti [45] V.8, Kaiemheset [84], V.L.

¹⁵³⁷ It is also found in the Sixth Dynasty tombs of Kagemni [94], Mereruka [103], Inumin [111], Mehu [121], Khentika [124], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Idu / Seneni [138].

many common details.¹⁵³⁸ It may be inferred that the decorative programs for these tombs followed the fashionable trend of the time, possibly originating from the same workshop with artists moving from site to site. The provincial examples from this time rely heavily on the features attested in Saqqara. This suggests that the artists were travelling from the capital to execute the works at these locations. They may have themselves worked within Memphite tombs and thus used that knowledge in the provincial sites. It is also clear that even during this period there is influence among provincial tombs, as seen in the case of Werirni [70] and Khunes [67].¹⁵³⁹

The Sixth Dynasty: The Reigns of Teti and Pepy I

Dragnet Scene

Certain details included in dragnet scenes in Kagemni [94] suggest a connection with Ihy r/u Seshseshet / Idut [72]. While some of these are, standard or appear frequently,¹⁵⁴⁰ the floats are a detail which may imply a stable connection between the tombs. Kagemni's [94] example includes a small rectangular addition to their base, a stabilizer or weight which would partially submerge the float. This is previously seen in the tomb of Ihy r/u Seshseshet / Idut [72] and while there are no further attestations in the Sixth Dynasty, it is found in four other mid to late Fifth Dynasty tombs, namely Nefer and Kahay [18], Rakhaefankh [26], Ptahshepses [41] and Sekhemka [48]. Given the dates of these occurrences it is plausible that the influence was from the tomb of Ihy r/u Seshseshet/Idut [72]. Mereruka [103] also incorporated many of the details described¹⁵⁴¹ and yet it is clear that the inspiration for the dragnets came from Kagemni [94]. Some of the haulers are shown with their foot raised and resting on the thigh or the ankle is wrapped around the back of the knee. This is not known in dragnet scenes prior to Kagemni [94], and is only again seen in the scenes from Mereruka [103], his wife Watetkhet-Hor/ Seshseshet [104] and finally Inumin [111].¹⁵⁴²

Nikauisesi's [101] dragnet scene depicts a number of unique or rare features: the arms of haulers are extended in front of the torso and curved as to replicate the curvature of the rope from the

¹⁵³⁸ Namely Inti [45], Kayemnofret (D23) [51], Akhethotep (D64) [58] Hesimin (M22) [56], Khunes [67], Ihy r/u Seshseshet/Idut [72], Nebkauhor/ Idu [73] and Neferirtenefer [52].

¹⁵³⁹ See ft. [1531].

¹⁵⁴⁰ Elements such as the use of floats and sinkers, the shape of the net and the tips of the net depicted above the water line. In addition, there are similar leg positions such as leaning back (Type C Leg Position) and striding (Type B Leg Position), the use of harnesses, and the depiction of a *Mugil sp.* within the net tips.

¹⁵⁴¹ Floats (minus the stabilizer), sinkers, tips above the water including fish, hauler positions, harnesses etc.

¹⁵⁴² As stated in Chapter 4: Dragnets: Leg Positions; Ptahhotep/ Iyniankh [80] is also shown with the leg raised above the register base line; however, the foot is not wrapped around the knee or resting on the thigh and therefore is not counted in this instance.

dragnet. This gave an oval appearance to the scene which was achieved by depicting arms and shoulders in awkward positions. The rare placement of a *Synodontis* in the tips of the net, only seen previously in the earlier tomb of Ty [35], is also featured in this scene. On the other hand, the dragnet has one of the last examples of oval sinkers in the Sixth Dynasty with inspiration possibly coming from Kagemni [94], Niankhnesut [99] or even the earlier tomb of Neferirtenef [52]. The supervisor depicted in the scene gestures towards the men, a detail that is previously seen in the tomb of Iynofert/ Shanef [63], Niankhkhnum and Khnumhotep [27] and Sekhemkare [13].

The dragnet scene of Nikauisesi [101] may be both compared and contrasted with those of his contemporaries and near contemporaries. For example, the dragnet scenes of Nikauisesi [101] and Inumin [111], his apparent successor¹⁵⁴³ are very different in their composition, although they do share certain small details such as the fish in the dragnet forming a single line rather than the multiple lines of Watetkhet-Hor/ Seshseshet [104], Hesi [110] and Mereruka [103]. On the other hand, Nikauisesi's [101] haulers are unique in their postures, whereas Inumin's [111] haulers are more comparable to Mereruka's [103].¹⁵⁴⁴ In addition the exclusion of vegetation at the haulers' feet is also dissimilar to the scenes in Watetkhet-Hor/ Seshseshet [104] and Hesi [110]. The supervisors of these tombs, as well as Inumin's [111], are shown in similar positions and wear a herdsmen's kilt rather than a pointed kilt like that in Nikauisesi [101].¹⁵⁴⁵ The floats from Inumin [111] are comparable to those of Hesi [110] with the definition of the lotiform shape not as pronounced (or not at all in the case of Inumin [111]) as that from Nikauisesi [101].

A minor detail in dragnet scenes is the addition of vegetation on the banks of the Nile where the haulers are positioned. This is first attested in the tomb of Ty [35] in the mid Fifth Dynasty, with a partial image of a single plant found between the legs of a hauler. This detail does not appear again until the early Sixth Dynasty tomb of Watetkhet-Hor/ Seshseshet [104] and then in the tombs of Hesi [110], Henqu/ Iy...f II [120] and Pepyankh/ Heri-Ib/ Neferka / Heny [131]. The amount of vegetation increased in the Sixth Dynasty and multiple bushes were depicted between the legs of the haulers along the entire length of the dragnet scene. The use of the vegetation in this way suggests that there was interactive influence in the Sixth Dynasty. The detail also extends into the provincial regions of Deir el-Gebrawi and Meir. The rarity of the attestations in the provinces suggests that the artist was privy to the scenes at the capital and chose to incorporate this element.

¹⁵⁴³ Kanawati-Abder- Raziq, *Teti Cemetery VIII*, 16-17.

¹⁵⁴⁴ They do not continue the detail of the lifted leg.

¹⁵⁴⁵ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing; See Chapter 4: Dragnets: Clothing.

In addition, it is possible that the artist had viewed the earlier scene in Henqu/ Iy...f II [120] at Deir el Gebrawi prior to executing Pepyankh/ Heri-Ib/ Neferka / Heny's [131] scene at Meir.

Crocodile Behaviour

This period saw the development of depictions of crocodile behaviour including the eating crocodile occurring in four examples, namely Kagemni [94], Khnumenti [98] Mereri [108], and Mehu [121]. There may be a depiction in Hesimin (M22) [56] from the late Fifth Dynasty, but it cannot be confirmed owing to the poor preservation of the scene. In all the examples of this behaviour, the fish are swallowed head first. However, the second images of this motif that occur in the tombs of Kagemni [94] and Mehu [121] depict the crocodile with multiple fish, one of which is reversed, in its mouth. Kagemni's [94] crocodile is slightly damaged yet it shows a possible *H. bebe*, or *P. bane* with the tail swallowed first. There are two other fish near the mouth of the crocodile, their heads depicted behind the body of the *H. bebe/P. bane* possibly indicating that they have been caught. The crocodile in Mehu [121] has two fish clearly placed within his mouth, one of which, a *Gnathonemus*, is swallowed tail first. The minor details surrounding this motif differ for these two attestations, yet the replication of the idea implies influence between them.¹⁵⁴⁶

The established motif of a hippopotamus attacking a crocodile is found in the scenes from Inumin [111], Mehu [121] and Khentika [124], as well as the provincial tombs of Pepyankh/Heri-Ib/ Neferka/ Heny [131] and Idu/ Seneni [138]. The standard depiction includes the crocodile body trapped within the powerful jaws of the hippopotamus.¹⁵⁴⁷ The scenes in Ty [35], Mereruka [103], Inumin [111], Pepyankh/Heri-Ib/ Neferka/ Heny [131] and Idu/ Seneni [138] appear visually similar as they all show the crocodile being lifted out of the water.¹⁵⁴⁸ Within these examples Ty [35], Mereruka [103], Inumin [111] and Idu/ Seneni [138] show the underside of the crocodile in the mouth of the hippopotamus, the tusk is visible piercing the body in Ty [35] and Mereruka [103]. The artist who executed the example in Mehu [121] may have deliberately depicted the crocodile at a smaller scale to keep the animal under the water. This deliberate attempt also occurs in Kagemni [94], the hippopotamus holding the full scale, yet stunted the body of the crocodile awkwardly in order to keep the snout from breaching the water's surface.

¹⁵⁴⁶ Other details slightly differ; the other fish in the scenes are not the same, teeth are visible in Kagemni's [94] crocodile only, the crocodile in Mehu [121] has a bony mask visible (consistent with other representations in the tomb) and the positioning of the crocodile's front legs are different.

¹⁵⁴⁷ Ty [35], Mereruka [103], Inumin [111], Mehu [121], Khentika [124], and Pepyankh/Heri-Ib/ Neferka/ Heny [131].

¹⁵⁴⁸ The damaged scene from Khentika [124] may also show the crocodile above the water line however this section is not preserved.

lhy r/u Seshseshet/Idut [72] includes the first known attestation of a hippopotamus giving birth with the addition of crocodile awaiting the arrival. This motif is repeated in the tomb of Kagemni [94]. Kagemni's [94] artist extended the motif with another hippopotamus depicted attacking the crocodile, also depicted in Mereruka [103].¹⁵⁴⁹ These behaviours are later found in the early Sixth Dynasty tombs of Iteti / Shedu [97], Ankhmahor [102], Hemre/Isi I [107], and Mereri [108], all of which follow the typical arrangement of the hippopotamus standing in front of a crocodile with a small calf emerging from the birthing canal. The crocodile's snout is not far from the calf in all representations. There are two representations in the Sixth Dynasty which show this motif without a crocodile, one attested in Kagemni [94] (a second representation) and the other in Seankhuptah [106], both located in the Teti cemetery.

Turtles

The depictions of turtles occur in two tombs of the early Sixth Dynasty, namely Hesi [110] and Mehu [121]. The animals are rendered with the same characteristics highlighting the unusual shaped head and snorkel of the native species of the *Trionyx triunguis*. The behaviours of swimming and copulating are portrayed three times in Hesi [110]. The two examples of this species found in Mehu [121] are shown swimming only. The exclusive depiction of the animal in these two tombs suggest that there was artistic influence between them.

Papyrus Boat Construction

Five examples of papyrus boat construction known to exist in the Sixth Dynasty are found in the tombs of Kagemni [94], Niankhnesut [99], Seshemnofer/ Ifi [134], and in the provincial tombs of Kahep/ Tjeti-Iker [140] and Neheri [151]. Only the first two of these dates to the period of Teti and Pepy I, but the use of the scene by Seshemnofer/ Ifi [134] and the provincial tombs suggests that the influence of these early tombs reached these sites at later times. The depiction in Kagemni [94] portrays a standard scene with a slight variation occurring in men who are seated or kneeling whilst tying the ropes. Their lower leg does not rest along the hull as is typical, and the artists have lifted it to run parallel to the thigh. The example known in Niankhnesut [99] is much smaller than Kagemni's [94], and it also includes a figure holding coils of rope attested previously in the fragment CG 1697 [37] dated to V.6-8.

¹⁵⁴⁹ Other examples of the birth of a hippopotamus are known in G2360 [87] (damaged), Iteti/ Shedu [97], Ankhmahor [102], Seankhuptah [106], Hemre/ Isi I [107], Mereri [108]. The crocodile being attacked by the hippopotamus is attested in Ty [35], Nebkauhor/ Idu [73], Kagemni [94], Mereruka [103], Inumin [111], Mehu [121], Khentika [124], Pepyankh/ Heri-Ib/ Neferka/ Heny [131], and Idu / Seneni [138].

The surviving details of the depiction found in Seshemnofer/ Ifi [134] are compositionally very different from all previous examples. The figure to the right appears to be holding a very tall prow/stern curling it inwards. The figure behind him leans over to the hull, tying a rope around what appears to be the end of the boat (no prow/stern present), reminiscent of the boats shown with only one prow or stern.¹⁵⁵⁰

Cord Spinning and Net Reparation

This minor scene continues into the early Sixth Dynasty with four examples from the tombs of Ankhmahor [102], Wedjahateti/ Neferseshemptah/ Sheshi [112], Mehu [121] and Seshemnofer/ Ifi [134]. The remaining details from the industrial scene in Ankhmahor [102] are unfortunately only the legs and feet of the spinners. These details are identifiable as this theme owing to the position of the legs, which are standard, and the remains of the spindles held in the hand beside the thighs.¹⁵⁵¹ In contrast, the figure in Wedjahateti/ Neferseshemptah/ Sheshi [112] appears in a natural setting, as is the following example in Mehu [121] which also shows a figure possibly constructing a net.¹⁵⁵² Conversely, the figure in Seshemnofer/ Ifi [134] who is repairing a net appears to be in a workshop setting. There is a change in the representation of the cord/net maker between the Fifth and Sixth Dynasties, the most dominant task for this craftsman becoming the repair of netting rather than the spinning of cord after the scene from Ankhmahor [102].

Markets

Only one market scene, in the tomb of Ankhmahor [102] from the Sixth Dynasty, includes fish. The scene is vibrant with two merchants situated at the opposite sides of the large baskets in front of them. On the left the merchant is selling gutted fish, while a second scene in the tomb depicts the seated merchant holding a gutted fish out towards a buyer. Compositionally, all known market scenes are slightly different, however the scene from Ankhmahor [102] closely resembles that from Niankhkhnum and Khnumhotep [27]. Interestingly, whole fish carcasses are absent, although found in the three previous tombs of Niankhkhnum and Khnumhotep [27], Fetekta [25] and Tepemankh (II) [17].

¹⁵⁵⁰ Type C Boat Structure, see examples from Ibi [130] (Lave Net Scene), Ty [35] (Angling), Seshemnofer IV [77] (Angling), Ihy r/u Seshseshet/Idut [72] (Angling/Lave Net), G2360 [87] (Angling), Kagemni [94] (Weir).

¹⁵⁵¹ See Chapter 19: *hsf nwt* Spinning Cord for standard details for Leg positions and standard inclusions for this scene.

¹⁵⁵² Based on the implement that he is shown using (Knitting needle) See Chapter 19: *hsf nwt* Spinning Cord: Equipment.

Funnel Trap Fishing

Funnel traps are depicted five times in the Sixth Dynasty, four of which within the period VI.1 and VI.2. The scene from Kagemni [94] is compositionally similar to the previously known scene from Ty [35] with one funnel trap set and occupying the entire width of the water band. Included with this trap are the attendants, an additional boat transporting fish and men emptying the trap. Mereruka's [103] artists have changed the method for the setting of the traps with the process occurring completely from the boat.¹⁵⁵³ This scene also uniquely shows a figure tying the end of the trap whilst still in situ. This scene is the second illustration to show the traps in series, the first occurring in Niankhkhnum and Khnumhotep [27] with traps set in opposing configurations of two rather than the three.

The trap configuration of Mereruka [103] is replicated in Hesi's [110] scene with two sets of three traps positioned in opposition. There are activities performed from a boat as seen in Kagemni [94] and Mereruka [103], however there is more compositional similarity with Mereruka [103], especially the transference of fish into baskets on the boat. Mehu [121] has followed the composition of Kagemni [94] with elements such as using a boat for the transportation of fish in baskets, the emptying of the traps on shore and most importantly the single trap that covers the majority of the water band. The scene has been further embellished with the addition of drying traps and a second trap emptier.¹⁵⁵⁴

Lave Net Fishing

Lave net fishing also occurs in Mereruka's [103] tomb, the scene is unique with four fishermen performing the activity as a group. Four also appear, but individually, in Ihy r/u Seshseshet/Idut [72] and two in Kagemni [94]. In general, the scenes which include the anglers from Ihy r/u Seshseshet/Idut [72] and Kagemni [94] are similar. This combination occurs in other tombs such as Kahep/ Tjeti-Iker [140], Shepsipumin/ Kheni [147], and Pepyankh/ Henykem [146]. The common details between Ihy r/u Seshseshet/Idut [72] and Kagemni [94] include the opaqueness of the net,¹⁵⁵⁵ the positions of the fishermen (those using scooping motion), and the frame structure (Type V)¹⁵⁵⁶ including a yoke. Mereruka's [103] scene shares many of the common elements such

¹⁵⁵³ The elements of the traps in the water and the emptying of the traps are still present; standards from the scene that have already been established in the previous dynasty. See Chapter 7: Funnel Traps: Trap Placement.

¹⁵⁵⁴ However, the damaged portion of the scene from Kagemni [94] may also have depicted these elements.

¹⁵⁵⁵ All except two nets in Ihy r/u Seshseshet/Idut [72].

¹⁵⁵⁶ See Chapter 6: Lave Nets: Lave Net Frame.

as the structure and yoke, and positions held by the fishermen (both scooping and hauling).¹⁵⁵⁷ In addition the visible fish in the net of Mereruka [103] are also seen in Ihy r/u Seshseshet/Idut [72]. Direct influence may be inferred between Ihy r/u Seshseshet /Idut [72] and Mereruka [103] by the inclusion of a fish jumping free of the net, which is unique to these two tombs.

Observations

It is difficult to pinpoint any line of direct influence between the tombs of this period. Standard details, now well established, and the frequency themes create multiple examples which are all visually comparable. The inclusion of one or two rarer details is notable and may imply that these details were requested or perhaps applied by an artist who worked on specific sections in both tombs. An example may be the depiction of turtles in the water bands in the contemporary scenes of Hesi [110] and Mehu [121] by the artist specifically ascribed to these sections. The image of a net being repaired in Wedjahateti/ Neferseshemptah/ Sheshi [112], Mehu [121] and Seshemnofer/ Ifi [134] may have been completed by the same artist or workshop. Ankhmahor's [102] scene composition followed the earlier models with the figures spinning cord which may infer a change in trend or artist/ workshop.¹⁵⁵⁸

Kanawati states that Inumin [111] is possibly the successor to Nikauisesi [101] and that their tombs resemble each other.¹⁵⁵⁹ He suggests the possibility of a master artist who has executed or been involved in both tombs, or that they have been greatly influenced from one source, namely Mereruka [103].¹⁵⁶⁰ In the comparison of these minor details it would appear that there was a stronger influence from Mereruka [103] on both tombs rather than direct influence from Nikauisesi [101] to Inumin [111]. The differences in the execution of the details in the latter two tombs support this. Nikauisesi [101], as mentioned, had an artistic style which freely modified elements to enrich or diversify the scene, Inumin's [111] details appear more typical for the time.

There appears to be a direct relationship between the tombs of Kagemni [94] and Mehu [121]. These tombs date to VI.1E and VI.2 respectively, although Mehu [121] may have begun construction on his tomb during the very late Fifth Dynasty.¹⁵⁶¹ In addition to this, we are aware that he also served Pepy II (VI.2) as his titles include connection to the priesthood of the pyramid of Pepy II. This suggests that the tomb spanned the period of V.9-VI.2 and would have been

¹⁵⁵⁷ See Chapter 6: Lave Nets: Minor figure positions.

¹⁵⁵⁸ See Firth and Gunn: Spinning cord [93], Ty [35], Hotepherakhti [34], Niankhkhnum and Khnumhotep [27].

¹⁵⁵⁹ Kanawati- Abder-Raziq, *Teti Cemetery VIII*, 16-17.

¹⁵⁶⁰ Kanawati- Abder-Raziq, *Teti Cemetery VIII*, 16-17.

¹⁵⁶¹ Supported by the placement of the tomb in the Unis cemetery.

decorated at the same time or close to as that of Kagemni [94]. There are several comparable details between the two; as mentioned above, they both have a scene of registering the catch, a weir scene and a trap drying scene. Further to this the inclusion of two crocodiles eating, among other interactions,¹⁵⁶² is notable.

Tomb scenes from the reign of Pepy II till the end of the Old Kingdom in the Memphite region

After the reign of Pepy I, the most important and richest tombs were located in the provincial regions in which they held power. There are only a limited number of tombs found in the Memphite region which include marsh scenes.

Spearfishing

Found in Meryrenefer/Qar [133], Cairo Fragment 6.12.24.5 [152], Duahep [155], Mastaba B [156], and MFA 13.5965 [165] the spearfishing theme is still considered one of the most attested scenes during this time.¹⁵⁶³ The details from Meryrenefer/ Qar [133] are fragmented but parts of the water band and an attendant carrying a fish on a sub register behind where the tomb owner would be situated, both standard elements in this theme, have survived.

The Cairo Fragment 6.12.24.5 [152] depicts the rare motif of a minor figure spearfishing in front of the tomb owner. There are only a few other tombs in this dynasty which depict this detail in the Memphite area, namely Remni/Merwi [109] and Heri/ Meru [118] located at Saqqara, Nekhebu [119] at Giza and provincial examples of Niankhpepy/ Khnumhotep/ Heti [123] at Zawyet el-Maiyetin, and Ibi [130] at Deir el-Gebrawi. It is difficult to draw comparisons between these scenes as Heri/Meru [118] and Nekhebu [119] have suffered substantial damage. However, there are similarities such as the inclusion of the fish in the large water mound which is not the case for the provincial example of Niankhpepy/ Khnumhotep/ Heti [123] nor Ibi [130] as the water mound is restricted to the speared fish.

Dragnet Scene

Dragnets are found in two examples from this period, the fragment London British Museum No. 994 [135] and Kahif [139]. The fragment London British Museum No. 994 [135] uses a boat as part

¹⁵⁶² Including hippopotami attacking a crocodile, a crocodile awaiting the birth of a hippopotamus, and mating crocodiles.

¹⁵⁶³ Unfortunately, there is no visual record of the scenes from Duahep [155] and Mastaba B [156] and the descriptions mentioning the theme are without the level of detail needed for this comparison. See Volume 2: Prosopography: Duahep [115] and Mastaba B [156]. The fragmented nature of MFA 13.5965 [165] also prevents it from a comparative analysis in influence.

of the hauling process. There is one other example of the method being performed via boat attested in Djau [141].¹⁵⁶⁴ The details from London British Museum No. 994 [135] are comparable to Khufukaef II [21] (V. 6) with a team of haulers within a boat.¹⁵⁶⁵ Djau's [141] example is unique as it is the only dragnet scene entirely performed from a single boat. The dragnet teams in Kahif [139] do not use a boat and the scene is reminiscent of the standard mid Fifth Dynasty scenes from Iynofret [19] and Neferirtenef [52].

Observations

The use of spearfishing extends to both Upper and Lower Egyptian sites across all periods, yet the inclusion of the minor spearfisher is seen rarely and is attested equally in both Memphite and provincial sites. The small number of attestations, makes analysis of the sources of influence impractical. The detail available in the dragnets scenes appears to show that the artists were looking locally for inspiration as they have used details from earlier tombs in the region and composed them similarly.

¹⁵⁶⁴ See previous discussion: Mid-Fifth Dynasty and Giza and Saqqara: *Dragnets* in this chapter, for examples dated to the Fifth Dynasty: Khufukaef II [21], Inti [45] and Kaiemheset [84].

¹⁵⁶⁵ There is a supervisor on board with the men facing all directions, Type A boat structure and harnesses.

Chapter 21: Artistic Influence and Innovation Part II: The Provinces



The painter Kaiemtjenet on the prow of the boat of
Pepyankh/ Heri-Ib/Neferka/Heny [131]

Connections between the Memphite region and provincial examples

There are multiple connections between the Memphite region and the provincial sites, some of which have been highlighted in the previous chapter (Chapter 20). As has been stated, the earliest tombs from the provincial regions, such as Serfka [49], Inti [45], Hesimin (M22) [56] and others,¹⁵⁶⁶ have a strong connection to the traditions of the Memphite tombs due to the deployment of artists from the capital to execute the art. Influence may have also returned from some provincial tombs to the capital, as will be discussed.¹⁵⁶⁷

Lave Net Fishing

Connections between the later tombs of the Sixth Dynasty and those of the Memphite region occur in the lave net scenes of Ibi [130], Djau [141] and Pepyankh/Henykem [146]. Several details such as standard features¹⁵⁶⁸ as well as the placement of fish within the net and the use of net patterning are also present in the Memphite scenes of Akhethotep (D64) [58], Kagemni [94] and Mereruka [103]. Scenes attested in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] also include the netting detail but no fish are present. As discussed in the chapter on lave net fishing, the appearance of the theme in Ankhtyfy [148] may either show a connection to the capital or that the theme was sourced from more local provinces depending on the date of construction.¹⁵⁶⁹ It is most likely that the use of the net with fish may have been sourced from the closer provincial examples of Ibi [130], Djau [141] or Pepyankh/Henykem [146].

Funnel Trap Fishing

The tomb of Ibi [130] also includes a funnel trap, found in earlier Memphite tombs.¹⁵⁷⁰ The representation is unusual and similar to the image found in Mereruka [103], although less detailed. These two scenes are the only depictions showing a figure setting the traps by boat, and manipulating the tethering base.

¹⁵⁶⁶ Khunes [67], Werirni [70], Iteti/ Shedu [97], CG 1782/1786 [95].

¹⁵⁶⁷ See Hesimin (M22) [56]. The possible first appearance of an eating crocodile, and the depiction of a minor figure spearfishing from the tomb owner's boat. This is only seen once previously in the tomb of Seshemnofer IV [77].

¹⁵⁶⁸ See Chapter 6: Lave Nets. See Also Appendix 2: Lave Net Detail Table A-M.

¹⁵⁶⁹ See Chapter 6: Lave Nets: Net Detailing.

¹⁵⁷⁰ Such as Mehu [121], Hesi [110], Mereruka [103], Kagemni [94], Ty [35] and Niankhkhnum and Khnumhotep [27].

Papyrus Boat Construction

The provincial scene of Kahep/ Tjeti-Iker [140] is similar in composition to those in the Memphite area such as Ptahhotep II/ Thefi [74] and Akhethotep (D64) [58].¹⁵⁷¹ The men are shown standing in and outside of the boat and semi kneeling (Type E leg position) on the hull. The boats however are very different with minimal curvature to the ends, making them appear to be more like rafts. This style is not attested previously nor in the following example from Neheri [151] but it reflects that used for other boats on this wall, as seen in the fighting boatmen scene above it. Neheri's [151] example is only a fragment, showing a shallow boat with two figures tying ropes in typical positions. Wooden wedges are included under the boats although not present in Khunes [67], which is an earlier example from the same site dated to V. 9. The knowledge for the inclusion of the wedge may have been sourced from earlier examples such as Niankhnesut [99], Kagemni [94] Nebkauhor/ Idu [73] or earlier examples.¹⁵⁷² Alternatively the addition of this detail may have been inspired by its use in reality.

Angling

The theme of angling is typically consistent, with only limited variations.¹⁵⁷³ The placement of laved net fishermen with the angler occurs in a limited Memphite tombs,¹⁵⁷⁴ and then depicted in the provincial scenes from Kahep/ Tjeti-Iker [140], Shepsipumin/ Kheni [147] and Pepyankh/Henykem [146]. The combination of these two fishermen may have been inspired by the earlier scene of Ihy r/u Seshseshet/ Idut [72] or Kagemni [94]. The reclining angler noted in the scene from Ibi [130], Djau [141] and Pepyankh/Henykem [146] has a possible source from the tomb of Nekhebu [119]. Visually, the figures of Nekhebu [119] and Pepyankh/Henykem [146] are the most similar. The examples from Bawi (G126) [113] and Tomb G97 [125] are visually similar with the same boat structure, minor figure position and placement. The damaged scene appears to have been illustrated with the standards of the theme in mind, yet the earlier scene of Bawi (G126) [113] certainly was a source for the scene from Tomb G97 [125] with the larger scene of spearfishing also compositionally similar.¹⁵⁷⁵

¹⁵⁷¹ Two boats being constructed by two figures.

¹⁵⁷² Such as Ihy r/u Seshseshet/ Idut [72], Ptahhotep II/ Thefi [74], Nebet [62], Werirni [70], Senedjem-Ib/ Inti [45], Hesimin (M22) [56], Akhethotep (D64) [58], Ty [35], CG 1697 [37], Akhethotep (Louvre) [31], Irenkaptah [22], Iymery [20], and Nebemakhet [8].

¹⁵⁷³ See Chapter 5: Angling.

¹⁵⁷⁴ Ihy r/u Seshseshet/ Idut [72], and Kagemni [94].

¹⁵⁷⁵ In general, the entire scene. both angling and spearfishing, are composed similarly and appear to be by the same artist(s) or inspired by the earlier tomb of Bawi (G126) [113].

Minor Spearfishing

Two provincial tombs, Niankhpepy/Khnumhotep/Heti [123] from Zawyet el-Maiyetin and Ibi [130] from Deir el-Gebrawi, include a minor figure spearfishing in the same pose as the tomb owner. The closest contemporary scenes are found in the Memphite cemeteries of Saqqara (Heri/Meru [118]) and Giza (Nekhebu [119]). While Niankhpepy/Khnumhotep/Heti [123] is contemporary with these examples, Ibi [130] is slightly later. As remarked above, the scenes of angling in Ibi [130] and Nekhebu [119] share the same pose for a reclining figure, it is possible that Nekhebu [119] also served as inspiration for this rare detail.

Bearers and Transportation of Fish

The transportation of fish using a variety of methods makes it difficult to see repeated or specific sources of details. One standout detail, however, is the draping of the arm over a pole as seen in the provincial tomb of Ibi [130]. This element is attested previously in four tombs. Beginning in the mid Fifth Dynasty these are Rakhaefankh [26], Kayemnofret (D23) [51], Meryteti/Meri [116] and the more contemporary fragment of GL.115 [126]. The repetition of this position may imply that Ibi's [130] artist had knowledge of this detail from Memphite sources.

Dragnet Scene

The inclusions of boats within the method of dragnetting may also indicate that there was artistic connection between the Memphite region and the provinces. Two tombs, Inti [45] and Djau [141] represent boats, yet in different styles. Inti's [45] example suggests a connection with Giza tombs of Khufukaef II [43], and Kaiemheset [84]. Djau [141] represents the two teams on one boat, a unique composition with influence from these earlier examples. The remaining scenes from the provinces follow standards (with marginal variations) as set by the Memphite tombs. This standardization is expected in such a widely-used theme, the artist not needing a point of reference.

Observations

Memphite traditions are the cannon for elite art that spans tomb decoration throughout the Old Kingdom. The use of the standards and cannons in the provincial regions is not unexpected as these nobles grew up, trained, lived and had contact with the capital. Their position and status entitled them to the same honours as their fellow nobles who resided and were buried in the capital. Some scholars infer that the art is not as high a quality, that there are some standards and details that

are missing.¹⁵⁷⁶ As stated in the beginning of Chapter 20, this view is subjective and there are multiple explanations for this. It is undeniable that there are some themes which do not extend across the regions, or if they do, they are only found in a limited number of tombs. For example, the lave net fishing in Ibi [130] and Pepyankh/Henykem [146], the funnel traps found in Ibi [130], papyrus boat construction scenes found in Kahep/ Tjeti-Iker [140] and Neheri [151]. However, the popular themes, the fishing methods of spearfishing, dragnetting, angling, and many non-marsh related themes are frequent additions to tomb decoration. This shows that the Memphite tradition was applied to the provinces. Some details of these scenes can further pinpoint the locations of inspiration as seen in Ibi [130] (and by extension its inspired tombs such as Djau [141] and Pepyankh/Henykem [146]) which has close ties to the Teti cemetery and tombs that are near contemporary (I.e. Nekhebu [119] at Giza and possibly GL.115 [126] at Giza for transportation detail). Although there are sources of inspiration from Memphite sources to provincial examples, it became apparent after the analysis of geographic locations that the provinces had *two* main sources of inspiration: the Memphite traditions with their grand tombs and local provincial examples.

Tracking Minor Details (II)

Provincial site of El-Khokha

Unisankh [150], Ihy [137], and Khenty [132].

The site of El-Khokha hosts three Old Kingdom tombs that are used in this study. Two of them, Khenty [132] and Ihy [137], are located in the same funerary complex on the north-east side of the hill, dated to VI.3-4M and VI.4E-M respectively. To access Khenty's [132] tomb one must first pass through Ihy's [137].¹⁵⁷⁷ The third tomb is Unisankh [150], located on the south-eastern side of the hill and dated to the late Sixth Dynasty (VI.L-?).

Dragnet Scene

The dragnet scenes in Khenty [132] and Unisankh [150] have comparable teams of haulers, which are primarily in a vertical position (except those on each end in Khenty [132]). They all have an open stance position (Type A) with arms on either side of the body grasping the rope. Yet, this detail is very common for this scene and the partial nature of the depiction in Unisankh [150] prevents further comparisons.

¹⁵⁷⁶ Fischer, *Dendera*, 73, n. 297; Smith, *HESPOK*, 226-227; Vandier, *Manuel*, IV, 719.

¹⁵⁷⁷ Saleh, *Three OK Tombs*, 17-19.

Fish in all Scenes

Although the tombs do not share any further theme commonalities, the rendering of the fish in each tomb may suggest some influence among them. The fish in all three are shown with abstract details that highlight the facial areas, including the eye and the gills. The eyes are similar in each tomb, the line drawing showing both the circumference of the eye and the 'pupil' for each fish. Also, the mouth of the *Tilapia sp.* and *Barbus bynni* species in the scenes from Ihy [137] (sailing) and Khenty [132] (bearing) are shown open and double lined. The bodies of most of the fish in these two tombs are also shown double lined. Additionally, Ihy [137] and Unisankh [150] have preserved scale detailing on the body of the fish.

Observations

The details discussed above show that there may have been some influence between the tombs of this province, especially see in the tombs of Khenty [132] and Ihy [137]. Khenty [132] and Ihy [137] share a familial bond, Khenty [132] is the son of Ihy [137].¹⁵⁷⁸ This relationship may also be a factor in the commonalities between the two tombs. Unfortunately, the damage that these three tombs have sustained by serving as living quarters in later times prevents any further comparisons.¹⁵⁷⁹ At this stage, there is certainly not enough data to suggest that they employed a common artist among them.

Provincial Site of Hagarsa

Wahi (D4) [162] and Mery Aa [158]

The provincial site of Hagarsa, located north of El-Khokha, is the location of the two late Old Kingdom tombs of Mery Aa [158] dated to VI.L-VIII.E, and Wahi (D4) [162] dated to VIII.L.

Spearfishing

In general, similar elements of the scenes in the two tombs include the proportions of the tomb owner, the water mound and the separation of the different artistic elements. In addition, there is a clear distinction made between these stalks and the speared fish with a sub register line dividing the image. The speared fish are the same, a *Lates* and *Tilapia sp.* shown in the same configuration. They are speared through the body, just under the gills. Although Wahi's (D4) [162] spear point is damaged, continuing the direction of the spear would result in this conclusion. The detailing on the fish's bodies differ slightly with Wahi's (D4) [162] fish shown with diamond style scales while the

¹⁵⁷⁸ Harpur, *Decoration*, 299.

¹⁵⁷⁹ Saleh, *Three OK Tombs*, 13, 17-19, 23.

remaining details on those in Mery Aa [158] suggest a dotted scale pattern. Yet the application of detail to define the face and scaling differences around the eyes and face of the fish are common to both. More fish are added to the mound of Wahi's (D4) [162], and it also includes a sailing or boating scene underneath. The tomb owner is shown in similar position, the figure of Mery Aa [158] in an open stance (Type A), while Wahi (D4) [162] is shown in a stride position (Type B), the spear held at a steep angle with the shaft of the spear probably sitting at ear level for both men. The arm positions are slightly different with the back arm depicted above shoulder height (Type SFD), the elbow bent (less than 90 ° in Wahi (D4) [162] and greater than 90° in Mery Aa [158]). The fingers are shown in Mery Aa [158] while the back of the hand is visible in Wahi (D4) [162]. Wahi (D4) [162] has a wreath around the neck, which is not seen elsewhere.

Observations

These scenes are clearly connected through a degree of influence. The commonalities between them are numerous and the general composition reinforces this. The scenes are still individualized for each tomb owner, the extra accessories for Wahi (D4) [162], attendants visible around him and the addition of the sail boat in the water mound. It is proposed that these two men are likely related,¹⁵⁸⁰ which would be a factor of influence between them in addition to location and date range. It may then be possible to infer that the tombs were decorated by the same artist(s) or workshop.

Provincial Site of Deir el- Gebrawi

The Northern and Southern Cliffs

The northern and southern Cliffs surrounding the towns of Arab el Atiyat (north) and Deir-el Gebrawi (south) contain tombs, five of which are known to have included marsh themes. The northern group, here represented by Henqu/ Kheteti I [105], Hemre/ Isi I [107] and Henqu/ Iy...f II [120], all belong to a family group involved in the governing of the 12th Upper Egyptian Province during the reigns of Teti and Pepy I (VI.1-2).¹⁵⁸¹ Ibi [130] and Djau [141] represent a successive ruling family who chose to use the southern cliff near the village of Deir el-Gebrawi.¹⁵⁸² This area was in use from the reign of Merenre (VI.3), Ibi [130] dated to VI.3-4E and Djau [141] to VI.4M.

¹⁵⁸⁰ Kanawati, *El-Hagarsa III*, 14.

¹⁵⁸¹ Kanawati, *Deir el-Gebrawi II*, 7.

¹⁵⁸² Kanawati, *Deir el-Gebrawi II*, 7.

Spearfishing

Amongst the northern groups Henqu/ Kheteti I [105] and Henqu/ Iy...f II [120] include this theme. That found in the tomb of Hemre/ Isi I [107] is classified as a fowling scene. The two spearfishing scenes found in Henqu/ Kheteti I [105] and Henqu/ Iy...f II [120] show different accessories on the tomb owner, the spear held at a different angle, and the accompanying figures differ in both proportions and placement. The surviving representation in Henqu/ Kheteti I [105] does not include any additional items on the boat and, while the boat detailing and structure differs between the two. The other similarities between them are common details found in many other scenes, such as the decking used on the boat, which is also present in Hemri/ Isi I's [107] fowling scene, the kilt (Type C Clothing) and beaded collar worn by the tomb owner.

The scenes from Ibi [130] and Djau [141] in the southern group are similar in their arrangement. The spearfishing scene in Ibi [130] includes the tomb owner and his son Djau¹⁵⁸³ successfully spearing the standard species of a *Tilapia sp.* and *Lates*. The water mound is unusual with the outline of the mound surrounding the fish only. This may be to ensure that both men could be shown performing this sport in an effective way. The water mound appears absent in the scene from Djau [141] as there is no surviving outline, nor does there appear to have been any interruption to the image at the water's surface or the boat. However, if the mound were represented in the same manner as that of his grandfather Ibi [130], then any indication of the water mound would not be present near the water band. The tomb owners are shown wearing the same accessories and kilt (Type C), yet Djau [141] has a possible false beard.¹⁵⁸⁴ The angle the spear is held is slightly different in these tombs; Ibi's [130] is a little more horizontal than found in Djau [141]. Decking is present on Ibi's [130] boat. Conversely, in Djau [141] the boat is shown with the hull thickened and flattened in order to create a stable surface. The inclusion of multiple registers to the left of the spearfishing scene are common to both tombs, as is the incorporation of the dragnet into the bottom row. A papyrus thicket makes a division between the two areas in the tomb of Djau [141]; an element that is missing in its entirety in that of Ibi [130].

As for any commonality between the tombs in the two cliffs, many of them share the common details of clothing and accessories, the spearing of the *Tilapia sp.* and *Lates* and the inclusion of other figures; yet the surviving evidence does not strongly support any direct influence between the two groups.

¹⁵⁸³ This Djau is not the Djau numbered [141] in this study but his father.

¹⁵⁸⁴ Shown in the line drawing from Davies, *Deir el-Gebrawi II*, pl. 5.

Dragnet Scene

The dragnet images in Henqu/ Iy...f II [120] and Ibi [130] depict the activity occurring from shore while that of Djau [141] is shown completely based within a boat. The dragnet itself is highly exaggerated in Ibi [130] and shown with large floats and sinkers. Henqu/ Iy...f II's [120] dragnet also has floats and sinkers present yet these are small and the sinkers are shown in the inside of the bottom rope rather than the outside. Djau's [141] dragnet only has sinkers, which are different in shape to that of the other two and comparable to the shape of floats. Vegetation is common to Henqu/Iy...f II [120] and Ibi [130] as is the use of harnesses by the haulers. Furthermore, the fish are large and are shown swimming in one line which is also seen in Djau [141] until the deviation in the net caused by the *Tilapia sp.* The haulers are shown wearing kilts (Type C) in both Henqu/Iy...f II [120] and Ibi [130]; they are naked (Type A) in Djau [141]. It is possible that there is an end hauler positioning his foot on the net in Henqu/Iy...f II [120] (right hand side), which is also attested for both end haulers in Ibi [130].

Angling

The anglers found in the two southern cliff tombs of Ibi [130] and Djau [141] appear similar. The reclining fishermen position is rare and its use may not be coincidental within these closely related tombs.¹⁵⁸⁵ Both fishing lines appear taut and possibly held in both hands.¹⁵⁸⁶ Hooks are visible in Ibi's [130] scene with a *Synodontis* captured on one hook. This differs from Djau's [141] scene with a *Tetraodon fahaka* swallowing the hook. Returning boatmen are found in proximity to both anglers. The boat is also occupied by a second figure: a weir manipulator in the scene from Ibi [130] and a figure stepping onto the boat in Djau [141].

Gutting and Dehydration

Henqu/Iy...f II [120] and Ibi [130] both represent a figure gutting fish. The gutters¹⁵⁸⁷ are seated in the same position, the far leg bent towards the chest, the other folded underneath the buttocks (Type E¹⁵⁸⁸). The arms are also replicated with one arm extended forwards cutting the fish, the second arm is also extended forwards holding a gutted fish by the head, a detail only attested in these two tombs. The gutted fish have a double outline in both scenes with eyes and spine also included in the detailing. Henqu/ Iy...f II [120] is seated in a papyrus thicket, the artist in Ibi [130]

¹⁵⁸⁵ See Chapter 5: Angling; Minor figure Positions. Also, seen in Nekhebu [119].

¹⁵⁸⁶ The second hand in Djau [141] is damaged, however the general outline of the body may suggest its position near the first arm and hand.

¹⁵⁸⁷ One in Henqu/ Iy...f II [120], and two in Ibi [130].

¹⁵⁸⁸ See Appendix 4: Typology: Basic Leg Positions: Type E.

however did not include any vegetation, yet the surrounding images of the fighting boatmen may suggest an on-shore location.

Lave Net Fishing

The lave net scenes in Ibi [130] and Djau [141] are compositionally different; Ibi's [130] fisherman is standing on a boat or raft, while the fisherman in Djau [141] is placed within the water band indicating that he was operating from the shallows or from shore. Both men are shown with a belt (Type B),¹⁵⁸⁹ which was more frequent in the Sixth Dynasty. The men appear to be performing a scooping motion with the net, yet their arm position differs; Ibi's [130] fisherman has Type LA. 2 (most common) and Djau's fisherman [141] is Type LA.1.¹⁵⁹⁰ The nets in Ibi [130] and Djau [141] are classified as the atypical 'Y' structure which depicts the end of the two rimes extended past the hands of the fisherman. The netting however differs greatly, Ibi's [130] net is shown falling vertically which is typical, however Djau's [141] net is horizontal and appears to be scooping from left to right. In addition, fish are found within Ibi's [130] net only. The net in use in Djau's [141] scene has a catch bag attached to it, a detail only attested again in the tomb of Pepyankh/Henykem [146] at Meir. Vegetation is present in both scenes.

Observations

In light of the observation between the five tombs of this province, it appears as though there is possible influence between Henqu/ Iy...f II [120] and Ibi [130], as evident by the commonalities of the dragnet scene, the gutting scene and in some form perhaps the spearfishing scene. The date ranges of these two tombs does not rule out either artistic influence by observation of the earlier scene nor the use of the same artist(s) or workshop. If this is the case, these two tombs tie the Northern and Southern cliffs by artistic factors. The tombs of Ibi [130] and Djau [141] are also connected by artistic commonalities in the lave net fishing scene, spearfishing scene and angling scene. Other factors of influence between these two tombs is the familial bond of grandson and grandfather, and the date range of the construction of the tombs.

¹⁵⁸⁹ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

¹⁵⁹⁰ See Appendix 4: Typology: Arm Positions: Lave Net Haulers Arm Positions LA.1, LA.2.

Provincial Site of El-Hawawish

Hesimin (M22) [56], Kahep/ Tjeti-Iker [140], Shepsipumin/ Kheni [147], and Others.

El-Hawawish, the cemetery for the provincial site of Akhmim located in the ninth Nome of Egypt, boasts the largest sample of provincial tombs used in this study.¹⁵⁹¹ This section also includes a comparison between Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] as they are known to have a common artist: Seni.

Spearfishing

This theme is found in seven tombs at this location.¹⁵⁹² The earliest attestation in Hesimin (M22) [56] appears to follow standards that have previously been set in the Memphite examples.¹⁵⁹³ The angle of the spear in Hesimin (M22) [56] is significant, the shaft possibly crossing the chest and upper arm of the tomb owner with the end of the shaft at chin height or above. This is also the case in the scenes from Bawi (G126) [113], Hesi-min/ Sesi (F1) [127] and Tomb G 97 [125]. The spear is held lower in Hem-min (M43) [61] with the top portion of the spear crossing the elbow of the tomb owner. The angle of the spear is more horizontal in the examples from Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] with the tail end of the shaft lower and held level with the tomb owner's shoulders. A *Tilapia sp.* and *Lates* are shown speared as is typical in all examples. The *Lates* is shown first followed by the *Tilapia sp.* in Hem-min (M43) [61], Bawi (G126) [113], Hesi-min/ Sesi (F1) [127] and Tomb G97 [125]. The combination is reversed in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147]. The two latter scenes also have a water mound shown at full height topped by umbels, while Bawi (G126) [113] and Tomb G97 [125] have a top curvature of the mound preserved. The earlier example in Hem-min (M43) [61] depicts both the water mound and papyrus thicket/ umbels, the mound is smaller and contained within a curved parameter, the umbels shown in the top section of the scene with a host of birds above them.¹⁵⁹⁴

¹⁵⁹¹ There are nine referenced in this case study; Hesimin (M22) [56] (V.8L-9E), Hem-min (M43) [61] (V.9E), Bawi (G126) [113] (VI.1L-2), Tomb G97 [125] (VI.2L-3), Hesi-min/ Sesi (F1) [127] (VI.2-4E), Kahep/ Tjeti-Iker [140] (VI.4M), Shepsipumin/ Kheni [147] (VI.4L), Gehesa/ Nebi [145] (VI.4L) and Tjeti Aa [161] (VIII).

¹⁵⁹² Hesimin (M22) [56], Bawi (G126) [113], Tomb G97 [125], Hesi-min/Sesi (F1) [127], Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147].

¹⁵⁹³ Such as including the type of clothing, the use of a deck for the tomb owner and the appearance of weeds under the prow and stern of the boat.

¹⁵⁹⁴ The scene from Hesimin (M22) [56] is damaged and does not have the fish nor water mound preserved.

Decking is shown in Hem-min (M43) [61], Hesi-min /Sesi (F1) [127], Tomb G97 [125] and Kahep/ Tjeti-Iker [140], yet only the decks in Hem-min (M43) [61] and Hesi-min/ Sesi (F1) [127] retain the wood grain finish.

The sporting kilt is most typical at this location with four attestations.¹⁵⁹⁵ Conversely, Bawi (G126) [113] is wearing a wrap-around kilt. Additionally, all main figures wear a filet and streamer.¹⁵⁹⁶ All figures are depicted in a striding position (Type B),¹⁵⁹⁷ typical of this scene and have accompanying minor figures performing various activities.¹⁵⁹⁸ A paddler is employed in the scenes from Bawi (G126) [113], Hesi-min/ Sesi (F1) [127], and possibly in Tomb G 97 [125]. The female figures in both Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] are rendered identically. In addition to these minor details an angler is included in the examples from Hesimin (M22) [56], Bawi (G126) [113] and Tomb G 97 [125], two of those using a club.¹⁵⁹⁹

The positions of a crocodile and a hippopotamus in Hesimin (M22) [56] are like those found in Bawi (G126) [113]. There is a possibility of a representation of the crocodile in Tomb G97 [125]; however, the scene is too badly damaged to confirm this.¹⁶⁰⁰ Lotiform vegetation is found in the water band of Hesi-min/ Sesi (F1) [127] and Tomb G97 [125].

Angling

The examples found in Hesimin (M22) [56], Bawi (G126) [113] and Tomb G97 [125] appear similar and are, as stated, found within the spearfishing scene. The boat used in Hesimin (M22) [56] is a combined Type A/B, the stern higher than the prow.¹⁶⁰¹ Those found in Bawi (G126) [113] and Tomb G97 [125] are rendered similar and are a Type B (vertical prow/stern). The fishing lines are partially preserved in Hesimin (M22) [56] and Tomb G97 [125] with both ending in multiple hooks and the artist(s) have depicted fish attached to them, a *Synodontis sp.* in Tomb G97 [125] and a *Clarias sp.* in Hesimin (M22) [56]. Only Hesimin (M22)'s [56] line shows a sinker at this stage. All anglers are in a similar seated position, Bawi (G126)'s [113] angler extends the bent leg slightly forwards.¹⁶⁰² As also stated above only Hesimin (M22) [56] and Tomb G97 [125] are using a club. The two angling scenes found in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] are almost

¹⁵⁹⁵ Hesimin (M22) [56], Hem-min (M43) [61], Kahep /Tjeti-Iker [140] and Shepsipumin/ Kheni [147].

¹⁵⁹⁶ Not applicable to Hesimin (M22) [56] due to damage to the head of the tomb owner.

¹⁵⁹⁷ See Appendix 4: Typology: Basic Leg Positions: Type B.

¹⁵⁹⁸ The scene is too partial in Hem-min (M43) [61] to include this scene for these details.

¹⁵⁹⁹ Hesimin (M22) [56] and Tomb G97 [125].

¹⁶⁰⁰ Details of scaling used in Hesimin (M22) [56] and Bawi (G126) [113] appear similar to details found in the water band in Tomb G97 [125]. However it is possible that the scaling belongs to a type of fish.

¹⁶⁰¹ See Appendix 4: Typology: Boat Structure.

¹⁶⁰² See Appendix 4: Typology: Basic Leg positions, Type F.

identical. They differ greatly from the three mentioned above as they are found to accompany a dragnet scene and include lave net fishermen within the same boat. Further dissimilar details include the use of a tunic (Type D) for both anglers, while the kilt (Type C) is most likely depicted in Hesimin (M22) [56] and Tomb G97 [125].¹⁶⁰³ Despite these parallels for the anglers in Kahep/ Tjeti-Iker [140] and Shepsipumin/Kheni [147], smaller details in the scene itself show differences. That in Shepsipumin/ Kheni [147], for example, illustrates a taut line and a club.

Lave Net Fishing

The boat that features the angler in the marsh scenes of Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] also depicts a lave net fisherman. Both tombs present this figure with an athletic body (Type A), a possible full head of hair (Type A), Type D clothing (although Shepsipumin/Kheni's [147] tunic is shorter),¹⁶⁰⁴ as well as the same body, arm and leg position. The frame of the lave net in each scene additionally appears similar, with its netting clearly visible.

Dragnet Scene

Hesimin (M22) [56], Kahep/ Tjeti-Iker [140], Shepsipumin/ Kheni [147], Gehesa/ Nebi [145] and Tjeti Aa [161] all include the dragnet theme. Unfortunately, there are only fragments remaining of the scene within Hesimin (M22) [56] which show haulers in multiple and overlapping positions whilst hauling in the net. The scenes found in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] are almost identical, the net rendered thin within the water (no fish inside) and the haulers all positioned in a like manner.¹⁶⁰⁵ The fish in the water band are shown in larger proportions in Kahep/ Tjeti-Iker [140], and in Shepsipumin/ Kheni [147] a larger number of fish are present. In addition, a supervisor is present and a hauler is shown reaching into the net and holding a fish in the scene from Shepsipumin/ Kheni [147]. Both dragnets are shown accompanied by angling and lave net fishermen. The deterioration to the scene in the tomb of Gehesa/ Nebi [145] prevents a comprehensive analysis, yet the haulers are not shown in one position as with the latter two examples, but have multiple positions much like those from Hesimin (M22) [56]. Harnesses are worn by the men and fish are present within the net.

¹⁶⁰³ The body of the angler in Bawi (G126) [113] is damaged. See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

¹⁶⁰⁴ See Appendix 4: Typology: Individual Characteristics and Clothing.

¹⁶⁰⁵ Including individual characteristics and clothing. See Appendix 2: Dragnet Detail Tables K, L, M.

Papyrus Boat Construction

Only two tombs represent papyrus boat building, Hesimin (M22) [56] and Kahep/ Tjeti-Iker [140]. In general, both scenes are dissimilar, with Hesimin (M22)'s [56] scene depicted over two registers and Kahep/ Tjeti-Iker [140] over only one. In addition, Hesimin (M22)'s [56] scene also incorporates the additional motif of gathering papyrus.¹⁶⁰⁶ Hesimin (M22)'s [56] scene is heavily detailed even though it is poorly preserved, with such inclusions as wedges under the ends of the boats, vegetation, and figures using a variety of positions in tethering the hull. Kahep/Tjeti-Iker's [140] scene is minimalistic and conveys the construction by two men per boat. The prow/stern of the hull is like those portrayed in adjacent scenes of returning boatmen and fighting boatmen. The design¹⁶⁰⁷ is unique to the latter's tomb as all other scenes show a type A (horizontal prow/stern) structure. Overall it would appear that it may be possible to suggest that the theme was inspired from the earlier tomb but not directly influenced by its details.

Observations

The tombs of Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] were completed by the same artist which is reflected in the details mentioned above. It is clear that the artist Seni also made changes and additions to the scenes to further individualize them. It may be inferred that there was a close connection between Bawi (G126) [113] and Tomb G97 [125] but there is no familial link noted between them,¹⁶⁰⁸ yet they share multiple commonalities across spearfishing and angling scenes. It is also apparent that there is a connection between Bawi (G126) [113] and Hesi-min/Sesi (F1) [127] with links shown between the spearfishing scenes. It is possible that these tombs were all worked on by the same group of artists given their date ranges, and served as a mutual inspiration due to their proximity. The earlier tomb of Hesimin (M22) [56] is rendered with many of the Memphite standards for these themes, thus serving as inspiration for the later tombs.¹⁶⁰⁹ The differences seen in the tombs of Shepsipumin /Kheni [147] and the contemporary tomb of Gehesa/ Nebi [145] may suggest that there were two different artists or groups working in the area at the same time. The repetitious tendency of Seni in the two tombs of Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] suggests that any tomb he worked in would most likely share the same

¹⁶⁰⁶ Also depicted in the contemporary tomb of Akhethotep (D64) [58] from the Memphite area: See also Inti [45], Hotepherakhti [34], Akhethotep (Louvre) [31], Irenkaptah [22], Nefer and Kahay [18], and Nebemakhet [8].

¹⁶⁰⁷ Boats are shown with little curvature to prow/stern. They appear more as rafts than boats.

¹⁶⁰⁸ No link is mentioned by Kanawati, *El-Hawawish*, VIII and IX. or Harpur, *Decoration*, 298.

¹⁶⁰⁹ Evident with the repetition of Papyrus Boat Construction in Kahep/ Tjeti-Iker [140].

style and details.¹⁶¹⁰ It is apparent that Gehesa/ Nebi [145] was rendered by a different hand in both execution and detailing as seen in the differences noted above.

Provincial Site of Meir

Pepyankh/Heri-Ib/Neferka/ Heny [131], Niankhpepy/ Sobekhotep/Hepi-Kem [136] and Pepyankh/Henykem [146].

Meir, located in Middle Egypt on the west bank of the Nile in the 14th Nome of Upper Egypt is the location of three tombs used in this study. Pepyankh/ Heri-Ib/ Neferka/ Heny [131], dated to VI.3-4E, is the earliest of this group, followed by Niankhpepy/Sobekhotep/Hepi-Kem [136] dated to VI.4E-M. Thirdly, Pepyankh/Henykem [146] dates to the late half of the reign of Pepy II, VI.4L.

Dragnet

A comparison between Pepyankh/Heri-Ib/Neferka/Heny [131] and Niankhpepy/ Sobekhotep/ Hepi-Kem [136] shows many similarities. These standard details include the shape of the net, the use of harnesses by the haulers, the depictions of triangular floats, as well as the representation of vegetation in between the feet of the haulers. In addition, the haulers are found to be positioned similarly with the men turned inwards¹⁶¹¹ and leaning forwards. A supervisor leaning on his staff is present in both scenes although each has a different position and clothing. Pepyankh/Heri-Ib/Neferka/Heny's [131] scenes have an accompanying caption and the fish within the net are swimming in multiple directions and depths. Conversely, Niankhpepy/Sobekhotep/Hepi-kem's [136] fish are all facing the right and swimming in single file. The dragnet theme represented in Pepyankh/Henykem [146] depicts the two innermost haulers with the rope placed over their shoulder which is unusual; similar rope interactions are only attested in the scenes from Akhetotep (Louvre) [31], Pehenuika [32], and Ty [35]. A hauler is also positioned in the water which is rare, perhaps helping the net to shore.¹⁶¹²

¹⁶¹⁰ The rare inscriptions found in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147] state that both tombs were completed by Seni, the artist. Kanawati-Woods, *Artists in the OK*, 9.

¹⁶¹¹ All except the end haulers and those immediately behind them in Pepyankh/Heri-Ib/Neferka/Heny [131].

¹⁶¹² Other figures may be seen in the same water band or register as the water band, however none are interacting with the dragnet scene.

Spearfishing

The depiction of the tomb owner in the scenes of Pepyankh/Heri-Ib/ Neferka/Heny [131] and Pepyankh/Henykem [146] are very similar. They include such standard details as wearing the sporting kilt, fillet and streamer, broad collar and a false beard. Each is in a striding position (Type B)¹⁶¹³ and the spear is held at a slight angle to reach the water mound. The height of the spear across the body differs slightly, with Pepyankh/Henykem's [146] shown crossing the rear shoulder while Pepyankh/Heri-Ib/Neferka/Heny's [131] is above the rear shoulder. The latter's arms are slightly more extended with the elbow at an obtuse angle in comparison to Pepyankh/Henykem's [146] which are slightly wider than 90°. Objects are depicted on each boat and the tomb owner is accompanied by another figure, the wife for Pepyankh/Heri-Ib/ Neferka/ Heny [131] and the son of Pepyankh/Henykem [146]. The water mounds in these scenes are both tall and the spear is shown piercing the eye of both fish, a *Tilapia sp.* and *Lates* respectively. Pepyankh/Henykem's [146] mound is full of fish, yet Pepyankh/Heri-Ib/Neferka/Heny's [131] appears empty in its current state but includes the motif of a hippopotamus attacking a crocodile. Details of mongoose climbing papyrus stalks are common to both scenes. While the example from Pepyankh/Henykem [146] has a papyrus thicket detailed behind the water mound and includes multiple images of mongooses and birds, Pepyankh/Heri-Ib/Neferka/Heny's [131] only includes a single papyrus stalk supporting the mongoose and a nest at its top.

Observations

The analysis above infers that there was great influence between Pepyankh/Heri-Ib/Neferka/Heny [131] and Niankhpepy/ Sobekhotep/Hepi-Kem [136] with the dragnet scenes being very similar. Commonalities exist too between the former and Pepyankh/Henykems' [146] spearfishing scene although not outside the typical detail for the scenes. It is possible that these scenes served as inspiration for each other due to their proximity, date range and most importantly the familial connections. Pepyankh/Heri-Ib/Neferka/Heny [131] was the father of Niankhpepy/ Sobekhotep/Hepi-Kem [136] and the grandfather of Pepyankh/Henykem [146].¹⁶¹⁴ Overall, it appears that there is a closer connection between the two earlier tombs, with Pepyankh/Henykem's [131] more reminiscent of Memphite models, especially with the inclusion of other popular Memphite themes of angling, cattle fording, hippopotamus hunting, and lave net fishing.

¹⁶¹³ See Appendix 4: Typology: Basic Leg Positions: Type B.

¹⁶¹⁴ Harpur, *Decoration*, 297. Kanawati, *Meir III*, 18.

Provincial Site of Sheikh Said

Serfka [49] and Werirni [70]

The tombs of Serfka [49] and Werirni [70] present another opportunity to see the relationship between tombs linked by family. Dated to the reigns of Djedkare (V.8) and Unis (V.9), the tombs are constructed side by side as Werirni [70] displaced older tombs to build close to his father.¹⁶¹⁵

Dragnet scene

The composition of these two scenes is very different. The earlier in Serfka [49] is depicted over two registers. The dragnet is placed in the water band of the lower register and the haulers in the register above. In between them is a boat directly over the dragnet, which has no connection with the dragnet process. In contrast, the image in Werirni [70] follows the more standard composition with the haulers directly above the net all encompassed within one register. The shapes of the nets differ slightly with Serfka's [49] extending into a crescent moon shape due to the long distance the net must cover. Some similarities include the variety of positions held by the haulers, with figures shown in opposition to team mates, leaning backwards and bent forwards. The legs of most minor figures are in an open stance position (Type A).¹⁶¹⁶ Both nets have triangular floats yet the depiction of the fish is disparate. In Serfka [49] they are shown swimming in single file towards the right; conversely in Werirni [70] there are multiple rows of fish swimming in both directions.

Observations

The commonalities noted between Serfka [49] and Werirni [70] are not significant as they are either typical for the scene or are frequent enough that the artist may have used them without influence. The state of preservation may be a hindrance here, as many details in both this scene and perhaps other marsh scenes would clarify any influence between these two tombs. It may also be suggested that due to the location and the period between construction,¹⁶¹⁷ that the appointed artists may have retired, with new persons taking their place or a different artist was sent from the capital to complete the tomb.

¹⁶¹⁵ Davies, *Sheikh Said*, 14-15.

¹⁶¹⁶ See Appendix 4: Typology: Basic Leg Positions: Type A.

¹⁶¹⁷ The reign of Djedkare lasted 39 years. The construction dates for this tomb cover this period plus the early reign of Unis whose reign spanned 30 years. Given this, and the average life span for the ancient Egyptian being 25-35 years (not all working years) it is possible that a period of 20 years is long enough to suggest that a different artist was contracted to complete works.

Provincial Site of Zawyet el-Maiyetin

Khunes [67] and Niankhpepy/Khnumhotep/Heti [123]

The tombs of Khunes [67] and Niankhpepy/Khnumhotep/Heti [123] are located in the Upper Egyptian cemetery of Zawyet el-Maiyetin. That of Khunes [67] is dated to the reign of Unis (V.9) while that of Niankhpepy/Khnumhotep/Heti [123] is assigned to the reign of Pepy I (VI.2), over 25 years later.

Marsh Pursuits

The remaining fragments of the marsh pursuit scene in the tomb of Niankhpepy/Khnumhotep/Heti [123] do not show many details similar to the marsh pursuits of Khunes [67]. Fragment F-E portrays oars in succession, like those in Khunes [67], but additional elements cannot be ascertained without further context. Fragment B-C, identified as a spearfishing scene, is strikingly different to the fowling scene in Khunes [67] with the background, persons featured on the boat and placements of the hippopotami varying to such a degree that no transfer between the two scenes can be inferred.

Fighting Boatmen

One scene from Niankhpepy/Khnumhotep/Heti [123] showing possible influence from the earlier tomb of Khunes [67] is that of the fighting boatmen. Both tombs depict a minor figure who has been knocked into the water, with the unfortunate man in Niankhpepy/Khnumhotep/Heti [123] attacked by a crocodile. The partial figure in Khunes [67] may have possibly suffered the same fate with the water bands composed in a similar fashion, but no other aquatic life is present and vegetation is instead shown under the boats.

Dragnet

The dragnet fishing scene in Niankhpepy/Khnumhotep/Heti [123] shares many standard features with that in Khunes [67]. Both have a rectangular shaped net, floats, and untangled but coiled rope ends. The minor figures are positioned slightly differently: a figure in Khunes [67] is shown opposite his teammates, while all face the same direction in Niankhpepy/Khnumhotep/Heti [123]. The placement of the net in Niankhpepy/Khnumhotep/Heti [123] is also unusual as it is in line or above a boat occupied by the supervisor. The net itself is additionally depicted with vegetation as well as sinkers, details that are absent in and on the net of Khunes [67].

Observations

A comparison of the marsh themes in these two tombs suggest that there was little influence between them with standard features comprised of many of their shared details. Niankhpepy/ Khnumhotep/ Heti's [123] scenes are elaborated and individualized, yet one possible connection is the fallen figure on the fighting boatmen scene. It may be possible that the earlier tomb of Khunes [67] was observed prior to the decoration of Niankhpepy/ Khnumhotep/ Heti's [123] tomb.

Conclusions

Three main types of factors influencing the burials of the elite have been identified in this study: (1) political and administrative circumstances, (2) familial or communal considerations, and (3) artistic elements.

Political and administrative factors (1) change over the course of the Old Kingdom with the officials at first usually buried in or close to the royal cemetery. This changes towards the end of the Old Kingdom, particularly in the Sixth Dynasty when the appointment of officials to the provinces necessitated their burial near their place of office.¹⁶¹⁸ In addition, changes in the composition of the decorative programmes also took place with trends of daily life and grave goods falling in and out of favour.¹⁶¹⁹

Familial and community factors (2) are a large part of the transference of details within and between sites. The familial bonds of some of the tomb owners are seen in the replication of details, themes and the inclusion of the family member in the tomb. There are many well-known connections such as those within the Senedjem-Ib complex, Nefermaat [2], Atet [3] and Rahotep [5], Mereruka [103], Watetkhet-Hor/ Seshseshet [104] and Meryteti/ Meri [116]. However, this familial bond appears more significant in the provincial regions than the Memphite cemeteries, as seen in but not limited to Ibi [130], and Djau [141], Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147], Pepyankh/Henykem [146], Pepyankh/Heri-Ib/Neferka/Heny [131] and Niankhpepy/ Sobekhotep/Hepi-Kem [136]; Wahi (D4) [162] and Mery Aa [158]. This sense of familial bonds in the provincial regions may be two-fold. Not only are they honouring their ancestors with the

¹⁶¹⁸ Djedkare and Teti appointed officials to the provinces; Pepy I returned these persons back to the capital. Pepy II resumed Teti's programs and with a wane in the power of the central government the provincial nomarchs could fund themselves through local resources and create lavish tombs. See discussion in Chapter 20: Artistic Influence and Innovation Part I: Political and Administrative Factors.

¹⁶¹⁹ The Fourth Dynasty under the reigns of Snefru and Khufu do not represent scenes of daily life, while the Fifth and Sixth Dynasty saw a remarked increase in these themes. See discussion in Chapter 20: Artistic Influence and Innovation Part I: Political and Administrative Factors.

perpetuation and emulation of their art but they are also establishing a line of succession and cementing their place of power.

The idea of community influence perhaps applies more aptly to the Memphite regions. As seen in the analysis of the minor details in the cemeteries of Maidum, Saqqara and Giza amongst others,¹⁶²⁰ there is an air not only of emulation but of competition. This is particularly present in the landmark tombs of Niankhkhnum and Khnumhotep [27], Ty [35], Neferirtenef [52] and Ihy r/u Seshseshet/ Idut [72] where they have themes and details that have been copied or alluded to in the earlier tombs of the Fourth and early Fifth Dynasty, but they also wished to exceed that and create their own art which would be admired and emulated by future tomb builders. They certainly excelled at this with details and themes from these tombs perpetuated well into the later Sixth Dynasty.

Artists (3) and workshops are also responsible for the repetition of themes and details. Unfortunately, it is difficult to judge conclusively that the same workshops or artist(s) executed the scene within two or more tombs as there is no signature or mark to identify them. At best, it may be suggested that the rarer details or infrequent motifs may have been completed by the same person or group of artists within a workshop. The theory is that the persons who worked together all had the same training or studied under an artist who invented or developed a detail or scene a certain way. Thus they used this feature in their work. Other workshops may have had a different approach to the theme or a different motif/detail which they included within their work. Seni, is the only artist to claim his work and we can see that there are multiple and identical details between the themes in Kahep/ Tjeti-Iker [140] and Shepsipumin/ Kheni [147]. The investigation into the identification of artists by their 'signature details/methods' is beyond the scope of this thesis, yet it is an intriguing line of inquiry which the author intends on pursuing in the future.

Minor Details

The Fourth Dynasty is primarily focused in the Maidum Cemeteries, which then expanded to Giza, and in the early-mid Fifth Dynasty to Saqqara and other sites such as Abu Rawash and Abusir. In these earlier times the detail appears to have been shared among the sites with specific influence developed from Maidum. The mid Fifth Dynasty saw both a spike in the number of tombs at Saqqara and a significant attestation of marsh scenes in Giza tombs. Influence was still drawn from the Fourth Dynasty tombs but the development of the scenes also shows a mutual sharing of details between Saqqara and Giza at this time. In the following period, there is a particular focus

¹⁶²⁰ See Chapter 20: Artistic Influence and Innovation Part I: Tracking Minor Details.

on Saqqara, which was an area of great growth and innovation with the introduction of new details, scenes and general advancement in sophistication of the art.¹⁶²¹ The use of Saqqara as the site of royal cemeteries at this time was the main force driving this. Artists and workshops would have all been congregated in one area, fuelling the competitiveness. This continued in the late Fifth and early Sixth Dynasties when tomb art is thought to have reached its peak. The allocation of officials and their tombs to the provinces meant that the artists had to work on location, sometimes sent from the capital. The provincial tombs of the early and indeed the later periods of the Sixth Dynasty show a connection to Saqqara tomb art with the replication of some details and themes that are only found in the Saqqara cemeteries.

The provincial tombs all incorporate the Memphite standards, yet they were not a strict requirement. Provincial officials would have grown up and been trained in the capital, experiencing all of the marsh activities and possibly viewing some of the grand tombs. The incorporation of these themes into the provincial art not only connects the officials with the iconic, elitist Memphite art, but with the status that they held.¹⁶²² This theory also applies to the artists commissioned to execute the art. They too would have trained and been privy to the older works in the Memphite tombs. A strong connection existed between the capital and the sites of Deir el-Gebrawi, Meir and El-Hawawish as shown in the chapters and analysis of this study. However, another point of influence between the provincial tombs is themselves; as stated earlier, in the provinces this is mostly seen between family tombs.

¹⁶²¹ Minor themes first attested at or a typically restricted to Saqqara, for example: the registering of the catch; round basket trap fishing; weir fishing; funnel trap fishing; Preparing fish for consumption; cord spinning and net reparation; and Drying and Storage of equipment.

¹⁶²² The 'Memphite art tradition' to connected them to the nobility thus showing their status. See discussion in Chapter 20: Artistic Influence and Innovation Part I under: Innovation and Originality in Marsh Scenes.

Chapter 22: Concluding Comments



Kagemni [94]

Chapter 22: Concluding Comments

This study has amassed and analysed over four hundred and fifty individual scenes from Old Kingdom tombs which relate to fish and fishing methods. These include an examination of fish and their occurrence throughout Old Kingdom tomb scenes,¹⁶²³ marsh themes which depict fishing methods¹⁶²⁴ and any activity outside of marsh themes which include fish or are related to fishing methods.¹⁶²⁵

Standard Features and Variations

The primary objective for this study was to establish what should be considered the standard features for the various themes relating to fish and fishing methods over the Old Kingdom period. This led to the identification of variations and innovations that had been introduced to the themes and by chronologically organizing the data and conducting a comparative analysis to highlight patterns which would become standards, trends or and variations.

Fish

In many marsh pursuit scenes fish are a central element and frequent addition. After analysis three key points can be made:

The representation of fish is first attested in the early Fourth Dynasty, although the depictions of crocodiles may have been earlier as seen in the Third Dynasty tomb of Hesy-Re [1] at Saqqara. Depictions of species were limited in the earlier periods, with a significant increase in both variety and numbers in the Fifth Dynasty; so much so that by the mid Fifth Dynasty all species identified in Chapter 3: Table 3.1 had been featured in a tomb wall scene.¹⁶²⁶ There are only two exceptions, *Hydocyon forskalii* or tiger fish and the *Alestes dentex* that are depicted in the scenes of the later Sixth Dynasty official Ankhtyfy [148].

The attestations of the various species were also shown in the provincial cemeteries, with a slight delay noticeable and all varieties are not represented until the later Sixth Dynasty. This delay may have been a result of the limited marsh pursuit themes found in the provinces during the Fifth Dynasty. They were attested in greater numbers in the later Sixth Dynasty due to the movement of officials to the provinces.¹⁶²⁷

¹⁶²³ See Chapter 3: Fish.

¹⁶²⁴ See Chapters 4 to 11.

¹⁶²⁵ See Chapter 12-19.

¹⁶²⁶ See Chapter 3: Occurrence of Scene: Also Volume 2: Table 1: List of Scenes that Include Fish.

¹⁶²⁷ See Chapter 20: Artistic Influence and Innovation Part I: Factors of influence.

A comparison between the natural habitats and the occurrence of various species of fish suggests that there was very little, if any, correlation of the representation of fish versus the limitations of their habitat. Only two species show possible restrictions, the *Gnathonemus* and *A. vulgaris* both of which are found in limited attestations in the provinces, their natural habitat being the lower Nile region.

Fishing Themes

The comparative study of scenes from each individual theme allowed for the establishment of features that were standard to a theme and for the pinpointing of the period when they became so.¹⁶²⁸ The analysis was focused on the elements which were the most essential to the theme: the equipment for the fishing method in question, the fish represented in association with the method, and the activity, postures and individual characteristics of the minor figures performing the task.

In almost all themes¹⁶²⁹ standards are rooted in the first few occurrences of the scene. This level of consistency early in the depiction of the themes suggests that there was a considerable amount of preplanning for the art programme of each tomb.

A consistent finding of the analysis described in chapters 4 to 11, shows that the artists were careful to ensure that the fishing equipment was standardized and only elaborated slightly from the typical form. Dragnets typically took a long rectangular shape that was filled with fish.¹⁶³⁰ The loti-form floats experienced little change, yet sinkers, another standard, showed some small developments over the Old Kingdom with a progression from spherical to oval, then becoming rectangular in shape.¹⁶³¹ The change of these weights is gradual with both the oval and rectangular seen at the same time prior to the increase in the rectangular shape in the Sixth Dynasty.¹⁶³² In a similar fashion the line for the angler experience little change over the period with the only major variation being the depiction of the hooks at its end.¹⁶³³ The trap shape and general composition remain fixed for the funnel and round basket traps over their date range as does the lave net structure.¹⁶³⁴

¹⁶²⁸ See Chapters 4 to 18.

¹⁶²⁹ Some themes such as: Chapter 10: Unique Fishing Methods, Chapter 18: Drying and Storage, and Chapter 14: Markets do not show the establishment of standards as these themes are individualized to suit the surrounding tomb art.

¹⁶³⁰ Kahep/Tjeti-Iker [140] and Shepsipumin/ Kheni [147] are two exceptions, as their dragnet, while still in a long rectangular shape, was thin and did not encompass the entire water band.

¹⁶³¹ See Chapter 4: Sinkers: Appendix 2: Dragnet Detail Table D.

¹⁶³² See Chapter 4: Sinkers: Appendix 2: Dragnet Detail Table D.

¹⁶³³ See Chapter 5: Hooks.

¹⁶³⁴ See Chapters 7, 8, and 6 respectively.

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The fish represented in association with fishing methods were also consistent; the *Mugil sp.*, *Tilapia sp.* and those of the *Mormyrus* family being the standards across three of the themes.¹⁶³⁵ Those methods depicting smaller numbers of fish such as angling and spearfishing have their own specific species of fish; angling favouring the *Synodontis* catfish and the spearfisher highlighted the *Tilapia sp.* and *Lates* upon his spear.¹⁶³⁶ This illustrates that the artists specified most themes to show or highlight certain species. The reason for the popularity and specific use of certain species of fish may be a reflection of reality. This would imply that the *Mugil sp.*, *Tilapia sp.* and those of the *Mormyrus* family were caught often in the nets and traps. The dragnet, funnel and round basket traps were placed in the shallows or near to shore for optimal operation.¹⁶³⁷ The *Tilapia sp.*, *Mugil sp.* and members of the *Mormyrus* family are well known to inhabit these inshore waters and thus would have been caught in great numbers via these methods.¹⁶³⁸ The specificity of the angler may also infer that the *Synodontis* was regularly caught on the hooks.¹⁶³⁹ In addition, it is possible that these fish were favoured for their meat and thus used in these scenes for the tomb owner to enjoy, being caught and then eaten in the afterlife.

Each theme depicts minor figures completing the task of fishing, needing specific postures to fulfil the task. Interestingly, across all themes, the foot position of the figures can be categorized into seven types.¹⁶⁴⁰ The arms are then shown in positions which suit the task at hand. While there are themes with highly standardized arm positions, the feature of arm postures depicts the most variation.¹⁶⁴¹

The individual characteristics of the human figures can be compared across the entire range of fishing methods. Overwhelmingly, the figures are shown with Type A Athletic bodies.¹⁶⁴² Type A hair (full) is typical across all themes, with weir fishermen, and funnel trap fishermen shown with nearly equal numbers of full heads of hair (Type A) and receding (Type B) hairlines. The representation of men as strong and healthy figures can suggest two things; that healthy abled bodied men were used to ensure that the tasks were performed efficiently, thus providing the

¹⁶³⁵ See Chapters 3, 6, 7.

¹⁶³⁶ See Chapters 4 and 11 under Fish: See Also Appendix 2: Angling Detail Table I; and Spearfishing Detail Table B.

¹⁶³⁷ See Chapter 4 Dragnets: Introduction and Hauling Method; Chapter 7: Funnel Traps: Introduction and Trap Placement; Chapter 8: Round Basket Trap: Introduction, and Trap Placement.

¹⁶³⁸ See Appendix 3: Fish Profiles: *Tilapia sp.*, *Mugil sp.*, *Petrocephalus*, and *Gnathonemus*.

¹⁶³⁹ *Synodontis* catfish are both bottom and surface feeders; See Appendix 3: Fish Profile: *Synodontis Schall* and *Synodontis Batensoda*.

¹⁶⁴⁰ See Appendix 4: Typology: Basic Leg positions A-G.

¹⁶⁴¹ Noted under Arm/Limb Positions in the themes of Dragnetting Chapter 4, Weir Fishing Chapter 9, Angling Chapter 5, Lave Net Fishing Chapter 6 and Spearfishing Chapter 11.

¹⁶⁴² See Appendix 4: Typology: Individual Characteristics; Chapters 3 to 11: Individual characteristics.

tomb owner with food and tireless workers.¹⁶⁴³ It may also have been a reflection of reality as primarily young men may have performed these heavy and gruelling tasks. One must also consider the depiction of the tomb owner in spearfishing scenes. All scenes depict the major figure in peak condition with a Type A body and a wig, as well as being adorned with multiple accessories reflecting his wealth and status. It is likely that the image is not a true reflection of how the tomb owner dressed to visit the marshes, nor may it be a true reflection of his body condition, yet the theme serves two purposes: a record of an event that he took part in, and the visualization of his wealth and power.

The kilt (Type C)¹⁶⁴⁴ is the most frequent type of clothing used.¹⁶⁴⁵ The activities performed from land or boat that required less exertion suited this garment, more so than those such as dragnetting, round basket trapping and to some degree funnel trapping. The latter required the men to get into the water and haul the large net or trap. The likelihood of getting wet was high and the need for a larger range of movement led to the use of no clothing (Type A) or a small belt or loincloth (Type B). Thus, within these themes there was a larger variety of clothing used.¹⁶⁴⁶ This range of clothing and the detail applied to the scene highlights the artist's precision in getting all the components accurate.

Themes associated with fish and/ or fishing methods

Chapters 12 to 19 detail themes which make the processing of fish, i.e. gutting, drying, preparation for consumption, or the construction of fishing equipment the main task.

Standards, that is, features that establish the essential nature of a scene, are applicable to all themes to varying degrees. It is clear that in comparison to Chapters 4 to 11, this collective group generally depicts more variations between individual scenes of the same theme than those depicting fishing methods. There may be several reasons for this, including the limited attestations of the themes and the restrictions of those to certain sites. Other reasons could be the availability of knowledge by the artists to correctly represent the task and/or the space and standard of art that was applied to the funerary decoration. The inclusion of some themes such as 'registering the catch', or 'market scenes' may have been included at the request tomb owner who wished to record his involvement in the activity, individualizing it to some degree.

¹⁶⁴³ Brewer-Teeter, *Egypt and the Egyptians*, 206-7.

¹⁶⁴⁴ See Appendix 4: Typology: Individual Characteristics and Clothing: Clothing.

¹⁶⁴⁵ See Chapters 5, 6, 7, 9, and 11.

¹⁶⁴⁶ See Appendix 2: Dragnet Detail Tables M, N; Round Basket Trap Detail Table: G and Funnel Trap Detail Table: N.

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Standards for themes focus on the key elements such as the equipment used in them, the general composition and in some cases the minor figures. Yet, there are more frequent examples of large developments in the constituents of the scene compared to the fishing methods. Examples of this may be found in such themes as the change in activity from spinning cord to net repair in spinning cord scenes,¹⁶⁴⁷ the placement of drying equipment having no standards other than the types of traps as shown in Chapter 18: Drying and Storage or the incredible variability of the positions of the bearers and market stall keepers.¹⁶⁴⁸

The *Mugil sp.*, *Tilapia sp.*, and *Lates* are the standard included fish for the themes of registering the catch, gutting, market and bearing scenes.¹⁶⁴⁹ This is similar to those that are considered standard in the fishing methods Chapters 4 to 11.

Specific leg positions are only used in the themes of papyrus boat construction, and *hsf nwt*/spinning cord themes;¹⁶⁵⁰ others use the standard leg placement types A-G that have been used in other scenes.¹⁶⁵¹ Arm position for these themes also show much variety and are suited to the task performed.

Generally, the individual characteristics of the minor figures, and the clothing worn were consistent with Type A hair and body condition being the most prevalent. The kilt (Type C) was also typical across these themes. The only exception was the figures in papyrus boat construction scenes who are represented naked (Type A clothing) as fitted the gruelling task of building boats.¹⁶⁵²

Innovation

Innovations can be seen in all themes and in all representations of fish across the entire Old Kingdom. This study highlights both the minor and the larger diversions of standards in each theme, showing the smallest changes and innovations within the larger framework of the scene.

The variations noted in Chapters 3 to 19 may imply two things; firstly, that the artist was an apprentice or one without much experience. This lack of knowledge and technique may have led to the addition or omission of certain details which make the scene unique or appear sub-standard. In opposition, there are many examples of highly detailed art or added motifs which likewise individualize the scene. Such examples are the additions of hippopotami and crocodile interactions

¹⁶⁴⁷ See Chapter 19.

¹⁶⁴⁸ Chapters 15 and 14: Minor Figures Limb Positions (Arm/leg) respectively.

¹⁶⁴⁹ See Chapters 12, 13, 14, 15; Fish Species.

¹⁶⁵⁰ See Chapters 17: and 19: Leg/ Limb Positions.

¹⁶⁵¹ See Appendix 4: Typology: Leg positions A-G.

¹⁶⁵² See Chapter 17: Papyrus Boat Construction: Clothing.

and their variations. The representation of behaviours of animals in the scenes such as the jumping fish in Ihy r/u Seshseshet / Idut [72] and Mereruka [103]. Also in Mereruka [103] the scene of three men (not tomb owners) spearfishing. The inclusions of scenes of the registering the catch in Ty [35], Kagemni [94] and Mehu [121], just to name a few.

One may consider the driving force behind the application of funerary art. Not only is it a way to provide the tomb owner with necessities in the afterlife, but images of special tasks, items and memories would also add to the experience of the afterlife. As noted, the modification and embellishment of the scene was a tool for the tomb owner to project his status and notoriety with high standards of art. This may have led to a competitive atmosphere with his successors also incorporating motifs and indeed adding more. This atmosphere may have led to the tombs we now identify as landmark tombs.

Dating Criterion

Although establishing dating criteria was not an aim of this study, the detailed analysis of individual themes shows that some features occur in specific periods within the date range of the scene. This information may be used in conjunction with other methods to help date fragments or scenes from unknown provenience.¹⁶⁵³

¹⁶⁵³ See Volume 2: Selected Criteria Date-Range Tables.

The movement of art/ or art centres

The second aim of this study was establishing if there was a specific cemetery or site which was responsible for the conception of details or the innovation of details and scenes.

In general, four stages of movement can be determined:

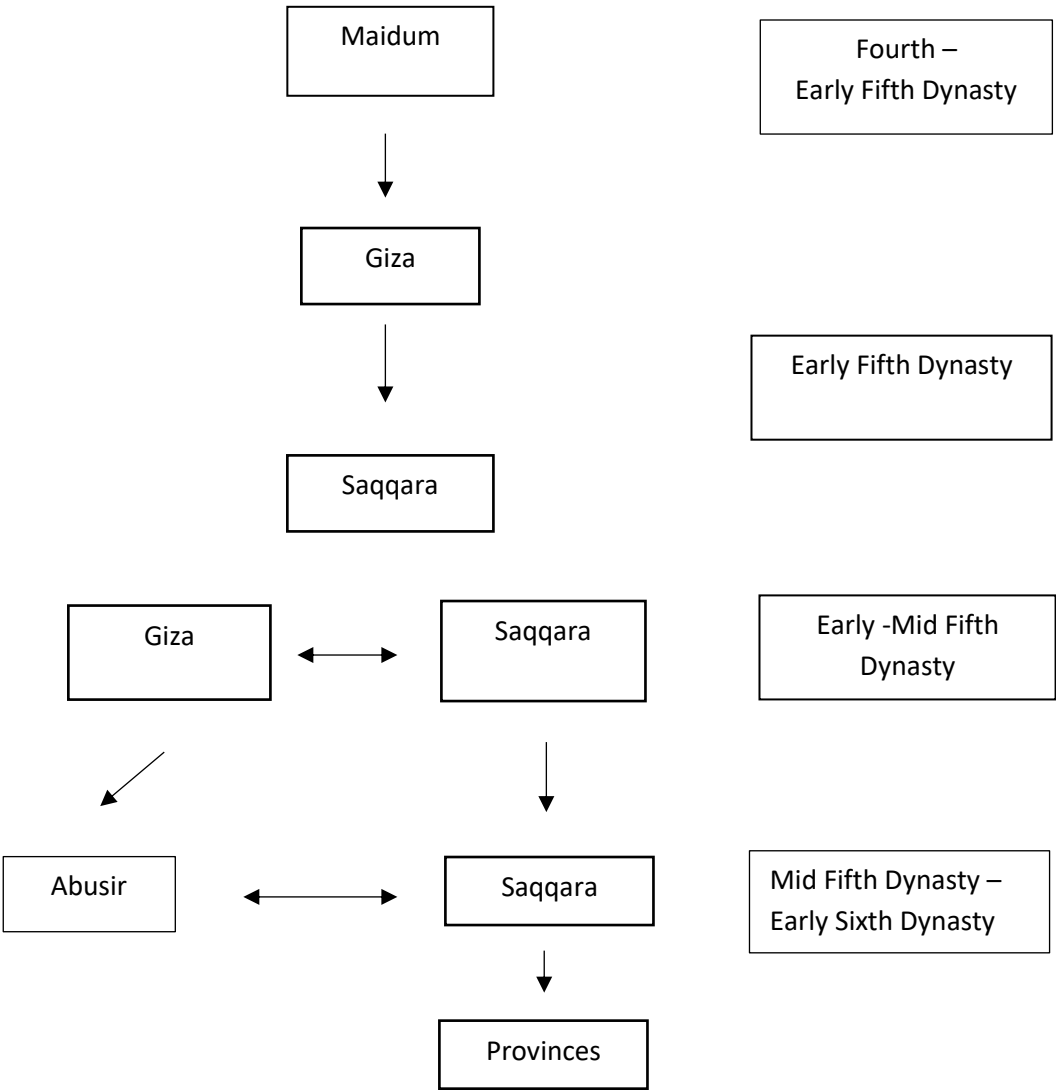


Figure 1. Movement of Art

The flow chart¹⁶⁵⁴ is a simplified version of the movement of the majority of themes across the Fourth to mid Sixth Dynasty with Saqqara being the hub of artistic activity for the majority of the later time frames. The movement of the volume of tombs from Maidum, Giza and to Saqqara follows the royal movement from one cemetery to another, yet Saqqara appears to become an established hub due to its length of time in use over the Fifth and Sixth Dynasties.

¹⁶⁵⁴ Fig 1. Movement of Art.

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The earliest fish and fish related themes are attested at the site of Maidum. The tombs of Nefermaat [2], Atet [3], Rahotep [5], and Nefer...w [4] include such themes are dragnetting, gutting, bearing and papyrus boat constriction. Tombs at Giza are also known from the reign of Khufu (IV.2)¹⁶⁵⁵ incorporating the above-mentioned themes and extra motifs such as cattle fording and hippopotami hunting.

Between the early Fifth Dynasty and the mid Fifth Dynasty, both Giza and Saqqara appear to have been in a transitional phase where details and motifs were traded back and forth or conversely had their own site specific version. This is most visible in the larger themes such as dragnetting.¹⁶⁵⁶ The site of Saqqara however appears to be the primary centre for art development during and after this period as it is here that the minor themes of funnel trapping, round basket trapping, registering the catch, spinning cord and others appear¹⁶⁵⁷ and for the most part are confined. One can state that the appearance of these themes outside of Saqqara and in provincial examples are due to influence or that the same artist(s) has executed the work. It must be noted that after the early Sixth Dynasty, with the movement of evidence to the provincial regions that the Memphite cemetery of Saqqara was still influential with the appearance of a few examples of Saqqara themes in such tombs as Ibi [130] (weirs), and lave nets at the sites of El-Hawawish,¹⁶⁵⁸ Meir¹⁶⁵⁹ and Deir el-Gebrawi.¹⁶⁶⁰ Provincial cemeteries in these latter periods were also governed by influence between tombs at the same site and those in neighbouring areas as demonstrated in Chapter 21: Artistic Influence and Innovation Part II: The Provinces.

Artistic Influence

The movement of the artistic centres is also relevant to the third aim of mapping artistic influence. The sites of Maidum, Giza and Saqqara had royal cemeteries well established within them. The tomb of an official is most likely to be in or near the royal cemeteries,¹⁶⁶¹ the King would allocate a plot for the construction of the tomb based on status and favouritism.¹⁶⁶² This practice means that the sites of Saqqara and Giza provide the most abundant evidence due to the longevity of the sites use. The tombs that are within the same site or in close proximity are more likely to show trances

¹⁶⁵⁵ Kawab [6], Debehen [7], and Nebemakhet [8].

¹⁶⁵⁶ Elements such as Sinkers and Rope ends. See Appendix 2: Dragnet Detail Tables D and F.

¹⁶⁵⁷ See Appendix 2: Detail Tables A for Funnel Traps, Round Basket Traps, Registering the Catch, Spinning Cord, Weirs, Drying of Equipment.

¹⁶⁵⁸ Kahep/ Tjeti-Iker [140] and Shepsipumin/Kheni [147].

¹⁶⁵⁹ Pepyankh/Henykem [146].

¹⁶⁶⁰ Ibi [130], Djau [141].

¹⁶⁶¹ Kanawati-McFarlane, *Akhmim*, 23.

¹⁶⁶² Kanawati-McFarlane, *Akhmim*, 51, 100, n. 528; Kanawati-Woods. *Artists in the OK*, 37.

of transference. This is visible in almost all themes studied in this text.¹⁶⁶³ The artist(s) would have used surrounding tombs or well-known tombs in the area for inspiration. In addition, it may have been possible that the artist himself worked in both or more tombs. Artist(s) were likely relocated to royal cemeteries as the sites changed, thus perpetuating some of the older details and motifs across locations.

Another influential factor is familial relationships. There are multiple examples of repeated details and themes within tombs that are linked by a familial connection. This may be seen in, but not limited to those buried in the Senedjem-Ib complex, as well as Serfka [49] and Werirni [70], and Kahep/Tjeti-Iker [140] and Shepsipumin/Kheni [147].¹⁶⁶⁴ This suggests that the later looked to their predecessor for inspiration and wished to create a link with him and his legacy. In most cases the proximity of the tombs also created an easy reference tool.

‘Land mark’ tombs have been identified in this study in most periods of the Old Kingdom.¹⁶⁶⁵ These tombs are usually those belonging to persons of high standing and have a high-quality finish to the funerary art. They are emulated by those surrounding them and their influence can be far reaching. Examples of these tombs are, but not limited to, Nebemakhet [8] of Giza, Niankhkhnum and Khnumhotep [27], Ty [35] and Neferirtenef [52] of Saqqara. The grand tombs of the Sixth Dynasty under the reign of Teti are also identified as ‘landmark’ tombs, such as the tombs of Kagemni [94], Mereruka [103], and the later tomb of Mehu [121]. Details from scenes in these tombs are known in provincial examples and create a link between Memphite and Provincial art.¹⁶⁶⁶

The location and familial or communal connections, along with the artist himself (factor three), are by no means the only influence in the replication or movement of details and themes within Egyptian art. It is most likely that a number of factors, combined, were at play when the funerary art was being composed including the design, construction and completion timeline of the tomb.

The examination of fish, fishing methods and themes which are associated with fishing primarily focused on the highlighting of standards and variations within the individual themes. This was executed by way of a comparative analysis which showed the source of minor details which were

¹⁶⁶³ See Chapters 3-19: (excluding 10) and Chapter 20: Artistic Transference.

¹⁶⁶⁴ Others include: Niankhpepy/Khnumhotep/Heti [123] and Khunes [67], Niankhpepy/ Sobekhotep/ Hepi-Kem [136] and Pepyankh/ Heri-Ib/ Neferka/ Heny [131] and Mereruka [103], Watetkhet-Hor/Seshseshet [104] and their son Meryteti/Meri [116]. For further familial connections, see Harpur, *Decoration*, 13-31.

¹⁶⁶⁵ See Chapter 20: Artistic Influence and Innovation Part I: The ‘landmark’ tombs of the Fifth Dynasty and their influence.

¹⁶⁶⁶ See Chapter 21: Artistic Influence and Innovation Part II: Connections between the Memphite Cemeteries and the provinces.

to become standards and allowed the writer to trace the influence of one tomb on another in both the Memphite and provincial regions. It highlighted the movement of artistic centres and allowed the writer to explore several factors which may have influenced the perpetuation of certain details.

The purpose of the tomb art is to convey several literal and figurative concepts. The images provide the tomb owner with provisions for the afterlife, thus they serve a very practical purpose. They are also a method of displaying the status and wealth of the owner via the intricacy and scope of the themes, the grand images for the world to see. Yet they also serve to solidify the tomb owner's link with the elite, identifying the person with a social class whose status demanded the very best. There were standards for these scenes to ensure that the messages that the artist and tomb owner were trying to communicate were clear, which may appear repetitive or static. However, it was the aim of the artist and his art to convey all these ideas and to serve their purpose. There is much innovation and individuality to each scene which highlights the creative capacity and adaptability of the Egyptian artist.

Bibliography

A

d'Abbadie, *Nestor L'Hôte*:

J.V d'Abbadie, *Nestor L'Hôte 1804-1842*, Vol. 11, (Leiden, 1963).

Akinyi et al., *Alestes dentex*, The IUCN Red List of Threatened Species 2010:

E. Akinyi, A. Azeroual, M. Entsua-Mensah, A. Getahun, P. Lalèyè, & T. Twongo, 2010. *Alestes dentex*. The IUCN Red List of Threatened Species 2010: e.T182128A7810513. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T182128A7810513.en>

Akinyi, et al., *Hydrocynus forskahlii*, The IUCN Red List of Threatened Species 2010:

E. Akinyi, A. Azeroual, M. Entsua-Mensah, A. Getahun, P. Lalèyè, P. Moelants, T. Twongo, 2010. *Hydrocynus forskahlii*. The IUCN Red List of Threatened Species 2010: e.T182366A7870497. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T182366A7870497.en>.

Aldred, *Egyptian Art*:

C. Aldred, *Egyptian Art in the Days of the Pharaohs 3100-320 BC*, (London, re-printed 1993).

Alexanian, 'Tomb and Social Status':

N. Alexanian, 'Tomb and social status. The textual evidence.' In (ed.) M. Bárta *The Old Kingdom Art and Archaeology. Proceedigs of the Conference*. (Prague. 2006).

Allen, 'Some aspects of the non-royal afterlife in the Old Kingdom', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31– June 4*, (Prague, 2006):

J.P. Allen, 'Some aspects of the non-royal afterlife in the Old Kingdom', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31– June 4*, (Prague, 2006), 9-18.

Altenmüller, *Mehu*:

H. Altenmüller, *Die Wanddarstellungen im Grab des Mehu in Saqqara*, (Mainz/Rhein, 1998).

Amenta, 'The Egyptian Tomb', *Egyptological Studies on Status and Society*:

A. Amenta, 'The Egyptian tomb as a house of life for the afterlife?' In *Egyptological essays on state and society*, Serie Egittologica 2, ed. Rosanna Pirelli, 13 - 26. (Naples: Università degli Studi di Napoli "L'Orientale", 2002).

Arnold, *An Egyptian Bestiary*:

D. Arnold, 'An Egyptian Bestiary' in *The Metropolitan Museum of Art Bulletin* 52, no. 4 (1995): 1-64.

Bibliography

Azeroual et-al., *Hyperopisus bebe*, The IUCN Red List of Threatened Species 2010:

A. Azeroual, M. Entsua-Mensah, A. Getahun, P. Lalèyè, & E. Vreven, 2010. *Hyperopisus bebe*. The IUCN Red List of Threatened Species 2010: e.T181624A7691619. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T181624A7691619.en>.

Azeroual, et al., *Mormyrus caschive*. The IUCN Red List of Threatened Species 2010:

A. Azeroual, A. Getahun, & T. Twongo, 2010. *Mormyrus caschive*. The IUCN Red List of Threatened Species 2010:e.T60726A12400544. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T60726A12400544.en>

Azeroual, et al., *Mormyrus kannume*. The IUCN Red List of Threatened Species 2010:

A. Azeroual, J. Bayona, & A. Getahun, 2010. *Mormyrus kannume*. The IUCN Red List of Threatened Species 2010: e.T182113A7803615. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T182113A7803615.en>.

Azeroual, et al., *Citharinus latus*. The IUCN Red List of Threatened Species 2010:

A. Azeroual, J. Bayona, M. Entsua-Mensah, A. Getahun, & P. Lalèyè, *Citharinus latus*. The IUCN Red List of Threatened Species 2010. (2010) e.T181716A7712641 <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T181716A7712641.en>.

Azeroual, et al. *Labeo niloticus*. The IUCN Red List of Threatened Species 2010:

A. Azeroual, A. Getahun, & E. Vreven, *Labeo niloticus*. The IUCN Red List of Threatened Species 2010, e.T182692A7945029. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T182692A7945029.en>.

Azeroual- Getahun, *Barbus bynni*. The IUCN Red List of Threatened Species 2010:

A. Azeroual, and A. Getahun, *Barbus bynni*. The IUCN Red List of Threatened Species 2010: (2010) e.T181643A7695781. <http://dx.doi.org/10.2305/IUCN.UK.2010-3.RLTS.T181643A7695781.en>.

B

Badawy, *Iteti*:

A. Badawy, *The Tombs of Iteti, Sekhemankh-Ptah, and Kaemnofert at Giza*, (Berkley, 1976).

Baer, *Rank*:

K. Baer, *Rank and Title in the Old Kingdom: The Structure of the Egyptian Administration in the Fifth and Sixth Dynasties*, (Chicago, 1960).

Balcz, 'Zur Datierung der Mastaba des Snofru-ini-iStef in Dahšûr':

H. Balcz, 'Zur Datierung der Mastaba des Snofru-ini-iStef in Dahšûr', *ZÄS* 67 (1931), 19-15.

Bibliography

Bárta, 'Ptahshepses Jr II':

M. Bárta. "The Mastaba of Ptahshepses Junior II at Abusir." *Ägypten und Levante/Egypt and the Levant* 10 (2000): 45-66.

Barsanti, 'Fouilles autour de la Pyramide l'Ounas':

A. Barsanti, 'Fouilles autour de la Pyramide l'Ounas': I: Le Mastaba de Samnofir', *ASAE* 1 (1900), 149-190.

Bates, 'Ancient Egyptian Fishing':

O. Bates, 'Ancient Egyptian Fishing', *Harvard African Studies* 1 (1917), 199-272.

Baud, *Famille Royale*:

M. Baud, *Famille royale et pouvoir sous l'Ancien Empire égyptien*, 2 vols. (IFAO, 2nd ed. Cairo, 2005).

von Beckernath, *Chronologie*:

J. von Beckernath, *Chronologie des pharaonischen Ägypten. Die Zeitbestimmung der ägyptischen Geschichte von der Vorzeit bis 332 v. Chr.*, (MÄS 46, Mainz, 1997).

Behrmann, *Nilpferd*:

A. Behrmann, *Das Nilpferd in der Vorstellungswelt der Alten Ägypter*, 2 vols. (Bern, 1989).

Bekker-Nielsen, 'The technology and productivity of ancient sea fishing'. In *Ancient Fishing and Fish Processing in the Black Sea Region* 2 (2005):

T. Bekker-Nielsen, 'The technology and productivity of ancient sea fishing.' *Ancient Fishing and Fish Processing in the Black Sea Region* 8396 (2005).

Berman, 'Relief of Nyankhnesut' in: *Berman, Cleveland Museum of Art: Catalogue*:

L. M. Berman, 'Relief of Nyankhnesut' in: *Berman, Cleveland Museum of Art: Catalogue*, (New York, 1999), 135-136.

Bidoli, 'Die Sprüche der Fangnetze Alägyptischen Sargtexten', in *Abhandlungen des Deutschen Archäologischen Instituts Kairo* 9:

D. Bidoli, 'Die Sprüche der Fangnetze Alägyptischen Sargtexten', in *Abhandlungen des Deutschen Archäologischen Instituts Kairo* 9, (1976).

Binder, 'The Tomb Owner Fishing and Fowling' in: Donovan – McCorquodale (eds.), *Egyptian Art*:

S. Binder, 'The Tomb Owner Fishing and Fowling' in: L. Donovan, K. McCorquodale (eds.), *Egyptian Art: Principles and Themes in Wall Scenes*, (Prism Archaeological Series 6, Cairo, 2000), 111-128.

von Bissing, *Gem-ni-kai*:

F. W. von Bissing, *Die Mastaba des Gem-ni-kai*, 2 vols. (Berlin, 1905-1911).

Bibliography

Bisson de la Roque, *Abou Roasch*:

M.F. Bisson de la Roque, *Abou Roasch, Fouilles de l'Institut Français d'Archéologie Orientale du Caire (Année 1924)*, Tome II IFAO (Cairo 1925).

Black Rock Lave Net Heritage Fishery (2016):

Black Rock Lave Net Heritage Fishery, *Techniques*, (Modified 2016)
<http://www.blackrocklavenets.co.uk/>

Blackman, *Meir*, I:

A. W. Blackman, *The Rock Cut Tombs of Meir: Part I: The Tomb-Chapel of Ukh-hotep's son Senbi*, (ASE 22, London, 1914).

Blackman, *Meir*, IV:

A.W. Blackman, *The Rock Cut tombs of Meir: Part IV: The Tomb-chapel of Pepi'onkh the middle son of Sobekhotpe and Pekhernefert (D. No.2)*, (ASE 25, London, 1924).

Blackman – Apted, *Meir*, V:

A. W. Blackman, M. R. Apted, *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)*, (ASE 28, London, 1953).

Bolshakov, 'Arrangement of Murals as a Principle of Old Kingdom Tomb Decoration' in: Fitzenreiter – Herb (eds.), *Dekorierete Grabanlagen*:

A. O. Bolshakov, 'Arrangement of Murals as a Principle of Old Kingdom Tomb Decoration' in: Fitzenreiter – Herb (eds.), *Dekorierete Grabanlagen*, 37-60.

Bolshakov, 'Hinting as a Method of Old Kingdom Tomb Decoration':

A. O. Bolshakov, 'Hinting as a Method of Old Kingdom Tomb Decoration, I: The Offering-stone and the False Door of the Dwarf Seneb', *GM* 139 (1994), 9-33.

Bolshakov, 'The Old Kingdom Representations of Funeral Procession', *GM*, 121 (1991), 31–54;

A.O. Bolshakov, 'The Old Kingdom Representations of Funeral Procession', *GM*, 121 (1991), 31–54;

Borchardt, *Denkmäler I*:

L. Borchardt, *Denkmäler des Alten Reiches*, (Catalogue général des antiquités égyptiennes du Musée du Caire. Berlin, 1937).

Borchardt, *Denkmäler*, II:

L. Borchardt, *Denkmäler des Alten Reiches*, II (Catalogue général des antiquités égyptiennes du Musée du Caire. Nos 1295-1808, Cairo, 1964).

Bibliography

Borchardt, *Ne-User-Re*:

L. Borchardt, *Das Grabdenkmal des Königs Ne-User-Re*, (Leipzig, 1907).

Borchardt, *SaaHu-Rea*:

L. Borchardt, *Das Grabdenkmal des Königs SaaHu-Re, II* (Leipzig, 1913; repr. Onsbück, 1981, 1982).

Bossneck, *Die Tierwelt des alten Ägypten*:

J. Boessneck, *Die Tierwelt des alten Ägypten: untersucht anhand kulturgeschichtlicher und zoologischer Quellen*, (Beck, 1988).

Boulenger, *The Fishes of the Nile*:

G. A. Boulenger, *Zoology of Egypt, The fishes of the Nile*, (London, 1907).

Boreux, 'Études de nautique égyptienne', *MIFAO* 50 (Cairo, 1925):

C. Boreux, 'Études de nautique égyptienne', in *MIFAO*, 50, (Cairo, 1925).

Breasted, *Geschichte Ägyptens*:

J. H. Breasted, and H. Ranke, *Geschichte Ägyptens*. (Wien: Phaidon, 1936).

Brewer – Friedman, *Fish and Fishing*:

D. J. Brewer, R. F. Friedman, *Fish and Fishing in Ancient Egypt*, (Warminster, 1989).

Brewer-Teeter, *Egypt and the Egyptians*:

D. J. Brewer, and E. Teeter, *Egypt and the Egyptians*. (Cambridge, 1999).

Brewer, 'Fish':

D. J. Brewer, 'Fish', *OEAE*, I (2001), 533-535.

Brier-Hobbs, *Daily Life*:

B. Brier, and A. H. Hobbs. *Daily Life of the Ancient Egyptians*. (Greenwood Publishing Group, 2008).

Brovarski, *Senedjem-Ib Complex I*:

E. Brovarski, *The Senedjemib Complex: Part 1: The Mastabas of Senedjemib Inti (G 2370), Khnumenti (G 2374), and Senedjemib Mehi (G 2378)*, 2 vols. (Giza Mastaba Series VII, Boston, 2001).

Brovarski, 'A Second Style in Egyptian Relief of the Old Kingdom', in Thompson-Der Manuelian (eds) *Egypt and Beyond*:

E. Brovarski, 'A Second Style in Egyptian Relief of the Old Kingdom', in Thompson-Der Manuelian (eds) *Egypt and Beyond* (Massachusetts, 2008), 49-90.

Bibliography

Budge, *The Chapters of Coming Fourth by Day*:

W. Budge, *The book of the dead: The chapters of coming forth by day*. (London, 1898).

Buffetaut, 'Evolution and Biology: Evolution' (in) Ross, C.A.(ed) *Crocodiles and Alligators*:

E. Buffetaut, 'Evolution and Biology: Evolution' (in) Ross, C.A.(ed) *Crocodiles and Alligators*, (Silverwater, 1989).

C

Caminos, *Literary Fragments in the Hieratic Script*:

R. A. Caminos, *Literary Fragments in the Hieratic Script*, (Oxford, 1956).

Cherpion, 'The Human Image in Old Kingdom Non-Royal Reliefs' in: *Egyptian Art in the Age of the Pyramids*:

N. Cherpion, 'The Human Image in Old Kingdom Non-Royal Reliefs' in: *Egyptian Art in the Age of the Pyramids*, (New York, 1999) 103-115.

Cherpion, *Mastabas et hypogées*:

N. Cherpion, *Mastabas et hypogées d'Ancien Empire: Le problème de la datation*, (Brussels, 1989).

Cherpion, 'De quand date la tombe du nain Seneb?':

N. Cherpion, 'De quand date la tombe du nain Seneb?', *BIFAO* 84 (1984), 35-84.

Clarke, 'Nile Boats and Other Matters', Petrie (ed) *Ancient Egypt* (1920):

S. Clarke, 'Nile Boats and Other Matters', W.M.F Petrie (ed), *Ancient Egypt*, (London, 1920)

Chlodnicki- Makowiecki, *Tell el Farkha*:

M. Chlodnicki, D. Makowiecki, 'The Archaeology and Archaeoichthyology of Fish and Fishing at Tell el Farkha, Egypt–Pre-dynastic and Early Dynastic Times'. in *Fishes–Culture–Environment*, (2009, Poland).

Corcoran, 'Roman Fishermen' in *The Classical World*, Vol. 56, No. 4 (Jan., 1963):

T. H. Corcoran, 'Roman Fishermen' in *The Classical World*, Vol. 56, No. 4 (Jan., 1963), 97-100.

Crowfoot, *Methods of Hand Spinning in Egypt and the Sudan*, (1931);

G. M. H Crowfoot, *Methods of Hand Spinning in Egypt and the Sudan*, (Halifax, 1931).

'*Crocodylus Niloticus*: Nile Crocodile', *National Geographic*:

'*Crocodylus Niloticus*: Nile Crocodile', *National Geographic Website*
<http://animals.nationalgeographic.com/animals/reptiles/nile-crocodile/> (Accessed 4/10/2012).

Bibliography

Curto, *Gli Scavi*:

S, Curto. *Gli Scavi italiana a el-Ghiza (1903)*, Monografie di Archeologica e d'Atre Volume 1. Centro per le Antichità e la Storia dell' Arte del vicino Oriente (Rome, 1963).

D

D' Auria, *Mummies and Magic*:

S. D'Auria, *Mummies & Magic: The Funerary Arts of Ancient Egypt*, (Boston, 1988).

Dambach – Wallert, 'Das Tilapia-Motiv in der altägyptischen Kunst':

M. Dambach, I. Wallert, 'Das Tilapia-Motiv in der altägyptischen Kunst', *CdÉ* 41 [81] (1966), 283294.

Daoud, 'The Mastaba of Kairer':

K. A. Daoud, 'The Mastaba of Kairer: Preliminary Report on the Field Work Seasons 1995-1998', *ASAE* 75 (2000), 91-106.

Daumas, *BIFAO* 62:

F. Daumas, 'Quelques remarques sur les représentations de pêche à la ligne sous l'ancien empire,' *Imprimerie de l'Istitut français di archéologie orientale*, 1964.

Davies, *Deir el-Gebrâwi*, I:

N. de G. Davies, *The Rock Tombs of Deir el Gebrawi: Part I: The Tomb of Aba and Smaller Tombs of the Southern Group*, (ASE 11, London, 1902).

Davies, *Deir el-Gebrâwi*, II:

N. de G. Davies, *The Rock Tombs of Deir el Gebrawi: Part II: Tomb of Zau and Tombs of the Northern Group*, (ASE 12, London, 1902).

Davies, *Ptahhetep*:

N. de G Davies, *The Mastaba of Ptahhetep and Akhethetep at Saqqarah*, 2 vols. (ASE 9, London, 1900-1901).

Davies, et al., *Saqqâra Tombs*, I:

W. V Davies, A. El-Khouli, A. B. Lloyd, A. J. Spencer, *Saqqâra Tombs I: The Mastabas of Mereri and Wernu*, (London, 1984).

Davies, *Sheikh Saïd*:

N. de G. Davies, *The Rock Tombs of Sheikh Saïd*, (ASE 10, London, 1901).

Dawson, 'Note on the Egyptian Papyrus Boat', *The Journal of Egyptian Archaeology*, 10 (1):

W.R. Dawson, 'Note on the Egyptian Papyrus Boat', *The Journal of Egyptian Archaeology*, 10 (1), (1924) 46-46.

Bibliography

Debono-Mortensen, *El Omari: A Neolithic Settlement and Other Sites in the Vicinity of Wadi Hof, Helwan*:

F. Debono and B. Mortensen. *El Omari: A Neolithic settlement and other sites in the vicinity of Wadi Hof, Helwan*. Vol. 82. (Mainz, 1990).

De Moor, 'In the Beginning' in *Fish Food for the Waters*:

J. De Moor, 'In the Beginning there was Fish, Fish in the Ancient Near East', in H. Walker (ed) *Fish: Food from the Waters*, Oxford Symposium, (England, 1998).

Decker – Herb, *Bildatlas*:

W. Decker, M. Herb, *Bildatlas zum Sport im alten Ägypten: Corpus der bildlichen Quellen zu Leibesübungen, Spiel, Jagd, Tanz und verwandten Themen*, 2 vols. (Leiden, 1994).

Decker, *Sport and Games in Ancient Egypt*:

W. Decker, *Sport and Games in Ancient Egypt*, A. Guttmann (trans.), (Cairo, 1992).

De Vos, 'A systematic revision of the African Schilbeidae (Teleostei, Siluriformes)':

L. De Vos, 'A systematic revision of the African Schilbeidae (Teleostei, Siluriformes). With an annotated bibliography'. *Ann. Mus. R. Afr. Centr., Sci. Zool.*, (1995) 271:1-450.

De Vos, 'Schilbeidae'

L. De Vos, 'Schilbeidae' In C. Lévêque, D. Paugy and G.G. Teugels (eds.) *Faune des poissons d'eaux douce et saumâtres de l'Afrique de l'Ouest, Tome 2*. Coll. Faune et Flore tropicales 40. Musée Royal de l'Afrique Centrale, Tervuren, Belgique, Museum National d'Histoire Naturelle, Paris, France and Institut de Recherche pour le Développement, Paris, France. (Paris, 2003) 97-116.

Dodson-Ikram, *The Tomb*:

A. Dodson, S. Ikram, *The Tomb in Ancient Egypt*, (London, 2008).

Drenkhahn, 'Artists and Artisans in Pharaonic Egypt' in: Sasson (ed.), *Civilisations of the Ancient Near East*:

R. Drenkhahn, 'Artists and Artisans in Pharaonic Egypt', J. M. Sasson (ed.), J. Baines (trans.), *Civilisations of the Ancient Near East*, I, (1995), 331-343.

Driesch, *Fische im Alten Ägypten. Eine osteoarchäologische Untersuchung*, (1986):

A, Von den Driesch. *Fische im alten Ägypten: eine osteoarchäologische Untersuchung*. (Kanzler, 1986).

Dunncliff, 'Marsh Activities' in *Behind the Scenes*:

S. Dunncliff, 'Marsh Activities' in A. McFarlane, A. Latifa Mourad (eds). "*Behind the scenes: daily life in Old Kingdom Egypt*." (Sydney, 2012).

Bibliography

Dunham, 'The Biographical Inscriptions of Nekhebu':

D. Dunham, 'The Biographical Inscriptions of Nekhebu in Boston and Cairo', *JEA* 24 (1938), 1-8.

E

Eaton-Krauss, *Statuary in Private Tombs of the Old Kingdom*:

M. Eaton-Krauss, *The Representation of Statuary in Private Tombs of the Old Kingdom*, (Wiesbaden, 1984).

Eaton-Krauss, 'Artists and Artisans':

M. Eaton-Krauss, 'Artists and Artisans', *OEAE*, I (2001), 136-140.

Edel, 'Zu den Inschriften der "Weltkammer" aus dem Sonnenheiligtum des Niuserre':

E. Edel, 'Zu den Inschriften der "Weltkammer" aus dem Sonnenheiligtum des Niuserre', *NAWG* 5/2 (1963), 143-217.

Egyptian Art in the Age of the Pyramids:

Egyptian Art in the Age of the Pyramids, (The Metropolitan Museum of Art, New York, 1999).

Edgerton, 'Ancient Egyptian Ships and Shipping', *American Journal of Semitic Languages* 39 (1923):

W.F. Edgerton, 'Ancient Egyptian Ships and Shipping', *American Journal of Semitic Languages* 39(2), (1923), 109-135.

El-Masry, *Two Old Kingdom Tombs*:

Y. El-Masry, 'Two Old Kingdom Rock-Tombs at Gohaina', *BACE* 15 (2004), 89-106.

Épron – Daumas, *Ti*, Fasc I:

L. Épron, F. Daumas, *Le Tombeau de Ti: Fascicle I: Les approches de la chapelle*, (Cairo, 1939).

Evans, *Animal Behaviour*:

L. Evans, *The Representation of Animal Behaviour in Old Kingdom Tomb Scenes from Giza and Saqqara*, (Unpublished PhD thesis, Macquarie University, Sydney, 2006).

Evans, 'Fighting Kites: Behaviour as a Key to Species Identity in Wall Scenes', *The Journal of Egyptian Archaeology*, Vol. 93, (2007):

L. Evans, 'Fighting Kites: Behaviour as a Key to Species Identity in Wall Scenes', *The Journal of Egyptian Archaeology*, Vol. 93, (2007), 245-247.

Eyre, 'Work in the Old Kingdom' in: Powell (ed.), *Labor in the Ancient Near East*:

C. J. Eyre, 'Work and the Organisation of Work in the Old Kingdom' in: M. A. Powell (ed.), *Labor in the Ancient Near East*, (AOS 68, New Haven, 1987), 5-47.

F

Fakhry, 'A Report on the Inspectorate of Upper Egypt':

A. Fakhry, 'A Report on the Inspectorate of Upper Egypt. 1. Inspectorate of Qena. 2. Inspectorate of Luxor. 3. The Theban Necropolis. 4. Inspectorate of Edfu. 5. Inspectorate of Asswan', *ASAE* 46 (1947), 25-54.

Faulkner, *Dictionary*:

R. O. Faulkner, *A Concise Dictionary of Middle Egyptian*, (Oxford, 1981, re-printed 2002).

Faulkner, *Coffin Texts I*:

R.O. Faulkner, *The Ancient Egyptian Coffin Texts: spells 1-354*, (Warminster, 1973).

Fazzini, 'Egyptian Reliefs in Brooklyn':

R. Fazzini, 'Some Egyptian Reliefs in Brooklyn', *MW* 1 (1972), 33-70.

Feucht, 'Fishing and Fowling' in: Luft, *The Intellectual Heritage of Egypt*:

E. Feucht, 'Fishing and Fowling with the Spear and Throw-stick Reconsidered', in: U. Luft, *The Intellectual Heritage of Egypt Studies presented to László Kákossy by friends and colleagues on Occasion of his 60th Birthday*, (*Studia Aegyptiaca* 14), (Budapest, 1992), 157-169.

Firth – Gunn, *Teti Pyramid Cemetery*:

C. M. Firth, B. Gunn, *Teti Pyramid Cemeteries*, 2 vols. (Cairo, 1926).

FishBase

R. Froese, and D. Pauly. (eds), 2016, *FishBase*. World Wide Web electronic publication. www.fishbase.org, version (10/2016).

Fischer, 'A Scribe of the Army':

H. G. Fischer, 'A Scribe of the Army in a Saqqara Mastaba of the Early Fifth Dynasty', *JNES* 18 (1959), 233-272.

Fischer, *JAOS* 76 (1956):

H. J. Fischer. 'A Daughter of the Overlords of Upper Egypt in the First Intermediate Period.' *Journal of the American Oriental Society* 76, no. 2 (1956): 99-110.

Fischer, *Dendera*:

H. G. Fischer, *Dendera in the Third Millennium B.C. Down to the Theban Domination of Upper Egypt*, (New York, 1968).

Forbes, *Studies in Ancient Technology*:

R. J., Forbes, *Studies in Ancient Technology, III*. (Brill Archive, Leiden, 1955).

G

Gaillard, 'Recherches sur les poissons représentés dans quelques tom beaux égyptiens de l'Ancien Empire ', *MIFAO* 51 (1923):

C. Gaillard, 'Recherches sur les poissons représentés dans quelques tom beaux égyptiens de l'Ancien Empire ', *MIFAO* 51 (Cairo, 1923).

Gamer-Wallert, *Fische*:

I. Gammer-Wallert, *Fische und Fischkulte im alten Ägypten*, (Wiesbaden, 1970).

Gamer-Wallert, 'Fische, religiös':

I. Gamer-Wallert, 'Fische, religiös', *LÄ* II (1977), 228-234.

Germond – Livet, *An Egyptian Bestiary*:

P. Germond, J. Livet, *An Egyptian Bestiary: Animals in Life and Religion in the Land of the Pharaohs*, (London, 2001).

Giza Archives Project: www.gizapyramids.org

Green, 'Haematology and habits in catfish of the genus *Synodontis*', *Journal of Zoology*:

J. Green, 'Haematology and habits in catfish of the genus *Synodontis*'. *Journal of Zoology* 182.1, (1977), 39-50.

Gaballa, *Narrative in Egyptian Art* (Mainz, 1976):

G.A. Gaballa, *Narrative in Egyptian Art*, (Mainz, 1976).

Groenewegen-Frankfort, *Arrest and Movement: An Essay on Space and Time in the Representational Art of the Ancient Near East* (New York, 1972):

H. A. Groenewegen-Frankfort, *Arrest and Movement: An Essay on Space and Time in the Representational Art of the Ancient Near East*, (New York, 1972).

Geolet, *Nudity*:

O, Goelet, 'Nudity in Ancient Egypt.' *Source: Notes in the History of Art* 12, no. 2 (1993), 20-31.

Grajetski, *Burial Customs*:

W. Grajetski. *Burial Customs in Ancient Egypt: Life in Death for Rich and Poor*. (Bristol Classical Press, 2003).

Gosse, *Mormyridae.*:

J. P. Gosse., *Mormyridae*. In J. Daget, J-P. Gosse, and D.F.E. Thys van den Audenaerde (eds.) *Check-list of the freshwater fishes of Africa (CLOFFA)*. *ORSTOM, Paris and MRAC, Tervuren*. Vol. 1. (1984, Paris) 63-122.

Bibliography

Guggisberg, *Crocodiles: Their Natural History, Folklore and Conservation*, (London, 1972):

C. A. W. Guggisberg, *Crocodiles: Their Natural History, Folklore and Conservation*, (London, 1972).

H

Haldane- Shelmerdine, 'Herodotus 2.96 1-2 Again', *The Classical Quarterly* 40 (1990):

C.W. Haldane, C.W Shelmerdine, 'Herodotus 2.96 1-2 Again', *The Classical Quarterly* 40 (1990), 535-539.

Hall, *Egyptian Textiles*:

R.M. Hall, *Egyptian Textiles*, (Aylesbury, Shire Publications ,1986).

Hall – Lambert, *Hieroglyphic Texts*:

H.R. Hall, E.S. Lambert, *Hieroglyphic Texts from Egyptian Stelae etc. In the British Museum VI. The Trustees of the British Museum*, (London, 1922).

Handoussa, 'Fish Offering in the OK':

T. Handoussa, "Fish offering in the Old Kingdom." *Mitteilungen des Deutschen Instituts für Ägyptische Altertumskunde in Kairo* 44 (1988): 105-109.

Hannig, *Ägyptisches Wörterbuch I: Altes Reich und Erste Zwischenzeit*:

R. Hannig, *Ägyptisches Wörterbuch I: Altes Reich und Erste Zwischenzeit*, (Kulturgeschichte der Antiken Welt 98, Hannig-Lexika 4, Mainz/Rhein, 2003).

Harrison, 'Mugilidae. Lisas':

I. J. Harrison.'Mugilidae. Lisas'. In W. Fischer, F. Krupp, W. Schneider, C. Sommer, K.E. Carpenter and V. Niem (eds.) *Guia FAO para Identification de Especies para lo Fines de la Pesca. Pacifico Centro-Oriental*. 3 Vols. FAO, (Rome, 1995), 1293-1298.

Harpur – Scremin, *The Chapel of Kagemni*:

Y. Harpur, P. Scremin, *The Chapel of Kagemni: Scene Details*, (Oxford, 2006).

Harpur, *Decoration*:

Y. Harpur, *Decoration in Egyptian tombs of the Old Kingdom: Studies in Orientation and Scene Content*, (Studies in Egyptology, London, 1987).

Harpur, *Maidum*:

Y. Harpur, *The Tombs of Nefermaat and Rahotep at Maidum: Discovery, Destruction and Reconstruction*, (Egyptian Tombs of the Old Kingdom 1, (Oxford, 2001).

Harpur, 'Positions' *JEA* 71:

Y. Harpur, 'The Identity and Positions of Reliefs Fragments in Museums and Private Collections: Miscellaneous Reliefs from Saqqâra and Giza,' *JEA* 71 (1985), 27-42.

Bibliography

Hartwig, *Tomb Painting and Identity in Ancient Thebes*:

M. Hartwig, *Tomb Painting and Identity in Ancient Thebes, 1419-1372 BCE*, Volume II, (Bruxelles, 2004).

Hassan, *Giza*, II:

S. Hassan, *Excavations at Giza*, II, (Cairo, 1936).

Hassan, *Giza*, III:

S. Hassan, *Excavations at Giza*, III, (Cairo, 1941).

Hassan, *Giza*, IV:

S. Hassan, *Excavations at Giza*, IV, (Cairo, 1943).

Hassan, *Giza*, V:

S. Hassan, *Excavations at Giza*, V, (Cairo, 1944).

Hassan, *Saqqara*, I:

S. Hassan, *Excavations at Saqqara, 1937-1938: Volume I: Mastaba of Neb-Kaw-Her*, (Cairo, 1975).

Hassan, *Saqqara*, II:

S. Hassan, *Excavations at Saqqara, 1937-1938: Volume II: Mastabas of Ny-aankh-Pepy and Others*, (Cairo, 1975).

Hassan, *Saqqara*, III:

S. Hassan, *Excavations at Saqqara, 1937-1938: Volume III: Mastabas of Princess Hemet-Ra and Others*, (Cairo, 1975).

Hayes, *Scepter*, I:

W. C. Hayes, *The Scepter of Egypt: Part I: From the Earliest Times to the End of the Middle Kingdom*, I, (New York, 1953).

Haynes, *The symbolism and significance of the butterfly in ancient Egypt*. Diss. Stellenbosch: Stellenbosch University, 2013.

D. Haynes, *The symbolism and significance of the butterfly in ancient Egypt*. Diss. Stellenbosch: Stellenbosch University, 2013.

Helck, *Materialien zur Wirtschaftsgeschichte des Neuen Reiches*:

W. Helck. 'Materialien zur Wirtschaftsgeschichte des Neuen Reiches V. Akademie der Wissenschaften und der Literatur.' *Abhandlungen der geistes-und sozialwissenschaftlichen Klasse* 1964 (1965).

Herodotus, 2:96.1-2. Trans: G. Rawlinson, *The History of Herodotus*, (1858):

Herodotus, *Histories* 2:96.1-2. (Trans) G. Rawlinson, *The History of Herodotus*, (New York, 1858).

Bibliography

'Hippopotamus': *Smithsonian National Zoological Park*:

'Hippopotamus': *Smithsonian National Zoological Park*:

<http://nationalzoo.si.Animals/AfricanSavanna/fact-hippo.cfm> (Accessed 14/5/2013)

Hodel-Hoenes, *Life and Death in Ancient Egypt*:

S. Hodel-Hoenes, *Life and Death in Ancient Egypt: Scenes from Private Tombs in New Kingdom Thebes*, D. Warburton, (trans), (New York, 2000).

Hornung – Krauss – Warburton (eds.), *Ancient Egyptian Chronology*:

E. Hornung, R. Krauss, D. A. Warburton (eds.), *Ancient Egyptian Chronology*, (HdO 83, Leiden, 2006).

Houlihan, 'A Guide to the Wildlife':

P. F. Houlihan. 'A Guide to the Wildlife Represented in the Great Swamp Land Scene in the Offering chapel of Ti (No. 60) at Saqqara,' *GM* 155 (1996), 19-53.

Houlihan, *The Animal World of the Pharaohs*:

P. F. Houlihan, *The Animal World of the Pharaohs*, (Cairo, 1996).

Houlihan, *The Birds of Ancient Egypt*:

P. F. Houlihan, *The Birds of Ancient Egypt*, (Warminster, 1986).

I

Ikram, *Choice Cuts*:

S. Ikram, *Choice Cuts: Meat Production in Ancient Egypt*, *Orientalia Lovaniensia analecta* ; 69 (Leuven, 1995).

J

Jacoby-Gollock, *Anguilla anguilla*. The IUCN Red List of Threatened Species 2014:

D. Jacoby. & M. Gollock, *Anguilla anguilla*. The IUCN Red List of Threatened Species 2014: e.T60344A45833138.(2014)<http://dx.doi.org/10.2305/IUCN.UK.2014-1.RLTS.T60344A45833138.en>

James-Apted, *Khentika*:

T.G.H, James, and M.R. Apted. *The Mastaba of Khentika, called Ikhekihi*. (London, 1953).

Jarmuzek, 'Loom-weights or net-weights?':

L. Jarmuzek, "Loom-weights or net-weights?." *Göttinger Miszellen* 226 (2010): 17-23.

Jones, *Boats*:

D. Jones, *Boats*. (London,1995).

Bibliography

Jones, 'The Phrase šd dšr, šd m dšr in Boat-Building Scenes', *JEA*, Vol. 7 2 (1986):

D, Jones. "The Phrase šd dšr, šd m dšr in Boat-Building Scenes." *The Journal of Egyptian Archaeology* (1986): 185-187.

Junker, *Gîza*, III:

H. Junker, *Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza*, III, (Vienna, 1938).

Junker, *Gîza*, IV:

H. Junker, *Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza*, IV, (Vienna, 1940).

Junker, *Gîza*, VI:

H. Junker, *Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza*, VI (Vienna, 1943).

Junker, *Gîza*, XI:

H. Junker, *Grabungen auf dem Friedhof des Alten Reiches bei den Pyramiden von Gîza*, XI, (Vienna, 1953).

K

Kamrin, *The Cosmos of Khnumhotep II at Beni Hasan*:

J. Kamrin, *The Cosmos of Khnumhotep II at Beni Hasan*, (London, 1999).

Kanawati – Abder-Raziq, *Teti Cemetery*, III:

N. Kanawati, M. Abder-Raziq, *The Teti Cemetery at Saqqara: Volume III: The Tombs of Neferseshemre and Seanhkuiptah*, (The Australian Centre for Egyptology Report 11, Warminster, 1998).

Kanawati – Abder-Raziq, *Teti Cemetery*, V:

N. Kanawati, M. Abder-Raziq, *The Teti Cemetery at Saqqara: Volume V: The Tomb of Hesi*, (The Australian Centre for Egyptology Report 13, Warminster, 1999).

Kanawati – Abder Raziq, *Teti Cemetery*, VI:

N. Kanawati, M. Abder-Raziq, *The Teti Cemetery at Saqqara: Volume VI: The Tomb of Nikauisesi*, (The Australian Centre for Egyptology Report 14, Warminster, 2000).

Kanawati – Abder-Raziq, *Teti Cemetery*, VIII:

N. Kanawati, *The Teti Cemetery at Saqqara: Volume VIII: The Tomb of Inumin*, (The Australian Centre for Egyptology Report 24, Oxford, 2006).

Kanawati – Abder-Raziq, *Unis Cemetery*, II:

N. Kanawati, M. Abder-Raziq, *The Unis Cemetery at Saqqara: Volume II: The Tombs of Iynefert and Ihy (reused by Idut)*, (The Australian Centre for Egyptology Report 19, Oxford, 2003).

Bibliography

Kanawati – Hassan, *Teti Cemetery, I:*

N. Kanawati, A. Hassan, *The Teti Cemetery at Saqqara: Volume I: The Tombs of Nedjet-em-pet, Kaaper and Others*, (The Australian Centre for Egyptology Report 8, Warminster, 1996).

Kanawati – Hassan, *Teti Cemetery, II:*

N. Kanawati, A. Hassan, *The Teti Cemetery at Saqqara: Volume II: The Tomb of Ankhmahor, II*, (The Australian Centre for Egyptology Report 9, Warminster, 1997).

Kanawati – McFarlane, *Akhmim:*

N. Kanawati, A. McFarlane, *Akhmim in the Old Kingdom, Part I: Chronology and Administration*, (The Australian Centre for Egyptology Study 2, Sydney, 1992).

Kanawati – McFarlane, *Deshasha:*

N. Kanawati, A. McFarlane, *Deshasha: The Tombs of Inti, Shedu, and Others*, (The Australian Centre for Egyptology Report 5, Sydney, 1993).

Kanawati-Woods, *Artists in the OK:*

N. Kanawati, A. Woods, *Artists in the Old Kingdom: Techniques and Achievements*, (Cairo, 2009).

Kanawati, *Mereruka I:*

N. Kanawati, M. Abder-Raziq, *Mereruka and his Family: Part 1: The Tomb of Meryteti*, (The Australian Centre for Egyptology Report 21, Oxford, 2004).

Kanawati, *Mereruka II:*

N. Kanawati, M. Abder-Raziq, *Mereruka and his Family: Part 2: The Tomb of Sesheshet/Waatetkhet-hor*, (The Australian Centre for Egyptology Report 26, Oxford, 2008).

Kanawati, *Mereruka III: I:*

N. Kanawati, *Mereruka and his Family: Part 3/1: The Tomb of Mereruka*, (The Australian Centre for Egyptology Report 29, Oxford 2010).

Kanawati, *Mereruka III:2:*

N. Kanawati, A. Woods, *Mereruka and his Family: Part 3/2: The Tomb of Mereruka*, (The Australian Centre for Egyptology Report 29, Oxford 2011).

Kanawati, *Administration:*

N. Kanawati, *The Egyptian Administration in the Old Kingdom: Evidence on its Economic Decline*, (Warminster, 1977).

Kanawati, *Conspiracies:*

N. Kanawati, *Conspiracies in the Egyptian Palace: Unis to Pepy I*, (London, 2003).

Bibliography

Kanawati, *Deir el-Gebrawi, I*:

N. Kanawati, *Deir el-Gebrawi: Volume I: The Northern Cliff*, (The Australian Centre for Egyptology Report 23, Oxford, 2005).

Kanawati, *Deir el-Gebrawi, II*:

N. Kanawati, *Deir el-Gebrawi: Volume II: The Southern Cliff: The Tomb of Ibi and Others*, (The Australian Centre for Egyptology Report 25, Oxford, 2007).

Kanawati, *Deir el-Gebrawi, III*:

N. Kanawati, *Deir el-Gebrawi: Volume III: The Southern Cliff: The Tomb of Djau/Shemai and Djau*, (The Australian Centre of Egyptology Report 32, Oxford, 2013).

Kanawati, *El-Hagarsa, III*:

N. Kanawati, *The Tombs of El-Hagarsa, III*, (The Australian Centre for Egyptology Report 7, Warminster, 1995).

Kanawati, *El-Hawawish, I*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, I*, (Sydney, 1980).

Kanawati, *El-Hawawish, II*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, II*, (Sydney, 1981).

Kanawati, *El-Hawawish, III*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, III*, (Sydney, 1982).

Kanawati, *El-Hawawish, IV*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, IV*, (Sydney, 1983).

Kanawati, *El-Hawawish, V*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, V*, (Sydney, 1985).

Kanawati, *El-Hawawish, VI*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, VI*, (Sydney, 1986).

Kanawati, *El-Hawawish, VII*:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, VII*, (Sydney, 1987).

Bibliography

Kanawati, *El-Hawawish*, VIII:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, VIII*, (Sydney, 1988).

Kanawati, *El-Hawawish*, IX:

N. Kanawati, *The Rock Tombs of El-Hawawish: The Cemetery of Akhmim, IX*, (Sydney, 1989).

Kanawati, *Giza*, I:

N. Kanawati, *Tombs at Giza: Volume 1: Kaiemankh (G4561) and Seshemnefer I (G4940)*, I, (The Australian Centre for Egyptology Report 16, Warminster, 2001).

Kanawati, *Giza*, II:

N. Kanawati, *Tombs at Giza: Volume II: Seshathetep/Heti (G5150), Nesutnefer (G4970) and Seshemnefer II (G5080)*, (The Australian Centre for Egyptology Report 18, Warminster, 2002).

Kanawati, *Meir I*:

N. Kanawati, *The Cemetery of Meir, Volume I, The Tomb of Pepyankh the Middle*, (The Australian Centre for Egyptology Report 31, Oxford, 2012).

Kanawati, *Meir III*:

N. Kanawati, *The Cemetery of Meir, Volume III, The Tomb of Niankhpepy the Black*, (The Australian Centre for Egyptology Report 38, Oxford, 2015).

Kanawati, *Governmental Reforms*:

N. Kanawati, *Governmental Reforms in Old Kingdom Egypt*, (Warminster, 1980).

Kanawati, 'Nepotism in the Egyptian Sixth Dynasty':

N. Kanawati, 'Nepotism in the Egyptian Sixth Dynasty', *BACE* 14 (2003), 39-59.

Kanawati, *The Tomb and Beyond*:

N. Kanawati, *The Tomb and Beyond: Burial Customs of Egyptian Officials*, (Warminster, 2001).

Kanawati, 'Specificity in Old Kingdom tomb scenes':

N. Kanawati, 'Specificity in Old Kingdom tomb scenes' in *Annales du Service des Antiquités de l'Égypte*, 83 (2009), 261–278.

Kaplony, *Methethi*:

P. Kaplony, *Studien zum Grab des Methethi*, (Bern, 1976).

Keeling, *Social behaviour in farm animals*:

J. L. Keeling, *Social behaviour in farm animals*, (Oxford, 2001).

Bibliography

Keenleyside, 'Some aspects of Schooling Fish Behaviour':

M.H.A Keenleyside, 'Some aspects of Schooling Fish Behaviour' *Behaviour*, Vol.8 No. 2/3 (1955), 183-247.

Kees, *Provinzialkunst*:

H. Kees, *Studien zur ägyptischen Provinzialkunst*, (Leipzig, 1921).

Kemp, *Anatomy of a Civilisation*:

B. J. Kemp, *Ancient Egypt: Anatomy of a Civilisation*, (2nd ed., London, 2006).

El-Khouli – Kanawati, *Quseir El-Amarna*:

A. El-Khouli, N. Kanawati, *Quseir El-Amarna: The Tombs of Pepy-ankh and Khewen-wekh*, (The Australian Centre for Egyptology Report 1, Sydney, 1989).

Klebs, *Reliefs des Mittleren Reiches*:

L. Klebs, *Die Reliefs und Malereien des Mittleren Reiches (VII-XVII. Dynastie ca. 2475-1580 v. Chr.) Material zur ägyptischen Kulturgeschichte*, (Heidelberg, 1922).

Kuzmin, et al., *Hyla savignyi*. The IUCN Red List of Threatened Species 2009:

S. Kuzmin, A.M.M Disi, G.Degani, D. Tarkhnishvili, B. Tuniyev, M. Sparreboom, I. H. Ugurtas, N. Rastegar-Pouyani, S. Anderson, R. Sadek, S. Hraoui-Bloquet, A. Gasith, E. Elron, Sarig Gafny, U?ur Kaya. 2009. *Hyla savignyi*. The IUCN Red List of Threatened Species 2009: e.T55647A11347491.

L

Lashien, 'Narrative in Wall Scenes: Progress Through Space and Time':

M. Lashien, 'Narrative in the Old Kingdom Wall Scenes: The Progression Through Space and Time', in *BACE* 22 (2011) 101-115.

Lauer, *Saqqara. The Royal Cemetery of Memphis*:

J.P. Lauer, *Saqqara: The Royal Cemetery of Memphis: Excavations and Discoveries since 1850*. (London, 1976).

Lloyd et. al, *Saqqara Tombs, II*:

A. B. Lloyd, A. J. Spencer, A. El-Khouli, *Saqqâra Tombs II: The Mastabas of Meru, Semdenti, Khui and Others*, (London, 1990).

Leahy – Mathieson, 'The Tomb of Nyankhnesut (Re)discovered':

A. Leahy, I. Mathieson, 'The Tomb of Nyankhnesut (Re)discovered', *JEA* 87 (2001), 33-42.

Lévêque- Daget, 'Cyprinidae'. In Daget-Gosse-Thys van den Audenaerde, (eds.) (*CLOFFA*). Vol. 1:

C. Lévêque, and J. Daget, *Cyprinidae*. In J. Daget, J-P, Gosse, D.F.E. Thys van den Audenaerde, (eds.) *Check-list of the freshwater fishes of Africa (CLOFFA)*. ORSTOM, Paris and MRAC, Tervuren. Vol. 1. (1984), 217-234.

Bibliography

LD, II:

C. R. Lepsius, *Denkmäler aus Aegypten und Aethiopien*, II, (Berlin, re-printed 1972).

LD, Erg.:

C. R. Lepsius, *Denkmäler aus Aegypten und Aethiopien, Ergänzungsband*, (Leipzig, 1913).

Lichtheim, *Ancient Egyptian Literature*, II:

M. Lichtheim, *Ancient Egyptian Literature: A Book of Readings: Volume II: The New Kingdom*, (Berkley, 1976).

Lucas, *Ancient Egyptian Materials and Industries*:

A. Lucas, *Ancient Egyptian Materials and Industries*. (London, 2003).

Lundbeck-Sahrhage, *A History of Fishing*:

J. Lundbeck, D Sahrhage, *A History of Fishing*, (Berlin, 1992).

M

Magnusson, et al., 'Behaviour and Environment: Reproduction' (in) Ross C.A.(eds) *Crocodiles and Alligators*:

W.E. Magnusson, K.A. Vliet, A.C. Pooley, R. Whitaker, 'Behaviour and Environment: Reproduction' in C.A. Ross (eds) *Crocodiles and Alligators*, (Silverwater, 1989).

Malek, *Egyptian Art*:

J. Malek, *Egyptian Art*, (London, 1999).

Malek, *In the Shadow of the Pyramids*:

J. Malek, *In the Shadow of the Pyramids: Egypt during the Old Kingdom*, (London, 1986).

Mariette, *Mastabas*:

A. Mariette, *Les mastabas de l'ancien Empire*, (Paris, 1889).

Martin, *Hetepka*:

G. T. Martin, *The Tomb of Hetepka and Other Reliefs and Inscriptions from the Sacred Animal Necropolis North Saqqâra: 1964-1973*, (London, 1979).

Marshal, *The life of fishes*:

N.B. Marshal, *The Life of Fishes*, (London, 1965).

Maspero, *Le Genre epistolaire ches les Égyptiens*:

G.C.C. Maspero. *Du genre épistolaire ches les Égyptiens de l'époque pharaonique*. Vol. 12. (Franck, 1873).

Bibliography

McCorquodale, *Representations of the Family*:

K.E. McCorquodale, *Representations of the family in the Old Kingdom: women and marriage*, (PhD Thesis: Macquarie University, Sydney, 2010).

McFarlane, *Unis Cemetery*, I:

A. McFarlane, *The Unis Cemetery at Saqqara: Volume I: The Tomb of Irukaptah*, (The Australian Centre for Egyptology Report 15, Warminster, 2000).

McFarlane, *Mastabas at Saqqara*:

A. McFarlane, *Mastabas at Saqqara: Kaiemheset, Kaipunesut, Kaiemsenu, Sehetepu, and others*, (The Australian Centre for Egyptology Report 20, Oxford, 2003).

Merzeban, 'Tired Workers in the Old Kingdom daily life scenes?' *MDAIK* 61:

R.Y., Merzeban, 'Tired workers in Old Kingdom daily life scenes?' *Mitteilungen des Deutschen Archäologischen Instituts. Abteilung Kairo* 61 (2007): 225-246.

Mogensen, *Le Mastaba égyptien*:

M. Mogensen, *Le mastaba égyptien de la Glyptothèque Ny Carlsberg*, (Copenhagen, 1921).

Mohr, *Hetep-her-akhti*:

H. T. Mohr, *The Mastaba of Hetep-her-akhti: The Study of an Egyptian Tomb chapel in the Museum of Antiquities Leiden*, (Leiden, 1943).

Montet, *Scenes de la Vie privée*:

P. Montet, *Scènes de la vie privée dans les tombeaux égyptiens de l'Ancien Empire*, (Strasbourg, 1925).

de Morgan, *Catalogue des monuments*:

J. de Morgan, *Catalogue des monuments et inscriptions de l'Égypte antique*, 3 vols. (Vienna, 1895-1903).

Moschus. 169:

Moschus. 169, 2nd cent. BC. (Trans) R. Bland, *Collections from the Greek anthology*, (1813).

Moussa – Altenmüller, *Nianchchnum*:

A. Moussa, H. Altenmüller, *Das Grab des Nianchchnum und Chnumhotep*, (Mainz/Rhein, 1977).

Moussa – Altenmüller, *The Tomb of Nefer and Ka-hay*:

A. Moussa, H. Altenmüller, *The Tomb of Nefer and Ka-hay*, (Mainz/Rhein, 1971).

Moussa – Junge, *Tombs of Two Craftsmen*:

A. Moussa, H. Junge, *Two Tombs of Craftsmen*, (Mainz/Rhein, 1975).

Bibliography

'Mullets: Mugiliformes – 'Behaviour and Reproduction', *Animal life Resource*:

'Mullets: Mugiliformes - Behaviour And Reproduction', *Animal life Resource*:
<http://animals.irank.org/pages/2100/Mullets-Mugiliformes-BEHAVIOR-REPRODUCTION.html> (Accessed 15/3/ 2014).

Müller, 'Musterbuch':

M. Müller, 'Musterbuch', *LÄ IV*, (1982), 244-246.

Munich Ägyptische Sammlung:

Munich, *Die Ägyptische Sammlung des Bayerischen Staates. Ausstellungsräumen de Staatichen Graphischen Sammlung* (Munich, 1966).

Munro, *Unas-Friedhof*:

P. Munro, *Der Unas-Friedhof Nord-West: Topographisch–historische Einleitung: Das Doppelgrab der Königinnen Nebet und Khenut*, I, (Mainz/Rhein, 1993).

Musambachime, 'The Fate of the Nile Crocodile in African Waterways' in *African Affairs*, Vol. 86, No. 343 (Apr., 1987):

M, C. Musambachime, "The fate of the Nile crocodile in African waterways." *African Affairs* 86, no. 343 (1987): 197-207.

Museum of Fine Arts Boston (2016):

The Ancient Worlds Collection, *Museum of Fine Arts Boston* (2016) www.mfa.org.

MySliwiec, *Merefnebef*:

K. MySliwiec, *Saqqara I: The Tomb of Merefnebef*, (Varsovie, 2004).

MMA, Egyptian Art in the Age of the Pyramids:

Metropolitan Museum of Art, *Egyptian Art in the Age of the Pyramids*, The Metropolitan Museum of Art. Distributed by H.N. Abrams Inc. (New York, 1999).

N

Newberry, *Beni Hasan*:

P. E. Newberry, *Beni Hasan*, II, (London, 1893).

O

OEE Database:

Linacre College, Oxford (2006) *Oxford Expedition to Egypt: Scene-details Database* [Marsh Scenes]. York: Archaeology Data Service <https://doi.org/10.5284/1000009>. (Last Modified 2011).

Bibliography

'Old Kingdom Textiles' at *Digital Egypt for Universities UCLA*:

'Old Kingdom Textiles' at *Digital Egypt for Universities UCLA* (ed) S. Quirke, (2002)
<http://www.ucl.ac.uk/museums-static/digitalegypt/textil.html> (Accessed April, 2015).

Orenstein, *Survivors in Armor: Turtles, Tortoises and Terrapins*:

R.I. Orenstein, *Survivors in Armor: Turtles, Tortoises and Terrapins*. (Toronto, 2001).

P

Parkinson, *Voices from Ancient Egypt*:

R. B. Parkinson, *Voices from Ancient Egypt: An Anthology of Middle Kingdom Writings*,
(Re-printed 2004, London, 1991).

Partridge, *Transport in Ancient Egypt*:

R. Partridge, *Transport in Ancient Egypt*. (London, 1996).

Paugy, 'Characidae':

D. Paugy, 'Characidae', In C. Lévêque, D. Paugy and G.G. Teugels, (eds.) *Faune des poissons d'eaux douces et saumâtres de l'Afrique de l'Ouest. Tome I. Coll. Faune Tropicale n° XXVIII. Musée Royal de l'Afrique Centrale, Tervuren et O.R.S.T.O.M.*, (Paris, 1990), 195-236.

Paugy- Roberts, 'Mochokidae':

D. Paugy and T.R. Roberts, 'Mochokidae'. In C. Lévêque, D. Paugy and G.G. Teugels, (eds.) *Faune des poissons d'eaux douce et saumâtres de l'Afrique de l'Ouest, Tome 2. Coll. Faune et Flore tropicales 40. Musée Royal de l'Afrique Centrale, Tervuren, Belgique, Museum National d'Histoire Naturelle, Paris, France and Institut de Recherche pour le Développement*, (Paris, 2003) 195-268.

Pauly- Schaefer, 'Alestidae':

D. Pauly, and S.A. Schaefer, 'Alestidae'. (In) M.L.J. Stiassny, G.G. Teugels, and C.D. Hopkins (eds.) *Poissons d'eaux douces et saumâtres de basse Guinée, ouest de l'Afrique centrale/The fresh and brackish water fishes of Lower Guinea, west-central Africa. Vol. 1. Coll. Faune et Flore tropicales 42. Istitut de recherche pour le développement, Paris, France, Muséum nationale d'histoire naturelle, Paris, France and Musée royale de l'Afrique centrale, Tervuren, Belgique*. (2007), 347-411.

Peck, *Naga ed-Dêr*:

C. Peck, *Some Decorated Tombs of the First Intermediate Period at Naga ed-Dêr*,
(Unpublished PhD thesis, Brown University, 1958).

Peck, 'Craftsman and Artist' in: Turner (ed.), *The Dictionary of Art*:

W. H. Peck, 'Craftsman and Artist' in: Turner (ed.), *The Dictionary of Art*, 789-791.

Bibliography

Peck, *Egyptian Drawings*:

W. H. Peck, *Egyptian Drawings*, (London, 1978).

Peters, 'Mesolithic fishing':

J. Peters, 'Mesolithic fishing along the Central Sudanese Nile and the lower Atbara.' *Sahara* (1991): 33-40.

Peterson, 'Cruising Speed During Migration of the Stripped Mullet':

C.H. Peterson, 'Cruising Speed During Migration of the Striped Mullet (*Mugil cephalus* L.): An Evolutionary Response to Predation?' *Evolution* 30, no. 2 (1976): 393-396.

Petrie, *Memphite Tombs Chapels*:

H. F. Petrie, *Seven Memphite Tombs Chapels*, (London, 1952).

Petrie, *Athribis*:

W. M. F. Petrie, *Athribis*, (London, 1908).

Petrie, *Denderah*:

W. M. F. Petrie, *Denderah*, (London, 1900).

Petrie, *Royal Tombs*:

W. M. F. Petrie, *Royal Tombs of the First Dynasty*, 2 vols. (ASE 18, London, 1900-1901).

Petrie, *Medum*:

W.M.F. Petrie, *Medum*, (London, 1892).

Petrie, *Kahun, Gurob and Hawara*:

W.M.F. Petrie, *Kahun, Gurob and Hawara*, (London, 1890).

Petrie Museum Catalogue (Online):

UCL Petrie Collection Online Catalogue: <http://petriecat.museums.ucl.ac.uk/> (Accessed June 2015).

Phillips, 'Fish Tales and Fancies':

D.W. Phillips, 'Fish tales and fancies.' *The Metropolitan Museum of Art Bulletin* 2, no. 6 (1944): 184-189.

Plautus, *Rudens* (290-315):

Plautus, *Rudens* (290-315). Trans. C.K. Chase, *The Rudens of Plautus*, (New York, 1919).

PM:

B. Porter, R. L. B. Moss, *Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings*, 7 vols. (Oxford, 1927-52, 2nd edn. 1960).

Bibliography

Pooley, 'Behaviour and Environment: Food and Feeding habits':

Pooley, 'Behaviour and Environment: Food and Feeding habits' in Ross C.A. (ed) *Crocodiles and Alligators*, (Silverwater, 1989).

Popma-Massa, 'Southern regional Aquiculture centre: Tilapia Life History and Biology':

T. Popma, M. Masser, 'Southern regional Aquiculture centre: Tilapia Life History and Biology' (March.1999) SRCA.283, .2.
<https://srac.tamu.edu/index.cfm/event/getFactSheet/whichfactsheet/53/>

Pritchard, *Living Turtles of the World*:

P.C.H. Pritchard, *Living Turtles of the World*, (New Jersey, 1967).

Q

Quibell, *Excavations at Saqqara, III*:

J. E. Quibell, *Excavations at Saqqara, III*, (Cairo, 1907-1908).

Quibell, *Excavations at Saqqara, IV*:

J. E. Quibell, *Excavations at Saqqara, IV*, (Cairo, 1907-1908).

R

Radcliffe, *Fishing from the Earliest Times*:

W. Radcliffe, *Fishing from the Earliest Times*. (London, 1921).

Reid, *A revision of African species of Labeo (Pisces: Cyprinidae) and a re-definition of the genus*:

G.M. Reid, *A revision of African species of Labeo (Pisces: Cyprinidae) and a re-definition of the genus*. (Verlag von J. Cramer, Braunschweig, 1985), 322.

Roberts, 'A Review of the African Electric Catfish':

T.R. Roberts, 'A review of the African electric catfish family Malapteruridae, with descriptions of new species.' *Occas. Pap. Ichthyol.* (2000) 1:1-15.

Roberts, 'Tetraodontidae':

T.R. Roberts, Tetraodontidae. In J. Daget, J.-P. Gosse and D.F.E. Thys van den Audenaerde (eds.) *Check-list of the freshwater fishes of Africa, Bruxelles (ISNB), Tervuren (MRAC) & Paris (ORSTOM)* (1986): 434-436.

Robins, et al., 'World fishes important to North Americans':

C.R. Robins, R.M. Bailey, C.E. Bond, J.R. Brooker, E.A. Lachner, R.N. Lea, and W.B. Scott, 'World fishes important to North Americans. Exclusive of species from the continental waters of the United States and Canada'. (in) *Am. Fish. Soc. Spec. Publ.* (21) (1991) 243.

Robins, *The Art of Ancient Egypt*:

G. Robins, *The Art of Ancient Egypt*, (Cambridge. Mass, 1997).

Bibliography

Robins, *Egyptian Painting and Relief*:

G. Robins, *Egyptian Painting and Relief*, (Aylesbury, Shire Egyptology, 1986).

Robins, 'Hair and the Construction of Identity in Ancient Egypt c. 1480-1350 B.C.':

G. Robins, 'Hair and the Construction of Identity in Ancient Egypt c. 1480-1350 B.C.', *JARCE* 36 (1999), 55-69.

Robins, *Proportions*:

G. Robins, *Proportion and Style in Ancient Egyptian Art*, (Austin, 1994).

Robins, 'Problems in Interpreting Egyptian Art':

G. Robins, 'Problems in Interpreting Egyptian Art', *DE* 17 (1990), 45-58.

Robins, *Women in Ancient Egypt*:

G. Robins, *Women in Ancient Egypt*, (London, 1993).

Roth, *Palace Attendants*:

A. M. Roth, *A Cemetery of Palace Attendants, including G 2084-2099, G2230 + 2231 and G 2240*, (Giza Mastabas VI, Boston, 1995).

Roth, 'The Practical Economics of Tomb Building in the Old Kingdom' in: Silverman (ed.), *For his Ka*:

A. M. Roth, 'The Practical Economics of Tomb Building in the Old Kingdom: A Visit to the Necropolis in a Carrying Chair', in: D. Silverman (ed.), *For His Ka: Essays Offered in Memory of Klaus Baer*, (SAOC 55, Chicago, 1994), 227-240.

Ruiz, *The Spirit of Ancient Egypt*:

A. Ruiz, *The Spirit of Ancient Egypt*, (New York, 2001).

Russmann, 'A Second Style in Egyptian Art of the Old Kingdom', *MDAIK* 51:

E.R. Russmann, 'A Second Style in Egyptian Art of the Old Kingdom', *Mitteilungen des Deutschen Archäologischen Instituts. Abteilung Kairo* 51 (1995): 269-279.

Ryan-Hansen, 'Egyptian Cordage':

D.P. Ryan, D.H. Hansen, 'A study of ancient Egyptian cordage in the British Museum', *British Museum Occasional Paper* 62, (1987).

S

Saffirio, 'Food and Dietary Habits in Ancient Egypt':

Saffirio, 'Food and Dietary Habits in Ancient Egypt', *Journal of Human Evolution* Volume 1, Issue 3, May 1972, 297-305.

Bibliography

Sahrhage, *Fischfang*:

D. Sahrhage, *Fischfang und Fischkult im alten Ägypten*, (Kulturgeschichte der Antiken Welt 70, Mainz/Rhein, 1998).

Sahrhage, 'Fishing in Ancient Egypt':

D. Sahrhage, 'Fishing in Ancient Egypt.' In *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*, (Springer Netherlands, 2008), 922-927.

Saleh, *Three Old Kingdom Tombs*:

M. Saleh, *Three Old Kingdom Tombs at Thebes: The Tomb of Unas-Ankh no. 413. II. The Tomb of Khenty no. 405. III. The Tomb of Ihy no. 186*, I, trans. M. Bullock, (Mainz/Rhein, 1977).

Säve-Söderberg, *Hamra Dom*:

T. Säve-Söderberg, *The Old Kingdom Cemetery at Hamra Dom* (El-Qasr wa Es-Saiyad), (Stockholm, 1994).

Schäfer, *Principles*:

H. Schäfer, *Principles of Egyptian Art*, J. Baines, trans., (Oxford, 1974).

Schürmann, *Ii-nefret*:

W. Schürmann, *Die Reliefs aus dem Grab des Pyramidenvorstehers Ii-nefret: Eine Bilddokumentation des Badischen Landesmuseums Karlsruhe*, (Karlsruhe, 1983).

Seghers, 'Schooling Behaviour'

B.H. Seghers, 'Schooling Behaviour in the Guppy (*Poecilia reticulata*): An Evolutionary Response to Predation' *Evolution* Vol. 28, No. 3 (Sep., 1974), 486-489.

'Sea Grant: Rhode Island Fact Sheet: Schooling' P.K. Stout, (Accessed 5/10/2014):

'Sea Grant: Rhode Island Fact Sheet: Schooling' P.K. Stout (ed),
<http://seagrants.gso.uri.edu/factsheets/schooling.html>. Accessed (5/10/2014).

Shaw, *Oxford History of Ancient Egypt*:

I. Shaw, *The Oxford history of Ancient Egypt*, (Oxford, 2003).

Shaw-Nicholson, *Dictionary of Ancient Egypt*:

I. Shaw, P. Nicholson, *The British Museum Dictionary of Ancient Egypt*, (Barcelona, 2002).

Shirai, 'Ideal and Reality in Old Kingdom Private Funerary Cults':

Y. Shirai, 'Ideal and Reality in Old Kingdom Private Funerary Cults', in (ed.) M. Bárta, *The Old Kingdom Art and Architecture: Proceedings of the Conference held in Prague May 31–June 4*, (Prague, 2006), 325- 334.

Bibliography

Simpson, *Kayemnofret*:

W. K. Simpson, *The Offering Chapel of Kayemnofret in the Museum of Fine Arts*, Boston, (Boston, 1992).

Simpson, *Kawab*:

W. K. Simpson, *The Mastabas of Kawab, Khafkhufu I and II: G7110-20, 7130-40, and 7150 and subsidiary mastabas of Street G 7100*, (Giza Mastaba Series III, Boston, 1978).

Simpson, *Qar and Idu*:

W. K. Simpson, *The Mastabas of Qar and Idu: G7101 and 7102*, (Giza Mastaba Series II, Boston, 1976).

Simpson, *Sekhem-ankh-Ptah*:

W. K. Simpson, *The Offering Chapel of Sekhem-ankh-Ptah in the Museum of Fine Arts*, Boston, (Boston, 1976).

Simpson, 'The Letter to the Dead':

W. K. Simpson, 'The Letter to the Dead from the Tomb of Meru (N3737) at Nag' ed-Deir', *JEA* 52 (1966), 39-52.

Simpson, *Western Cemetery, I*:

W. K. Simpson, *Mastabas of the Western Cemetery: Part I: Sekhemka (G 1029); Tjetu I (G 2001); Iasen (G 2196); Penmeru (G 2197); Hagy, Nefertjentet, and Herunefer (G 2352/53); Djaty, Tjetu II, and Nimesti (G 2337 X, 2343, 2366)*, (Giza Mastaba Series IV, Boston, 1980).

Smith, *Art and Architecture*:

W. S. Smith, *The Art and Architecture of Ancient Egypt*, (3rd ed. New Haven, 1998).

Smith, *Interconnections with the Near East*:

W.S. Smith, *Interconnections in the ancient Near East*. (New Haven, 1965).

Staring, 'Fixed rules or personal choice?':

N. Staring, 'Fixed rules or personal choice? On the composition and arrangements of daily life scenes in Old Kingdom elite tombs', in (eds.) N. Strudwick, H. Strudwick, *Old Kingdom, New Perspectives: Egyptian Art and Archeology 2750–2150 BC*, (Oxford, 2011), 256-269.

Strudwick, *Administration*:

N. Strudwick, *The Administration of Egypt in the Old Kingdom: The Highest Titles and their Holders*, (London, 1985).

Swinton, *Dating of Old Kingdom (OK) Tombs*:

J. Swinton, *Dating the tombs of the Egyptian Old Kingdom*, (Oxford, 2014).

Bibliography

Swinton, 'The Depiction of Wives':

J. Swinton, 'The Depiction of Wives of Tomb Owners in the Later Old Kingdom', *BACE* 14 (2003), 95-109.

Smith, *HESPOK*:

W. S. Smith, *A History of Egyptian Sculpture and Painting in the Old Kingdom*, (New York, re-issued 1978).

Smith, 'The Judge goes Fishing':

W. S. Smith, 'The Judge goes Fishing', *BMFA* 56 [304] (1958), 56-63.

I

Täckholm, 'Ancient Egypt, landscape, flora and agriculture.' *In: The Nile, biology of an ancient river*:

V. Täckholm, 'Ancient Egypt, landscape, flora and agriculture.' *In: The Nile, biology of an ancient river*, (Springer Netherlands, 1976), 51-68.

Tandy- Baha El Din, *Amietophrynus kassasii*. The IUCN Red List of Threatened Species 2004:

M. Tandy, S.B. El Din. 2004. *Amietophrynus kassasii*. The IUCN Red List of Threatened Species 2004: e.T54678A11171872.

<http://dx.doi.org/10.2305/IUCN.UK.2004.RLTS.T54678A11171872.en>

Teeter, 'Rope-Making':

E. Teeter, 'Techniques and Terminology of Rope-Making in Ancient Egypt', *JEA* 73 (1987), 71-77.

Trewavas, 'Tilapiine fishes of the genera *Sarotherodon*, *Oreochromis* and *Danakilia*.':

E. Trewavas, 'Tilapiine fishes of the genera *Sarotherodon*, *Oreochromis* and *Danakilia*', *British Mus. Nat. Hist.*, (1983, London).

Teugels, 'A systematic revision of the African species of the genus *Clarias*':

G.G. Teugels, 'A systematic revision of the African species of the genus *Clarias* (Pisces; Clariidae).' *Annales-Musee Royal de l'Afrique Centrale. Sciences Zoologiques (Belgium)*, (1986).

Tokyo, *Bridgestone Museum of Art*:

Tokyo, *Bridgestone Museum of Art*, Publication of the Bridgestone Museum (Tokyo, 1977).

V

Vachala, *Abusir*, VIII:

B. Vachala, *Abusir VIII: Die Reliefs aus der Ptahschepses-Mastaba in Abusir*, (Prague, 2004).

Bibliography

Vandier, *Manuel*, IV:

J. Vandier, *Manuel d'archéologie égyptienne: Bas-Reliefs et Peintures: Scènes de la vie quotidienne*, IV, (Paris, 1964).

Vandier, *Manuel*, V:

J. Vandier, *Manuel d'archéologie égyptienne: Bas-Reliefs et Peintures: Scènes de la vie quotidienne*, V [II], (Paris, 1969).

Vandier, *Moʿalla*:

J. Vandier, *Moʿalla: La tombe d'Anktifi et la tombe de Sebekhotep*, (FIFAO, Cairo, 1950).

Vandier, *La Revue du Louvre et des Musées de France*:

J. Vandier, 'Un don des amis du Louvre au département des antiquités égyptiennes', *La Revue du Louvre et des Musées de France*, 19 (1969), 1-6.

van Elsbergen, *Fischerei*:

M. J. van Elsbergen, *Fischerei im Alten Ägypten: Untersuchungen zu den Fischfangdarstellungen in den Gräbern der 4. bis 6. Dynastie*, (Abhandlungen des Deutschen Archäologischen Institutes Kairo, Ägyptologische Reihe 14, Berlin, 1997).

van de Walle, *Neferirtenef*:

B. van der Walle, *La chapelle funéraire de Neferirtenef*, (Bruxelles, 1978).

van Walsem, *Iconography*:

R. van Walsem, *Iconography of Old Kingdom Elite Tombs: Analysis and Interpretation, Theoretical and Methodological Aspects*, (Mémoires de la Société d'Études Orientales 35, Leiden, 2005).

van Walsem, 'The Mastaba Project at Leiden University': in: Schoske (ed.), *Akhten*:

R. Van Walsem, 'The Mastaba Project at Leiden University' in: S. Schoske (ed.), *Akhten des vierten Ägyptologen kongresses*, München 1985, II, (Hamburg, 1989), 143-154.

Varille, *Ni-ankh-Pepi*:

A. Varille, *La Tombe de Ni-ankh-Pepi à Zâouyet El-Mayetîn*, (IFAO, Cairo, 1938).

Veldmeijer, 'Fishing from Berenike':

A. Veldmeijer, 'Fishing from Berenike (Egyptian Red Sea Coast)' (in) *Paper on Ancient Egypt 3* (2004), 99-110.

Veldmeijer, 'Cordage Production':

A. Veldmeijer, 'Cordage Production', In Willeke Wendrich (ed.), *UCLA Encyclopedia of Egyptology* (2009) <https://escholarship.org/uc/item/1w90v76c> (accessed April 2015).

Bibliography

Vinson, 'Πακτουν and πάκτωσις as Ship-Construction Terminology in Herodotus, Pollux and Documentary Papyri ':

S. Vinson, 'Πακτουν and πάκτωσις as Ship-Construction Terminology in Herodotus, Pollux and Documentary Papyri ', *Zeitschrift für Papyrologie und Epigraphik* Bd. 113, (1996), 197-204.

Vischak, 'Agency':

D. A. Vischak, 'Agency in Old Kingdom Elite Tomb Programs: Traditions, Locations and Variable Meanings' in: Fitzenreiter – Herb (eds.), *Dekorierte Grabanlagen*, 255-276.

Vischak, 'Identity in/of Elephantine':

D.A. Vischak, 'Identity in/of Elephantine: The Old Kingdom Tombs at Qubbet el hawa.' *The Archaeology and Art of Ancient Egypt: Essays in Honor of David B. O'Connor Vol 2* (2007): 443-458.

W

Wales Museum: 'Traditional Fishing Practices on the Severn Estuary' (Published 2007)
<http://www.museumwales.ac.uk/en/1923/>.

Ward, 'Sewn planked boats from early dynastic Abydos, Egypt':

C. Ward, 'Sewn planked boats from early dynastic Abydos, Egypt'. *Boats, Ships & Shipyards: International Proceedings of Ninth International Symposium on Boat and Ship Archaeology, Venice*. (2000). 19-23.

Wassell, *Ancient Egyptian Fauna: a lexicographical study*. Diss. University of Durham, 1991:

B.A. Wassell, *Ancient Egyptian Fauna: a lexicographical study*. Diss. University of Durham, 1991.

Watson, *Egyptian Pyramids and Mastaba Tombs*:

P.J. Watson, *Egyptian Pyramids and Mastaba Tombs*, (Botley, Shire Egyptology 6, 2008).

Weeks, in: Weeks (ed.), *Egyptology and the Social Sciences*:

K. R. Weeks, 'Art, Word, and the Egyptian World View' in: K. R. Weeks (ed.) *Egyptology and the Social Sciences: Five Studies*, (Cairo, 1979), 59-81.

Weeks, *Cemetery G6000*:

K. R. Weeks, *Mastabas of Cemetery G6000: G 6010 (Neferbaupth); G 6020 (Iymery); G 6030 (Ity); G 6040 (Shepseskafankh)*, (Giza Mastabas V, Boston, 1994).

Wild, *Ti*, II:

H. Wild, *Le Tombeau de Ti: Fascicle II: Le Chapelle*, (Cairo, 1953).

Wild, *Ti*, III:

H. Wild, *Le tombeau de Ti*, (Cairo, 1966).

Bibliography

Wildung, 'Feindsymbolik':

D. Wildung, 'Feindsymbolik', *LÄ II* (1977), 146-148.

Wilkinson, *Manners and Customs*:

J.G. Wilkinson, *The Manners and Customs of the Ancient Egyptians*, Vol. 2. (London, 1878).

Wilkinson, *Reading Egyptian Art*:

R. H. Wilkinson, *Reading Egyptian Art: A Hieroglyphic Guide to Ancient Egyptian Painting and Sculpture*, (London, 1992).

Wilkinson, *Symbol and Magic*:

R. H. Wilkinson, *Symbol and Magic in Egyptian Art*, (London, 1994).

Wilson, *Food and Drink*:

H. Wilson, *Egyptian Food and Drink*, (Buckinghamshire, Shire Egyptology 9, 2001).

Wolf, *Die Kunst Aegyptens*:

W. Wolf, *Die Kunst Ägyptens: Gestalt und Geschichte*, (Stuttgart, 1957).

Woods, *BACE 17*:

A. Woods, 'The Composite Fishing and Fowling Scene in the Tomb of Remni at Saqqara', *BACE 17* (2006), 137-157.

Woods, *A Day in the Marshes*:

A. Woods, 'A 'Day in the Marshes: a study of Old Kingdom marsh scenes in the tombs of the Memphite cemeteries', (Unpublished Thesis (PhD) -- Macquarie University, 2008).

Wreszinski, *Atlas*:

W. Wreszinski, *Atlas zur altägyptischen Kulturgeschichte*, Vols. I, III, (Leipzig, 1923-1936).

Z

Ziegler, *Akhethetep*:

C. Ziegler, *Le mastaba d'Akhethetep: Une Chapelle funéraire de l'Ancien Empire*, (Paris, 1993).

Ziegler, *Catalogue du stèles*:

C. Ziegler, *Catalogue des steles, peintures et reliefs égyptiens de l'Ancien Empire et de la Première Période Intermédiaire vers 2686-2040 avant J.-C.*, (Paris, 1990).

List of Abbreviations

AJA: American Journal of Archaeology.

Am. Fish. Soc. Spec. Publ.: American Fisheries Society Special Publication

ASAE: Annales du Service des Antiquités de l'Égypte.

BACE: Bulletin of the Australian Centre for Egyptology

BIFAO: Bulletin de l'Institut Français d'Archéologie Orientale.

BMFA: Bulletin of the Museum of Fine Arts, Boston

BSEG: Bulletin de la Société d'Égyptologie Genève

CdÉ: Chronique d'Égypte.

DE: Discussions in Egyptology

FAO: Food and Agriculture Association

GM: Göttinger Miszellen: Beiträge zur ägyptologischen Diskussion

Occas. Pap. Ichthyol.: Occasional Papers in Journal of Applied Ichthyology

JARCE: Journal of the American Research Centre in Egypt.

JEA: Journal of Egyptian Archaeology, The Egypt Exploration Society.

JNES: Journal of Near Eastern Studies. Continuing the American Journal of Semetic Languages and Literatures.

LÄ: Lexikon der Ägyptologie, W. Helck, E. Otto, W. Westendorf (eds.) 7 vols.

MDAIK: Mitteilungen des Deutschen Archäologischen Instituts Abteilung Kairo.

MW: Miscellanae Wilbourniana.

NAWG: Nachrichten der Akademie der Wissenschaften zu Göttingen.

PM: B. Porter, R. L. B. Moss, Topographical Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings, 7 vols. (Oxford, 1927-52, 2nd edn. 1960-).

RAIN: Royal Anthropological Institute News[letter], London.

REA: Revue de l'Égypte Ancienne.

SAK: Studien zur Altägyptischen Kultur

ZÄS: Zeitschrift für ägyptische Sprache und Altertumskunde.

Appendices

Appendix 1: List of Tombs Used in this Study

Tomb Owner	Location	Date	Scenes
Hesy-Re [1]	Saqqara	III.2	Cattle fording
Nefermaat [2]	Maidum	IV.1-M	Dragnet
			Gutting and Dehydration
Atet [3]	Maidum	IV.1M	Papyrus Boat Construction
Nefer...w [4]	Maidum	IV.1-2	Dragnet
Rahotep [5]	Maidum	IV.1L-2	Dragnet
			Fish Bearing
			Gutting and Dehydration
Kawab [6]	Giza	IV. 2L-3L	Dragnet
Akhetotep (G7650) [14]	Giza	IV.2-4	Dragnet
			Fish Bearing
Debehen [7]	Giza	IV.5	Dragnet
			Hippopotamus Hunting
Nebemakhet [8]	Giza	IV.4-6	Cattle Fording
			Fish Bearing
			Gutting and Dehydration
			Prep. Fish for Consumption
			Papyrus Boat Construction
Persen [9]	Giza	V.1-2	Dragnet
			Fish Bearing
Ka-Aper [10]	Saqqara	V.1-2	Dragnet
Kaseuza (F7) [11]	Abu Rawash	V.1-2	Dragnet
Iteti [12]	Giza	V. E-M	Dragnet
			Misc. Water Band
Sekhemkare [13]	Giza	V.2	Dragnet
			Fish Bearers (Hooks Only)
Khnumhotep (D49) [15]	Saqqara	V.2-6)	Papyrus Boat Construction
Werirniptah [16]	Saqqara	V.3-5	Dragnet
			Gutting and Dehydration
			Fish Bearing (Destroyed)
Tepemankh (II) [17]	Saqqara	V.5-6?	Market
Nefer and Kahay [18]	Saqqara	V.6E	Dragnet
			Fish Bearing
			Papyrus Boat Construction
Iynofret [19]	Giza	V.6	Dragnet
			Fish Bearing
			Hippopotamus Hunting
			Fowling
Iymery [20]	Giza	V.6	Dragnet
			Fish Bearing
			Gutting and Dehydration
			Papyrus Boat Construction

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
Khufukhaef II [21]	Giza	V.6	Dragnet
Irenkaptah [22]	Saqqara	V.6	Dragnet
			Fish/Fowl
			Gutting and Dehydration
			Fish Bearing
			Papyrus Boat Construction
Nikauhathor [23]	Giza	V.6	Dragnet
			Hippopotamus Hunting
Itisen [24]	Giza	V.6	Papyrus Pulling
Fetekta [25]	Abusir	V.6-	Dragnet
			Market
Rakhaefankh [26]	Giza	V.6?	Dragnet
			Gutting and Dehydration
			Fish Bearing
			Papyrus Boat Construction
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7	Fish/Fowl (2)
			Fish Bearing (2)
			Prep. Fish for consumption
			Spinning Cord/ Net Repair
			Gutting and Dehydration
			Lave Net
			Funnel Traps
			Drying and Storage
			Weir
			Angling
			Dragnet
			Round Basket Traps
			Market
			Cattle Fording
Ramaka [28]	Saqqara	V.6-7	Fish Bearing
			Gutting and Dehydration
Nimaatre [29]	Giza	V.6-7	Dragnet
			Hippopotamus Hunting
			Fighting Boatmen
			Cattle Fording
Kapi [30]	Giza	V.6-8E	Dragnet
			Gutting and Dehydration
			Papyrus Boat Construction
Akhethotep (Louvre) [31]	Saqqara	V6-8E	Dragnet
			Gutting and Dehydration
			Fish Bearing
			Papyrus Boat Construction

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Hippopotamus Hunting
Pehenuika [32]	Saqqara	V.6-8E	Dragnet
			Gutting and Dehydration
Neferseshemptah and Sekhentiu [33]	Saqqara	V.6-8	Fish/Fowl
Hotepherakhti [34]	Saqqara	V.6-8	Dragnet
			Round Basket Traps
			Fish/Fowl
			Angling
			Fish Bearing
			Gutting and Dehydration
			Net making/ Spinning Cord
			Cattle Fording
			Papyrus boat Construction
Ty [35]	Saqqara	V.6-8	Gutting and Dehydration
			Dragnet
			Funnel Traps (2)
			Round Basket Traps
			Weir
			Angling
			Spinning Cord/ Net Repair
			Drying and Storage
			Papyrus Boat Construction
			Registering the Catch
CG 1535 [36]	Saqqara	V.6-8	Gutting and Dehydration
			Round Basket Traps
			Prep. Fish for Consumption
			Fish Bearing (poss.)
CG 1697 [37]	Saqqara	V.6-8	Papyrus Boat Construction
Khnumhotep Fragment [38]	Saqqara	V.6-8	Hippopotamus Hunting
Tepemankh [39]	Abusir	V.6-?	Dragnet
Sopedhotep (D15) [40]	Saqqara	V.6L-8	Dragnet
			Gutting and Dehydration
Ptahshepses [41]	Abusir	V.6L-9	Dragnet
			Weir
			Gutting and Dehydration
			Fish Bearing
			Funnel Traps
			Prep. Fish or Consumption
			Papyrus Boat Construction
			Round Basket Traps
Ptahshepses II [42]	Abusir	V.6L-9?	Round Basket Trap
Kayemnofret II [43]	Giza	V.6L-VI?	Dragnet

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Cattle Fording
			Hippopotamus Hunting
Irukaptah/ Khenu [44]	Saqqara	V.7-8	Dragnet
			Cattle Fording
			Hippopotamus Hunting
Inti [45]	Deshasha	V.8	Dragnet
			Fish Bearing
			Gutting and Dehydration
			Papyrus Boat Construction
Rashepses [46]	Saqqara	V.8	Hippopotamus Hunting
Kaemrehu [47]	Saqqara	V.8	Dragnet
			Cattle fording
Sekhemka [48]	Giza	V.8-L	Dragnet
Serfka [49]	Sheikh Said	V.8-9E	Dragnet
Khuwiwer [50]	Giza	V.8-9M	Dragnet
Kayemnofret (D23) [51]	Saqqara	V.8-9	Dragnet
			Angling
			Fish Bearing
			Lave Net
			Papyrus Boat Construction
Neferirtenef [52]	Saqqara	V.8-9	Fish/Fowl
			Dragnet
			Bearers
			Gutting and Dehydration
			Prep. Fish for Consumption
CG 1562 [53]	Saqqara	V.8-9	Gutting and Dehydration
Akhetmehu [54]	Giza	V.8-9	Fish/Fowl
Kednes [55]	Saqqara	V.8-VI.1	Fish/Fowl
Hesimin (M22) [56]	El- Hawawish	V.8L-9E	Dragnet
			Spearfishing+ Minor Spearfisher
			Angling
			Fish Bearing
			Papyrus Boat Construction
Kaiemankh [57]	Giza	V.8L-9E	Spearfishing
			Cattle Fording
			Bearers
Akhethotep (D64) [58]	Saqqara	V.8L-9E	Angling
			Lave Net
			Papyrus Boat Construction
Senedjem-Ib/ Inti [59]	Giza	V.8L-9	Spearfishing
			Fowling

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Lave Net
			Hippopotamus Hunting
			Pleasure Cruise
			Papyrus Boat Construction
Nimaatre [60]	Giza	V.8L-9	Lave Net
			Angling
			Spearfishing
			Cattle Fording
Hem-Min (M43) [61]	El-Hawawish	V.9E	Spear fishing
Nebet [62]	Saqqara	V.9	Fish/ Fowl
			Hippopotamus Hunting
			Bearers
			Returning boatmen
			Pleasure Cruise
			Papyrus Boat Construction
Iynofert/Shanef [63]	Saqqara	V.9	Fish/Fowl
			Angling
			Dragnet
			Fish Bearing
			Gutting and Dehydration
Nikauhor [64]	Saqqara	V.9	Dragnet
			Gutting and Dehydration
Ankhmare [65]	Giza	V.9	Dragnet
Kairer [66]	Saqqara	V.9	Dragnet
			Prep. For Consumption
			Fish Bearing
			Fish/Fowl
Khunes [67]	Zawyet el-Maiyetin	V.9	Fish/Fowl
			Dragnet
			Gutting and Dehydration
			Cattle fording
			Papyrus Boat Construction
Khenut [68]	Saqqara	V.9	Dragnet
			Angling
			Hippopotamus Hunting
			Pleasure Cruise
			Papyrus Boat Construction
Methethi [69]	Saqqara	V.9	Cattle fording
Werirni [70]	Sheikh Said	V.9	Papyrus Pulling
			Dragnet
			Gutting and Dehydration
			Prep. Fish for Consumption

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Papyrus Boat Construction
Akhethotep [71]	Saqqara	V.9	Fish/Fowl
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1	Fish/Fowl
			Dragnet
			Lave Net
			Angling
			Cattle Fording
			Hippopotamus Hunting
			Pleasure Cruise
			Papyrus Boat Construction
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1	Dragnet
			Gutting and Dehydration
			Misc. Water Band
			Market
			Papyrus Boat Construction
Ptahhotep II/ Thefi [74]	Saqqara	V.9M-L	Gutting and Dehydration
			Cattle Fording
			Returning/Fighting boatmen
			Papyrus Boat Construction
Ptahhotep/ Thefu [75]	Saqqara	V.9L	Angling
			Lave Net
			Hippopotamus Hunting
Senedjem-Ib/ Mehi [76]	Giza	V.9L	Fish/Fowl
			Dragnet
			Lave Net
			Returning Boatmen
			Hippopotamus Hunting
Seshemnofer IV [77]	Giza	V.9-VI.1	Fish/Fowl
			Angling
			Dragnet
			Cattle Fording
Nefer (1) [78]	Giza	V.9-VI.1	Small Hand Net
Mereri (Hassan Frag.) [79]	Saqqara	V.9-VI	Gutting and Dehydration
			Eel
Ptahhotep /Iyniankh [80]	Saqqara	V.9-VI.1	Dragnet
			Gutting and Dehydration
Hetepka [81]	Saqqara	V.9-VI.1	Dragnet
			Martin Frag. [24] Fish
Akhmerutnesut [82]	Giza	V.9-VI.1	Fish/Fowl
			Dragnet

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Bearers
			Cattle Fording
CG 1720 [83]	Saqqara	V.9-VI.1-2	Dragnet
Kaiemheset [84]	Saqqara	V.L	Dragnet
Turin Museo Egizio Sup. 1854 [85]	Giza	V?	Dragnet
Cairo Fragment 5.11.24.17 [86]	Unknown	V	Misc. Water Band
G3260 [87]	Giza	V-VI	Fish/Fowl
			Angling
Berlin Frag. 14103 [88]	Unknown	V-VI	Fish/Fowl
Berlin Frag. 2/70 [89]	Unknown	V-VI	Hippopotamus Hunting
Borchardt Frag. [90]	Abusir	V-VI	Fish/Fowl
Mehu [91]	Giza	V.L-VI.1	Fish/Fowl
Paris Louvre E. 26092 [92]	Saqqara	V.L-VI	Spearfishing
Firth and Gunn: Spinning Cord [93]	Saqqara	VI.E	Spinning Cord/ Net Repair
Kagemni [94]	Saqqara	VI.1E	Dragnet
			Gutting and Dehydration
			Registering the Catch
			Fish Bearing
			Drying and Storage
			Funnel Traps
			Returning Boatmen
			Pleasure Cruise
			Lave Nets
			Angling
			Fowling
			Spearfishing
			Cattle Fording
			Hippopotamus Hunting
			Weir
			Papyrus Boat Construction
CG 1782/1786 [95]	Dahshur	VI.1	Fish/Fowl
In-Snefru-Ishtef [96]	Dahshur	VI.1	Angling
			Dragnet
			Fish/Fowl + Minor Spearfisher
			Fish Bearing
Iteti/ Shedu [97]	Deshasha	VI.1	Spearfishing
			Fowling
			Cattle Fording
Khnumenti [98]	Giza	VI.1	Misc. Water band
Niankhnesut [99]	Saqqara	VI.1-2	Dragnet
			Gutting and Dehydration

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Fish Bearing
			Papyrus Boat Construction
			Hippopotamus Hunting
Nikauisesi [101]	Saqqara	VI.1M	Fowling
			Dragnet
			Returning Boatmen/ Fish Bearing
			Angling
Ankhmahor [102]	Saqqara	VI.1M	Cattle Fording
			Hippopotamus Hunting
			Market
			Fish Bearing
			Spinning Cord/ Net Repair
			Misc. Water Band
Mereruka [103]	Saqqara	VI.M-L	Fish/Fowl + Minor Spearfisher
			Dragnet
			Angling
			Hippopotamus Hunting
			Fish Bearing
			Gutting and Dehydration
			Cattle Fording
			Funnel Traps + Drying
			Lave Nets
			Pleasure Cruise
Watetkhet-Hor/ Seshseshet [104]	Saqqara	VI.1M-L	Dragnet
			Fish Bearing
Henqu/ Kheteti I [105]	Deir el-Gebrawi	VI.1L	Spearfishing
Seankhuiphtah [106]	Saqqara	VI.1L-2E	Fish/Fowl
			Hippopotamus Hunting
Hemre/Isi I [107]	Deir el-Gebrawi	VI.1L-2E	Cattle Fording
			Hippopotamus Hunting
			Misc. Water Band
			Papyrus Pulling
Mereri [108]	Saqqara	VI.1L-2E	Spearfishing
			Gutting and Dehydration
Remni/ Merwi [109]	Saqqara	VI.1L-2E	Fish/Fowl + Minor Spearfisher
			Fish Bearing
Hesi [110]	Saqqara	VI.1L-2E	Cattle Fording
			Dragnet
			Fish/Fowl

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Lave Net
			Angling
			Funnel Traps
Inumin [111]	Saqqara	VI.1L-2E	Dragnet
			Fowling
			Spearfishing
Wedjahateti/ Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E	Angling
			Fish Bearing
			Spinning Cord/ Net Repair
Bawi (G126) [113]	El- Hawawish	VI.1L-2	Spearfishing
			Angling
Wernu [114]	Saqqara	VI.1L-2	Fish/Fowl
Meru/Tetiseneb [115]	Saqqara	VI.1L-2	Dragnet
Meryteti/ Meri [116]	Saqqara	VI.1L-2M	Fish Bearing
Merefnebef [117]	Saqqara	VI.1L-2L	Dragnet
			Fish Bearing
Heri/Meru [118]	Saqqara	VI.2E	Spearfishing + Minor Spearfisher
			Dragnet
Nekhebu [119]	Giza	VI.2	Angling
			Spearfishing + Minor Spearfisher
Henqu/Iy...f II [120]	Deir el-Gebrawi	VI.2	Spearfishing
			Dragnet
			Returning Boatmen
			Gutting and Dehydration
Mehu [121]	Saqqara	VI.2	Pleasure Cruise
			Cattle Fording
			Spinning Cord/ Net Repair
			Round Basket Traps
			Registering the Catch
			Weir
			Angling
			Dragnet
			Spearfishing
			Funnel Traps + Drying Traps
			Misc. Water Band
			Fowling
Khewen-wekh/ Tjetji [122]	Quiser el-Amarna	VI.2	Spearfishing
Niankhpepy/Khnumhotep/ Heti [123]	Zawyet el-Maiyetin	VI.2	Spearfishing + Minor Spearfisher
			Fighting Boatmen

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Dragnet
Khentika [124]	Saqqara	VI.2	Misc. Water Band
Tomb G97 [125]	El-Hawawish	VI.2L-3	Spearfishing
			Angling
Munich Ag. Mus GL.115 [126]	Giza	VI.2-4E	Gutting and Dehydration
			Fish Bearing
Hesi-min/ Sesi [F1] [127]	El-Hawawish	VI.2-4E	Spearfishing
Idu 1 [128]	Dendera	VI.3-4E	Dragnet
			Fish Bearing
			Spearfishing
Pepyankh/ Khuwi [129]	El-Kom el-Ahmar Sawars	VI. 3-4E	Gutting and Dehydration
Ibi [130]	Deir el-Gebrawi	VI.3-4E	Spearfishing +Minor Spearfisher
			Funnel Traps
			Angling
			Dragnet
			Lave Net
			Gutting and Dehydration
			Fish Bearing
			Cattle Fording
			Fowling
Pepyankh/Heri-Ib/ Neferka/Heny [131]	Meir	VI.3-4E	Dragnet
			Spearfishing
Khenty [132]	El-Khokha	VI.3-4M	Dragnet
			Fish Bearing
			Gutting and Dehydration
Meryrenefer/ Qar [133]	Giza	VI.3-4	Spearfishing
			Fish Bearing
Seshemnofer/ Ifi [134]	Saqqara	VI. 3-4	Spinning Cord/ Net Repair
			Papyrus Boat Construction
			Spearfishing (Frag.)
London British Museum no. 994 [135]	Giza	VI.4?	Dragnet
Niankhpepy/ Sobekhotep/Hepi-Kem [136]	Meir	VI.4E-M	Dragnet
Ihy [137]	El-Khokha	VI.4E-M	Spearfishing
			Misc. Water band
Idu /Seneni [138]	Qasr el-Sayad	VI.4E-M	Spearfishing
			Fowling
Kahif [139]	Giza	VI.4	Dragnet
Kahep/Tjeti -Iker [140]	El-Hawawish	VI.4M	Spearfishing
			Angling

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
			Dragnet
			Lave Net
			Cattle Fording
			Papyrus Boat Construction
Djau [141]	Deir el-Gebrawi	VI.4M	Fish/Fowl
			Lave Nets
			Angling
			Dragnet
			Cattle Fording
			Returning Boatmen
Sabni (1) [142]	Aswan	VI.4L	Fish/Fowl
Sabni (2) [143]	Aswan	VI.4L	Fish/ Fowl
Khunes (A6) [144]	Aswan	VI.4L	Fish/Fowl
Gehesa/ Nebi [145]	El-Hawawish	VI4L	Dragnet
			Cattle Fording
Pepyankh/ Henykem [146]	Meir	VI.4L	Dragnet
			Hippopotamus Hunting
			Cattle Fording
			Lave Nets
			Fish Bearing
			Angling
			Fish/ Fowl
			Returning Men
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L	Dragnet
			Spearfishing
			Cattle Fording
			Hippopotamus Hunting
			Angling
			Lave Nets
Ankhtyfy [148]	Mo'Alla	VI.4L- VIII E	Dragnet
			Fowling
			Spearfishing
			Lave Nets
			Round Basket Trap (Stored)
			Hippopotamus Hunting
Kanawati TNE 96: F95 [149]	Saqqara	VI.L	Frag. With Fish
Unisankh [150]	El- Khokha	VI.L-?	Dragnet
			Angling
			Misc. Water band
Neheri [151]	Zawyet el-Maiyetin	VI	Papyrus Boat Construction

Appendix 1 List of tombs used in this study

Tomb Owner	Location	Date	Scenes
Cairo Fragment 6.12.24.5 [152]	Saqqara	VI	Spearfishing + Minor spearfishing
Pepyankh/ Khuwi [153]	Kom el-Ahmar	VI	Spearfishing
Ma [154]	Zawyet el-Maiyetin	VI	Spearfishing
Dauhep [155]	Saqqara	VI	Spearfishing
Mastaba B [156]	Saqqara	VI	Spearfishing
Khuwi/ Tjetji-Iker [157]	Gohainna	VI.L-VIII.E	Fish/Fowl
Mery Aa [158]	El-Hagarsa	VI.L-VIII.E	Spearfishing
			Dragnet
			Fish Bearing
Tjemerery [159]	Naga el-Deir	VI-FIP	Dragnet
			Fish Bearing
Twau [160]	Naga el-Deir	VI-FIP	Dragnet
			Fish Bearing
Tjeti Aa [161]	El-Hawawish	VIII	Dragnet
Wahi (D4) [162]	El- Hagarsa	VIII	Spearfishing
Baketi I [163]	Beni Hassan	VIII-FIP	Spearfishing
Meru [164]	Naga el-Deir	F.I.P	Fowling
MFA 13.5965 [165]	Giza	OK	Spearfishing

Appendix 2: Detail Tables

Dragnet Detail Tables A-P

Table A: Occurrence

Tomb	Location	Date
Nefermaat [2]	Maidum	IV.1E
Nefer...w [4]	Maidum	IV.1-2
Rahotep [5]	Maidum	IV. 2
Kawab [6]	Giza	IV.2L-3L
Akhethotep (G7650) [14]	Giza	IV.2-4
Debehen [7]	Giza	IV.5
Persen [9]	Giza	V.1-2
Ka-Aper [10]	Saqqara	V.1-2
Kaseuza (F7) [11]	Abu Rawash	V.1-2
Iteti [12]	Giza	V. E-M
Sekhemkare [13]	Giza	V.2
Werirniptah [16]	Saqqara	V.3-5
Nefer and Kahay [18]	Saqqara	V.6
Iynofret [19]	Giza	V.6
Iymery [20]	Giza	V.6
Khufukhaef II [21]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Nikauhathor [23]	Giza	V.6
Fetekta [25]	Abusir	V.6-?
Rakhaefankh [26]	Giza	V.6?
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Nimaatre [29]	Giza	V.6-7
Kapi [30]	Giza	V.6-8E
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Pehenuika [32]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
Tepemankh [39]	Abusir	V.6-9
Sopedhotep [40]	Saqqara	V.6L-8
Ptahshepses [41]	Abusir	V.6L-9
Kayemnofret II [43]	Giza	V.6L-VI
Irukaptah/ Khenu [44]	Saqqara	V.7-8
Inti [45]	Deshasha	V.8
Kaemrehu [47]	Saqqara	V.8
Sekhemka [48]	Giza	V.8-L
Serfka [49]	Sheikh Said	V.8-9E
Khuwiwer [50]	Giza	V.8-9M
Kayemnofret (D23) [51]	Giza	V.8-9
Neferirtenef [52]	Saqqara	V.8-9
Hesimin (M22) [56]	El-Hawawish	V.8L-9E
Iynofert/ Shanef [63]	Saqqara	V.9
Nikauhor [64]	Saqqara	V.9
Ankhmare [65]	Giza	V.9

Appendix 2: Detail Tables: Dragnets

Tomb	Location	Date
Kairer [66]	Saqqara	V.9
Khenut [68]	Saqqara	V.9
Khunes [67]	Zawyet el-Maiyetin	V.9
Werirni [70]	Sheikh Said	V.9
Senedjem-Ib/Mehi [76]	Giza	V.9L
Seshemnofer IV [77]	Giza	V.9-VI.1
Ptahhotep/Iyniankh [80]	Saqqara	V.9-VI.1
Hetepka [81]	Saqqara	V.9-VI.1
Akhmerutnesut [82]	Giza	V.9-VI.1
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1
Kaiemheset [84]	Saqqara	V.L
Turin Museo Egizio Sup. 1854 [85]	Giza	V.?
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Dahshur	VI.1
Niankhnesut [99]	Saqqara	VI.1-2
Nikauisesi [101]	Saqqara	VI.1M
Mereruka [103]	Saqqara	VI.1M-L
Watetkhet-Hor/ Seshseshet [104]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Inumin [111]	Saqqara	VI.1L-2E
Meru/Tetiseneb [115]	Saqqara	VI.1L-2
Merefnebef [117]	Saqqara	VI.1L-2L
Heri/ Meru [118]	Saqqara	VI.2E
Henqu/ Iy...f II [120]	Deir el-Gebrawi	VI.2
Mehu [121]	Saqqara	VI.2
Niankhpepy/ Khnumhotep/ Heti [123]	Zawyet el-Maiyetin	VI.2
Idu 1 [128]	Dendera	VI.3-4 E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	Meir	VI.3-4E
Khenty [132]	El-Khokha	VI.3-4M
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	Meir	VI.4E-M
London British Museum No. 994 [135]	Giza	VI.4?
Kahif [139]	Giza	VI.4
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M
Djau [141]	Deir el-Gebrawi	VI.4M
Gehesa/ Nebi [145]	El-Hawawish	VI.4L
Pepyankh/ Henykem [146]	Meir	VI.4L
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L
Ankhtyfy [148]	Mo'alla	VI. 4I-VIII.E
Unisankh [150]	El-Khokha	VI.L?
Tjemerery [159]	Naga el-Deir	VI-FIP
Twau [160]	Naga el-Deir	VI- VIII
Mery Aa [158]	El-Hagarsa	VI.L-VIIIE
Tjeti Aa [161]	El-Hawawish	VIII

Table B: Shape of Net

Tomb	Date	Rectangular	Crescent	Missshapen
Nefermaat [2]	VI.1	X		
Nefer...w [4]	VI.1-2	X		
Rahotep [5]	VI.2	X		
Ka-Aper [10]	V	X		
Persen [9]	V.1-2	X		
Werirniptah [16]	V.3-5	X		
Nefer and Kahay [18]	V.6	X		
Iynofret [19]	V.6	X		
Iymery [20]	V.6	X		
Khufukaef II [21]	V.6	X		
Nikauhathor [23]	V.6	X		
Niankhkhnum and Khnumhotep [27]	V.6-7	X		
Akhethotep (Louvre) [31]	V.6-8E	X		
Pehenuika [32]	V.6-8E	X		
Hotepherakhti [34]	V.6-8	X		
Ty [35]	V.6-8	X		
Kayemnofret II [43]	V.6-VI	X		
Irukaptah/Khenu [44]	V.7-8	X		
Inti [45]	V.8	X		
Kaemrehu [47]	V.8	X		
Sekhemka [48]	V.8-L	X		
Serfka [49]	V.8-9	X		
Khuwiwer [50]	V.8-9M	X		
Neferirtenef [52]	V.8-9	X		
Nikauhor [64]	V.9	X		
Iynofert/ Shanef [63]	V.9	X		
Khenut [68]	V.9	X		
Khunes [67]	V.9	X		
Werirni [70]	V.9	X		
Kairer [66]	V.9	X		
Senedjem-Ib/ Mehi [76]	V.9L	X		
Ptahhotep/Iyniankh [80]	V.9-VI.1	X		
CG 1720 [83]	V.9-VI.1-2	X		
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X		
Kaiemheset [84]	V.L	X		
Kagemni [94]	VI.1E	X		
In-Snefru-Ishtef [96]	VI.1	X		
Niankhnesut [99]	VI.1-2	X		
Nikauisesi [101]	VI.1M	X		
Mereruka [103]	VI.1 M-L	X		
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	X		

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Rectangular	Crescent	Misshapen
Hesi [110]	VI.1L-2E	X		
Inumin [111]	VI.1L-2E	X		
Meru/ Tetiseneb [115]	VI.1L-2	X		
Merefnebef [117]	VI.1L-2L	X		
Heri/ Meru [118]	VI.2E	X		
Henqu/ Iy...f II [120]	VI.2	X		
Mehu [121]	VI.2	X		
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	X		
Idu 1 [128]	VI.3-4E	X		
Ibi [130]	VI.3-4E		X	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X		
Khenty [132]	VI.3-4E	X		
London British Museum No. 994 [135]	VI.4?	X		
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	X		
Kahif [139]	VI.4	X		
Kahep/ Tjeti-Iker [140]	VI.4M	X		
Djau [141]	VI.4M			X
Pepyankh/ Henykem [146]	VI.4L	X		
Shepsipumin/ Kheni [147]	VI.4L	X		
Ankhtyfy [148]	VI.4L-VIII.E	X		
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	X		
Tjemerery [159]	VI-FIP	X		
Twau [160]	VI-VIII	X		

Table C: Net 'Tips'

Tomb	Date	Tips Above Waterline	Fish Present in Tip	Fish Species
Nefer...w [4]	IV. 1-2	X		
Ka-Aper [10]	V.1-2	X		
Werirniptah [16]	V.3-5	X		
Khufukaef II [21]	V.6	X		
Nikauhathor [23]	V.6	X		
Niankhkhnum and Khnumhotep [27]	V.6-7	X		
Akhethotep (Louvre) [31]	V.6-8E	X		
Pehenuika [32]	V.6-8E	X	X	<i>Mugil sp.</i>
Hotepherakhti [34]	V.6-8	X		
Ty [35]	V.6-8	X		<i>Synodontis Schall (2)</i>
Iruckaptah/Khenu [44]	V.7-8	X		
Inti [45]	V.8	X		
Kaemrehu [47]	V.8	X		

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Tips Above Waterline	Fish Present in Tip	Fish Species
Sekhemka [48]	V.8-L	X		
Serfka [49]	V.8-L	X	X	<i>Tetraodon Fahaka</i>
Khuwiwer [50]	V.8-9M	X		
Neferirtenef [52]	V.8-9	X		
Nikauhor [64]	V.9	X	X	<i>Mugil sp.</i>
Iynofert/ Shanef [63]	V.9	X?		
Khunes [67]	V.9	X		
Werirni [70]	V.9	X	X?	<i>Mugil sp.</i>
Kairer [66]	V.9	X	X	<i>Mugil sp.</i>
Ptahhotep/Iyniankh [80]	V.9-VI.1	X		
CG 1720 [83]	V.9-VI.1-2	X		
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X	X	<i>Mugil sp.</i>
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X		
Kaiemheset [84]	V.L	X		
Kagemni [94]	VI.1E	X	X?	<i>Mugil sp.</i>
Nikauisesi [101]	VI.1M	X	X	<i>Synodontis Batensoda (2)</i>
Mereruka [103]	VI.1M-L	X	X	<i>Mugil sp. (3)</i>
Watetkhet-Hor/ Seshseshet [104]	VI.1 M-L	X	X	<i>Mugil sp. (2)</i>
Hesi [110]	VI.1L-2E	X	X	<i>Mugil sp.</i>
Inumin [111]	VI.1L-2E	X		
Meru/ Tetiseneb [115]	VI.1L-2E	X		
Merefnebef [117]	VI.1L-2L	X		
Henqu/ Iy...f II [120]	VI.2	X		
Mehu [121]	VI.2	X	X	<i>Mugil (2)</i>
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	X	X	<i>M. Caschive?</i>
Idu I [128]	VI.3-4E	X	X	<i>Schilbe (+ Vegetation)</i>
Ibi [130]	VI.3-4E	X		
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	X	<i>Mugil sp. (2)</i>
London British Museum No. 994 [135]	VI.4?	X		
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	X		
Khuwi/ Tjetji-Iker [157]	VI.L-VIII.E	X		

Table D: Sinkers**KEY:**

Sinker Shapes: (A) spherical; (B) oval; and (C) rectangular.

Tethering Types: Strap (Hanging from net via cord), Thick Tethering (One Bold cord around sinker) and Multiple (multiple line or cord around sinker)

Tomb	Date	Sinker Type A	Sinker Type B	Sinker Type C	Atypical	Tethering Type A	Tethering Type B	Tethering Type C
Nefermaat [2]	IV.1E	X						
Nefer...w [4]	IV.1-2	X						
Rahotep [5]	IV.2	X						
Persen [9]	V.1-2		X			X		
Nefer and Kahay [18]	V.6		X					
Iynofret [19]	V.6		X					
Iymery [20]	V.6			X				
Rakhaefankh [26]	V.6?		X			X		
Niankhkhnun and Khnumhotep [27]	V.6-7					X		
Akhethotep (Louvre) [31]	V.6-8E		X					X
Pehenuika [32]	V.6-8E			X				X
Kapi [30]	V.6-8E			X				
Ty [35]	V.6-8			X				X
Sopedhotep [40]	V.6L-8		X					X
Kaemrehu [47]	V.8		X					X
Sekhemka [48]	V.8-L			X				X
Neferirteneb [52]	V.8-9		X					X
Werirni [70]	V.9			X				
Nikauhor [64]	V.9				X			
Hetepka [81]	V.9-VI.1		X				X	
CG1720 [83]	V.9-VI.1-2		X					
Kaiemheset [84]	V.L			X				
Kagemni [94]	VI.1E		X					X
In-Snefru-Ishtef [96]	VI.I			X			X	
Niankhnesut [99]	VI.1-2		X					X
Nikauisesi [101]	VI.1M		X					X
Mereruka [103]	VI.1M-L			X				X
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L			X				X
Hesi [110]	VI.1L-2E			X				X
Merefnebef [117]	VI.1L-2L		X					X
Henqu/ Iy...f II [120]	VI.2			X				
Mehu [121]	VI.2			X				X
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2			X				
Ibi [130]	VI.3-4E			X				X
Kahif [139]	VI.4				X			

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Sinker Type A	Sinker Type B	Sinker Type C	Atypical	Tethering Type A	Tethering Type B	Tethering Type C
Djau [141]	VI.4M-		X					

Table E: Floats

Tomb	Date	Triangular	Other Shape	Triangular Detailing	Upside-down Floats	Floats on side
Nefer...w [4]	IV.1-2	X		X		
Kawab [6]	IV.2L-3L	X				
Akhethotep (G7650) [14]	IV.2-4	X		X?		
Ka-Aper [10]	V.1-2	X				
Kaseuza (F7) [11]	V.1-2	X				
Werirniptah [16]	V.3-5	X				
Nefer and Kahay [18]	V.6	X		X		
Iynofret [19]	V.6	X		X?		
Iymery [20]	V.6	X		X		
Nikauhathor [23]	V.6	X		X?		
Fetekta [25]	V.6-	X				
Rakhaefankh [26]	V.6?	X				
Niankhkhnum and Khnumhotep [27]	V.6-7	X		X		
Akhethotep (Louvre) [31]	V.6-8E	X			X	
Pehenuika [32]	V.6-8E	X				X
Hotepherakhti [34]	V.6-8	X		X?		
Ty [35]	V.6-8	X		X	X	
Sopedhotep [40]	V.6L-8	X		X		
Ptahshepses [41]	V.6L-9	X		X		
Kayemnofret II [43]	V.6-VI	X		X?		
Kaemrehu [47]	V.8	X		X?	X	
Sekhemka [48]	V.8-L	X		X	X	
Serfka [49]	V.8-9E	X				
Neferirtenef [52]	V.8-9		Rectangular			
Nikauhor [64]	V.9	X		X		X
Khunes [67]	V.9	X		X		
Werirni [70]	V.9	X				
Senedjem-Ib/Mehi [76]	V.9L		Semi-Circle			
Ptahhotep /Iyniankh [80]	V.9-VI.1	X		X		
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X		X		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X				
Kaiemheset [84]	V.L	X				
Kagemni [94]	VI.1E	X		X?		

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Triangular	Other Shape	Triangular Detailing	Upside-down Floats	Floats on side
Niankhnesut [99]	VI.1-2	X		X		
Nikauisesi [101]	VI.1M	X		X		
Mereruka [103]	VI.1 M-L	X		X		
Watetkhet-Hor/ Seshseshet [104]	VI.1 M-I			X		
Hesi [110]	VI.1L-2E	X		X		
Inumin [111]	VI.1L-2E		Rectangular			
Merefnebef [117]	VI.1L-2L	X				
Henqu/ ly...f II [120]	VI.2	X				
Mehu [121]	VI.2	X		X		
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2		Rectangular			
Idu 1 [128]	VI.3-4E	X				
Ibi [130]	VI.3-4E	X		X		
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X		X		
Kahif [139]	VI.4	X		X		
Ankhtyfy [148]	VI.4L-VIII.E		Oval			

Table F: Rope Ends

Tomb	Date	Coiled (A)	Loose (B)	Tangled (C)	Interactive (D)
Rahotep [5]	IV.2	X			
Ka-Aper [10]	V.1-2		X		
Nefer and Kahay [18]	V.6			X	
Iynofret [19]	V.6			X	
Nikauhathor [23]	V.6	X			
Rakhaefankh [26]	V.6?	X			
Niankhkhnum and Khnumhotep [27]	V.6-7	X			X
Nimaatre [29]	V.6-7	X			
Akhethotep (Louvre) [31]	V.6-8E	X			X
Pehenuika [32]	V.6-8E	X			
Hotepherakhti [34]	V.6-8			X	
Ty [35]	V.6-8	X			
Ptahshepses [41]	V.6L-9	X			
Irukaptah/Khenu [44]	V.7-8		X		
Kayemnofret II [43]	V.6-VI	X			
Inti [45]	V.8		X		
Kaemrehu [47]	V.8	X			
Sekhemka [48]	V.8-L	X			X
Khuwiwer [50]	V.8-9M	X			

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Coiled (A)	Loose (B)	Tangled (C)	Interactive (D)
Neferirtenef [52]	V.8-9	X			
Khunes [67]	V.9	X			
Werirni [70]	V.9			X	
Senedjem-Ib/ Mehi [76]	V.9L	X	X		
Seshemnofer IV [77]	V.9-VI.1	X			
CG 1720 [83]	V.9-VI.2-3	X			
Ptahhotep/Iyniankh [80]	V.9-VI.1	X			
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X			
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X			
Kaiemheset [84]	V.L		X		
In-Snefru-Ishtef [96]	VI.1		X		
Nikauisesi [101]	VI.1M		X		
Mereruka [103]	VI.1M-L	X	X		
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	X			
Hesi [110]	VI.1L-2E	X			
Inumin [111]	VI.1L-2E	X			
Meru/ Tetiseneb [115]	VI.1L-2		X		
Merefnebef [117]	VI.1L-2L		X		
Henqu/ Iy...f II [120]	VI.2	X			
Mehu [121]	VI.2		X		
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2		X		
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X			
London British Museum Number 994 [135]	VI.4?		X		
Kahep/ Tjeti-Iker [140]	VI.4M			X	
Djau [141]	VI.4M-	X			
Pepyankh/ Henykem [146]	V.4L		X		
Ankhtyfy [148]	VI.4L-VIII.E		X		

Table G: Boats

KEY:

Boat Structure:

- A. *Horizontal Position*
- B. *Vertical Position; and*
- C. *Varying Position*

Boat Detailing:

- A. *Lashing and Reed;*
- B. *Lashing only; and*
- C. *No Details*

Tomb	Dates	Dragnet Cast from Boat	Dragnet cast from Boat and Shore	Boat Structure	Boat Detailing
Khufukaef II [21]	V.6		X	B	-
Inti [45]	V.8		X	A	C
Kaiemheset [84]	V.L		X	A	A (reeds)
London British Museum No. 994 [135]	VI.4?		X?	A	C
Djau [141]	VI.4M-	X		A	A

Table H: Minor Figures

Tomb	Date	Number of Haulers	Supervisor
Nefermaat [2]	IV.1E	5 (minimum)	
Nefer...w [4]	IV.1-2	9 (minimum)	
Rahotep [5]	IV.2	3	
Kawab [6]	IV.2L-3L	1 (minimum)	
Akhethotep (G7650) [14]	IV.2-4	2 (minimum)	
Persen [9]	V.1-2	6	
Ka-Aper [10]	V.1-2	9	
Iteti [12]	V.E-M	2 (minimum)	
Sekhemkare [13]	V.2	7	X
Nefer and Kahay [18]	V.6	9	X
Iynofret [19]	V.6	12	
Iymery [20]	V.6	9 (minimum)	X
Khufukaef II [21]	V.6	9	X
Irenkaptah [22]	V.6	2 (minimum)	
Nikauhathor [23]	V.6	8	
Fetekta [25]	V.6-	4 (minimum)	X
Rakhaefankh [26]	V.6?	7	X
Niankhkhnum and Khnumhotep [27]	V.6-7	11	X
Nimaatre [29]	V.6-7	2 (minimum)	
Akhethotep (Louvre) [31]	V.6-8E	9	X (2)
Hotepherakhti [34]	V.6-8	8	X
Ty [35]	V.6-8	11	X
Ptahshepses [41]	V.6L-9	-	
Kayemnofret II [43]	V.6L-VI	4 (minimum)	
Irukaptah/Khenu [44]	V.7-8	10	X
Inti [45]	V.8	6	
Kaemrehu [47]	V.8	5 (minimum)	
Sekhemka [48]	V.8-L	9	X
Serfka [49]	V.8-9E	9 (minimum)	
Khuwiwer [50]	V.8-9M	6	
Kayemnofret (D23) [51]	V.8-9	11 (minimum)	
Neferirtenef [52]	V.8-9	9	
Hesimin (M22) [56]	V.8L-9E	3 (minimum)	
Nikauhor [64]	V.9	5 (minimum)	
Iynofert/ Shanef [63]	V.9	11	X
Khenut [68]	V.9	3 (minimum)	
Khunes [67]	V.9	5 (minimum)	
Werirni [70]	V.9	6 (minimum)	
Kairer [66]	V.9	1 (minimum)	
Senedjem-Ib/ Mehi [76]	V.9L	11	X
Seshemnofer IV [77]	V.9-VI.1	8	X
CG 1720 [83]	V.9- VI.1-2	4	X

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Number of Haulers	Supervisor
Ptahhotep/Iyniankh [80]	V.9-VI.1	8 (minimum)	X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	8 (minimum)	
Nebkauhor/ Idu [73]	V.9 r/u VI.1	10	X
Kaiemheset [84]	V.L	4 (hauling); 3 (paddlers)	
Turin Museo Egizio Sup. 1854 [85]	V?	1 Visual; 3 Description	
In-Snefru-Ishtef [96]	VI.1	8	X
Kagemni [94]	VI.1E	10 (minimum)	
Niankhnesut [99]	VI.1-2	5 (minimum)	
Nikauisesi [101]	VI.1M	10	X
Mereruka [103]	VI.1M-L	(S1) 18	X
		(S2) 23	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	29	X
Hesi [110]	VI.1L-2E	9	X
Inumin [111]	VI.1L-2E	8	X
Meru / Tetiseneb [115]	VI.1L-2	4 (minimum)	X
Merefnebef [117]	VI.1L-2L	6	
Heri/ Meru [118]	VI.2E	4 (minimum)	
Henqu/ Iy...f II [120]	VI.2	8 (minimum)	X
Mehu [121]	VI.2	13	X
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	6 + Boy/dwarf	X
Idu I [128]	VI.3-4E	2 (minimum)	
Ibi [130]	VI.3-4E	8	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	11	X
Khenty [132]	VI.3-4M	5 (minimum)	
London British Museum No. 994 [135]	VI.4?	4 (minimum)	X
Kahif [139]	VI.4	5 (minimum)	
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	10	X
Kahep/ Tjeti-Iker [140]	VI.4M	6	
Djau [141]	VI.4M	7	
Gehesa/ Nebi [145]	VI.4L	4 (minimum)	
Pepyankh/ Henykem [146]	VI.4L	12	X
Shepsipumin/ Kheni [147]	VI.4L	7	X
Ankhtyfy [148]	VI.4L-VIII.E	5 (minimum)	X (2)
Unisankh [150]	VI.L?	1 (minimum)	
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	3 (minimum)	
Mery Aa [158]	VI.L-VIII.E	4 (minimum)	
Tjemerery [159]	VI-FIP	2 (minimum)	
Twau [160]	VI-FIP	6 (minimum)	
Tjeti Aa [161]	VIII	3 (minimum)	

Table I: Haulers Body Position
KEY:

- A. *Upright position;*
- B. *Bent position;*
- C. *Leaning position;* and
- D. *Lunge position*

Tomb	Date	Opposed to teammates (when in same team)	Type A	Type B	Type C	Type D
Nefermaat [2]	IV.1E			X		
Nefer...w [4]	IV.1-2		X	X		X?
Rahotep [5]	IV.2			X		
Kawab [6]	IV. 2L-3L		X?			
Akhethotep (G7650) [14]	IV.2-4		X	X		
Persen [9]	V.1-2	X?		X		
Ka-Aper [10]	V.1-2	X	X	X		
Sekhemkare [13]	V.2	X	X	X		
Iteti [12]	V. E-M	X	X	X		X
Nefer and Kahay [18]	V.6	X	X	X	X	X
Iynofret [19]	V.6	X	X			X
Iymery [20]	V.6	X	X			X
Khufukhaef II [21]	V.6	X	X			X?
Irenkaptah [22]	V.6	X	X			X
Nikauhathor [23]	V.6	X	X	X		
Fetekta [25]	V.6-	X?		X		
Rakhaefankh [26]	V.6	X		X		
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X	X		
Pehenuika [32]	V.6-8E	X	X			X
Akhethotep (Louvre) [31]	V.6-8E	X	X	X	X	
Hotepherakhti [34]	V.6-8		X		X?	X
Ty [35]	V.6-8	X	X	X?		X
Kayemnofret II [21]	V.6-VI	X	X			
Ptahshepses [41]	V.6L-9	X	X			
Irukaptah/Khenu [44]	V.7-8	X	X			
Inti [45]	V.8		X	X	X?	
Kaemrehu [47]	V.8	X		X	X?	
Sekhemka [48]	V.8-L	X	X	X	X?	

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Opposed to teammates (when in same team)	Type A	Type B	Type C	Type D
Serfka [49]	V.8-9E	X?	X	X		
Khuwiwer [50]	V.8-9M	X	X	X		
Kayemnofret (D23) [51]	V.8-9	X?	X	X		
Neferirtenef [52]	V.8-9	X	X	X	X	X
Iynofert/ Shanef [63]	V.9	X	X			X
Nikauhor [64]	V.9	X	X	X		X?
Khenut [68]	V.9		X			
Khunes [67]	V.9	X	X	X		
Werirni [70]	V.9	X	X	X	X (Heel)	X
Senedjem-Ib/ Mehi [76]	V.9L	X	X		X (Toes)	X
Seshemnofer IV [77]	V.9-VI.1	X	X	X		
Ptahhotep/Iyniankh [80]	V.9-VI.1	X	X	X		X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X		X (Toes)	
Kaiemheset [84]	V.L	X	X		X	
Kagemni [94]	VI.1E	X	X		X (Both)	X
In-Snefru-Ishtef [96]	VI.1	X				X?
Niankhnesut [99]	VI.1-2	X	X?			X
Nikauisesi [101]	VI.1M	X			X (Toes)	X
Mereruka [103]	VI.1M-L	X	X	X	X (Both)	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	X	X		X (Both)	
Hesi [110]	VI.1L-2E	X	X			
Inumin [111]	VI.1L-2E	X	X		X	
Meru/ Tetiseneb [115]	VI.1L-2	X	X			
Merefnebef [117]	VI.1L-2L	X	X			X
Heri/ Meru [118]	VI.2E		X			
Henqu/ Iy...f II [120]	VI.2	X				
Mehu [121]	VI.2	X	X		X (Both)	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2					
Idu I [128]	VI.3-4E					
Ibi [130]	VI.3-4E	X	X			X
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	X		X	
Khenty [132]	VI.3-4M		X			
London British Museum No. 994 [135]	VI.4?	X	X			X

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Opposed to teammates (when in same team)	Type A	Type B	Type C	Type D
Kahif [139]	VI.4	X	X		X (Toes)	
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	X	X			
Kahep/ Tjeti-Iker [140]	VI.4M		X			
Djau [141]	VI.4M-	X	X			
Gehesa/ Nebi [145]	VI.4L	X?	X			
Pepyankh/ Henykem [146]	VI.4L	X			X	
Shepsipumin/ Kheni [147]	VI.4L		X			
Ankhtyfy [148]	VI.4L-VIII.E		X			
Tjemerery [159]	VI-FIP		X			
Twau [160]	VI-FIP	X	X			
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	X	X			
Mery Aa [158]	VI.L-VIII.E	X	X		X	
Tjeti Aa [161]	VIII		X			

Table J: Haulers Limb Positions

KEY:

Arm Positions:

DA.A - *Forwards*: arms in front;
DA.B- *Either side*: arms either side of the body; and
DA.C- *Behind*: both arms holding the rope behind the torso.

Leg Positions:

A- *Open Stance*
B- *Stride*
C- *Leaning*
G- *Lunge*

Tomb	Date	Arm Position DA.A	Arm Position DA.B	Arm Position DA.C	Leg Position Type A	Leg Position Type B	Leg Position Type C	Leg Position Type G
Nefermaat [2]	IV.1E	X	X		X			
Nefer...w [4]	IV.1-2	X	X			X		
Rahotep [5]	IV.2	X				X		
Kawab [6]	IV.2L-3L					X		
Akhethotep (G7650) [14]	IV.2-4				X			
Persen [9]	V.1-2	X			X			

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Arm Position DA.A	Arm Position DA.B	Arm Position DA.C	Leg Position Type A	Leg Position Type B	Leg Position Type C	Leg Position Type G
Ka-Aper [10]	V.1-2	X	X		X			
Iteti [12]	V.E-M					X		
Sekhemkare [13]	V.2	X	X		X			
Nefer and Kahay [18]	V.6		X		X	X	X	X
Iynofret [19]	V.6	X	X			X		X
Iymery [20]	V.6	X	X		X	X		
Khufukhaef II [21]	V.6	X	X		X			X
Irenkaptah [22]	V.6	X	X			X		
Nikauhathor [23]	V.6	X	X		X	X		
Fetekta [25]	V.6-	X			X			
Rakhaefankh [26]	V.6?	X	X	X	X			
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X	X	X	X		
Akhethotep (Louvre) [31]	V.6-8E	X	X		X		X	
Pehenuika [32]	V.6-8E	X	X	X	X	X		X
Hotepherakhti [34]	v.6-8	X	X		X			X
Ty [35]	V.6-8	X	X	X	X	X	X	X
Ptahshepses [41]	V.6L-9	X	X		X			
Kayemnofret II [43]	V.6L-VI	X?	X?	X?		X		
Irukaptah/Khenu [44]	v.7-8	X			X			
Inti [45]	V.8	X				X	X	
Kaemrehu [47]	V.8	-	-	-		X	X	
Sekhemka [48]	V.8-L	X	X		X	X	X	
Serfka [49]	V.8-9E	X			X	X	X	
Khuwiwer [50]	V.8-9M	X	X		X			
Kayemnofret (D23) [51]	V.8-9		X		-	-	-	-
Neferirtenefer [52]	V.8-9	X	X				X	X
Iynofert/ Shanef [63]	V.9		X			X		X
Nikauhor [64]	V.9	X	X		X	X		X
Khunes [67]	V.9	X	X		X			
Werirni [70]	V.9	X	X	X	X	X	X	X
Senedjem-Ib/ Mehi [76]	V.9L	X	X		X	X	X	X
Seshemnofer IV [77]	V.9-VI.1	X	X			X		X
Ptahhotep/Iyniankh [80]	V.9-VI.1	X	X			X	X	X
CG 1720 [83]	V.9-VI.1					X	X	X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X			X	X	X	
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X?	X			X		X
Kaiemheset [84]	V.L		X		X		X	
Turin Museo Egizio Sup. 1854 [85]	V?					X		

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Arm Position DA.A	Arm Position DA.B	Arm Position DA.C	Leg Position Type A	Leg Position Type B	Leg Position Type C	Leg Position Type G
Kagemni [94]	VI.1E	X	X				X	X
In-Snefru-Ishtef [96]	VI.1	X	X		X		X	
Niankhnesut [99]	VI.1-2	X	X			X		X
Nikauisesi [101]	VI.1M	X	X	X	X	X	X	X
Mereruka [103]	VI.1M-L	X	X		X	X	X	X
Watetkhet-Hor/ Seshseshet [104]	VI.1	X	X		X	X	X	
Hesi [110]	VI.1L-2E	X	X		X	X		X
Inumin [111]	VI.L-2E	X	X			X	X	X
Meru/Tetiseneb [115]	VI.1L-2	X	X		X			X
Merefnebef [117]	VI.1L-2L	X	X			X	X	X
Heri/ Meru [118]	VI.2E	X	X?		-	-	-	-
Henqu/ Iy...f II [120]	VI.2	X			X	X		
Mehu [121]	VI.2	X	X		X	X	X	X
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	X			X			
Idu I [128]	VI.3-4E	X			X			
Ibi [130]	VI.3-4E	X	X		X			X
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	X			X	X	X
Khenty [132]	VI.3-4M	X	X		X			
London British Museum No. 994 [135]	VI.4?	X	X			X		X
Kahif [139]	VI.4	X	X?			X	X	X
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	X			X			
Kahep/ Tjeti-Iker [140]	VI.4M	X			X			
Djau [141]	VI.4M-	X	X		X			X
Gehesa/ Nebi [145]	VI.4L	-	-	-	X			X
Pepyankh/ Henykem [146]	VI.4L	X	X		X		X	
Shepsipumin/ Kheni [147]	VI.4L	X			X			
Ankhtyfy [148]	VI.L-8		X		X			
Tjemerery [159]	VI.L-FIP	X	X?		X			
Twau [160]	VI.VIII	X	X	X	X			
Mery Aa [158]	VI.L-VIII E	X	X		X		X	
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	X		X	-	-	-	-
Tjeti Aa [161]	VIII		X		X			

Table K: Clothing of Haulers**KEY:**Clothing Type:

A- Naked

B- Belt

C- Kilt

D- Apron

(G)- Indicates representation of Genitalia

+ High- Indicates clothing has been depicted higher than normally worn.

Tomb	Date	Clothing Type A	Clothing Type B	Clothing Type C	Clothing Type D
Nefermaat [2]	IV.1E	X			
Nefer...w [4]	IV.1-2	X			
Rahotep [5]	IV.2		X	X	
Kawab [6]	IV.2L-3L		X		
Persen [9]	V.1-2				
Ka-Aper [10]	V.1-2	X			
Sekhemkare [13]	V.2	X	X?		
Nefer and Kahay [18]	V.6		X (G) + High		
Iynofret [19]	V.6		X		
Iymery [20]	V.6	X			
Khufukhaef II [21]	V.6		X		
Irenkaptah [22]	V.6		X		
Nikauhathor [23]	V.6	X			
Fetekta [25]	V.6-	X			
Rakhaefankh [26]	V.6?	X (G)	X		
Niankhkhnum and Khnumhotep [27]	V.6-7		X (G) + High		
Akhethotep (Louvre) [31]	V.6-8		X		
Pehenuika [32]	V.6-8E		X		
Ty [35]	V.6-8	X (G)		X (G)	X
Ptahshepses [41]	V.6L-9	X	X		
Kayemnofret II [43]	V.6L-VI	X			
Irukaptah/Khenu [44]	V.7-8	X	X		
Inti [45]	V.8			X	
Kaemrehu [47]	V.8	X (G)	X		
Sekhemka [48]	V.8-L		X		
Serfka [49]	V.8-9E		X?		
Khuwiwer [50]	V.8-9M	X			
Kayemnofret (D23) [51]	V.8-9			X	
Neferirtenef [52]	V.8-9		X		
Iynofert/ Shanef [63]	V.9		X	X	
Nikauhor [64]	V.9	X			
Khenut [68]	V.9	X			

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Clothing Type A	Clothing Type B	Clothing Type C	Clothing Type D
Khunes [67]	V.9	X			
Werirni [70]	V.9	X (G)			
Senedjem-Ib/ Mehi [76]	V.9L			X	
Seshemnofer IV [77]	V.9-VI.1	X			
Ptahhotep/Iyniankh [80]	V.9-VI.1		X		
Nebkauhor/ Idu [73]	V.9 r/u VI.1			X	
Kaiemheset [84]	V.L	X			
Turin Museo Egizio Sup. 1854 [85]	V?		X		
Kagemni [94]	VI.1E		X		
In-Snefru-Ishtef [96]	VI.1			X	
Niankhnesut [99]	VI.1-2			X (G)	
Nikauisesi [101]	VI.1M		X (G)		
Mereruka [103]	VI.1M-L		X (G) (S2)	X(S1)	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L			X	
Hesi [110]	VI.1L-2E			X (G)	
Inumin [111]	VI.1L-2E		X (G)		
Meru/ Tetiseneb [115]	VI.1L-2		X		
Merefnebef [117]	VI.1L-2L			X	
Heri/ Meru [118]	VI.2E		X		
Henqu/ Iy...f II [120]	VI.2			X	
Mehu [121]	VI.2		X	X	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	X (G)			
Idu 1 [128]	VI.3-4E	X			
Ibi [130]	VI.3-4E			X	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E			X (G)	
Khenty [132]	VI.3-4M	X			
London British Museum No. 994 [135]	VI.4?			X	
Kahif [139]	VI.4		X		
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M			X	
Kahep/ Tjeti-Iker [140]	VI.4M		X		
Djau [141]	VI.4M-	X			
Gehesa/ Nebi [145]	VI.4L		X	X	
Pepyankh/ Henykem [146]	VI.4L			X	
Shepsipumin/ Kheni [147]	VI.4L		X		
Ankhtyfy [148]	VI.4L-VIII.E	X			X
Twau [160]	VI-FIP	X (G)			
Mery Aa [158]	VI.L-VIII.E	X			
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E			X	
Tjeti Aa [161]	VIII			X	

Table L: Harness

Tomb	Date	Harness	Other accessories
Nefer and Kahay [18]	V.6	X	
Iynofret [19]	V.6	X	
Iymery [20]	V.6	X	
Khufukhaef II [21]	V.6	X	
Irenkaptah [22]	V.6	X	
Niankhkhnum and Khnumhotep [27]	V.6-7	X	
Akhethotep (Louvre) [31]	V.6-8E	X	
Pehenuika [32]	V.6-8E	X	
Hotepherakhti [34]	V.6-8	X	
Ty [35]	V.6-8	X	
Irukaptah/Khenu [44]	V.7-8	X	
Kaemrehu [47]	V.8	X	
Sekhemka [48]	V.8-L	X	
Neferirtenef [52]	V.8-9	X	
Iynofert/ Shanef [63]	V.9	X	
Werirni [70]	V.9	X	
Senedjem-Ib/ Mehi [76]	V.9L	X	
CG 1720 [83]	V.9- VI.1		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	
Kagemni [94]	VI.1E	X	
In-Snefru-Ishtef [96]	VI.1	X	
Mereruka [103]	VI.1M	X	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	X	
Hesi [110]	VI.1L-2E	X	
Inumin [111]	VI.1L-2E	X	Papyrus Hats
Henqu/ Iy...f II [120]	VI.2	X	
Mehu [121]	VI.2	X	
Ibi [130]	VI.3-4E	X	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	
London British Museum No. 994 [135]	VI.4?	X	
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4 E-M	X	
Pepyankh/ Henykem [146]	VI.4L	X	
Ankhtyfy [148]	VI.4L-VIII.E	X	
Twau [160]	VI-FIP	X	

Table M: Haulers Individual Characteristics**KEY:****Hair Type:**

- A- Full head of hair
B- Receding hairline

Body Condition:

- A- Athletic
B- Non-Athletic

Tomb	Date	Body Type A	Body Type B	Hair Type A	Hair Type B
Nefermaat [2]	IV. 1E	3		-	-
Nefer...w [4]	IV.1-2	7		4 (minimum)	
Rahotep [5]	IV.2	3		3	
Kawab [6]	IV 2L-3L	1?		-	-
Akhethotep (G7650) [14]	V.2-4	3		-	-
Persen [9]	V.1-2	5		-	-
Ka-Aper [10]	V.1-2	9		8	
Iteti [12]	V.E-M	2		-	-
Sekhemkare [13]	V.2	6		6	
Nefer and Kahay [18]	V.6	9		5	4
Iynofret [19]	V.6	12		3	
Iymery [20]	V.6	8		4	
Khufukhaef II [21]	V.6	6		5	
Irenkaptah [22]	V.6	2		1	1
Nikauhathor [23]	V.6	8		-	-
Fetekta [25]	V.6-	3		-	-
Rakhaefankh [26]	V.6?	7		7	
Niankhkhnum and Khnumhotep [27]	V.6-7	8	2	6	4
Akhethotep (Louvre) [31]	V.6-8E	9		9	
Pehenuika [32]	V.6-8E	6		6	
Hotepherakhti [34]	V.6-8	8		6	
Ty [35]	V.6-8	2	7	1	8
Ptahshepses [41]	V.6L-9	9		-	-
Kayemnofret II [43]	V.6L-VI	2		-	-
Irukaptah/Khenu [44]	V.7-8	9	1	4	5
Inti [45]	V.8	6		2	-
Sekhemka [48]	V.8-L	8		7	
Serfka [49]	V.8-9E	3		-	-
Khuwiwer [50]	V.8-9M	5		5	
Neferirtenef [52]	V.8-9	8		2	4
Iynofert/ Shanef [63]	V.9	9		5	
Nikauhor [64]	V.9	3		2	1?
Khunes [67]	V.9	5		5	
Werirni [70]	V.9	5	1	4	
Senedjem-Ib/ Mehi [76]	V.9L	11		11	
Seshemnofer IV [77]	V.9-VI.1	7		-	-

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Body Type A	Body Type B	Hair Type A	Hair Type B
Ptahhotep/Iyniankh [80]	V.9-VI.1	3		-	-
Nebkauhor/ Idu [73]	V.9 r/u VI.1	7			-
Kaiemheset [84]	V.L	3		-	-
Turin Museo Egizio Sup 1854 [85]	V?	1		-	-
Kagemni [94]	VI.IE	10		2	
In-Snefru-Ishtef [96]	VI.1	7	1	2	3
Niankhnesut [99]	VI.1-2	4			1
Nikauisesi [101]	VI.1M	9	1	3	6
Mereruka [103]	VI.1M-L	41	1	27	13
Watetkhet-Hor/ Seshseset [104]	VI.1M-L	29		25	1
Hesi [110]	VI.1L-2E	5	3	2	4
Inumin [111]	VI.1L-2E	7	1	7	
Meru/Tetiseneb [115]	VI.1L-2	3	1	2	2
Merefnebef [117]	VI.1L-2L	6		6	
Heri/ Meru [118]	VI.2E	3		1	
Henqu/ Iy...f II [120]	VI.2	5 (hernia)		5	
Mehu [121]	VI.2	10	1	5	7
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	7		4	
Ibi [130]	VI.3-4E	8		8	
Pepyanh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	10		6	4
Khenty [132]	VI.3-4M	5		5	
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI. 4 E-M	7		5	
London British Museum No. 944 [135]	VI. 4 ?	3	1	3	
Kahif [139]	VI.4	1		-	-
Kahep/ Tjeti-Iker [140]	VI.4 M	6		4	
Djau [141]	VI.4M-	7		1	2
Gehesa/ Nebi [145]	VI.4L	3		-	-
Pepyanh/ Henykem [146]	VI.4L	11		7	2?
Shepsipumin/ Kheni [147]	VI.4L	6		-	-
Ankhtyfy [148]	VI.4L-VIII E	4		4	
Unisankh [150]	VI.L	-	-	1	
Tjemerery [159]	VI.FIP	1		-	-
Twau [160]	VI-VIII	6		3	
Mery Aa [158]	VI.L-VIII E	3		-	-
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	3		1	-
Tjeti Aa [161]	VIII	2		-	-

Table N: Supervisor Body and Limb Positions, Individual Characteristics, and Clothing**KEY:**

Body position: (following Hauler Body positions)

A- Upright position.

D- Lunge

Leg Position:

A- Open Stance

Hair Type:

A- Full head of hair

B- Receding hairline

Body Condition:

A- Athletic

B- Non-Athletic

Clothing:

A- Naked

B- Belt

C- Kilt- (P= Pointed Kilt, D= Drop kilt, F= Fringed Kilt, No descriptor = Wrap around Kilt)

Tomb	Date	Body Position	Gesturing	Holding Fish	Leaning on Staff	Other	Leg Position A	Body Type.	Hair Type	Clothing Type
Sekhemkare [13]	V.2	A	X				X	A	A	C
Nefer and Kahay [18]	V.6	A		X			X	A	A	-
Iymery [20]	V.6	A		X			-	-	-	C
Khufukaef II [21]	V.6	A			X		X	A	A	C
Fetekta [25]	V.6-	A				X	X	B	-	C
Rakhaefankh [26]	V.6?	A			X		X Var ¹⁶⁶⁷	A	A	C (P)
Niankhkhnum and Khnumhotep [27]	V. 6-7	A	X				X	B	B	C (D)
Akhetotep (Louvre) [31]	V.6-8E	A (2)		X			X (2)	A (2)	A (2)	C (2)
Hotepherakhti [34]	V.6-8	A			X		X	A	-	-
Ty [35]	V.6-8	A, D		X	X		X	B (2)	B (2)	C (2)(D, F)
Irukaptah/Khenu [44]	V.7-8.	A			X		X	B	A	C (P)
Inti [45]	V.8	A	X				X	B	A	C
Sekhemka [48]	V.8-L	A				X ¹⁶⁶⁸	X	A	B	C (D,F)
Neferirtenef [52]	V.9	A			X		X	A	-	C (D,F)
Iynofert/ Shanef [63]	V.9	A	X				X	A	A	C (P)
Senedjem-Ib/ Mehi [76]	V.9L	A		X			X	A	A	-
Seshemnofer IV [77]	V.9-VI.1	A	-	-	-	-	X	-	-	C (P)
Ptahhotep/Iyniankh [80]	V.9-VI.1	A	-	-	-	-	X	-	-	C (D,F)
CG 1720 [83]	V.9-VI.1	A			X			A	-	C (F)

¹⁶⁶⁷ One foot flat other raised to toes and knees bent

¹⁶⁶⁸ Holding both arms in front one elbow turned up.

Appendix 2: Detail Tables: Dragnets

Tomb	Date	Body Position	Gesturing	Holding Fish	Leaning on Staff	Other	Leg Position A	Body Type.	Hair Type	Clothing Type
Nebkauhor/ Idu [73]	V.9 r/u VI.1	A			X		X	B	-	C
In-Snefru-Ishtef [96]	VI.1	A			X		X	B	-	C (P)
Nikauisesi [101]	VI.1M	A	X				X	A	A	
Mereruka [103]	VI.1M-L	A			X		X Var ¹⁶⁶⁹	A	A	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	A			X		X	A	A	
Hesi [110]	VI.1L- 2E	A			X		X	A	A	
Inumin [111]	VI.1L- 2E	A			X		X	B	A with Hat	
Meru/ Tetiseneb [115]	VI.1L-2	A			X		X	B	-	
Henqu/ Iy...f II [120]	VI.2	A	-	-	-	-	X	-	-	
Mehu [121]	VI.2	A			X		X Var ¹⁶⁷⁰	B	B	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	A			X		X	A	A	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4M	A			X		X Var ¹⁶⁷¹	A	-	
Niankhpepy/ Sobekhotep/ Hepi-Kem [136]	VI.4E-M	A	-	-	-	-	X	A	-	
London British Museum No. 944 [135]	VI.4?	A			X		X	A	-	
Pepyankh/ Henykem [146]	VI.4L	A			X		X Var ¹⁶⁷²	A	A?	
Shepsipumin/ Kheni [147]	VI.4L	A			X		X	A	-	

¹⁶⁶⁹ Feet together one flat one up on toes slightly.

¹⁶⁷⁰ Feet together one flat one up on toes slightly.

¹⁶⁷¹ Feet together one flat one up on toes slightly.

¹⁶⁷² Feet together both flat.


Table O: Captions

Tomb	Transliteration	Translation
Irenkaptah [22]	<i>ḥzm p[w] i ḥ[b] p[w] i</i>	“O! such a haul, O! Such a Catch” or; ‘This catch is a celebration’ ¹⁶⁷³
Niankhkhnum and Khnumhotep [27]	<i>ḥzm pw n.t ḥn^c iw.s inn//// ḥzb ntr</i>	Such a catch????and It (the net) comes and brings/// a good catch
	<i>Ḥh wn mk m^c ntw Ḥmī-r mḥw</i>	Oh! hurry? Behold! You see the Overseer of fishermen
Akhethotep (Louvre) [31]	<i>ḥ[ṣ]m</i>	To catch/rawl
Hotepherakhti [34]	<i>ḥṣ[m]</i>	To catch/rawl
	<i>stzī r=k</i>	Cause to lift to you!
	<i>Gb.t tw h^c</i>	To bone the Synodontis? ¹⁶⁷⁴
Ty [35]		
	<i>Ḥw.s inn.s ḥb nfr</i>	It comes and brings good catch
	<i>Ḥw mḥyt im.s r nfr</i>	The fish in it, are more perfect?
	<i>Ḥnī.tn s</i>	It Brings!
	<i>Ḥmī-r mḥw Ḥw in ḥt ʿz n</i>	Overseer of the fishermen, your body great? ¹⁶⁷⁵
	<i>Ḥw.s inn.s</i>	It comes and brings
	<i>ḥb ntr</i>	Good catch
	<i>Ḥry (i) r mnḥ</i>	I make to excellent I make to perfection ¹⁶⁷⁶
	<i>Ḥry (i) hsn.k</i>	I make to your desire
	<i>Ḥn d(w) k tw ḥr gb.t¹⁶⁷⁷?(syno), m iwī nšmt. s</i>	You place yourself on (syno), who comes for its scale. ¹⁶⁷⁸
Sekhemka [48]	<i>ḥzm p(w), ḥb pw, iw.s inn.[s] ḥb nfr</i>	Such a haul, such a catch, It (the net) comes and brings a good catch
Neferirtenef [52]	<i>ḥzm p[w] i, ḥb p[w] i</i>	O! such a haul, O! Such a Catch”

¹⁶⁷³ Van Elsbergen, *Fischerei*, 212.¹⁶⁷⁴ See Mohr, *Hotepherakhti*, 59; Monet, *Scenes de la Vie Privee*, 37. *b.t* = Synodontis.¹⁶⁷⁵ Monet, *Scenes de la Vie Privee*, 36: for last part of sentence ‘you are like... if you...’.¹⁶⁷⁶ Monet, *Scenes de la Vie Privee*, 37.¹⁶⁷⁷ Monet, *Scenes de la Vie Privee*, 37: Monet indicates the word means *Synodontis batensoda*, also sentence translates as “do not you 're going to have the *batensoda* Boning? go! Run!”.¹⁶⁷⁸ Van Elsbergen *Fischerei*, 294. (last section) ‘to send for the sting?’

Appendix 2: Detail Tables: Dragnets

Tomb	Transliteration	Translation
	<i>inl.s in(n) s n.n(pl.) ḥb nfr</i>	bring it (the net) and it brings to us a good catch ¹⁶⁷⁹
Nikauhor [64]	<i>//z ḥm p(w)</i>	(such a haul? Complete?) ¹⁶⁸⁰
Ptahhotep/Iyniankh [80]	<i>ʾTw ḥb</i>	The (it is) catch
	<i>ḥb nfr pw</i>	This is a good catch
Kagemni [94]	<i>iw.s inn.[s] ḥb nfr</i>	It (the net) comes and brings a good catch
	<i>ḥb pw</i>	‘such a catch [of fish]
Watetkhet-Hor/ Seshseshet [104]	<i>ḥm-k^c Mri</i>	Ka Servant Mery
	<i>mr</i>	Mer(y)
	<i>ḥm-k^c Mri</i>	Ka Servant Mery
	<i>ḥm-k^c</i>	Ka Servant
	<i>mri imi ///</i>	Mery imi// (Missing Title) ¹⁶⁸¹
Hesi [110]	<i>Jmj-r mḥw</i>	Overseer of fishermen
Mehu [121]	<i>ʾInl r.k nt ḥn^c ḥ[3]m mḥty wr.t</i>	Bring to you and (it is) a great catch of fish
	<i>ʾInl r.k r ḥr is wdnt wr.t</i>	Bring it forwards to you, truly a great offering.
	<i>ʾImy-r wh^c</i>	Overseer of fishermen
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	<i>ʾIn.sy r-k nty ḥn^c.i i[w].s wdnty</i>	Draw it (net) in comrade it is heavily laden! ¹⁶⁸²
	<i>iw.s inn.s nn ḥb nfr</i>	It (the net) comes and brings these good catch
	<i>ʾImi -r wh^c</i>	Over seer of fishermen
	<i>twq qther lqst (in p^cint)</i>	First under the king of the great house, the Nome scribe ¹⁶⁸³
London British Museum No. 994 [135]	<i>// wh^c</i>	fishermen
Pepyankh/ Henykem [146]	<i>/// w^c.t n mḥ.yt n K^c n sr</i>	[Make} way for the catch for the Ka of the noble ¹⁶⁸⁴
	<i>ʾTry, hy, iw ikr tzy</i>	Take action, hail, come skilfully man
	<i>Wr ikr, wr ikr</i>	Great skill, Great skill
	<i>ʾIs mḥ.yt</i>	What a catch ¹⁶⁸⁵
	<i>ʾImi -r wh^c</i>	Over seer of fishermen

¹⁶⁷⁹ Van Elsbergen reconstructs the Hieroglyphics as such: . Van Elsbergen, *Fischerei*, 261.
¹⁶⁸⁰ Van Elsbergen, *Fischerei*, 254: ‘such a haul’.
¹⁶⁸¹ Kanawati, *Mereruka II*, 21.
¹⁶⁸² Blackman, *Meir IV*, 30; However, it may also mean offerings ‘it is an offering’ because of determinative.
¹⁶⁸³ Blackman *Meir IV*, 30 [ft. 5].
¹⁶⁸⁴ Blackman *Meir V*, 38.
¹⁶⁸⁵ Van Elsbergen, *Fischerei*, 201.

Appendix 2: Detail Tables: Dragnets

Tomb	Transliteration	Translation
	//w n K ^c n hñi.t km ¹⁶⁸⁶	For the ka of hñi.t-km ¹⁶⁸⁷
	stì m dbw.t(s) r t̃z mḥtt	Throw the rope (band/belt) towards the north land! (or directional north) ¹⁶⁸⁸
	ʾIs ʔpd.t hr r-m ʾr	It is a bird carrying a fish.
	ḥy iwi r=k ḥr? ḥb nfr pw	Hail, come to you// this beautiful catch
Ankhtyfy [148]	ʾI(w).t ḥ[b] ikr nfr m(=tn) nḥt (tn) (i)r.tn nfr imi mḥyt	Your catch is very good, Behold your strength, your success! Place the Fish!!

Table P: Fish Occurrence in Dragnets Per Dynasty

Fish Species (Per Dynasty)	Fourth Dynasty	Fifth Dynasty	Sixth Dynasty	Eighth Dynasty
<i>Petrocephalus</i>		10	4	
<i>Gnathonemus</i>		16	4	
<i>Mormyrus Kannume</i>		8	9	1
<i>Mormyrus Caschive</i>	2	9	8	1
<i>Mormyrus Nilotica</i>		2	1	2
<i>Hyperopisus</i>		5	4	
<i>Citharinus sp.</i>		16	16	
<i>Barbus bynni</i>	1	16	16	
<i>Clarias ssp.</i>		22	15	
<i>Schilbe</i>		7	9	
<i>Synodontis Schall</i>		32	29	1
<i>Synodontis Batensoda</i>		10	14	
<i>M. electricus</i>		13	11	
<i>A. vulgaris</i>		18	17	
<i>Mugil sp.</i>	2	48	73	3
<i>Lates</i>		11	22	3
<i>Tilapia ssp.</i>		38	44	1
<i>Tetraodon fahaka</i>		22	25	
<i>Unknown</i>		61	42	3

¹⁶⁸⁶ Van Elsbergen, *Fischerei*, 201 [ft. 1]: Ranke, *PN*, 244 [25].

¹⁶⁸⁷ Blackman *Meir V*, 38.

¹⁶⁸⁸ Van Elsbergen, *Fischerei*, 201 [ft. 2] explains that the inclusion of the *s* after *dbw.t* 'is not otherwise occupied, but must designate because of determinative, the rope. The feminine suffix could refer to the nets'.

Angling Detail Tables A-M

Table A: Occurrence

Tomb Owner	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8
Hotepherakhti [34]	Saqqara	V.6-8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Hesimin (M22) [56]	El-Hawawish	V.8L-9E
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Nimaatre [60]	Giza	V.8L-9
Iynofert/ Shanef [63]	Saqqara	V.9
Khenut [68]	Saqqara	V.9
Ptahhotep/ Thefu [75]	Saqqara	V.9L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1
Seshemnofer IV [77]	Giza	V.9 – VI.1
G2360 [87]	Giza	V-VI
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Dahshur	VI.1
Mereruka [103]	Saqqara	VI.1M-L
Nikauisesi [101]	Saqqara	VI.1M
Hesi [110]	Saqqara	VI.1L-2E
Wedjahateti / Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E
Bawi (G126) [113]	El-Hawawish	VI.1L-2
Nekhebu [119]	Giza	VI.2
Mehu [121]	Saqqara	VI.2
Tomb G97 [125]	El-Hawawish	VI.2L-3
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Djau [141]	Deir el-Gebrawi	VI.4M
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L
Pepyankh/ Henykem [146]	Meir	VI.4L
Unisankh [150]	El-Khokha	VI.L-?

Table B: Anglers on boat

Tomb Owner	Date	Angler	Two Anglers on One boat	With Lave Net Fisherman	Other
Niankhkhnum and Khnumhotep [27]	V.6-7	X (2)			
Ty [35]	V.6-8	X			
Hotepherakhti [34]	V.6-8	X			
Kayemnofret (D23) [51]	V.8-9	X			
Hesimin (M22) [56]	V.8L-9E	X			
Akhethotep (D64) [58]	V.8L-9E	X			
Nimaatre [60]	V.8L-9	X			
Iynofert/ Shanef [63]	V.9	X			X
Khenut [68]	V.9	X			
Ptahhotep/ Thefu [75]	V.9L	X			
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X (2)		X (2)	
Seshemnofer IV [77]	V.9 – VI.1	X			
G2360 [87]	V-VI	X			
Kagemni [94]	VI.1E	X (2)		X	X
In-Snefru-Ishtef [96]	VI.1	X			
Mereruka [103]	VI.1M-L	X			X
Nikauisesi [101]	VI.1M	X			X
Hesi [110]	VI.1L-2E	X			X
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X			
Bawi (G126) [113]	VI.1L-2	X			
Nekhebu [119]	VI.2	X (3)	X		
Mehu [121]	VI.2	X (2)	X		
Tomb G97 [125]	VI.2L-3	X			
Ibi [130]	VI.3-4E	X			X
Djau [141]	VI.4M	X			
Kahep/ Tjeti-Iker [140]	VI.4M	X		X	
Shepsipumin/ Kheni [147]	VI.4L	X		X	
Pepyankh/ Henykem [146]	VI.4L	X (3)		X (2)	
Unisankh [150]	VI.L-?	X			

Table C: Fishing Equipment: Hooks

Tomb Owner	Date	Hooks Visible	Multiple Hooks Shown	Hooks Swallowed	Both Visible and Swallowed
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X		
Ty [35]	V.6-8			X	
Hotepherakhti [34]	V.6-8			X	
Kayemnofret (D23) [51]	V.8-9	-	-	-	-
Hesimin (M22) [56]	V.8L-9E	X	X		
Akhethotep (D64) [58]	V.8L-9E			X	
Nimaatre [60]	V.8L-9	X			X
Iynofert/ Shanef [63]	V.9	-	-	-	-
Khenut [68]	V.9	-	-	-	-
Ptahhotep/ Thefu [75]	V.9L	-	-	-	-
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X (2)	X (2)		
Seshemnofret IV [77]	V.9 – VI.1			X	
G2360 [87]	V-VI			X	
Kagemni [94]	VI.1E	X (2)	X (2)		
In-Snefru-Ishtef [96]	VI.1	-	-	-	-
Mereruka [103]	VI.1M-L	X	X		
Nikauisesi [101]	VI.1M	-	-	-	-
Hesi [110]	VI.1L-2E	X			X
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X	X		
Bawi (G126) [113]	VI.1L-2	-	-	-	-
Nekhebu [119]	VI.2	X (2)	X (2)		
Mehu [121]	VI.2	X	X	X	
Tomb G97 [125]	VI.2L-3	X	X?		
Ibi [130]	VI.3-4E	X			X
Djau [141]	VI.4M			X	
Kahep/ Tjeti-Iker [140]	VI.4M	-	-	-	-
Shepsipumin/ Kheni [147]	VI.4L	X			X
Pepyankh/ Henykem [146]	VI.4L			X (3)	
Unisankh [150]	VI.L-?	-	-	-	-

Table D: Equipment: Fishing Line

Tomb Owner	Date	Terminates at Hand	Extends past hand	Other	Taut	Lax
Niankhkhnum and Khnumhotep [27]	V.6-7	X				X
Ty [35]	V.6-8		X		X	
Hotepherakhti [34]	V.6-8	-	-	-	-	-
Kayemnofret (D23) [51]	V.8-9	-	-	-	-	-
Hesimin (M22) [56]	V.8L-9E		X		-	-
Akhethotep (D64) [58]	V.8L-9E		X			X
Nimaatre [60]	V.8L-9	-	-	-	X	
Iynofert/ Shanef [63]	V.9	X			X	
Khenut [68]	V.9	-	-	-	X	
Ptahhotep/ Thefu [75]	V.9L	-	-	-	-	-
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X			X	
Seshemnofer IV [77]	V.9 – VI.1	X			X	
G2360 [87]	V-VI	-	-	-	-	
Kagemni [94]	VI.1E		X	Coiled		X
In-Snefru-Ishtef [96]	VI.1	-	-	-	-	-
Mereruka [103]	VI.1M-L		X	Coiled		X
Nikauisesi [101]	VI.1M		X		X	
Hesi [110]	VI.1L-2E		X	Coiled	X	
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X			X	
Bawi (G126) [113]	VI.1L-2	-	-	-	-	-
Nekhebu [119]	VI.2		X			X
Mehu [121]	VI.2	-	-	-	X	
Tomb G97 [125]	VI.2L-3	-	-	-	X	
Ibi [130]	VI.3-4E		X			X
Djau [141]	VI.4M		X		X	
Kahep/ Tjeti-Iker [140]	VI.4M		X			X
Shepsipumin/ Kheni [147]	VI.4L		X		X	
Pepyankh/ Henykem [146]	VI.4L		X			X
Unisankh [150]	VI.L-?	-	-	-	-	-

Table E: Equipment: Sinker

Tomb Owner	Date	Sinker	Bell Shape	Rectangular shape	Triangular Shape	Tear Drop Shape	Spherical Shape
Niankhkhnum and Khnumhotep [27]	V.6-7						
Ty [35]	V.6-8						
Hotepherakhti [34]	V.6-8						
Kayemnofret (D23) [51]	V.8-9						
Hesimin (M22) [56]	V.8L-9E	X	X				
Akhethotep (D64) [58]	V.8L-9E						
Nimaatre [60]	V.8L-9	X					X
Iynofert/ Shanef [63]	V.9						
Khenut [68]	V.9						
Ptahhotep/ Thefu [75]	V.9L						
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X				X	
Seshemnofer IV [77]	V.9 – VI.1						
G2360 [87]	V-VI						
Kagemni [94]	VI.1E	X			X		
In-Snefru-Ishtef [96]	VI.1						
Mereruka [103]	VI.1M-L	X				X	
Nikauisesi [101]	VI.1M						
Hesi [110]	VI.1L-2E	X		X			
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X	X				
Bawi (G126) [113]	VI.1L-2						
Nekhebu [119]	VI.2						
Mehu [121]	VI.2						
Tomb G97 [125]	VI.2L-3						
Ibi [130]	VI.3-4E						
Djau [141]	VI.4M						
Kahep/ Tjeti-Iker [140]	VI.4M						
Shepsipumin/ Kheni [147]	VI.4L						
Pepyankh/ Henykem [146]	VI.4L						
Unisankh [150]	VI.L-?						

Table F: Equipment: Club

Tomb Owner	Date	Club Represented
Niankhkhnum and Khnumhotep [27]	V.6-7	
Ty [35]	V.6-8	X
Hotepherakhti [34]	V.6-8	X
Kayemnofret (D23) [51]	V.8-9	
Hesimin (M22) [56]	V.8L-9E	X
Akhethotep (D64) [58]	V.8L-9E	X
Nimaatre [60]	V.8L-9	
Iynofert/ Shanef [63]	V.9	
Khenut [68]	V.9	X
Ptahhotep/ Thefu [75]	V.9L	X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X (2)
Seshemnofer IV [77]	V.9 – VI.1	X
G2360 [87]	V-VI	
Kagemni [94]	VI.1E	
In-Snefru-Ishtef [96]	VI.1	
Mereruka [103]	VI.1M-L	X
Nikauisesi [101]	VI.1M	X
Hesi [110]	VI.1L-2E	X
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	
Bawi (G126) [113]	VI.1L-2	X
Nekhebu [119]	VI.2	X (1)
Mehu [121]	VI.2	X
Tomb G97 [125]	VI.2L-3	X?
Ibi [130]	VI.3-4E	
Djau [141]	VI.4M	
Kahep/ Tjeti-Iker [140]	VI.4M	
Shepsipumin/ Kheni [147]	VI.4L	X?
Pepyankh/ Henykem [146]	VI.4L	
Unisankh [150]	VI.L-?	

Table G: Seats and Equipment on Boat

Tomb Owner	Date	Simple Seat (Type B)	Seat with back rest (Above hips) (Type A)	Cushion (Type C)	Detailing on seat	Equipment on boat
Niankhkhnum and Khnumhotep [27]	V.6-7		X (2)			X
Ty [35]	V.6-8		X		X	X
Hotepherakhti [34]	V.6-8	X				
Kayemnofret (D23) [51]	V.8-9		X			
Hesimin (M22) [56]	V.8L-9E		X			X?
Akhethotep (D64) [58]	V.8L-9E		X		X	
Nimaatre [60]	V.8L-9					
Iynofert/ Shanef [63]	V.9	X				
Khenut [68]	V.9					
Ptahhotep/ Thefu [75]	V.9L		X			
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1		X (2)		X (1)	X (2)
Seshemnofer IV [77]	V.9 - VI.1					
G2360 [87]	V-VI		X			X
Kagemni [94]	VI.1E	X	X	X	X (2)	X
In-Snefru-Ishtef [96]	VI.1					
Mereruka [103]	VI.1M-L					
Nikauisesi [101]	VI.1M					
Hesi [110]	VI.1L-2E		X			
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E		X			X
Bawi (G126) [113]	VI.1L-2					
Nekhebu [119]	VI.2					
Mehu [121]	VI.2					
Tomb G97 [125]	VI.2L-3					
Ibi [130]	VI.3-4E		X			
Djau [141]	VI.4M					
Kahep/ Tjeti-Iker [140]	VI.4M					
Shepsipumin/ Kheni [147]	VI.4L					
Pepyankh/ Henykem [146]	VI.4L		X (1)			X (1)
Unisankh [150]	VI.L-?					

Table H: Boats

KEY:

Boat Structure:

- A. *Near horizontal position:*
- B. *Vertical position: and*
- C. *Varying position*

Boat Detailing:

- A. *Lashing and reed:*
- B. *Lashing only: and*
- C. *No detailing*

Tomb Owner	Date	Structure Type A	Structure Type B	Structure Type A/B	Structure Type C	Detailing Type A	Detailing Type B	Detailing Type C
Niankhkhnum and Khnumhotep [27]	V.6-7	X (2)					X	
Ty [35]	V.6-8				X		X	
Hotepherakhti [34]	V.6-8						X	
Kayemnofret (D23) [51]	V.8-9	X						X
Hesimin (M22) [56]	V.8L-9E	X					X	
Akhethotep (D64) [58]	V.8L-9E	X					X	
Nimaatre [60]	V.8L-9	X						X
Iynofert/ Shanef [63]	V.9		X					X
Khenut [68]	V.9	X						X
Ptahhotep/ Thefu [75]	V.9L		X				X	
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1				X (2)	X	X	
Seshemnofer IV [77]	V.9 – VI.1				X		X	
G2360 [87]	V-VI				X			X
Kagemni [94]	VI.1E	X		X		X		
In-Snefru-Ishtef [96]	VI.1				X			
Mereruka [103]	VI.1M-L	X						
Nikauisesi [101]	VI.1M	X					X	
Hesi [110]	VI.1L-2E			X		X		
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X				X		X
Bawi (G126) [113]	VI.1L-2		X					X
Nekhebu [119]	VI.2	X						X
Mehu [121]	VI.2		X					X
Tomb G97 [125]	VI.2L-3		X					X
Ibi [130]	VI.3-4E				X			X
Djau [141]	VI.4M		X				X	
Kahep/ Tjeti-Iker [140]	VI.4M	X				X		
Shepsipumin/ Kheni [147]	VI.4L	X						X
Pepyankh/ Henykem [146]	VI.4L	X (3)						X
Unisankh [150]	VI.L-?				X			X

Table I: Fish Species

Tomb Owner	Date	Fish Hooked on Line	<i>Clarias</i> sp.	<i>Synodontis</i> ssp.	<i>Barbus Bynni</i>	<i>Mugil</i> sp.	<i>Tetraodon Fahaka</i>
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X	X ¹⁶⁸⁹			
Ty [35]	V.6-8	X	X				
Hotepherakhti [34]	V.6-8			X			
Kayemnofret (D23) [51]	V.8-9	X?	X?				
Hesimin (M22) [56]	V.8L-9E	X	X				
Akhethotep (D64) [58]	V.8L-9E	X		X			
Nimaatre [60]	V.8L-9	X	X				
Iynofert/ Shanef [63]	V.9						
Khenut [68]	V.9	X		X			
Ptahhotep/ Thefu [75]	V.9L						
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X		X (2)			
Seshemnofret IV [77]	V.9 – VI.1	X	X				
G2360 [87]	V-VI	X		X			
Kagemni [94]	VI.1E	X		X	X		
In-Snefru-Ishtef [96]	VI.1						
Mereruka [103]	VI.1M-L	X			X		
Nikauisesi [101]	VI.1M						
Hesi [110]	VI.1L-2E	X		X	X		
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X		X?			
Bawi (G126) [113]	VI.1L-2						
Nekhebu [119]	VI.2	X		X (2)			
Mehu [121]	VI.2	X		X (2)			
Tomb G97 [125]	VI.2L-3	X		X			
Ibi [130]	VI.3-4E	X		X			
Djau [141]	VI.4M	X					X
Kahep/ Tjeti-Iker [140]	VI.4M						
Shepsipumin/ Kheni [147]	VI.4L	X		X			
Pepyankh/ Henykem [146]	VI.4L	X		X (2)		X	
Unisankh [150]	VI.L-?						

Table J: Anglers Body Position

Tomb Owner	Date	Seated	Reclining
Niankhkhnum and Khnumhotep [27]	V.6-7	X (2)	
Ty [35]	V.6-8	X	
Hotepherakhti [34]	V.6-8	X	
Kayemnofret (D23) [51]	V.8-9	X	
Hesimin (M22) [56]	V.8L-9E	X	
Akhethotep (D64) [58]	V.8L-9E	X	
Nimaatre [60]	V.8L-9	X	
Iynofert/ Shanef [63]	V.9	X	
Khenut [68]	V.9	X	
Ptahhotep/ Thefu [75]	V.9L	X	
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X (2)	
Seshemnofer IV [77]	V.9 – VI.1	X	
G2360 [87]	V-VI	X	
Kagemni [94]	VI.1E	X (2)	
In-Snefru-Ishtef [96]	VI.1	X	
Mereruka [103]	VI.1M-L	X	
Nikauisesi [101]	VI.1M	X	
Hesi [110]	VI.1L-2E	X	
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E	X	
Bawi (G126) [113]	VI.1L-2	X	
Nekhebu [119]	VI.2	X	X
Mehu [121]	VI.2	X (2)	
Tomb G97 [125]	VI.2L-3	X	
Ibi [130]	VI.3-4E		X
Djau [141]	VI.4M		X
Kahep/ Tjeti-Iker [140]	VI.4M	X	
Shepsipumin/ Kheni [147]	VI.4L	X	
Pepyankh/ Henykem [146]	VI.4L	X (2)	X
Unisankh [150]	VI.L-?		X

Table K: Limb Positions of Anglers**KEY:****Arm Positions:**

- A. One hand holds the fishing line, the other raises a club;
- B. One hand holds a fishing line, the other is by the side;
- C. One hand holds a fishing line, the other is in a unique/Rare position.

Leg Positions:

- D. *Kneeling*;
- E. *Semi-Kneeling*;
- F.1. *Seated Leg to chest*;
- F.2. *Seated one leg extended*.

Tomb Owner	Date	Arm Position A	Arm Position B	Arm Position C	Leg Position D	Leg Position E	Leg Position F.1	Leg Position F.2
Niankhkhnum and Khnumhotep [27]	V.6-7		X	X			X (2)	
Ty [35]	V.6-8	X			X			
Hotepherakhti [34]	V.6-8	X			-	-	-	-
Kayemnofret (D23) [51]	V.8-9		X			X		
Hesimin (M22) [56]	V.8L-9E	X				X		
Akhethotep (D64) [58]	V.8L-9E	X				X		
Nimaatre [60]	V.8L-9		X		X			
Iynofert/ Shanef [63]	V.9			X			X	
Khenut [68]	V.9	X			-	-	-	-
Ptahhotep/ Thefu [75]	V.9L	X					X	
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	X (2)						X (2)
Seshemnofer IV [77]	V.9 – VI.1	X			-	-	-	-
G2360 [87]	V-VI			X			X	
Kagemni [94]	VI.1E			X (2)		X		X
In-Snefru-Ishtef [96]	VI.1			X	-	-	-	-
Mereruka [103]	VI.1M-L	X				X		
Nikauisesi [101]	VI.1M	X						X
Hesi [110]	VI.1L-2E	X				X		
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E			X			X	
Bawi (G126) [113]	VI.1L-2	X				X		

Appendix 2: Detail Tables: Angling

Tomb Owner	Date	Arm Position A	Arm Position B	Arm Position C	Leg Position D	Leg Position E	Leg Position F.1	Leg Position F.2
Nekhebu [119]	VI.2	X		X	X ¹⁶⁹⁰			
Mehu [121]	VI.2	X			-	-	-	-
Tomb G97 [125]	VI.2L-3	X				X		
Ibi [130]	VI.3-4E			X				X ¹⁶⁹¹
Djau [141]	VI.4M		X					X ¹⁶⁹²
Kahep/ Tjeti-Iker [140]	VI.4M		X				X	
Shepsipumin/ Kheni [147]	VI.4L	X					X	
Pepyankh/ Henykem [146]	VI.4L	X (2)		X				X ¹⁶⁹³ (2)
Unisankh [150]	VI.L-?			X	-	-	-	-

Table L: Individual Characteristics and Clothing

KEY:

Hair Type:

- A. A full head of hair; and
- B. A receding hairline.

Body Types:

- A. An athletic build, and
- B. A non-athletic build

Clothing:

- A. No clothing;
- B. Small belt;
- C. Kilt: and
- D. Tunic.

(G)- Indicates representation of genitalia.

Tomb Owner	Date	Hair: Type A	Hair: Type B	Body: Type A	Body: Type B	Clothing: Type A	Clothing: Type B	Clothing: Type C	Clothing: Type D	Shoulder strap
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X	X (2)			X (2)			
Ty [35]	V.6-8		X		X	X				
Hotepherakhti [34]	V.6-8	-	-	X		-	-	-	-	-
Kayemnofret (D23) [51]	V.8-9	-	-	X			-	-	-	-

¹⁶⁹⁰ Other two Figures are in Unusual Positions, a crawling position on all fours, and reclining as indicated in Table J, both legs are extended forwards.

¹⁶⁹¹ Reclining as indicated in Table J, both legs are extended forwards.

¹⁶⁹² Reclining as indicated in Table J, both legs are extended forwards.

¹⁶⁹³ One other figure reclining as indicated in Table J, both legs are extended forwards.

Appendix 2: Detail Tables: Angling

Tomb Owner	Date	Hair: Type A	Hair: Type B	Body: Type A	Body: Type B	Clothing: Type A	Clothing: Type B	Clothing: Type C	Clothing: Type D	Shoulder strap
Hesimin (M22) [56]	V.8L-9E	-	-	X				X		
Akhethotep (D64) [58]	V.8L-9E	X			X			X		
Nimaatre [60]	V.8L-9	-	-	X		-	-	-	-	-
Iynofert/ Shanef [63]	V.9	X		X				X		
Khenut [68]	V.9	-	-	X				X		
Ptahhotep/ Thefu [75]	V.9L	-	-	X				X		
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1		X (2)	X (2)			X (2)			X
Seshemnofer IV [77]	V.9 – VI.1	-	-	X		-	-	-	-	-
G2360 [87]	V-VI	X?		X		-	-	-	-	-
Kagemni [94]	VI.1E	X (2)		X (2)			X	X		
In-Snefru-Ishtef [96]	VI.1		X	X		-	-	-	-	-
Mereruka [103]	VI.1M-L	X		X				X		
Nikauisesi [101]	VI.1M		X	X				X (G)		X
Hesi [110]	VI.1L-2E		X	X				X		
Wedjahateti / Neferseshemptah/ Sheshi [112]	VI.1L-2E		X	X			X			X
Bawi (G126) [113]	VI.1L-2	-	-	-	-	-	-	-	-	-
Nekhebu [119]	VI.2	X		X (3)				X		
Mehu [121]	VI.2		X (2)	X (2)		-	-	-	-	X
Tomb G97 [125]	VI.2L-3	X		X				X		X
Ibi [130]	VI.3-4E	X		X		-	-	-	-	-
Djau [141]	VI.4M		X	-	-	-	-	-	-	-
Kahep/ Tjeti-Iker [140]	VI.4M	X		X					X	
Shepsipumin/ Kheni [147]	VI.4L	X		X					X	
Pepyankh/ Henykem [146]	VI.4L	X (2)		X		-	-	-	-	-
Unisankh [150]	VI.L-?	-	-	-	-	-	-	-	-	-

Table M: Captions

Tomb	Transliteration	Translation
Ptahhotep / Thefu [75]	<i>ḏ im=f hrt =t nb ////</i>	// he gave all of your things. //
Kagemni [94]	<i>snḥw n pr-ḏt</i>	Angler of the <i>pr-ḏt</i>
Mereruka [103]	<i>ḏymrī</i>	lymery
Pepyankh/ Henykem [146]	<i>(mḏḏ) ḏnk nfr</i>	See, I am at ease/ happy

Lave Nets Detail Tables A-M

Table A: Occurrence of Scene

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Kayemnofret (D23) [51]	Saqqara	V.8-9
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Senedjem-Ib/ Inti [59]	Giza	V.8L-9
Nimaatre [60]	Giza	V.8L-9
Kairer [66]	Saqqara	V.9
Senedjem-Ib/ Mehi [76]	Giza	V.9L
Ptahhotep/Thefu [75]	Saqqara	V.9L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u IV.1
In -Snefru -Ishtef [96]	Dahshur	VI.1
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Ibi [130]	Gebrawi	VI.3-4E
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M
Djau [141]	Gebrawi	VI.4M
Pepyankh/ Henykem [146]	Gebrawi	VI.4L
Shepsipumin/ Kheni [147]	El Hawawish	VI.4L
Ankhtyfy [148]	Mo'alla	VI.4L-VIII.E

Table B: Lave Net Structure

Tomb	Date	Y Structure	V Structure	Yoke Present
Niankhkhnum and Khnumhotep [27]	V.6-7		X	X
Kayemnofret (D23) [51]	V.8-9		X	X?
Akhethotep (D64) [58]	V.8L-9E		X	
Senedjem-Ib/Inti [59]	V.8L-9		X	
Nimaatre [60]	V.8L-9		X	X
Senedjem-Ib/ Mehi [76]	V.9L		X	X?
Ptahhotep/Thefu [75]	V.9L		X	X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1		X (4)	X (4)
In-Snefru-Ishtef [96]	VI.1	X?	?	?
Kagemni [94]	VI.1E		X	X (incl. Rope)
Mereruka [103]	VI.1M-L		X (4)	X (4)
Hesi [110]	VI.1L-2E		X	X
Ibi [130]	VI.3-4E	X		X
Kahep/ Tjeti-Iker [140]	VI.4M		X	X
Djau [141]	VI.4M	X?		
Pepyankh/ Henykem [146]	VI.4L	X (2)	X (2)	X (1)
Ankhtyfy [148]	VI.4L-VIII.E		X	X

Table C: Netting Details

Tomb	Date	Visible	Not visible	Opaque	Clear
Niankhkhnum and Khnumhotep [27]	V.6-7	X			X?
Kayemnofret (D23) [51]	V.8-9		X		
Akhethotep (D64) [58]	V.8L-9E	X			X?
Senedjem-Ib/ Inti [59]	V.8L-9		X		
Nimaatre [60]	V.8L-9		X	X	
Senedjem-Ib/ Mehi [76]	V.9L		X		?
Ptahhotep/ Thefu [75]	V.9L		X		X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1		X (4)	X (2)	X (2) (Fish)
Kagemni [94]	VI.1E		X	X (2) (Fish)	
Mereruka [103]	VI.1M-L		X		X (4) (Fish)
Hesi [110]	VI.1L-2E		X	X	
Ibi [130]	VI.3-4E	X			X (Fish)
Kahep/ Tjeti-Iker [140]	VI.4M	X			X?
Djau [141]	VI.4M	X		X?	
Pepyankh/ Henykem [146]	VI.4L		X (2)		X (1) (Fish)
Shepsipumin/ Kheni [147]	VI.4L	X			X
Ankhtyfy [148]	VI.4L-VIII.E	X			X

Table D: Fish Species

Tomb	Date	<i>Mormyrus Group</i>	<i>Mugil sp.</i>	<i>Tilapia sp.</i>	<i>Schilbe</i>	<i>Synodontis sp.</i>	<i>Tetraodon Fahaka</i>	<i>Clarias sp.</i>	<i>Barbus Bynni.</i>	<i>M. Caschive</i>	<i>M. Kannume</i>	<i>A. Vulgaris</i>	Other	Unknown
Kayemnofret (D23) [51]	V.8-9	X (1)												
Ihy r/u Seshseshet /Idut [72]	V.9 r/u VI.1	X (6)	X (7)	X (4)	X (1)	X (2)	X (2)	X (1)	X (1)	X (1)	X (1)			X (11)
Kagemni [94]	VI.1E							X (1)						X (4)
Mereruka [103]	VI.1M-L	X (18)	X (9)	X (13)	X (1)	X (12)	X (2)	X (4)		X (3)		X (2)	X (2) ¹⁶⁹⁴	X (10+)
Ibi [130]	VI.3-4E				X (1)	X (1)								X (3)
Djau [141]	VI.4M													X (3)

¹⁶⁹⁴ *M. Electricus* and *Citharinus*.

Appendix 2: Detail Tables: Lave Nets

Tomb	Date	<i>Mormyrus Group</i>	<i>Mugil sp.</i>	<i>Tilapia sp.</i>	<i>Schilbe</i>	<i>Synodontis sp.</i>	<i>Tetraodon Fahaka</i>	<i>Clarias sp.</i>	<i>Barbus Bynni.</i>	<i>M. Caschive</i>	<i>M. Kannume</i>	<i>A. Vulgaris</i>	Other	Unknown
Pepyankh/ Henykem [146]	VI.4L		X (1)		X (1)									X (6)
Ankhtyfy [148]	VI.4L- VIII.E	X (2?)							X (1)				X (1) ¹⁶⁹⁵	

Table E: Fish Within Net

Tomb	Date	In Net	In Catch Bag	Other
Kayemnofret (D23) [51]	V.8-9			X (1) Held in hand
Ihy r/u Seshseshet /Idut [72]	V.9 r/u VI.1	X (2) Nets full+ Jumper		
Kagemni [94]	VI.1E	X (1) Net full		
Mereruka [103]	VI.1M-L	X (4) Net Full + Jumpers		
Ibi [130]	VI.3-4E	X (1) Net Full		
Djau [141]	VI.4M		X (1)	
Pepyankh/ Henykem [146]	VI.4L	X (1)	X (1)	
Ankhtyfy [148]	VI.4L-VIII.E	X (1)		

¹⁶⁹⁵ *Citharinus sp.*

Table F: Boat Structure and Detailing
KEY:
Boat Structure Types:

- A. Near Horizontal Position;
- B. Vertical Position; and
- C. Varying Position.

Boat Detailing Types:

- A. Lashing and Reed;
- B. Lashing only; and
- C. No Detailing

Tomb	Date	Fishing from Boat	Boat Type	Detailing Type
Niankhkhnum and Khnumhotep [27]	V.6-7			
Kayemnofret (D23) [51]	V.8-9			
Akhethotep (D64) [58]	V.8L-9E	X	A/B	C
Senedjem-Ib/ Inti [59]	V.8L-9	X?	A (1)	-
Nimaatre [60]	V.8L-9	X	A (1)	C
Senedjem-Ib/ Mehi [76]	V.9L	X	A (1)	C
Ptahhotep/ Thefu [75]	V.9L	X	A/B (1)	A
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1	X (4)	A/B (2) A (1), C (1)	A (1), B (2), C (1)
Kagemni [94]	VI.1E	X	A/B	B (2)
Mereruka [103]	VI.1M-L	X (2)	A (2)	B (2)
Hesi [110]	VI.1L-2E	X	A (1)	A
Ibi [130]	VI.3-4E	X	C (1)	A
Kahep/ Tjeti-Iker [140]	VI.4M	X	A (1)	B
Djau [141]	VI.4M			
Pepyankh/ Henykem [146]	VI.4L	X (2)	A (2)	C (2)
Shepsipumin/ Kheni [147]	VI.4L	X	A (2)	C
Ankhtyfy [148]	VI.4L-VIII.E	-	-	-

Table G: Other Occupants of Boat

Tomb	Date	Lave Net Fishermen	Anglers	Other
Kayemnofret (D23) [51]	V.8-9	X?		
Nimaatre [60]	V.8L-9	X		
Ptahhotep/ Thefu [75]	V.9L		X	
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1		X(4)	X(4) ¹⁶⁹⁶
In-Snefru-Ishtef [96]	VI.1			
Kagemni [94]	VI.1E		X (2)	X (2) Oarsmen
Mereruka [103]	VI.1M-L	X (2)		
Hesi [110]	VI.1L-2E			X Oarsmen

¹⁶⁹⁶ Scene 1- Oarsman, Scene 3- Figure engaged in Hippopotami hunt; Two Unknown.

Appendix 2: Detail Tables: Lave Nets

Tomb	Date	Lave Net Fishermen	Anglers	Other
Kahep/ Tjeti-Iker [140]	VI.4M		X	
Pepyankh/ Hentykem [146]	VI.4L		X (2)	
Shepsipumin/ Kheni [147]	VI.4L		X	

Table H: Lave Net Fisherman's Body Position

KEY:¹⁶⁹⁷

A. Leaning Forwards;

B. Vertical;

C. Leaning back; and

D. Other

Tomb	Date	Type A	Type B	Type C	Type D
Niankhkhnum and Khnumhotep [27]	V.6-7	X			
Kayemnofret (D23) [51]	V.8-9	X (slight)	X		
Akhethotep (D64) [58]	V.8L-9E		X		
Senedjem-Ib/ Inti [59]	V.8L-9				X
Nimaatre [60]	V.8L-9	X		X	
Senedjem-Ib/ Mehi [76]	V.9L				X
Ptahhotep /Thefu [75]	V.9L	X			
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1	X (3)	X		
In-Snefru-Ishtef [96]	VI.1	-	-	-	
Kagemni [94]	VI.1E	X (2)			
Mereruka [103]	VI.1M-L	X (2)	X (2)		
Hesi [110]	VI.1L-2E			X	
Ibi [130]	VI.3-4E	X (slight)			
Kahep/ Tjeti-Iker [140]	VI.4M	X (Slight)			
Djau [141]	VI.4M	X (Slight)			
Pepyankh/ Hentykem [146]	VI.4L	X (2)			
Shepsipumin/ Kheni [147]	VI.4L	X			
Ankhtyfy [148]	VI.4L-VIII.E		X		

¹⁶⁹⁷

See Appendix 4: Typology: Body Position Lave Net Fishermen for full explanation of types.

Table I: Limb Position

KEY:

Arm Position:

LA.1. Forward: and

LA.2. Rotated:

A. Open Stance

G. Lunge; and

L.1. One or more of the legs is bent at the knee.

Leg Position:

Tomb	Date	Arm: LA.1	Arm: LA.2	Leg Type A	Lunge Type G	Leg: L.1
Niankhkhnum and Khnumhotep [27]	V.6-7		X	X		
Kayemnofret (D23) [51]	V.8-9	X?		X		
Akhethotep (D64) [58]	V.8L-9E		X			X
Senedjem-Ib/ Inti [59]	V.8L-9	X			X	
Nimaatre [60]	V.8L-9		X	X		X
Senedjem-Ib/ Mehi [76]	V.9L	X			X	
Ptahhotep/ Thefu [75]	V.9L		X			X
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1	X (2)	X (2)	X		X(3)
Kagemni [94]	VI.1E		X (2)		X(2)	
Mereruka [103]	VI.1M-L		X (4)			X
Hesi [110]	VI.1L-2E		X			X
Ibi [130]	VI.3-4E		X	X		
Kahep/ Tjeti-Iker [140]	VI.4M		X	X		
Djau [141]	VI.4M	X		X		
Pepyankh/ Henykem [146]	VI.4L	X (2)		X		
Shepsipumin/ Kheni [147]	VI.4L		X			X
Ankhtyfy [148]	VI.4L-VIII.E	X		-	-	-

Table J: Individual Characteristics**KEY:****Hair Types**

- A. A full head of hair; and
B. A receding hairline.

Body Types

- A. An athletic build; and
B. A non-athletic build.

Tomb	Date	Type A Full	Type B Receding	Type A Athletic	Type B Non- Athletic
Niankhkhnum and Khnumhotep [27]	V.6-7	X		-	-
Kayemnofret (D23) [51]	V.8-9	-	-	X (2)	
Akhethotep (D64) [58]	V.8L-9E	X		X	
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	X	
Nimaatre [60]	V.8L-9	-	-	X (2)	
Senedjem-Ib/ Mehi [76]	V.9L	-	-	-	-
Ptahhotep /Thefu [75]	V.9L	-	-	X?	
Ihy r/u Seshseshet /Idut [72]	V.9 r/u IV.1	X (3)	X (1)	X (1)	X (3)
Kagemni [94]	VI.1E		X (2)		X (2)
Mereruka [103]	VI.1M-L	X (1)	X (3)	X (1)	X (3)
Hesi [110]	VI.1L-2E		X	X	
Ibi [130]	VI.3-4E	X		X	
Kahep/ Tjeti-Iker [140]	VI.4M	X		X	
Djau [141]	VI.4M	X		X	
Pepyankh/ Henykem [146]	VI.4L	X (2)		X (1)	
Shepsipumin/ Kheni [147]	VI.4L	-	-		X
Ankhtyfy [148]	VI.4L-VIII.E	X		X	

Table K: Clothing**KEY:****Clothing Types:**

- B. Belt; and
C. Kilt;

- D. Apron/Tunic.

(G) Indicates Genitalia Represented

Tomb	Date	Type B	Type C	Type D	Other
Niankhkhnum and Khnumhotep [27]	V.6-7		X		Shoulder strap?
Kayemnofret (D23) [51]	V.8-9	-	-		-
Akhethotep (D64) [58]	V.8L-9E		X		
Senedjem-Ib/ Inti [59]	V.8L-9	-	-		-
Nimaatre [60]	V.8L-9		X (2)		
Senedjem-Ib/ Mehi [76]	V.9L	-	-		-

Appendix 2: Detail Tables: Lave Nets

Tomb	Date	Type B	Type C	Type D	Other
Ptahhotep/ Thefu [75]	V.9L	-	-		-
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u IV.1		X (3)		Shoulder strap (3)
Kagemni [94]	VI.1E	X (2)(G)			
Mereruka [103]	VI.1M-L		X G)	X (3) (Gx3)	
Hesi [110]	VI.1L-2E	X			
Ibi [130]	VI.3-4E	X (G)			
Kahep/ Tjeti-Iker [140]	VI.4M			X	
Djau [141]	VI.4M	X? NG			
Pepyankh/ Henykem [146]	VI.4L	-	-	-	-
Shepsipumin/ Kheni [147]	VI.4L			X	
Ankhtyfy [148]	VI.4L-VIII.E	-	-	-	Shoulder strap?

Table M: Captions

Tomb	Transliteration	Translation
Niankhkhnum and Khnumhotep [27]	<i>ḥwdw</i>	Fisherman
Kayemnofret (D23) [51]	<i>ḥwdw</i>	Fisherman
Ptahhotep/ Thefu [75]	<i>z// ḥm=f ḥrt =t nb ////</i>	// he gave all of your things..//
Djau [141]	<i>ḥr.t(i) r //// (mw)</i>	ascend from ...(waters) ¹⁶⁹⁸
Shepsipumin/ Kheni [147]	<i>'In i3dt r.k sin mḥw</i>	Bring the net to you quickly, fisherman

¹⁶⁹⁸ Davies suggests that this caption belongs to the water fording scene above the lave net scene. Davies, *Deir el-Gebrawi pt 2*, 6.

Funnel Traps Detail Tables A-O

Table A: Occurrence

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Hesi [110]	Saqqara	VI.1L-2E
Mehu [121]	Saqqara	VI.2
Ibi [130]	Deir el-Gebrawi	VI.3-4E

Table B: Trap Placement

Tomb	Date	Quantity of Traps (Total)	Water band (A)	Being Emptied (B)	Drying/Stored (C)	Traps Attended
Niankhkhnum and Khnumhotep [27]	V.6-7	6	3	2	1	
Ty [35]	V.6-8	4	2	2		X
Kagemni [94]	VI.1E	2	1	1		X
Mereruka [103]	VI.1M-L	7	4	1	2	X
Hesi [110]	VI.1L-2E	7	6	1		X
Mehu [121]	VI.2	10	5	2	3	X
Ibi [130]	VI.3-4E	1	5			X

Table C: Structure of Trap

- A. *Lashing or reed*: traps display either the reeds or the lashing around the trap;
 B. *Lashing and reed*: traps bear both details; and
 C. *No detailing*: traps are not detailed.

Tomb	Date	Body Shape: Conical	Weave Detailing	Length (relative to minor figure)
Niankhkhnum and Khnumhotep [27]	V.6-7	X	B	N/A ¹⁶⁹⁹
Ty [35]	V.6-8	X+ slight bulge	A	½-3/4 of figure
Kagemni [94]	VI.1E	X	B	½ of figure
Mereruka [103]	VI.1M-L	X	A, C	½ of figure
Hesi [110]	VI.1L-2E	X	C	¾ of figure
Mehu [121]	VI.2	X	B, C	2/3 of figure
Ibi [130]	VI.3-4E	X	C	½ of figure

¹⁶⁹⁹ The traps are not attended to in this scene and are therefore not able to be measured in context with a minor figure. The traps appear large, perhaps exaggerated to fill the space. If there were to be compared to a minor figure in their current state; the length would be approximately ¾ to 7/8 of the figure.

Table D: Additional Trap Structure Details

Tomb	Date	Mouth structure: Concave	Mouth Structure: Straight	Additional < in Mouth	Tethering
Niankhkhnum and Khnumhotep [27]	V.6-7	X		X?	
Ty [35]	V.6-8		X		X
Kagemni [94]	VI.1E		X		X?
Mereruka [103]	VI.1M-L	X			X
Hesi [110]	VI.1L-2E		X	X	X
Mehu [121]	VI.2	X		X	
Ibi [130]	VI.3-4E	X			X

Table E: Trap Configuration

Tomb	Date	Individual	Series
Niankhkhnum and Khnumhotep [27]	V.6-7		X
Ty [35]	V.6-8	X	
Kagemni [94]	VI.1E	X	
Mereruka [103]	VI.1M-L		X
Hesi [110]	VI.1L-2E		X
Mehu [121]	VI.2		X
Ibi [130]	VI.3-4E	X	

Table F: Fish Representation

Tomb	Date	Fish in Trap	Surrounding Trap
Niankhkhnum and Khnumhotep [27]	V.6-7		X
Ty [35]	V.6-8	X	X
Kagemni [94]	VI.1E	X?	X
Mereruka [103]	VI.1M-L		X
Hesi [110]	VI.1L-2E		X
Mehu [121]	VI.2	X	X
Ibi [130]	VI.3-4E		

Table G.1: Fish Species

Tomb	Date	<i>M. Caschive</i>	<i>Synodontis Schall</i>	<i>M. Electricus</i>	<i>Tetraodon Fahaka</i>	<i>Mugil sp.</i>	<i>Tilapia sp.</i>	<i>Hyperopisus</i>
Niankhkhnum and Khnumhotep [27]	V.6-7	1	1		1	2	2	
Ty [35]	V.6-8	1	1	1		6	3	
Kagemni [94]	VI.1E				3	3	2	1
Mereruka [103]	VI.1M-L	1	6		1	3	2	
Hesi [110]	VI.1L-2E	1	1		2	2	1	
Mehu [121]	VI.2	1?	1?	2	1	1	2	
Ibi [130]	VI.3-4E	-	-	-	-	-	-	-

Table G.2 Fish Species

Tomb	Date	<i>B. Bynni</i>	<i>A. vulgaris</i>	<i>Clarias sp.</i>	<i>Schilbe</i>	<i>Citharinus</i>	<i>Lates</i>	<i>M. Kannume</i>	<i>Gnathonemus</i>	<i>P. Bane</i>
Niankhkhnum and Khnumhotep [27]	V.6-7									
Ty [35]	V.6-8	1(3?)	1	3				1?		
Kagemni [94]	VI.1E	6 (7?)	1	2	1	1			1	
Mereruka [103]	VI.1M-L	1	2		3		1	1	1	2
Hesi [110]	VI.1L-2E			2	1		1	1		
Mehu [121]	VI.2	1		2	1?	2	2	1?		
Ibi [130]	VI.3-4E	-	-	-	-	-	-	-	-	-

Table H: Boats and Boat Details
KEY:
Boat Structure:

- A. Near horizontal position;
- B. Vertical position; and
- C. Varying position

Boat Detailing:

- A. Lashing and reed;
- B. Lashing only; and
- C. No detailing

Tomb	Date	Represented	Structure Type A	Structure Type B	Detailing Type, A	Detailing Type B	Detailing Type C
Niankhkhnum and Khnumhotep [27]	V.6-7						
Ty [35]	V.6-8						
Kagemni [94]	VI.1E	X	X		X		
Mereruka [103]	VI.1M-L	X	X				X
Hesi [110]	VI.1L-2E	X	X		X		
Mehu [121]	VI.2	X	X			X	
Ibi [130]	VI.3-4E	X	X (A/B)				X

Table I: Attendant Operating the Trap in Water (Type 1) Limb Positions
KEY:
Leg Position:

- A- Open Stance
- D- Kneeling

Arm Position:

FA.1: the hand at the front grasping the mouth of the trap at an invariably 45° angle. The other arm extends forward at approximately 90°, the hand placed on the trap's body, securing it firmly in place

Tomb	Date	Arm Position: FA.1	Leg Position: Type A	Leg Position Type D
Niankhkhnum and Khnumhotep [27]	V.6-7	-	-	-
Ty [35]	V.6-8	X	X	
Kagemni [94]	VI.1E	X	X	
Mereruka [103]	VI.1M-L	X		X
Hesi [110]	VI.1L-2E	-	-	-
Mehu [121]	VI.2	X	X	
Ibi [130]	VI.3-4E	X		X

Table J: Attendant Emptying Traps (Type 2) Limb Positions

KEY:

Leg Positions:

- A- Open Stance
- B- Stride

Arm Positions:

- FA.2: Hand at forefront grasps trap's base;¹⁷⁰⁰ and
- FA.3: Hand at forefront grasps trap's mouth:

Tomb	Date	Arm Position: FA.2	Arm Position: FA.3	Leg Position: Type A	Leg Position: Type B
Niankhkhnum and Khnumhotep [27]	V.6-7	-	-	-	-
TY [35]	V.6-8	X			X
Kagemni [94]	VI.1E		X		X
Mereruka [103]	VI.1M-L	X		X	
Hesi [110]	VI.1L-2E		X	X	
Mehu [121]	VI.2	X			X
Ibi [130]	VI.3-4E	-	-	-	-

Table K: Basket attendants (Type 3) Limb Positions

KEY:

Leg Positions:

- D- Kneeling
- F.2- Seated with one leg extended forwards other towards chest.

Tomb	Date	Arm Position: Extended forwards grasping basket handles	Leg Position: Type D	Leg Position: Type F.2
Niankhkhnum and Khnumhotep [27]	V.6-7	-	-	-
TY [35]	V.6-8	X	X	
Kagemni [94]	VI.1E	X	X	
Mereruka [103]	VI.1M-L	X		X
Hesi [110]	VI.1L-2E	X	X	
Mehu [121]	VI.2	X	X	
Ibi [130]	VI.3-4E	-	-	-

¹⁷⁰⁰ The trap is inverted when emptying, thus the base is at the bottom.

Table M: Other Attendants Limb Positions
KEY:
Leg Positions:

A- Open Stance

D- Kneeling

E- Semi Kneeling

G- Lunge

Tomb	Date	Attendant	Arm Position	Leg Position
Niankhkhnum and Khnumhotep [27]	V.6-7	-	-	-
TY [35]	V.6-8	Basket	Extended forwards grasping basket handles	A
Kagemni [94]	VI.1E	Basket	Extended forwards grasping basket handles	G
		Paddler	Forwards grasping pole	D
Mereruka [103]	VI.1M-L	-	-	-
Hesi [110]	VI.1L-2E	Paddler	Forwards grasping pole	D
Mehu [121]	VI.2	Basket	Extended forwards grasping basket handles	G
		Paddler	Forwards grasping pole	D
Ibi [130]	VI.3-4E	Basket	Extended forwards grasping basket handles	A
		Paddler	Forwards Grasping pole	E

Table N: Individual Characteristics (All Figures)

(G)- Indicates genitalia represented

Tomb	Date	Hair Type A: Full Hair	Hair Type B: Receding Hair	Body Type A: Athletic	Clothing Type A: Naked	Clothing Type B: Belt	Clothing Type C: Kilt
Niankhkhnum and Khnumhotep [27]	V.6-7	-		-	-		
TY [35]	V.6-8	X (2)	X (2) + Beard (2)	X	X (2) (G)	X (1) (G)	X(2)
Kagemni [94]	VI.1E	X (2)	X (2)	X	X (1) (G)	X (2) (Gx1)	X (2)
Mereruka [103]	VI.1M-L	X (2)	X (1)	X			X (4)
Hesi [110]	VI.1L-2E	X (2)		X		X (1) (G)	X (3) (Gx1)
Mehu [121]	VI.2	X(2)	X (4)	X		X (1)	X (4)
Ibi [130]	VI.3-4E	X (3)		X			X (4)

Table O: Captions

Tomb	Transliteration	Translation
Ty [35] Scene 1	<i>wh̥z s[kt]</i>	Shake the trap
	<i>Grgt.w pw s̥kt r mn̥h</i>	This catch (of fish) in the trap is excellent.
TY [35] Scene 2	<i>rd̥i h̥z wnn</i>	Cause to descend (fall), Hurry!!
	<i>wh̥z s̥kt</i>	Shake the trap
	<i>Rd̥i gr̥g.s nt hn̥c sh̥zi išt.k im sr(w)ḏ ht int</i>	Establish it (the trap) and allow to fall your possessions therein, filling the body with fish.
	<i>N t̥wt sb̥z(w(i) it̥z pw rh̥.k nn ir nb</i>	You cannot teach me this thief; you know not better that all!
Kagemni [94]	<i>wh̥z s̥kt</i>	Shake the trap
	<i>hn̥n wr.t nt wn̥.t hn̥c</i>	Row Strong and make (the boats/traps) together
	<i>s̥t̥z nt hn̥c</i>	Pull them together
Hesi [110]	<i>wh̥z s̥kt</i>	Shake the trap
	<i>nd̥r(.i) s(i) ikr</i>	I am holding it excellently
	<i>hn̥.iḏr nt(. i) ḥ̥n(. i) [Correction hn̥c (.i)]</i>	Row well comrade
Mehu [121]	<i>wh̥z s̥kw̥t</i>	Shake the traps
	<i>s̥t̥z nty hn̥c (.i) wr̥t nty hn̥c(.i)</i>	'pull out (the trap), comrade!, Row strong Comrade!
	<i>Grg s̥kt</i>	Set(ting) of trap
Ibi [130]	<i>hn̥i hr̥ n k̥z (.w)</i>	Rowing towards the bull(s) ¹⁷⁰¹
	<i>šdt [s̥kt]</i>	Remove [trap] ¹⁷⁰²

¹⁷⁰¹ Davies suggests 'paddling towards the bull' Davies, *Gebrawi I*, 14; Monet Suggests 'vessel/lead in front of the bulls' Monet, *Scenes de la Vie Privée*, 30.

¹⁷⁰² Davies, *Gebrawi I*, 14 [ft.2]: Monet, *Scenes de la Vie Privée*, 31-1.

Round Basket Traps Detail Tables A-H

Table A: Occurrence of Scene

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Hotepherakhti [34]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Ptahshepses II [42]	Abusir	V.6L-9?

Table B: Trap Details

Tomb	Date	Trap Type A: semi-Spherical	Trap Type B: Conical	Detailing Type A: Closed weave	Detailing Type B: Open Weave	Opaque	Transparent
Niankhkhnum and Khnumhotep [27]	V.6-7		X (2)	X (2)		X (2)	
Hotepherakhti [34]	V.6-8	X		X		X	
CG 1535 [36]	V.6-8	X (2)			X (2)		X (2)
Ptahshepses [41]	V.6L-9		X	X		X	
Ptahshepses II [42]	V.6L-9?		X (2)	-	-	X (2)	

Table C: Trap Placement

Tomb	Date	Shallow Water band	Deep Water band	Bank of River
Niankhkhnum and Khnumhotep [27]	V.6-7		X (2)	
Hotepherakhti [34]	V.6-8			X
CG 1535 [36]	V.6-8	X (2)		
Ptahshepses [41]	V.6L-9	-	-	-
Ptahshepses II [42]	V.6L-9?	X (2)		

Table D: Fish

Tomb	Date	Fish depicted inside trap	Fish depicted surrounding trap
Niankhkhnum and Khnumhotep [27]	V.6-7		X
Hotepherakhti [34]	V.6-8	-	X
CG 1535 [36]	V.6-8	X ¹⁷⁰³	
Ptahshepses [41]	V.6L-9		
Ptahshepses II [42]	V.6L-9?		

Table E: Fish Species

Tomb	Date	<i>Mugil sp.</i>	<i>Tilapia sp.</i>	<i>Clarias</i>	<i>B. Bynni</i>	<i>M. Kannume</i>	<i>Gnathonemus/ Petrocephalus/ Hyperopisus</i>	<i>Schilbe</i>	<i>A. vulgaris</i>
Niankhkhnum and Khnumhotep [27]	V.6-7	2	14		43	1	5	2	1
Hotepherakhti [34]	V.6-8	1							
CG 1535 [36]	V.6-8		1	1					
Ptahshepses [41]	V.6L-9								
Ptahshepses II [42]	V.6L-9?								

Table F: Trap Attendants Limb Positions**KEY:****Leg Position:**

A- Open Stance

Arm Positions:

A. An acute 45° angle to the body, typically attested for figures with a torso bent at 135°; or

B. A 90° angle from the body, used for minor figures with a 90° bend to the waist.

Tomb	Date	Leg Position Type A	Arm Position A	Arm Position B
Niankhkhnum and Khnumhotep [27]	V.6-7	X (2)	X	X
Hotepherakhti [34]	V.6-8	X	X	
CG 1535 [36]	V.6-8	X (2)		X (3)
Ptahshepses [41]	V.6L-9	-	A	
Ptahshepses II [42]	V.6L-9?	X (2)	-	-

¹⁷⁰³ *Tilapia sp.* and *Clarias sp.*

Table G: Trap Attendants Individual Characteristics

KEY:

Hair Type:

A- *Full head of Hair*

Body Type:

A- *Athletic*

Clothing Type:

A- *Naked*

B- *Belt*

C- *Kilt*

Tomb	Date	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	A (2)	A (2)	A (2)
Hotepherakhti [34]	V.6-8	A	A	B
CG 1535 [36]	V.6-8	-	-	-
Ptahshepses [41]	V.6L-9	-	A (2)	-
Ptahshepses II [42]	V.6L-9?	-	-	C (1)

Table H: Captions

Tomb	Transliteration	Translation
Ptahshepses [41]	<i>ḥ [z]</i>	Fish Trap

Weirs Detail Tables A-S

Table A: Occurrence of Scene

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Kagemni [94]	Saqqara	VI.1E
Mehu [121]	Saqqara	VI.2

Table B: Shape of Weir

Tomb	Date	Funnel	Conical
Niankhkhnum and Khnumhotep [27]	V.6-7	X	
Ty [35]	V.6-8		X
Ptahshepses [41]	V.6L-9	-	-
Kagemni [94]	VI.1E		X
Mehu [121]	VI.2	X	

Table C: Anchored to the Bank

Tomb	Date	Anchored	Free Floating
Niankhkhnum and Khnumhotep [27]	V.6-7	X	
Ty [35]	V.6-8	X	
Ptahshepses [41]	V.6L-9	-	-
Kagemni [94]	VI.1E		X
Mehu [121]	VI.2	X	

Table D: Chambers

Tomb	Date	Chambers defined by Rope	Number of Chambers
Niankhkhnum and Khnumhotep [27]	V.6-7	X	1
Ty [35]	V.6-8	X	3
Ptahshepses [41]	V.6L-9	-	-
Kagemni [94]	VI.1E	X	2
Mehu [121]	VI.2	X	2

Table E: Floats

Tomb	Date	Float
Niankhkhnum and Khnumhotep [27]	V.6-7	
Ty [35]	V.6-8	X
Ptahshepses [41]	V.6L-9	-
Kagemni [94]	VI.1E	
Mehu [121]	VI.2	

Table F: Netting Detailing

Tomb	Date	Visible Netting
Niankhkhnum and Khnumhotep [27]	V.6-7	X
Ty [35]	V.6-8	
Ptahshepses [41]	V.6L-9	-
Kagemni [94]	VI.1E	X
Mehu [121]	VI.2	

Table G: Fish represented in Front of the Weir

Tomb	Date	<i>Tetraodon Fahaka</i>	<i>Synodontis.</i>	<i>Clarias sp.</i>	<i>M. electricus</i>	<i>Tilapia sp.</i>	<i>A.vulgaris</i>	<i>Mugil sp.</i>	<i>M. Caschive</i>	<i>Citharinus</i>	<i>B. Bynni</i>	Unknown
Niankhkhnum and Khnumhotep [27]	V.6-7											
Ty [35]	V.6-8	X	X	X	X	X	X	X	X			
Ptahshepses [41]	V.6L-9	-	-	-	-	-	-	-	-	-	-	-
Kagemni [94]	VI.1E											X
Mehu [121]	VI.2	X	X	X						X	X	X

Table H: Boat Structure

KEY:

Boat Structure:

A: Near Horizontal;

A/B: Combination of (A) Near Horizontal and (B) Vertical;

C: Varying Position.

Tomb	Date	Number of boats	Type A	Type A/ B	Type C
Niankhkhnum and Khnumhotep [27]	V.6-7	3	X (1)	X (2)	
Ty [35]	V.6-8	2		X (2)	
Ptahshepses [41]	V.6L-9	1	X (1)		
Kagemni [94]	VI.1E	2	X (1)		X (1)
Mehu [121]	VI.2	2	X (2)		

Table I: Boat Detailing

KEY:

Boat Detailing Types:

A. Lashing and reed; and

B. Lashing only.

Tomb	Date	Type A	Type B
Niankhkhnum and Khnumhotep [27]	V.6-7		X (3)
Ty [35]	V.6-8		X (2)
Ptahshepses [41]	V.6L-9		X (1)
Kagemni [94]	VI.1E	X (2)	
Mehu [121]	VI.2		X (2)

Table J: Attendants

Tomb	Date	Rope Manipulators (Type .1)	Basket Attendants (Type 2)	Paddlers (Type 3)	Weir Handlers (Type 4)
Niankhkhnum and Khnumhotep [27]	V.6-7	1	3	0	2
Ty (S1 and S2) [35]	V.6-8	3	4?	4	0
Ptahshepses [41]	V.6L-9	-	?	1	-
Kagemni [94]	VI.1E	2	2	2	0
Mehu [121]	VI.2	2	2	2	0

Table K: Rope Manipulator Limb Positions (Type.1)**KEY:**Leg Positions:*D- Kneeling;**G- Lunge.*

Tomb	Date	Arm Position	Leg Position	Other
Niankhkhnum and Khnumhotep [27]	V.6-7	Forward: 45° to body Grasping Rope	G	Head tilted back
Ty [35]	V.6-8	Forward: 90° to body Grasping Rope	D	
Ptahshepses [41]	V.6L-9	-	-	-
Kagemni [94]	VI.1E	Forward: 45° to body Grasping Rope (2)	D (2)	
Mehu [121]	VI.2	Forward: 45° to body Grasping Rope (2)	D (1)	

Table L: Individual Characteristics and Clothing of Rope Manipulators (Type.1)**KEY:****Hair Type:***A- Full Hair**B- Receding Hairline.***Body Type:***A- Athletic;**B- Non-Athletic.***Clothing Type:***B- Belt;**C- Kilt.*

(G) Indicates representation of Genitalia

Tomb	Date	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	B	A	-
Ty [35]	V.6-8	B (2)	B (3)	C (2) (Gx2)
Ptahshepses [41]	V.6L-9	-	-	-
Kagemni [94]	VI.1E	A	A	B (1), C (1)
Mehu [121]	VI.2	-	A (1), B (1)	B (1)

Table M: Limb Positions of Basket Attendants (Type. 2)**KEY:****Leg Positions:***A- Open stance;**D- Kneeling**G- Lunge*

Tomb	Date	Arm Position	Leg Position	Other
Niankhkhnum and Khnumhotep [27]	V.6-7	Forwards: Holding Basket at Chest height; (1) Forwards: Grasping handles at foot level (2)	A(1), E(1), G(1)	
Ty [35]	V.6-8	Forwards: Grasping handles at foot level (2)	A (4)	One figure head turned up
Ptahshepses [41]	V.6L-9	-	-	-
Kagemni [94]	VI.1E	Forwards: Holding Basket at Chest height; (2)	A (2)	-
Mehu [121]	VI.2	Forwards: Holding Basket at Chest height; (1)	A(2)	

Table N: Individual Characteristics and Clothing for Basket Attendants (Type. 2)

KEY:

Hair Type:

- A- Full Hair
B- Receding
Hairline.

Body Type:

- A- Athletic;
B- Non-Athletic.

Clothing Type:

- A- Naked
B- Belt;
C- Kilt.

(G) Indicates representation of Genitalia

Tomb	Date	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	A (2), B (1)	A (3)	B (2) (Gx3)
Ty [35]	V.6-8	A (2)	A (4)	C (4), (Gx2)
Ptahshepses [41]	V.6L-9	-	-	-
Kagemni [94]	VI.1E	A (1)	A (2)	C (2), (Gx1?)
Mehu [121]	VI.2	A (1)	A (1)	A (2)

Table O: Limb Positions of Paddlers (Type. 3)

KEY:

Leg Position:

- D- Kneeling
F.2 -Seated (Leg Drawn to Chest/ other Extended)

Tomb	Date	Arm Position	Leg Position
Ty [35]	V.6-8	Forwards: Grasping Oar (4)	D (1), F.2 (1)
Ptahshepses [41]	V.6L-9	Forwards: Grasping Oar (1)	D
Kagemni [94]	VI.1E	Forwards: Grasping Oar (2)	D (2)
Mehu [121]	VI.2	Forwards: Grasping Oar (1)	D

Table P: Individual Characteristics and Clothing for Paddlers (Type. 3)**KEY:****Hair Type:***A- Full Hair**B- Receding
Hairline.***Body Type:***A- Athletic;**B- Non-Athletic.***Clothing Type:***A- Naked**C- Kilt.**(G) Indicates representation of Genitalia*

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	B (2)	A (3), B (1)	C (1), A (1) (Gx1)
Ptahshepses [41]	V.6L-9	-	A (1)	-
Kagemni [94]	VI.1E	A (1)	A (2)	C (2)
Mehu [121]	VI.2	B (1)	A (1)	C (2)

Table Q: Weir Handlers Limb Positions (Type.4)**KEY:****Leg Position:***B- Stride*

Tomb	Date	Arm Positions	Leg Positions
Niankhkhnum and Khnumhotep [27]	V.6-7	Forwards: Extended Downwards (2)	B (2) (Knees Bent)

Table R: Individual Characteristics and Clothing for Weir Handlers (Type.4)**KEY:****Hair Type:***B- Receding
Hairline.***Body Type:***A- Athletic***Clothing Type:***B- Belt**(G) Indicates representation of Genitalia*

Tomb	Date	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	B (2) Beard (2)	Type A+ Large abdomen	B (1) (Gx1)

Table S: Captions

Tomb	Transliteration	Translation
Niankhkhnum and Khnumhotep [27]	<i>ʾImi n=f sp</i>	<i>Give to him the basket!</i>
Ty [35] (Scene 1)	<i>hni wrt</i>	<i>Row strong!</i>
	<i>stz n // (t hn^c n)/¹⁷⁰⁴</i>	<i>Bring // (, friend, together//)</i>
Ty [35] (Scene 2)	<i>hni wrt n.t hn^c di smz=sn mnḥ</i>	<i>Row strong together and unite (the boats) effectively</i>
	<i>stz ir=k</i>	<i>Drag/bring to you!</i>
	<i>m mḥw=sw m sph pn</i>	<i>How full is it this time?</i>
	<i>hni iw hni wrt hr ipf</i>	<i>Row! I row strongly like them!</i>
Kagemni [94]	<i>hni wrt</i>	<i>Row strong!</i>
	<i>stz n.t hn^c////</i>	<i>Bring/drag together////</i>
	<i>hni</i>	<i>Row!</i>
	<i>ʾIwi s///, inḥ n n///</i>	<i>Come! Bring ////</i>
Mehu [121]	<i>hni</i>	<i>Row!</i>
	<i>iwi r=k n.t hn^c nt r</i>	<i>Bring to you, together</i>

Spearfishing Detail Tables A-T

Table A: Occurrence

KEY:

SF= Spearfish only

CFF= Composite Fish/ Fowl

Tomb	Location	Date	SF/CFF
Nefermaat [2]	Maidum	IV.1-M	Unknown
Irenkaptah [22]	Giza	V.6	CCF
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7	CCF (Chapel) SF
Neferseshemptah and Sekhentiu [33]	Saqqara	V.6-8	CCF
Hotepherakhti [34]	Saqqara	V.6-8	SF
Neferirtenef [51]	Saqqara	V.8-9	CCF
Akhetmehu [54]	Giza	V.8-9	SF
Kednes [55]	Saqqara	V.8-VI.1	CCF
Hesimin (M22) [56]	El-Hawawish	V.8L-9E	SF
Kaiemankh [57]	Giza	V.8L-9E	SF
Senedjem-Ib/ Inti [59]	Giza	V.8L-9	SF
Nimaatre [60]	Giza	V.8L-9	SF
Hem-Min (M43) [61]	El-Hawawish	V.9E	SF
Nebet [62]	Saqqara	V.9	
Iynofert/ Shanef [63]	Saqqara	V.9	CFF
Kairer [66]	Saqqara	V.9	CFF
Khunes [67]	Zawyet el-Maiyetin	V.9	Fowling
Akhethotep [71]	Saqqara	V.9	CCF
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 r/u VI.1	SF
Seshemnofer IV [77]	Giza	V.9-VI.1	SF
Akhmerutnesut [82]	Giza	V.9-VI.1	SF
Senedjem-Ib/ Mehi [76]	Giza	V.9L	SF
G2360 [87]	Giza	V.-VI	SF
Berlin Fragment 14103 [88]	Unknown	V.-VI	SF
Borchardt Fragment [90]	Abusir	V.-VI	SF
Mehu [91]	Giza	V.I-VI.1	SF
Paris Louvre E. 26092 [92]	Saqqara	V.L-VI	SF
Kagemni [94]	Saqqara	VI.1E	CFF
CG 1782/1786 [95]	Dahshur	VI.1	CFF
In – Snefru- Ishtef [96]	Dahshur	VI.1	CCF
Iteti/ Shedu [97]	Deshasha	VI.1	SF
Nikauisesi [101]	Saqqara	VI.1M	Fowling
Mereruka [103]	Saqqara	VI.1M-L	SF
Henqu/ Kheteti I [105]	Deir el-Gebrawi	VI.1L	SF
Seankhuptah [106]	Saqqara	VI.L-2E	CCF
Mereri [108]	Saqqara	VI.1L-2E	SF
Remni/ Merwi [109]	Saqqara	VI.1L-2E	CFF
Hesi [110]	Saqqara	VI.1L-2E	SF
Inumin [111]	Saqqara	VI.1L-2E	SF

Appendix 2: Detail Tables: Spearfishing

Tomb	Location	Date	SF/CCF
Bawi (G126) [113]	El-Hawawish	VI.1I-2	SF
Wernu [114]	Saqqara	VI.1L-2	CCF
Heri/ Meru [118]	Saqqara	VI.2E	SF
Nekhebu [119]	Giza	VI.2	SF
Henqu/ Iy...f II [120]	Deir el-Gebrawi	VI.2	SF
Mehu [121]	Saqqara	VI.2	SF
Khewen-wekh/ Tjetji [122]	Quiser el-Amarna	VI.2	SF
Niankhpepy/ Khnumhotep/ Heti [123]	Zawyet el-Maiyetin	VI.2	SF
Tomb G97 [125]	El-Hawawish	VI.2L-3	SF
Hesi-Min/ Sesi (F1) [127]	El-Hawawish	VI.2-4E	SF
Idu 1 [128]	Dendera	VI.3-4E	SF
Ibi [130]	Deir el-Gebrawi	VI.3-4E	SF
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	Meir	VI.3-4E	SF
Seshemnofer/ Ifi [134]	Saqqara	VI 3-4	CCF
Meryrenefer/ Qar [133]	Giza	VI.3-4	SF
Ihy [137]	El-Khokha	VI.4E-M	SF
Idu/ Seneni [138]	Qasr el-Sayad	VI.4E-M	SF
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M	SF
Djau [141]	Deir el-Gebrawi	VI.4M	SF
Sabni (1) [142]	Aswan	VI.4L	CCF
Sabni (2) [143]	Aswan	VI.4L	CCF
Khunes (A6) [144]	Aswan	VI.4L	CCF
Pepyankh/ Henykem [146]	Meir	VI.4L	SF
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L	SF
Ankhtyfy [148]	Mo'Alla	VI.4L-VIII.E	SF
Cairo Fragment 6.12.24.5 [152]	Saqqara	VI	SF
Pepyankh/Khuwi [153]	Kom el-Ahmar	VI	CCF
Ma [154]	Zawyet el-Maiyetin	VI	SF
Dauhep [155]	Saqqara	VI	SF
Mastaba B [156]	Saqqara	VI	SF
Khuwi/Tjeti-Iker [157]	Gohainna	VI.L-VIII.E	CCF
Mery Aa [158]	El-Hagarsa	VI.L-VIII.E	CCF
Wahi (D4) [162]	El-Hagarsa	VIII	SF
Baketi I [163]	Beni Hassan	VIII-FIP	SF
MFA 13.5965 [165]	Giza	OK	SF

Table B: Speared Fish in Scene

Tomb	Date	Lates / Tilapia	Lates x2	Tilapia x2	Other	Comment
Nefermaat [2]	IV.1-M					Unknown
Irenkaptah [22]	V.6	X?				
Niankhkhnum and Khnumhotep [27]	V.6-7			X (S1) X (S2)		
Neferseshemptah and Sekhentiu [33]	V.6-8					Damaged
Hotepherakhti [34]	V.6-8	X				
Neferirtenef [51]	V.8-9	X				
Akhetmehu [54]	V.8-9	X				
Kednes [55]	V.8-VI.1					Unknown
Hesimin (M22) [56]	V.8L-9E					Major and Minor Damaged
Kaiemankh [57]	V.8L-9E	X				
Senedjem-Ib/ Inti [59]	V.8L-9	X				
Nimaatre [60]	V.8L-9					Damaged
Hem-Min (M43) [61]	V.9E	X				
Nebet [62]	V.9					Damaged
Iynofert/ Shanef [63]	V.9	X				
Kairer [66]	V.9	X			Catfish	
Akhethotep [71]	V.9	X				
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1					Damaged
Seshemnofer IV [77]	V.9-VI.1					Damaged
Akhmerutnesut [82]	V.9-VI.1				<i>B. Bynni</i> x2	
Senedjem-Ib/ Mehi [76]	V.9L					Damaged
G2360 [87]	V.-VI					Damaged
Berlin Fragment 14103 [88]	V.-VI		1x <i>Lates</i>			Other Damaged
Borchardt Fragment [90]	V.-VI					Damaged
Mehu [91]	V.I-VI.1					Damaged
Paris Louvre E. 26092 [92]	V.L-VI					Damaged
Kagemni [94]	VI.1E					Damaged
CG 1782/1786 [95]	VI.1				Mugil sp. (Minor)	Major Damaged
In – Snefru- Ishtef [96]	VI.1	X?				Minor Damaged
Iteti/ Shedu [97]	VI.1	X				
Mereruka [103]	VI.1M-L	X				
Henqu/ Kheteti I [105]	VI.1L					Damaged

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Lates / Tilapia	Lates x2	Tilapia x2	Other	Comment
Seankhuiptah [106]	VI.L-2E			1x <i>Tilapia</i>		1x Damaged
Mereri [108]	VI.1L-2E					Damaged
Remni/ Merwi [109]	VI.1L-2E					Major and Minor Damaged
Hesi [110]	VI.1L-2E	X				
Inumin [111]	VI.1L-2E	X				
Bawi (G126) [113]	VI.1L-2	X				
Wernu [114]	VI.1L-2					Damaged
Heri/ Meru [118]	VI.2E	X				Minor Damaged
Nekhebu [119]	VI.2	Major X Minor X				
Henqu/ Iy...f II [120]	VI.2	X				
Mehu [121]	VI.2	X				
Khewen-wekh/ Tjetji [122]	VI.2	X				
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	Minor X				Major Damaged
Tomb G97 [125]	VI.2L-3	X				
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	X				
Idu 1 [128]	VI.3-4E					Damaged
Ibi [130]	VI.3-4E	Major X Minor X				
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X				
Meryrenefer/ Qar [133]	VI.3-4					Damaged
Seshemnofer/ Ifi [134]	VI. 3-4					Damaged
Ihy [137]	VI.4E-M					Damaged
Idu/ Seneni [138]	VI.4E-M					Damaged
Kahep/ Tjeti-Iker [140]	VI.4M					Damaged
Djau [141]	VI.4M	X				
Sabni (1) [142]	VI.4L	X				
Sabni (2) [143]	VI.4L	X				
Khunes (A6) [144]	VI.4L	X (S1)		X (S2)		
Pepyankh/ Henykem [146]	VI.4L	X				
Shepsipumin/ Kheni [147]	VI.4L	X				
Ankhtyfy [148]	VI.4L- VIII.E	X				
Cairo Fragment 6.12.24.5 [152]	VI	Minor X				Major Damaged

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Lates / <i>Tilapia</i>	Lates x2	<i>Tilapia</i> x2	Other	Comment
Khuwi/Tjeti- Iker [157]	VI.L-VIII.E	X				
Mery Aa [158]	VI.L-VIII.E	X				
Wahi (D4) [162]	VIII	X				
Baketi I [163]	VIII-FIP			1x <i>Tilapia</i>		1x unknown
MFA 13.5965 [165]	OK					unknown

Table C: Placement of Barb Entering Fish

Tomb	Date	Head	Eye	Body	Barb visible
Nefermaat [2]	IV.1-M				
Irenkaptah [22]	V.6	X			
Niankhkhnum and Khnumhotep [27]	V.6-7			X (x2)	X (S1 only)
Neferseshemptah and Sekhentiu [33]	V.6-8				
Hotepherakhti [34]	V.6-8		X		
Neferirtenef [51]	V.8-9				
Akhetmehu [54]	V.8-9		X		X
Kednes [55]	V.8-VI.1				
Hesimin (M22) [56]	V.8L-9E				
Kaiemankh [57]	V.8L-9E		X		
Senedjem-Ib/ Inti [59]	V.8L-9	X			
Nimaatre [60]	V.8L-9				
Hem-Min (M43) [61]	V.9E				
Nebet [62]	V.9				
Iynofert/ Shanef [63]	V.9		X		
Kairer [66]	V.9				
Khunes [67]	V.9				
Akhethotep [71]	V.9		X		
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1				
Seshemnofer IV [77]	V.9-VI.1				
Akhmerutnesut [82]	V.9-VI.1	X			
Senedjem-Ib/ Mehi [76]	V.9L				
G2360 [87]	V.-VI				
Berlin Fragment 14103 [88]	V.-VI	X			
Borchardt Fragment [90]	V.-VI				
Mehu [91]	V.I-VI.1				
Paris Louvre E. 26092 [92]	V.L-VI				
Kagemni [94]	VI.1E				
CG 1782/1786 [95]	VI.1				
In – Snefru- Ishtef [96]	VI.1				
Iteti/ Shedu [97]	VI.1	X			
Mereruka [103]	VI.1M-L		X		

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Head	Eye	Body	Barb visible
Henqu/ Kheteti I [105]	VI.1L				
Seankhuipah [106]	VI.L-2E				
Mereri [108]	VI.1L-2E		X		
Remni/ Merwi [109]	VI.1L-2E				
Hesi [110]	VI.1L-2E	X			
Inumin [111]	VI.1L-2E		X		
Bawi (G126) [113]	VI.1L-2			X	
Wernu [114]	VI.1L-2				
Heri/ Meru [118]	VI.2E			X	
Nekhhebu [119]	VI.2		X		
Henqu/ Iy...f II [120]	VI.2			X	
Mehu [121]	VI.2		X		
Khewen-wekh/ Tjetji [122]	VI.2		X		X
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2				
Tomb G97 [125]	VI.2L-3			X?	
Hesi-Min/ Sesi (F1) [127]	VI.2-4E				
Idu 1 [128]	VI.3-4E				
Ibi [130]	VI.3-4E	X			X
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E		X		
Meryrenefer/ Qar [133]	VI.3-4				
Seshemnofer/ Ifi [134]	VI. 3-4				
Ihy [137]	VI.4E-M				
Idu/ Seneni [138]	VI.4E-M	X			
Kahep/ Tjeti-Iker [140]	VI.4M		X		
Djau [141]	VI.4M	X			X
Sabni (1) [142]	VI.4L	X			X
Sabni (2) [143]	VI.4L			X	
Khunes (A6) [144]	VI.4L	X			
Pepyankh/ Henykem [146]	VI.4L		X		
Shepsipumin/ Kheni [147]	VI.4L		X		
Ankhtyfy [148]	VI.4L-VIII.E			X	
Cairo Fragment 6.12.24.5 [152]	VI				
Pepyankh/Khuwi [153]	VI				
Ma [154]	VI				
Dauhep [155]	VI				
Mastaba B [156]	VI				
Khuwi/Tjeti-Iker [157]	VI.L-VIII.E				
Mery Aa [158]	VI.L-VIII.E			X	
Wahi (D4) [162]	VIII				
Baketi I [163]	VIII-FIP				
MFA 13.5965 [165]	OK	X			

Table D: Bident Spear Details

KEY:

Spear Type:

Type A - a forked head with both points at equal lengths.

Type B- has two points, however they are lashed separately.

Binding- N: No / Y: Yes

Angle:

H = 1-6 degrees

T = 6- 20 degrees

S = 20 degrees and beyond.

Tomb	Date	Spear Type	Binding	Decoration	Angle	Retrieving line
Irenkaptah [22]	V.6	n/a			T	
Niankhkhnum and Khnumhotep [27]	V.6-7	Bx2			S x 2	
Neferseshemptah and Sekhentiu [33]	V.6-8					
Hotepherakhti [34]	V.6-8	B			H	
Neferirtenef [51]	V.8-9	A	Y			
Akhetmehu [54]	V.8-9	A				
Hesimin (M22) [56]	V.8L-9E		Y?	Y	S	
Kaiemankh [57]	V.8L-9E	B				
Senedjem-Ib/ Inti [59]	V.8L-9					
Hem-Min (M43) [61]	V.9E	A				
Iynofert/ Shanef [63]	V.9					
Akhethotep [71]	V.9				H	
Akhmerutnesut [82]	V.9-VI.1					
Senedjem-Ib/ Mehi [76]	V.9L					
Mehu [91]	V.I-VI.1					
Mereruka [103]	VI.1M-L	B	Y			
Henqu/ Kheteti I [105]	VI.1L				H	
Mereri [108]	VI.1L-2E					
Remni/ Merwi [109]	VI.1L-2E				H	
Hesi [110]	VI.1L-2E				H	
Inumin [111]	VI.1L-2E	B				
Bawi (G126) [113]	VI.1L-2			Y		
Heri/ Meru [118]	VI.2E					
Nekhebu [119]	VI.2	B	Y		H	
Henqu/ Iy...f II [120]	VI.2				S	
Mehu [121]	VI.2				H	
Khewen-wekh/ Tjetji [122]	VI.2				H	
Hesi-Min/ Sesi (F1) [127]	VI.2-4E					
Idu 1 [128]	VI.3-4E					Yes
Ibi [130]	VI.3-4E			Y	H	

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Spear Type	Binding	Decoration	Angle	Retrieving line
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	B	Y	Y		
Idu/ Seneni [138]	VI.4E-M					
Kahep/ Tjeti-Iker [140]	VI.4M	A		Y	H	
Djau [141]	VI.4M					
Sabni (1) [142]	VI.4L					
Khunes (A6) [144]	VI.4L					
Pepyankh/ Henykem [146]	VI.4L	B				
Shepsipumin/ Kheni [147]	VI.4L					
Ankhtyfy [148]	VI.4L-VIII.E				S	Yes
Cairo Fragment 6.12.24.5 [152]	VI					
Khuwi/Tjeti-Iker [157]	VI.L-VIII.E					
Mery Aa [158]	VI.L-VIII.E				S	
Wahi (D4) [162]	VIII				S	
Baketi I [163]	VIII-FIP				H	

Table E: Water Mound Details

Tomb	Date	Shoulder or higher	Waist or Lower	Straight sides round top	One round 90° angle at top
Nefermaat [2]	IV.1-M	-	-	-	-
Irenkaptah [22]	V.6	x			x
Niankhkhnum and Khnumhotep [27]	V.6-7		X (x2)		x(x2)
Nefersehemptah and Sekhentiu [33]	V.6-8	-	-	-	-
Hotepherakhti [34]	V.6-8	x			X
Neferirtenef [51]	V.8-9	x			X
Akhetmehu [54]	V.8-9	X			x
Kednes [55]	V.8-VI.1	-	-	-	-
Hesimin (M22) [56]	V.8L-9E		x?	-	-
Kaiemankh [57]	V.8L-9E	x			X (v) ¹⁷⁰⁵
Senedjem-Ib/ Inti [59]	V.8L-9	x			X
Nimaatre [60]	V.8L-9	-	-		X
Hem-Min (M43) [61]	V.9E		X		X
Nebet [62]	V.9	-	-	-	-
Iynofert/ Shanef [63]	V.9	x			X
Kairer [66]	V.9	-	-	-	-
Khunes [67]	V.9	-	-	-	-

¹⁷⁰⁵

Bottom of water mound curves towards the boat; parallel to other side.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Shoulder or higher	Waist or Lower	Straight sides round top	One round 90° angle at top
Akhethotep [71]	V.9	x		x	
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	-	-	-	-
Seshemnofer IV [77]	V.9-VI.1	-	-	-	-
Akhmerutnesut [82]	V.9-VI.1		x	X (v) ¹⁷⁰⁶	
Senedjem-Ib/ Mehi [76]	V.9L	-	-	-	-
G2360 [87]	V.-VI	-	-	-	-
Berlin Fragment 14103 [88]	V.-VI	X?	-	-	-
Borchardt Fragment [90]	V.-VI	-	-	-	-
Mehu [91]	V.I-VI.1	-	-	-	-
Paris Louvre E. 26092 [92]	V.L-VI	-	-	-	-
Kagemni [94]	VI.1E	-	-	-	-
CG 1782/1786 [95]	VI.1	-	-		X
In – Snefru- Ishtef [96]	VI.1	-	-		X?
Iteti/ Shedu [97]	VI.1	-	-	-	-
Mereruka [103]	VI.1M-L	X			X
Henqu/ Kheteti I [105]	VI.1L	-	-	-	-
Seankhuipah [106]	VI.L-2E	x		X	
Mereri [108]	VI.1L-2E	-	-	-	-
Remni/ Merwi [109]	VI.1L-2E	-	-	-	-
Hesi [110]	VI.1L-2E	X			X
Inumin [111]	VI.1L-2E	x			X (v) ¹⁷⁰⁷
Bawi (G126) [113]	VI.1L-2	x			X?
Wernu [114]	VI.1L-2	-	-	-	-
Heri/ Meru [118]	VI.2E	-	-	-	-
Nekhebu [119]	VI.2	x			X
Henqu/ Iy...f II [120]	VI.2	x		x	
Mehu [121]	VI.2	x			X
Khewen-wekh/ Tjetji [122]	VI.2	x		X	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	-	-	-	-
Tomb G97 [125]	VI.2L-3	X?		-	-
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	-	-	-	-
Idu 1 [128]	VI.3-4E	-	-	-	-
Ibi [130]	VI.3-4E	x		X (v) ¹⁷⁰⁸	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	x		X	
Meryrenefer/ Qar [133]	VI.3-4	-	-	-	-
Seshemnofer/ Ifi [134]	VI. 3-4	-	-	-	-
Ihy [137]	VI.4E-M	-	-	-	-
Idu/ Seneni [138]	VI.4E-M	x		-	-

¹⁷⁰⁶ Water mound is almost oval in appearance encapsulating the fish.

¹⁷⁰⁷ The top right-hand corner of mound is rounded, yet the right-side outline and overall shape of mound suggest it belongs in this category.

¹⁷⁰⁸ Water mound encapsulates fish only.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Shoulder or higher	Waist or Lower	Straight sides round top	One round 90° angle at top
Kahep/ Tjeti-Iker [140]	VI.4M	X		X	
Djau [141]	VI.4M	-	-	-	-
Sabni (1) [142]	VI.4L	X (v) ¹⁷⁰⁹		x	
Sabni (2) [143]	VI.4L	-	-	-	-
Khunes (A6) [144]	VI.4L	X (v) ¹⁷¹⁰ (S2)		X (S2)	
Pepyankh/ Henykem [146]	VI.4L	x		-	-
Shepsipumin/ Kheni [147]	VI.4L	X		X	
Ankhtyfy [148]	VI.4L-VIII.E	-	-	-	-
Cairo Fragment 6.12.24.5 [152]	VI	-	-	-	-
Pepyankh/Khuwi [153]	VI	-	-	-	-
Ma [154]	VI	-	-	-	-
Dauhep [155]	VI	-	-	-	-
Mastaba B [156]	VI	-	-	-	-
Khuwi/Tjeti-Iker [157]	VI.L-VIII.E	-	-	-	-
Mery Aa [158]	VI.L-VIII.E	X (v) ¹⁷¹¹		X (Flat top)	
Wahi (D4) [162]	VIII	X(v) ¹⁷¹²		X (Flat top)	
Baketi I [163]	VIII-FIP	-	-	-	-
MFA 13.5965 [165]	OK	-	-	-	-

Table F: Fishing Boat

KEY:

Boat Type:

- A. Near Horizontal Position;
- B. Vertical Position;
- C. Varying Position.

Detailing Type:

- A. Lashing and Reed:
- B. Lashing only:
- C. No Detailing.

Tomb	Date	Structure Type	Detailing Type
Nefermaat [2]	IV.1-M	-	-
Irenkaptah [22]	V.6	A/B	B
Niankhkhnum and Khnumhotep [27]	V.6-7	(S1) A/B	(S1) C

¹⁷⁰⁹ Water mound is slightly lower than shoulders.

¹⁷¹⁰ Water mound is slightly lower than shoulders.

¹⁷¹¹ Water mound is slightly lower than shoulders.

¹⁷¹² Water mound is slightly lower than shoulders.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Structure Type	Detailing Type
		(S2) A/B	(S2) B?
Neferseshemptah and Sekhentiu [33]	V.6-8	-	-
Hotepherakhti [34]	V.6-8	A/B	B ¹⁷¹³
Neferirtenef [51]	V.8-9	A/B	B ¹⁷¹⁴
Akhetmehu [54]	V.8-9	A	C
Kednes [55]	V.8-VI.1	-	-
Hesimin (M22) [56]	V.8L-9E	A	B ¹⁷¹⁵
Kaiemankh [57]	V.8L-9E	A/B	B ¹⁷¹⁶
Senedjem-Ib/ Inti [59]	V.8L-9	A/B	C?
Nimaatre [60]	V.8L-9	A/B	C
Hem-Min (M43) [61]	V.9E	-	-
Nebet [62]	V.9	A/B	B (Half)
Iynofert/ Shanef [63]	V.9	A / A/B (Slight)	B (Half)
Kairer [66]	V.9	-	-
Khunes [67]	V.9	-	-
Akhethotep [71]	V.9	-	C
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	A/B (x2)	A x2
Seshemnofer IV [77]	V.9-VI.1	A/B	C
Akhmerutnesut [82]	V.9-VI.1	A/B	C
Senedjem-Ib/ Mehi [76]	V.9L	A/B	C
G2360 [87]	V.-VI	-	A
Berlin Fragment 14103 [88]	V.-VI	A/B	B
Borchardt Fragment [90]	V.-VI	-	-
Mehu [91]	V.I-VI.1	-	-
Paris Louvre E. 26092 [92]	V.L-VI	-	B (Horizontal)
Kagemni [94]	VI.1E	A/B	A
CG 1782/1786 [95]	VI.1	A/ A/B (slight)	C
In – Snefru- Ishtef [96]	VI.1	A/B	B
Iteti/ Shedu [97]	VI.1	-	-
Mereruka [103]	VI.1M-L	A/B	A ¹⁷¹⁷
Henqu/ Kheteti I [105]	VI.1L	A?	B
Seankhuiptah [106]	VI.L-2E	A/B	B
Mereri [108]	VI.1L-2E	A/B	B
Remni/ Merwi [109]	VI.1L-2E	A/B	B
Hesi [110]	VI.1L-2E	A/B	B
Inumin [111]	VI.1L-2E	A/B (Slight)	B ¹⁷¹⁸
Bawi (G126) [113]	VI.1L-2	A/B	B

¹⁷¹³ Lashing closer together at stern/prow.

¹⁷¹⁴ Lashing closer together at stern/prow.

¹⁷¹⁵ Lashing closer together at stern/prow.

¹⁷¹⁶ Possible? one small vertical strip evident.

¹⁷¹⁷ Decoration missing on stern.

¹⁷¹⁸ Decorations missing in middle.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Structure Type	Detailing Type
Wernu [114]	VI.1L-2	A/B?	B
Heri/ Meru [118]	VI.2E	A	C
Nekhebu [119]	VI.2	A/B	B
Henqu/ Iy...f II [120]	VI.2	A	B
Mehu [121]	VI.2	A/B	B ¹⁷¹⁹
Khewen-wekh/ Tjetji [122]	VI.2	A	B ¹⁷²⁰
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	A/B	A
Tomb G97 [125]	VI.2L-3	B	B
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	B	B
Idu 1 [128]	VI.3-4E	-	B
Ibi [130]	VI.3-4E	A	B ¹⁷²¹
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	A/B	B
Meryrenefer/ Qar [133]	VI.3-4	-	-
Seshemnofer/ Ifi [134]	VI. 3-4	A/B	B ¹⁷²²
Ihy [137]	VI.4E-M	-	-
Idu/ Seneni [138]	VI.4E-M	-	-
Kahep/ Tjeti-Iker [140]	VI.4M	A/B	A ¹⁷²³
Djau [141]	VI.4M	A/B	B
Sabni (1) [142]	VI.4L	A	A
Sabni (2) [143]	VI.4L	B	-
Khunes (A6) [144]	VI.4L	B	C
Pepyankh/ Henykem [146]	VI.4L	A/B	B
Shepsipumin/ Kheni [147]	VI.4L	A/B	A
Ankhtyfy [148]	VI.4L-VIII.E	B?	B
Cairo Fragment 6.12.24.5 [152]	VI	-	B
Pepyankh/Khuwi [153]	VI	-	-
Ma [154]	VI	-	-
Dauhep [155]	VI	-	-
Mastaba B [156]	VI	-	-
Khuwi/Tjeti-Iker [157]	VI.L-VIII.E	A/B	A
Mery Aa [158]	VI.L-VIII.E	NO BOAT	
Wahi (D4) [162]	VIII	NO BOAT	
Baketi I [163]	VIII-FIP	Flat platform	Wood grain
MFA 13.5965 [165]	OK	-	-

¹⁷¹⁹ Decoration missing in middle (deliberate).

¹⁷²⁰ Decoration missing in middle (deliberate).

¹⁷²¹ Decoration missing in middle (deliberate).

¹⁷²² One vertical strip seen.

¹⁷²³ Type B in middle of boat.

Table G: Decking
KEY:
Deck Size:

S: *Short*; the deck terminates before the edge of the inner hull; and,

L: *Long*; the deck is shown the entire length of the inner hull.

Tomb	Date	Deck	Deck Size	Decorated
Nefermaat [2]	IV.1-M	-	-	-
Irenkaptah [22]	V.6	Possible	-	-
Niankhkhnum and Khnumhotep [27]	V.6-7	S1- X	S	Nil
		S2- X	L	-
Neferseshemptah and Sekhentiu [33]	V.6-8	-	-	-
Hotepherakhti [34]	V.6-8	X	L	Nil
Neferirtenef [51]	V.8-9	X	L	Nil
Akhetmehu [54]	V.8-9	X	L	Horizontal Lines?
Kednes [55]	V.8-VI.1	-	-	-
Hesimin (M22) [56]	V.8L-9E	X	L	Wood grain
Kaiemankh [57]	V.8L-9E	X	L	Nil
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	-
Nimaatre [60]	V.8L-9	X	L	Nil
Hem-Min (M43) [61]	V.9E	X	-	Woodgrain
Nebet [62]	V.9	-	-	-
Iynofert/ Shanef [63]	V.9	X	L	Nil
Kairer [66]	V.9	-	-	-
Khunes [67]	V.9	-	-	-
Akhethotep [71]	V.9	-	-	-
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	-	-	-
Seshemnofer IV [77]	V.9-VI.1	X	L	Nil
Akhmerutnesut [82]	V.9-VI.1	X	L ¹⁷²⁴	Nil
Senedjem-Ib/ Mehi [76]	V.9L	-	-	-
G2360 [87]	V.-VI	-	-	-
Berlin Fragment 14103 [88]	V.-VI	X	L	-
Borchardt Fragment [90]	V.-VI	-	-	-
Mehu [91]	V.I-VI.1	-	-	-
Paris Louvre E. 26092 [92]	V.L-VI	X	-	Nil
Kagemni [94]	VI.1E	X ¹⁷²⁵	L	Nil
CG 1782/1786 [95]	VI.1	X	L	Nil
In – Snefru- Ishtef [96]	VI.1	X	L? ¹⁷²⁶	Horizontal lines

¹⁷²⁴ One foot placed outside of deck.

¹⁷²⁵ Deck has a thin layer of material under deck.

¹⁷²⁶ One foot placed outside of deck.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Deck	Deck Size	Decorated
Iteti/ Shedu [97]	VI.1	X	L	Nil
Nikauisesi [101]	VI.1M	-	-	-
Mereruka [103]	VI.1M-L	X	L	Nil
Henqu/ Kheteti I [105]	VI.1L	X	L	Nil
Seankhuptah [106]	VI.L-2E	X	L	Nil
Mereri [108]	VI.1L-2E	X	L	Nil
Remni/ Merwi [109]	VI.1L-2E	X ¹⁷²⁷	L	Woodgrain
Hesi [110]	VI.1L-2E	X	L	Nil
Inumin [111]	VI.1L-2E	X	L	Nil
Bawi (G126) [113]	VI.1L-2	-	-	-
Wernu [114]	VI.1L-2	X	L	Nil
Heri/ Meru [118]	VI.2E	X	L	Nil?
Nekhebu [119]	VI.2	X	L	Nil
Henqu/ Iy...f II [120]	VI.2	X	L	Woodgrain
Mehu [121]	VI.2	X	L	Nil
Khewen-wekh/ Tjetji [122]	VI.2	-	-	-
Niankhpepy/ Khnumhotep/ Hetj [123]	VI.2	-	-	-
Tomb G97 [125]	VI.2L-3	X	S	Nil
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	X	L	Woodgrain
Idu 1 [128]	VI.3-4E	X	L	Nil
Ibi [130]	VI.3-4E	X x2	L x2	Nil x2
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	L	Nil
Seshemnofer/ Ifi [134]	VI 3-4	X	L	Nil
Meryrenefer/ Qar [133]	VI.3-4	-	-	-
Ihy [137]	VI.4E-M	-	-	-
Idu/ Seneni [138]	VI.4E-M	-	-	-
Kahep/ Tjeti-Iker [140]	VI.4M	X	L	Nil
Djau [141]	VI.4M	-	-	-
Sabni (1) [142]	VI.4L	X	L	Woodgrain
Sabni (2) [143]	VI.4L	-	-	-
Khunes (A6) [144]	VI.4L	-	-	-
Pepyankh/ Henykem [146]	VI.4L	X	L	Nil
Shepsipumin/ Kheni [147]	VI.4L	-	-	-
Ankhtyfy [148]	VI.4L-VIII.E	-	-	-
Cairo Fragment 6.12.24.5 [152]	VI	X?	-	Nil
Pepyankh/Khuwi [153]	VI	-	-	-
Ma [154]	VI	-	-	-
Dauhep [155]	VI	-	-	-
Mastaba B [156]	VI	-	-	-

¹⁷²⁷ Deck has a thin layer of material under deck.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Deck	Deck Size	Decorated
Khuwi/Tjeti-Iker [157]	VI.L-VIII.E	X	S ¹⁷²⁸	Woodgrain
Mery Aa [158]	VI.L-VIII.E	No boat	-	-
Wahi (D4) [162]	VIII	No boat	-	-
Baketi I [163]	VIII-FIP	Raft no deck	-	-

Table H: Equipment on Boat

Tomb	Location	Date	Equipment
Kaiemankh [57]	Giza	V.8L-9E	X
In – Snefru- Ishtef [96]	Dahshur	VI.1	X
Hesi [110]	Saqqara	VI.1L-2E	X
Inumin [111]	Saqqara	VI.1L-2E	X
Nekhebu [119]	Giza	VI.2	X
Mehu [121]	Saqqara	VI.2	X
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	Meir	VI.3-4E	X
Seshemnofer/ Ifi [134]	Saqqara	VI 3-4	X
Kahep/ Tjeti-Iker [140]	El-Hawawish	VI.4M	?
Pepyankh/ Henykem [146]	Meir	VI.4L	X
Shepsipumin/ Kheni [147]	El-Hawawish	VI.4L	X

Table I: Animals (Excluding Birds)

Tomb	Date	Insect	Frog	Mongoose
Nefermaat [2]	IV.1-M	-	-	-
Irenkaptah [22]	V.6	-	-	X
Niankhkhnum and Khnumhotep [27]	V.6-7	(S1) -	-	X
		(S2) -	X	X
Neferseshemptah and Sekhentiu [33]	V.6-8	-	-	-
Hotepherakhti [34]	V.6-8	-	X	X?
Neferirtenef [51]	V.8-9	-	X	X
Akhetmehu [54]	V.8-9	-	-	-
Kednes [55]	V.8-VI.1	-	-	-
Hesimin (M22) [56]	V.8L-9E	Grasshopper	X	-

¹⁷²⁸ One foot placed outside of deck.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Insect	Frog	Mongoose
Kaiemankh [57]	V.8L-9E	Butterfly	X	-
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	-
Nimaatre [60]	V.8L-9	Butterfly	-	-
Hem-Min (M43) [61]	V.9E	-	-	X
Nebet [62]	V.9	-	-	-
Iynofert/ Shanef [63]	V.9	-	X	X x2
Kairer [66]	V.9	-	-	-
Khunes [67]	V.9	-	-	-
Akhetotep [71]	V.9	-	-	X x2
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1		-	-
Seshemnofer IV [77]	V.9-VI.1	Grasshopper	X	-
Akhmerutnesut [82]	V.9-VI.1	-	-	-
Senedjem-Ib/ Mehi [76]	V.9L	-	-	-
G2360 [87]	V.-VI	-	-	-
Berlin Fragment 14103 [88]	V.-VI	X ?	-	-
Borchardt Fragment [90]	V.-VI	-	-	X
Mehu [91]	V.I-VI.1	-	-	-
Paris Louvre E. 26092 [92]	V.L-VI	-	X	-
Kagemni [94]	VI.1E	Butterfly	X	-
CG 1782/1786 [95]	VI.1	-	X	-
In – Snefru- Ishtef [96]	VI.1	-	X	-
Iteti/ Shedu [97]	VI.1	-	-	-
Nikauisesi [101]	VI.1M	-		
Mereruka [103]	VI.1M-L	Grasshopper	X	X
Henqu/ Kheteti I [105]	VI.1L	-	-	-
Seankhuiptah [106]	VI.L-2E	-	-	X (x4)
Mereri [108]	VI.1L-2E	-	X	X
Remni/ Merwi [109]	VI.1L-2E	-	-	-
Hesi [110]	VI.1L-2E	-	-	X
Inumin [111]	VI.1L-2E	-	-	-
Bawi (G126) [113]	VI.1L-2	-	-	-
Wernu [114]	VI.1L-2	-	X	-
Heri/ Meru [118]	VI.2E	-	-	-
Nekhebu [119]	VI.2	-	-	X
Henqu/ Iy...f II [120]	VI.2	-	-	-
Mehu [121]	VI.2	-	-	X
Khewen-wekh/ Tjetji [122]	VI.2	-	-	X
Niankhpepy/ Khnumhotep/ Hetu [123]	VI.2	-	-	-
Tomb G97 [125]	VI.2L-3	-	-	-
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	-	-	-
Idu 1 [128]	VI.3-4E	-	-	--
Ibi [130]	VI.3-4E	-	-	X

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Insect	Frog	Mongoose
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	-	X	X
Seshemnofer/ Ifi [134]	VI 3-4	-	-	-
Meryrenefer/ Qar [133]	VI.3-4	-	-	X
Ihy [137]	VI.4E-M	-	-	-
Idu/ Seneni [138]	VI.4E-M	-	-	-
Kahep/ Tjeti-Iker [140]	VI.4M	-	-	-
Djau [141]	VI.4M	-	X	-
Sabni (1) [142]	VI.4L	-	-	-
Sabni (2) [143]	VI.4L	X?	-	-
Khunes (A6) [144]	VI.4L	-	-	-
Pepyankh/ Henykem [146]	VI.4L	-	-	X
Shepsipumin/ Kheni [147]	VI.4L	-	-	-
Ankhtyfy [148]	VI.4L-VIII.E	-	-	-
Cairo Fragment 6.12.24.5 [152]	VI	-	-	-
Pepyankh/Khuwi [153]	VI	-	-	-
Ma [154]	VI	-	-	-
Dauhep [155]	VI	-	-	-
Mastaba B [156]	VI	-	-	-
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	-	-	X
Mery Aa [158]	VI.L-VIII.E	-	-	-
Wahi (D4) [162]	VIII	-	-	-
Baketi I [163]	VIII-FIP	-	-	-
MFA 13.5965 [165]	OK	-	-	-

Table J: Major Figure Limb Positions

KEY:

Leg positions

A: Open stance position

B: Stride position

Arm Positions

SFA: Horizontal (little bend)

SFB: Bent at both elbows arms below shoulders

SFC: Bent both elbows at 45 degrees

SFD: Back arm is above shoulders

Tomb	Date	Leg Position	Arm Position
Nefermaat [2]	IV.1-M	-	-
Irenkaptah [22]	V.6	-	SFD
Niankhkhnum and Khnumhotep [27]	V.6-7	(S1) B	SFD

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Leg Position	Arm Position
		(S2) B	SFB
Neferseshemptah and Sekhentiu [33]	V.6-8	B	-
Hotepherakhti [34]	V.6-8	B	SFC
Neferirtenef [51]	V.8-9	B	SFC
Akhetmehu [54]	V.8-9	B	SFB
Kednes [55]	V.8-VI.1	-	-
Hesimin (M22) [56]	V.8L-9E	B	SFA
Kaiemankh [57]	V.8L-9E	B	SFA
Senedjem-Ib/ Inti [59]	V.8L-9	-	SFC
Nimaatre [60]	V.8L-9	-	-
Hem-Min (M43) [61]	V.9E	B	-
Nebet [62]	V.9	-	-
Iynofert/ Shanef [63]	V.9	B	SFC
Kairer [66]	V.9	-	-
Khunes [67]	V.9	-	-
Akhethotep [71]	V.9	B	SFC
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	B	-
Seshemnofer IV [77]	V.9-VI.1	B	-
Akhmerutnesut [82]	V.9-VI.1	B	SFB
Senedjem-Ib/ Mehi [76]	V.9L	B	-
G2360 [87]	V.-VI	-	-
Berlin Fragment 14103 [88]	V.-VI	B	SFC
Borchardt Fragment [90]	V.-VI	-	-
Mehu [91]	V.I-VI.1	-	SFD
Paris Louvre E. 26092 [92]	V.L-VI	-	-
Kagemni [94]	VI.1E	B	-
CG 1782/1786 [95]	VI.1	B	-
In – Snefru- Ishtef [96]	VI.1	B	-
Iteti/ Shedu [97]	VI.1	B	SFB
Mereruka [103]	VI.1M-L	B	-
Henqu/ Kheteti I [105]	VI.1L	B	SFC
Seankhuiphtah [106]	VI.L-2E	B	SFB
Mereri [108]	VI.1L-2E	B	SFC
Remni/ Merwi [109]	VI.1L-2E	B	SFB
Hesi [110]	VI.1L-2E	-	-
Inumin [111]	VI.1L-2E	B	-
Bawi (G126) [113]	VI.1L-2	B	SFD
Wernu [114]	VI.1L-2	B	-
Heri/ Meru [118]	VI.2E	B	SFC
Nekhebu [119]	VI.2	B	SFB
Henqu/ Iy...f II [120]	VI.2	B	SFA
Mehu [121]	VI.2	B	SFC
Khewen-wekh/ Tjetji [122]	VI.2	B	SFC
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	B	-

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Leg Position	Arm Position
Tomb G97 [125]	VI.2L-3	B	SFD
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	B	SFB
Idu 1 [128]	VI.3-4E	B	SFB
Ibi [130]	VI.3-4E	B	SFC
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	B	SFA
Seshemnofer/ Ifi [134]	VI 3-4	B	-
Meryrenefer/ Qar [133]	VI.3-4	-	-
Ihy [137]	VI.4E-M	-	-
Idu/ Seneni [138]	VI.4E-M	-	-
Kahep/ Tjeti-Iker [140]	VI.4M	B	-
Djau [141]	VI.4M	B ¹⁷²⁹	SFB
Sabni (1) [142]	VI.4L	B	SFB
Sabni (2) [143]	VI.4L	B ¹⁷³⁰	SFD
Khunes (A6) [144]	VI.4L	B ¹⁷³¹	SFD
Pepyankh/ Henykem [146]	VI.4L	B	SFB
Shepsipumin/ Kheni [147]	VI.4L	B	SFB
Ankhtyfy [148]	VI.4L-VIII.E	A	-
Cairo Fragment 6.12.24.5 [152]	VI	-	-
Pepyankh/Khuwi [153]	VI	-	-
Ma [154]	VI	-	-
Dauhep [155]	VI	-	-
Mastaba B [156]	VI	-	-
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	B	SFB
Mery Aa [158]	VI.L-VIII.E	A	SFD
Wahi (D4) [162]	VIII	B	SFD
Baketi I [163]	VIII-FIP	B	SFA
MFA 13.5965 [165]	OK	-	-

¹⁷²⁹ Front foot raised to ball of foot.

¹⁷³⁰ Both feet raised to ball of foot.

¹⁷³¹ Both feet raised to ball of foot.

Table K: Major Figure Individual Characteristics**KEY:**

Body Type:

A. *Athletic*

Tomb	Date	Shendy Kilt	Wrap around kilt	Broad Collar	Wrist Bands	Wig L- Long S- Short	Fillet and Streamer	Other	Body Type
Nefermaat [2]	IV.1-M	-	-	-	-	-		-	-
Irenkaptah [22]	V.6	-	-	X		L		False beard	A
Niankhkhnum and Khnumhotep [27]	V.6-7		X	X		L			A
Neferseshemptah and Sekhentiu [33]	V.6-8	-	-	X					A
Hotepherakhti [34]	V.6-8	-	-	X		L			A
Neferirtenef [51]	V.8-9	X	-	X		L			A
Akhetmehu [54]	V.8-9	X	-			L			A
Kednes [55]	V.8-VI.1	-	-	-	-	-		-	-
Hesimin (M22) [56]	V.8L-9E	X		X		S	X		A
Kaiemankh [57]	V.8L-9E	X	-	X		L			A
Senedjem-Ib/ Inti [59]	V.8L-9	-	-					-	A
Nimaatre [60]	V.8L-9	X	-					-	-
Hem-Min (M43) [61]	V.9E	X	-	X		S	X		A
Nebet [62]	V.9	-	-					-	-
Iynofert/ Shanef [63]	V.9	X	-			S	S		A
Kairer [66]	V.9	-	-					-	-
Khunes [67]	V.9	-	-					-	-
Akhethotep [71]	V.9	S	-	X		S	X		A
Ihy r/u Seshseshet/ Idut [72]	V.9 r/u VI.1	-	-					-	-
Seshemnofer IV [77]	V.9-VI.1	-	-					-	-
Akhmerutnesut [82]	V.9-VI.1	-	W	X		S			A
Senedjem-Ib/ Mehi [76]	V.9L	-	-			L			A
G2360 [87]	V.-VI	-	-					-	-
Berlin Fragment 14103 [88]	V.-VI	X	-	X		L	X		A
Borchardt Fragment [90]	V.-VI	-	-					-	-
Mehu [91]	V.I-VI.1	-	-	X		L			A
Paris Louvre E. 26092 [92]	V.L-VI	-	-					-	-
Kagemni [94]	VI.1E	-	-					-	-
CG 1782/1786 [95]	VI.1	-	-					-	-
In – Snefru- Ishtef [96]	VI.1	X	-					-	A
Iteti/ Shedu [97]	VI.1	X	-	X					A
Nikauisesi [101]	VI.1M	-	-					-	-

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Shendty Kilt	Wrap around kilt	Broad Collar	Wrist Bands	Wig L- Long S- Short	Fillet and Streamer	Other	Body Type
Mereruka [103]	VI.1M-L	X	-					-	-
Henqu/ Kheteti I [105]	VI.1L	X	-	X		S			A
Seankhuiptah [106]	VI.L-2E	-	-					-	A?
Mereri [108]	VI.1L-2E	X		X		S	X		A
Remni/ Merwi [109]	VI.1L-2E	-	-	X		S	X		A
Hesi [110]	VI.1L-2E	-	-					-	-
Inumin [111]	VI.1L-2E	X	-		X				A
Bawi (G126) [113]	VI.1I-2	-	X	X	X				A
Wernu [114]	VI.1L-2	-	-					-	-
Heri/ Meru [118]	VI.2E	-	-			S	X		A
Nekhebu [119]	VI.2	X	-		X	S	X		A
Henqu/ Iy...f II [120]	VI.2	-	X P		X	L		Long necklace + pendent	A
Mehu [121]	VI.2	X	-	X		S	X		A
Khewen-wekh/ Tjetji [122]	VI.2	X	-	X	X	S	X		A
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	-	-					-	-
Tomb G97 [125]	VI.2L-3	-	-	X	X	L	X		A
Hesi-Min/ Sesi (F1) [127]	VI.2-4E	-	-	X	X	S	X?		A
Idu 1 [128]	VI.3-4E	-	-	X?		S	X		A
Ibi [130]	VI.3-4E	-	-	X	X	S	X		A
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	-	-	X		S	X		A
Seshemnofer/ Ifi [134]	VI 3-4	-	-					-	-
Meryrenefer/ Qar [133]	VI.3-4	-	-					-	-
Ihy [137]	VI.4E-M	-	-	X					-
Idu/ Seneni [138]	VI.4E-M	-	-	X		S	X		A
Kahep/ Tjetji-Iker [140]	VI.4M	-	-	X	X	S	X		A
Djau [141]	VI.4M	-	-	X	X	S	X?		A
Sabni (1) [142]	VI.4L	-	-	X		S	X	Strap	A
Sabni (2) [143]	VI.4L	-	-	X		S	X		A
Khunes (A6) [144]	VI.4L	-	-			L			A
		-	-	X		S	X		A
Pepyankh/ Henykem [146]	VI.4L	-	-	X	X	S	X		A
Shepsipumin/ Kheni [147]	VI.4L	X	-	X	X	S	X		A
Ankhtyfy [148]	VI.4L- VIII.E	-	X	X	X	L	X		A
Cairo Fragment 6.12.24.5 [152]	VI	-	-					-	-

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Shendty Kilt	Wrap around kilt	Broad Collar	Wrist Bands	Wig L- Long S- Short	Fillet and Streamer	Other	Body Type
Pepyankh/Khuwi [153]	VI	-	-					-	-
Ma [154]	VI	-	-					-	-
Dauhep [155]	VI	-	-					-	-
Mastaba B [156]	VI	-	-					-	-
Khuwi/ Tjeti-Iker [157]	VI.L- VIII.E	-	-	X		L	X		A
Mery Aa [158]	VI.L- VIII.E	-	-	X	X	S	X		A
Wahi (D4) [162]	VIII	-	-	X	X			Lotus garland	A
Baketi I [163]	VIII-FIP	-	-	X	X	S	X		A
MFA 13.5965 [165]	OK	-	-					-	-

Table L: Wife/ Female Figures on Boat Positions

KEY:

Placement: P= Prow, S= Stern, B= Between legs of major figure.

Leg Positions:

A: *Open Stance*

B: *Stride,*

D: *Kneeling,*

E: *Semi-Kneeling.*

Arm Positions

SF.W.A- Active gesturing forwards;
rear arm touching Tomb owner.

SF.W.B- One arm holding Object,
other touching tomb owner.

SF.W.C – One Arm to Chest Or at rest;
Other touching Tomb owner.

SF.W.D – One arm holding object;
Other at rest by side /On lap

SF.W.E- One arm across chest; other
at rest

Tomb	Date	Placement	Leg Positions	Arm Positions
Irenkaptah [22]	V.6	P	A	SF.W.A
Niankhkhnum and Khnumhotep [27]	V.6-7	(S1) P (S2) B	A D	SF.W.B SF.W.C
Neferirtenef [51]	V.8-9	B	D	SF.W.B
Akhetmehu [54]	V.8-9	S	A	SF.W.D
Hesimin (M22) [56]	V.8L-9E	S	A	-
Seshemnofer IV [77]	V.9-VI.1	B	D	SF.W.E
Akhmerutnesut [82]	V.9-VI.1	P	D	SF.W.B
Senedjem-Ib/ Mehi [76]	V.9L	B	D	SF.W.D

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Placement	Leg Positions	Arm Positions
Berlin Fragment 14103 [88]	V.-VI	B	D	SF.W.B ?
Kagemni [94]	VI.1E	P	A	SF.W.D
CG 1782/1786 [95]	VI.1	B	D	SF.W.B x2
In – Snefru- Ishtef [96]	VI.1	S	A	SF.W.A Var ¹⁷³²
Iteti/ Shedu [97]	VI.1	P	A	SF.W.D
Mereruka [103]	VI.1M-L	P	A	SF.W. D
Seankhuipah [106]	VI.L-2E	P	A	SF.W.A
Mereri [108]	VI.1L-2E	P	A	SF.W.D
Remni/ Merwi [109]	VI.1L-2E	B	D	SF.W.C
Inumin [111]	VI.1L-2E	P	A	SF.W.B
Heri/ Meru [118]	VI.2E	B	D	SF.W.A
Nekhebu [119]	VI.2	B	D	unclear
Henqu/ ly...f II [120]	VI.2		E	unique
Mehu [121]	VI.2	B	D	SF.W.C
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	B	E	SF.W.D
Idu 1 [128]	VI.3-4E	(S1) B	E	SF.W.D
		(S2) S	E	SF.W.D
Ibi [130]	VI.3-4E	B	E	SF.W.E
		B	A	SF.W.D
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	S	D	SF.W.A
Ihy [137]	VI.4E-M	B	D	-
Kahep/ Tjeti-Iker [140]	VI.4M	B	D	SW.F.D Var ¹⁷³³
Khunes (A6) [144]	VI.4L	p ¹⁷³⁴	A	SF.W.D
		B	D	SF.W.D
		B	D	SF.W.D
Shepsipumin/ Kheni [147]	VI.4L	B	D	SF.W.D Var ¹⁷³⁵
Ankhtyfy [148]	VI.4L-VIII.E	B	E	-
		S	A	SF.W.D
		S	A	SF.W.D
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	B	D	SF.W.D Var ¹⁷³⁶
Wahi (D4) [162]	VIII	S	A	SF.W.D
		S	A	SF.W.D
		S	A	SF.W.D
		P	A	SF.W.D

¹⁷³² Wife holding leg and waist.

¹⁷³³ Both hands holding lotus.

¹⁷³⁴ Floating in front of tomb owner.

¹⁷³⁵ Both hands holding lotus.

¹⁷³⁶ Both hands holding objects.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Placement	Leg Positions	Arm Positions
		P	A	SF.W.D
Baketi I [163]	VIII-FIP	S	A	SF.W.D Var ¹⁷³⁷

Table M: Wife/ Female Figure in Boat Individual Characteristics

KEY:

Body Type:

A. Athletic

Tomb	Date	Clothes	Wig L: Long S: Short	Fillet and streamer	Body	Headdress	Collar	Wrist bands	Ankle Bands	Holding Lotus/flowers
Irenkaptah [22]	V.6	Dress	L		A	X				
Niankhkhnum and Khnumhotep [27]	V.6-7	Dress	L		A					X
		Dress	L		A					-
Neferseshemptah and Sekhentiu [33]	V.6-8	-	-		-	-				
Hotepherakhti [34]	V.6-8	-	-		-	-				
Neferirtenef [51]	V.8-9	Dress	L	X	A		X			X
Akhetmehu [54]	V.8-9	Dress	?		A					X?
Hesimin (M22) [56]	V.8L-9E	Dress	-		A	-				
Seshemnofer IV [77]	V.9-VI.1	unclear	S	S	A		S			
Akhmerutnesut [82]	V.9-VI.1	Dress	S		A					X
Senedjem-Ib/ Mehi [76]	V.9L	-	S	X	A					X?
Berlin Fragment 14103 [88]	V.-VI	-	-		A	X				
Kagemni [94]	VI.1E	-	Side lock with disk		A		X			X
CG 1782/1786 [95]	VI.1	Dress	S	X	A					X
		Dress	L	X	A					X
In – Snefru- Ishtef [96]	VI.1	Dress	L	X	A					

¹⁷³⁷ Both hands holding a lotus stem each.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Clothes	Wig L: Long S: Short	Fillet and streamer	Body	Headdress	Collar	Wrist bands	Ankle Bands	Holding Lotus/flowers
Iteti/ Shedu [97]	VI.1	Dress	S	X	A				X	X
Nikauisesi [101]	VI.1M	-	-		-	-				
Mereruka [103]	VI.1M-L	Dress	S	X	A		X			X
Henqu/ Kheteti I [105]	VI.1L	-	-		-	-				
Seankhuipah [106]	VI.L-2E	Dress	S	X	A		X			
Mereri [108]	VI.1L-2E	Dress?	-		A					X
Remni/ Merwi [109]	VI.1L-2E	Dress	S		A		X			
Inumin [111]	VI.1L-2E	Dress	side lock with disk		A		X			X
Heri/ Meru [118]	VI.2E	-	S?	X	A					
Nekhebu [119]	VI.2	Dress	S	X	A		X		X	
Henqu/ Iy...f II [120]	VI.2	Dress	S		A					X ¹⁷³⁸
Mehu [121]	VI.2	Dress	L		A	X	X	X	X	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	-	S	X	A					X
Idu 1 [128]	VI.3-4E	Dress	-		A		X			X
		-	-		A					X
Ibi [130]	VI.3-4E	Dress	S	X	A		X	X	X	
		Dress	S	X	X		X	X		X
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	Dress	L		A	X	X			
Ihy [137]	VI.4E-M	-	-		A	-				
Kahep/ Tjeti-Iker [140]	VI.4M	Dress	S		A			X	X	X (2)
Khunes (A6) [144]	VI.4L	-	L		A					X
		-	-		A					X
		-	-		A					X
Shepsipumin/ Kheni [147]	VI.4L	Dress	-	X	A		X	X		X
Ankhtyfy [148]	VI.4L-VIII.E	Dress	L	A	A		X	X		
		Dress	L	A	A		X	X		X?
		Dress	L		A		X	X?		
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	-	L		A		X	X		X

¹⁷³⁸ Club and papyrus stalk.

Tomb	Date	Clothes	Wig L: Long S: Short	Fillet and streamer	Body	Headress	Collar	Wrist bands	Ankle Bands	Holding Lotus/flowers
Wahi (D4) [162]	VIII	Dress	L		A		X	X	X	X
		Dress	L		A		X	X	X	X
		Dress	L		A		X	X	X	X
		Dress	L		A		X	X	X	X
		Dress	L		A		X	X	X	X
Baketi I [163]	VIII-FIP	Dress	L		A		X	X	X	X (2)

Table N: Tomb Owners Son(s) Limb Positions

KEY:

Arm positions for Inactive Son:

- SF.S. A- One arm at rest/ one to mouth; variation one arm to chest, other at rest (holding object)
 SF.S.B – One arm touching Tomb owner, Other holding object.
 SF.S.C – Both hands holding object (s)
 SF.S.D – One hand holding object, other at rest.
 SF.S.E – Both hands/ arms at rest.

Major Figure/ Active Son:

- SFA- Horizontal (little bend)
 SFB- Bent at both elbows arms below shoulders
 SFC- Bent both elbows at 45 degrees
 SFD- Back arm is above shoulders.

Leg Position:

- A. Open stance;
 B. Stride.

Tomb	Date	Active (A) or In-Active (INA)	Leg Position	Arm Position	Item Carried (if applicable)
Niankhkhnum and Khnumhotep [27]	V.6-7	(S1) INA	A	SFSA	
		(S2) INA	A	SFSB	Bird
Hotepherakhti [34]	V.6-8	INA	A	SFSC	Birds
		INA	A	SFSC	Birds
Neferirtenef [51]	V.8-9	INA	A	SFSC	Bird/spear
Akhetmehu [54]	V.8-9	INA	A	SFSC	Bird/spear
		INA	A	SFSB	Bird
Hesimin (M22) [56]	V.8L-9E	A	B	SFD	-
Kaiemankh [57]	V.8L-9E	INA	A	SFAC	Spear/bird
Nimaatre [60]	V.8L-9	INA	A	SFSC	Spear/bird

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Active (A) or In-Active (INA)	Leg Position	Arm Position	Item Carried (If applicable)
Kairer [66]	V.9	A	-	-	Catfish
Akhethotep [71]	V.9	INA	A	SFSD	Spear
Seshemnofer IV [77]	V.9-VI.1	A	B	-	-
Senedjem-Ib/ Mehi [76]	V.9L	INA	A	SFSD	Spear
Mehu [91]	V.I-VI.1	INA	-	SFSD	Spear
CG 1782/1786 [95]	VI.1	A	B	SFC	<i>Mugil sp.</i>
In – Snefru- Ishtef [96]	VI.1	A	B	SFC	-
Henqu/ Kheteti I [105]	VI.1L	INA	A	SFSD	Spear
		INA	A	SFSB?	
		INA	A	SFSE	-
Remni/ Merwi [109]	VI.1L-2E	A	A	SFC	-
Hesi [110]	VI.1L-2E	INA	A	SFSC	Birds
		INA	A	SFSD	Birds
Heri/ Meru [118]	VI.2E	A	B	SFB	-
Nekhhebu [119]	VI.2	A	B	SFB	<i>Lates/Tilapia sp</i>
		INA	A	SFSE	
Henqu/ Iy...f II [120]	VI.2	INA	A	SFSC	Spears
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	A	B	-	<i>Lates/ Tilapia sp.</i>
Idu 1 [128]	VI.3-4E	INA	A	SFSC	Spears
		INA	A	SFSC	Spears
Ibi [130]	VI.3-4E	A	B	SFB	<i>Lates/Tilapia sp.</i>
		INA	A	SFSA Var ¹⁷³⁹	Geese
		INA	A	SFSC	Geese
		INA	A	SFSD	Geese
		INA	A	SFSD	Geese
		INA	A	SFSD	Geese
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	INA	A	SFSC	Spear /Fowling Stick
		INA	A	SFSC	Spear /Fowling Stick
Djau [141]	VI.4M	INA	A	SFSC	Birds and fish
Sabni (1) [142]	VI.4L	INA	A	SFSC	Box?
Sabni (2) [143]	VI.4L	INA	A	-	-
Khunes (A6) [144]	VI.4L	INA	A	SFSD	Spear
Pepyankh/ Henykem [146]	VI.4L	INA	A	SFSA ¹⁷⁴⁰	Spear
Shepsipumin/ Kheni [147]	VI.4L	INA	A	SFSA ¹⁷⁴¹	Spear

¹⁷³⁹ One arm to chest; other at rest holding a bird.

¹⁷⁴⁰ Variation: Arm to chest.

¹⁷⁴¹ Variation: Arm to chest

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Active (A) or In-Active (INA)	Leg Position	Arm Position	Item Carried (If applicable)
Cairo Fragment 6.12.24.5 [152]	VI	A	B	SFB	Fish speared
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	INA	A	SFSA ¹⁷⁴²	Birds/ flowers
		INA	A	SFSA ¹⁷⁴³	Birds/ flowers
Wahi (D4) [162]	VIII	INA	A	SFSD	Spear
		INA	A	SFSC	Spear/ Bird
Baketi I [163]	VIII-FIP	A?	-	-	-
MFA 13.5965 [165]	OK	INA	A?	SFSD	Spear

Table O: Son(s) Individual Characteristics

KEY:

Clothing:

A: *Naked*

C: *Kilt*

(G): *Genitals represented*

Body Type:

A: *Athletic*

Tomb	Date	Clothing	Wig L: Long, S: Short	Body Type	Filet and Streamer	Collar	Wrist Band	Other
Niankhkhnum and Khnumhotep [27]	V.6-7	A(G)	Side lock	A				
		A (G)	Side Lock	A				
Hotepherakhti [34]	V.6-8	A (G)	-	A				
Neferirtenef [51]	V.8-9	-	S	A		X		
Akhetmehu [54]	V.8-9	C	S	A		X		
		-	S	A		X		
Kaiemankh [57]	V.8L-9E	A (G)	Side lock	A		X		
Nimaatre [60]	V.8L-9	-	Side lock	A	-			
Akhethotep [71]	V.9	C	-	A	-			
Seshemnofer IV [77]	V.9-VI.1	C	-	-				
		A ¹⁷⁴⁴ (G)	Side lock	A		X		
Senedjem-Ib/ Mehi [76]	V.9L	C	S	A	-			
Mehu [91]	V.I-VI.1	-	-	A	-			

¹⁷⁴² Variation: Arm to chest

¹⁷⁴³ Variation: Arm to chest.

¹⁷⁴⁴ Grandchild.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	Clothing	Wig L: Long, S: Short	Body Type	Filet and Streamer	Collar	Wrist Band	Other
CG 1782/1786 [95]	VI.1	C	S	A	X	X		
In – Snefru- Ishtef [96]	VI.1	C	-	A		X		
Henqu/ Kheteti I [105]	VI.1L	-	S	-				
		C	-	A				
		C	S?	A				
Remni/ Merwi [109]	VI.1L-2E	C	-	A		X		
Hesi [110]	VI.1L-2E	C	Side lock	A		X		
		C	Side lock	A		X		
Inumin [111]	VI.1L-2E	-	L	-	-			
Heri/ Meru [118]	VI.2E	C	-	A	-			
Nekhebu [119]	VI.2	-	-	-	X			
		C	L	A		X	X	X ¹⁷⁴⁵
Henqu/ Iy...f II [120]	VI.2	C	-	A			X	X ¹⁷⁴⁶
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	-	-	A	-			
Idu 1 [128]	VI.3-4E	C	S	A			X	
		C	S	A		X	X	
Ibi [130]	VI.3-4E	C	S	A	X	X	X	
		C	L	A		X	X	
		C	L			X	X	
		C	S			X	X	
		C	S			X	X	
		C	S			X	X	
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	C	S	A		X		
		C	S	A		X		
Djau [141]	VI.4M	C	L	A	-			
Sabni (1) [142]	VI.4L	C	S	A				
Khunes (A6) [144]	VI.4L	C	-	A				
Pepyankh/ Henykem [146]	VI.4L	C	S	A		X		
Shepsipumin/ Kheni [147]	VI.4L	C	S	A		X		
Cairo Fragment 6.12.24.5 [152]	VI	C	S	A		X		
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	C	L	A	-			
		C	L	A				
Wahi (D4) [162]	VIII	C	S	A		X		
		C	L	A		X		
Baketi I [163]	VIII-FIP	-	S	-	-			
MFA 13.5965 [165]	OK	C	S	A	X			

¹⁷⁴⁵ Linen strap over shoulders.

¹⁷⁴⁶ Possible Pendant.

Table P: Oarsmen/ Punters Leg Positions

KEY:

Leg Type:

A: *Open stance*;

B: *Stride*; and

G: *Lunge*.

Tomb	Date	Leg Type
Niankhkhnum and Khnumhotep [27]	V.6-7	G
Berlin Fragment 14103 [88]	V-VI	G; B; and A Var ¹⁷⁴⁷
Bawi (G126) [113]	VI.1L-2	G
Henqu/ Iy...f II [120]	VI.2	B
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	A
Tomb G97 [125]	VI.2L-3	G
Hesi-min/Sesi (F1) [127]	VI.2-4E	G
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	A?

Table Q: Oarsmen/Punters Individual Characteristics

KEY:

Clothing:

A: *Naked*;

C: *Kilt*.

Hair:

A: *Full head of hair*.

Body Type:

A: *Athletic*.

Tomb	Date	Clothing	Hair	Body
Niankhkhnum and Khnumhotep [27]	V.6-7	A	A	A
Berlin Fragment 14103 [88]	V-VI	A(4)	A(4)	A(4)
Bawi (G126) [113]	VI.iL-2	C	A	A
Henqu/ Iy...f II [120]	VI.2	C?	-	-
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	A	A	A
Tomb G97 [125]	VI.2L-3	-	A	A
Hesi-min/Sesi (F1) [127]	VI.2-4E	-	A	-
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	-	-	-

¹⁷⁴⁷ Figure at stern, one foot flat on stern, other behind it but due to vertical stern it is bent at the knee.

Table R: Attendant Placement and Limb Positions
KEY:
Leg Positions:

A: *Open stance*;

B: *Stride*;

D: *Kneeling*.

Arm Positions:

SFA. A – Arms are either side of body with slight bend to elbows

SFA.B – One arm at rest by side, other extended forwards at any degree

SFA. C - One at rest by side; other hand is raised to or above shoulder

SFA.D – Both arms are holding an object across the torso

SFA.E – One arm/hand is raised across the chest: other arm either by side extended forwards.

SFA.F – both arms are crossed at chest.

SFA.G – Other; Infrequent or unique arm position.

Tomb	Date	In a Register	Leg Position	Arm Position	Objects Carried	Animals Carried
Niankhkhnum and Khnumhotep [27]	V.6-7	X	A (3)	SFA.A (2) SFA.B(1)	Spear	Fish (4)
Neferirteneft [52]	V.8-9	X	A (1)	SFA. B (1)	Spear	Fish (1)
Hesimin (M22) [56]	V.8L-9E	X	A (8)	SFA.B (6) SFA.C (1)	Spear (3) Flower (2) Vessel (1)	Fish (4)
Kaiemankh [57]	V.8L-9E	X	A (4)	SFA.A (1) SFA.C (1) SFA.D (1) SFA.E (1)		Fish (5)
Nimaatre [60]	V.8L-9	X	A (3)	SFA.E (1) SFA.B (2)	Spears (3)	-
Iynofert/ Shanef [63]	V.9	X	A (2)	SFA.B (2)	Spear (2)	Fish (2)
Senedjem-Ib/ Mehi [76]	V.9L	X	A (1)	SFA. A(2)	-	-
CG 1782/1786 [95]	VI.1	X	A(2)	-	-	-
Iteti/ Shedu [97]	VI.1	X	A(1)	SFA.B (1)	Spear (1)	-
Mereruka [103]	VI,1 M-L	X	A(27)	SFA.A (13) SFA.E (2) SFA. F (4)	Spear (3)	-
Seankhuipah [106]	VI.1L-2E	X	A(5)	SFA.F (3) SFA.D(1) SFA.G (1) ¹⁷⁴⁸	Spear case? (1)	-
Mereri [108]	VI.1L-2E	X	A(11)	SFA. A (2) SFA. E (2)	Food stuffs (1)	Birds (3)

¹⁷⁴⁸

Bent over holding object to leg; other arm carrying sack over shoulder.

Appendix 2: Detail Tables: Spearfishing

Tomb	Date	In a Register	Leg Position	Arm Position	Objects Carried	Animals Carried
				SFA. B (1)	Spear cases (2) Papyrus stalks (2) Flowers x(2) Box (1)	
Remni/ Merwi [109]	VI.1L-2E	X	A(4)	SFA. B (1)	Food, rope? (1)	Birds (2) Fish (3)
Hesi [110]	VI.1L-2E	X	A(8)	SFA. B(3) SFA. E(4) SFA. D(1)	Oars (5) Sandals (2) Vessel (1) Spears (4) Case (1)	
Inumin [111]	VI.1L-2E	X	A(5)	SFA. A(4) SFA. E (1)	-	-
Bawi (G126) [113]	VI.1L-2	X	A(1)	SFA.E (1)	Spear (1)	
Nekhebu [119]	VI.2	X	-	SFA. B (1)	Spear (1)	
Niankhpepy/ Khnumhotep/ Heti [123]	VI.2	X	A(1)	-	-	-
Tomb G97 [125]	VI.2L-3	X	A(2)	SFA. B(1)	-	-
Hesi-min/ Sesi (F1) [127]	VI.2-4E	X	A(1)	-	Spear (1)	-
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E	X	A(1)	SFA. B (1)	Spear/ fowling stick (1)	-
Meryrenefer/ Qar [133]	VI.3-4	X	-	SFA. D (1)	-	Fish (1)
Ihy [137]	VI.4E-M	X	-	SFA. E (1)	Spear (1)	-
Kahep/ Tjeti-Iker [140]	VI.4M	X	A(2)	SFA. A(2)	Scroll? (2)	-
Pepyankh/ Henykem [146]	VI.4L	X	A(9)	SFA. A(3) SFA. E(6)	Spear (5) Basket (5)	Fish (2)
Shepsipumin/ Kheni [147]	VI.4L	X	A(2)	SFA. A(2)	Scrolls (2?)	-
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E		A(1), B(1), D(1)	SFA. G (3)	-	-

Table S: Attendant Individual Characteristics**KEY:****Clothing:***Type C: Kilt***Hair Type:***A: Full head of hair;**B: Receding hairline***Body Type:***A: Athletic;**B: Non – Athletic.*

Tomb	Date	Kilt: Wrap Around	Kilt: Wrap around with Point	Other	Hair Type	Body Type
Niankhkhnum and Khnumhotep [27]	V.6-7	(3)			A(3)	A(3)
Neferirteneb [52]	V.8-9		(1)		-	A (1)
Hesimin (M22) [56]	V.8L-9E	(1)			-	A (8)
Kaiemankh [57]	V.8L-9E	(4)			A(4)	A(4)
Nimaatre [60]	V.8L-9	(1)			-	A(3)
Iynofert/ Shanef [63]	V.9			<i>Shendty</i> (2)	-	A(2)
Senedjem-Ib/ Mehi [76]	V.9L		(2)		A(2)	A(2)
Iteti/ Shedu [97]	VI.1		(1)		-	A(1)
Mereruka [103]	VI,1 M-L		(25)		A (16)	A (27)
Seankhuipah [106]	VI.1L-2E	(5)			A (5)	A(5)
Mereri [108]	VI.1L-2E	(2)	(4)		A(1)	A(6) ¹⁷⁴⁹
Remni/ Merwi [109]	VI.1L-2E		(3)		A(1)	A(2)
Hesi [110]	VI.1L-2E	(8)			A(8)	A(8)
Inumin [111]	VI.1L-2E		(5)		A(4) B (1)	A(4) B(1)
Bawi (G126) [113]	VI.1L-2		(1)		A(1)	A(1)
Nekhebu [119]	VI.2		(1)		A (1)	A (1)
Tomb G97 [125]	VI.2L-3		(1)		-	-
Hesi-min/ Sesi (F1) [127]	VI.2-4E		(1)		-	-
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	VI.3-4E		(1)		A (1)	A (1)
Meryrenefer/ Qar [133]	VI.3-4		(1)		-	-
Ihy [137]	VI.4E-M	-			A (1)	-
Kahep/ Tjeti-Iker [140]	VI.4M		(2)		A(1)	A(2)
Pepyankh/ Henykem [146]	VI.4L	(3)	(6)		A(7)	A(9)
Shepsipumin/ Kheni [147]	VI.4L		(2)		A(2)	A(2)
Khuwi/ Tjeti-Iker [157]	VI.L-VIII.E	(2)	(1)		A(2)	A(3)

Table T: Captions

Tomb	Transliteration	Translation
Irenkaptah [22]	<i>stl.t mhy.t</i>	Spearing Fish
Niankhkhnum and Khnumhotep [27] (Scene 1)	<i>[hns] phw.w m33 [k3.t nb.t n.t sh.t (?) stl.t mhy.t]</i>	[Traversing] the marshlands and watching [all the activities in the marsh fields (?), Spearing fish]
Niankhkhnum and Khnumhotep [27] (Scene 2)	<i>stl.t mhy.t m phw.w nfr m33 r ih.t nb.t</i>	Spearing fish in the marshlands, more beautiful to view than anything
Neferseshemptah and Sekhentiu [33]	<i>stl.t mhyt 3.t</i>	Spearing fish in large quantities
Hotepherakhti [34]	<i>m33 phw.w stl.t mhy.t...</i>	Watching the marshlands and spearing fish...
Kaiemankh [57]	<i>stl.t mhy.t m phw.w</i>	Spearing fish in the marshlands
Senedjem-Ib/ Inti [59]	<i>stl.t [mhy.t]</i>	Spearing [fish]
Hesimin (M22) [56]	<i>stl.t mhy.t 3.t-wr.t... stl.t mhyt... š3.w m phw.w</i>	Spearing fish in very large quantities... spearing fish... lotus pools in marsh lands
Hem-Min (M43) [61]	<i>stl.t mhy.t hns š3.w sh.wt phw.w</i>	Spearing fish and traversing the lotus pools, marsh fields and the marshlands...
Iynofert/ Shanef [63]	<i>[stl.t mhy.t] 3.t-wr.t</i>	[Spearing fish] in great quantities
Akhethotep [71]	<i>stl.t mhy.t m š3.w . sš.w</i>	Spearing fish in the lotus pools and the bird pools
Hesi [110]	<i>hns sš.w stl.t mhy.t 3.t-wr.t</i>	Traversing the bird pools, spearing fish in great quantities
Seankhuaptah [106]	<i>hns sš.w stl.t mhy.t 3.t-wr.t</i>	Traversing the bird pools, spearing fish in great quantities
Mehu [121]	<i>[stl.t mhy.t] 3-wr.t [m] phw.w [m33 ih.t] nb.t nfr.t [ntt m t3-mh.w]</i>	[Spearing fish] in great quantities [in] the marshlands [and seeing] every good [thing which is in the Delta]
Henqu/ Iy...f II [120]	<i>sd3š im3h.w [hmk.w] smr wty hr.y-hb.t r stl.t mhy.t r phw.w r sš.w</i>	Travelling of the honoured one [Henqu], sole companion and lector priest, to spear fish in the marshlands and the bird pools.
Hesi-min/ Sesi (F1) [127]	<i>stl.t mhy.t 3.t-wr.t</i>	Spearing fish in great quantities
Bawi (G126) [113]	<i>š3.w phw.w stl.t mhy.t</i>	The lotus pools and marshlands. Spearing fish
Tomb G97 [125]	<i>stl.t mhy.t</i>	Spearing Fish
Ibi [130]	<i>m33 k3.t sh.t sp3.t hcm mhy.t stl n k3 n(y ir.y-p.t hr.y-hb.t hr.y-tp... Ibi</i>	Watching the work of Sekhet of the province, to catch and spear fish for the Ka of the hereditary prince, chief lector priest...Ibi
Pepyankh/ Heri-Ib/ Neferka/ Heny [131]	<i>stl.t mhy.t 3.t-wr.t</i>	Spearing fish in Great Quantities
Idu I [128]	<i>stl.t mhy.t</i>	Spearing Fish
Djau [141]	<i>Nfr.wy iwi sh.t nb.t h3b hr rm.w mhy.t r 3pd.w n k3 n(y) h3.ty-3 htm.w bi.ty ... q3.w</i>	How beautiful it is that Sekhet mistress of the Catch, comes with fish and birds for the Ka of Count, seal bearer of Lower Egypt... Djau

Appendix 2: Detail Tables: Spearfishing

Tomb	Transliteration	Translation
Idu/ Seneni [138]	<i>hns pḥw.w s3.w š3.w [n.w] t3-mḥ.w in ḥ3.ty.w ḥtm.w bì.ty... stl.t mḥy.t ʿ3.t-wr.t</i>	Traversing the marshlands, bird pools and lotus pools [of] the Delta by the count and seal bearer of the King of Lower Egypt. Spearing fish in great quantities.
Kahep/ Tjeti-Iker [140]	<i>rdi [n]=k sh.t {hṭp=s} nfr</i>	The marsh fields gives to you {its} goodly offerings
Shepsipumin/ Kheni [147]	<i>stl.t mḥy.t hns sh.wt nb.(w)t in ḥ3.ty-ʿ3.w ḥtm.w bity hni rdi n=k sh.t {hṭp.w}=s nfr</i>	Spearing fish, traversing all the marsh lands by the count and seal bearer of the king of Lower Egypt, Kheni. The marsh fields give to you its goodly {offerings}
Pepyankh/ Henykem [146]	<i>stl.t mḥy.t ʿ3.t-wr.t m sš.w n.w šmʿ t3-mḥ.w</i>	Spearing fish in great quantities in the bird pools of Upper and Lower Egypt.
Sabni (1) [142]	<i>stl.t mḥy.t...</i>	Spearing fish
Pepyankh/ Khuwi [153]	<i>stl.t mḥy.t ʿ3.t- wr.t</i>	Spearing fish in great quantities
Khuwi/ Tjeti-Iker [157]	<i>stl.t mḥy.t m pḥw[.w t3-] mḥ.w</i>	Spearing fish in the marshland[s of the Delta marshes]
Ankhtyfy [148]	<i>m3 ʿstl.t mḥy.t</i>	Watching and spearing fish.

Registering the Catch Detail Tables A-O

Table A: Occurrence of Scene

Tomb	Location	Date
Ty [35]	Saqqara	V.6-8
Kagemni [94]	Saqqara	VI.1E
Mehu [121]	Saqqara	VI.2

Table B.1: Fish Species

Tomb	Date	<i>Tilapia sp.</i>	<i>Lates</i>	<i>Mugil sp.</i>	<i>M. Caschive</i>	<i>M. Kannume</i>	<i>Gnathonemus</i>
Ty [35]	V.6-8	-	-	-	-	-	-
Kagemni [94]	VI.1E	3	6	6	2	0	4
Mehu [121]	VI.2	2	4	6	2	2	0

Table B.2: Fish Species

Tomb	Date	<i>Clarias sp.</i>	<i>Synodontis ssp.</i>	<i>Schilbe</i>	<i>Tetraodon Fahaka</i>	<i>B. Bynni</i>	<i>Citharinus</i>
Ty [35]	V.6-8	-	-	2	-	-	-
Kagemni [94]	VI.1E	5	1	1	1	0	0
Mehu [121]	VI.2	1	4	0	0	1	1

Table C: Equipment used to transport fish

Tomb	Date	Rope	Basket (Rectangular)	Basket (Round Trap)	Basket (Trapezoidal)	Pole	Oar	Sling
Ty [35]	V.6-8	X (2)		X (2)	X (1)	X (3)		
Kagemni [94]	VI.1E	X (6)	X (4)			X (2)		X (2)
Mehu [121]	VI.2	X (6)	X (1)	X (1)	X (1)		X (1)	

Table D: Minor Figures

Tomb	Date	Seated Officials	Distributors	Scribes	Bearers	Kneeling Bearers
Ty [35]	V.6-8	-	-	-	8	-
Kagemni [94]	VI.1E	10	2	2	10	1
Mehu [121]	VI.2	10	3	2	8	1

Table E: Seated Officials Limb Position

KEY:

Arm Position

- A. The arms are crossed over the chest and the hands are under the armpits;
- B. One arm is across the chest, its hand placed on the opposite shoulder; the second hand holds the first arm's elbow;
- C. A variation of Type B, where the second hand is not holding the elbow but the forearm of the arm crossed over the chest; and
- D. Both arms are extended forwards as if to receive fish. This position is reserved for the first two officials of the sub-registers

Tomb	Date	Leg: Type D (Kneeling)	Leg: Type E (Semi Kneeling)	Arm: Type A	Arm: Type B	Arm: Type C	Arm Type D
Ty [35]	V.6-8	-	-	-	-	-	-
Kagemni [94]	VI.1E	1	9	2	3	3	2
Mehu [121]	VI.2	0	10	1	3	2	2

Table F: Seated Officials Individual Characteristics

KEY:¹⁷⁵⁰

Hair

A- Full Head of Hair

Body:

A- Athletic

Clothing:

C- Kilt

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	A (10)	A (10)	C (10)
Mehu [121]	VI.2	A (10)	A(10)	C (10)

Table G: Distributors Limb Positions

Tomb	Date	Leg: Type A (Open Stance)	Arm: Both arms forwards bent at elbows (45) holding Fish	Arm: Forearm angled up Passing fish to top row of officials, other is angled down passing to bottom row.
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	2	1	1
Mehu [121]	VI.2	2	1	1

Table H: Distributors Individual Characteristics

KEY:¹⁷⁵¹

Hair

A- Full Head of Hair

Body:

A- Athletic

Clothing:

C- Kilt

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	A (2)	A (2)	C (2)
Mehu [121]	VI.2	A (2)	A (2)	C (2)

¹⁷⁵⁰ See Appendix 4: Typology: Individual Characteristics.

¹⁷⁵¹ See Appendix 4: Typology: Individual Characteristics.

Table I: Scribe Limb Positions

Tomb	Date	Leg: Type A (Open Stance)	Arm: Both arms forwards bent at elbows (45°) holding writing implements
Ty [35]	V.6-8	-	-
Kagemni [94]	VI.1E	2	2
Mehu [121]	VI.2	2	2

Table J: Scribe Individual Characteristics

KEY:¹⁷⁵²

Hair

A- Full Head of Hair

Body:

A- Athletic

Clothing:

C- Kilt

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	A (2)	A (2)	C (2)
Mehu [121]	VI.2	A (1)	A (1)	C (2) (Pointed)

Table J: Scribal Equipment

Tomb	Date	Writing Implement	Tablet/Board	Ink-well
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	X (2)	X (2)	
Mehu [121]	VI.2	X (1)	X(1)	X (1)

¹⁷⁵² See Appendix 4: Typology: Individual Characteristics.

Table K: Kneeling Bearers Limb Positions

Tomb	Date	Leg: Type D (Kneeling)	Leg: Type E (Semi Kneeling)	Arm: Both arms forwards bent at elbows (45°) holding Fish
Ty [35]	V.6-8	-		-
Kagemni [94]	VI.1E		1	1
Mehu [121]	VI.2	1		1

Table L: Kneeling Bearers Individual Characteristics

KEY:¹⁷⁵³

Hair

A- Full Head of Hair

Body:

A- Athletic

B- Non-Athletic

Clothing:

C- Kilt

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	-	-	-
Kagemni [94]	VI.1E	A (1)	A (1)	-
Mehu [121]	VI.2	-	B (1) (hernia)	C (1)

¹⁷⁵³ See Appendix 4: Typology: Individual Characteristics.

Table M: Bearers Limb Positions

KEY:

Arm Positions

- A. Both arms are bent 45° at the elbow, each reaching up to hold onto the end of a pole;
- B. One arm is placed straight at the body, its hand holding a fish either directly or by rope; the other arm is bent at a 90° angle, holding the fish against the chest or at chest height.
- C. One arm is placed straight at the body, its hand holding a fish; the other arm is bent up at a 45° angle, holding a fish slung over the shoulder or placed in a basket balanced on the shoulder.

Tomb	Date	Leg: Type A (Open Stance)	Leg: Type B (Stride)	Arm: Type A	Arm: Type B	Arm: Type C
Ty [35]	V.6-8	7	1	4 (1x Var.)	1	0
Kagemni [94]	VI.1E	10	0	4 (1x Var.)	3 (1x Var.)	1
Mehu [121]	VI.2	8	0	1 (1x Var.)	0	5

Table N: Bearers Individual Characteristic

KEY:¹⁷⁵⁴

Hair

- A- Full Head of Hair
- B- Receding hair

Body:

- A- Athletic
- B- Non-Athletic

Clothing:

- C- Kilt
- D- Tunic

Tomb	Date	Hair Type	Body Type	Clothing Type
Ty [35]	V.6-8	-	A (8)	C (2)
Kagemni [94]	VI.1E	A (10)	A (10)	C (10)
Mehu [121]	VI.2	A (1), B(6)	A (6), B (1)	C (5), D (2)

¹⁷⁵⁴ See Appendix 4: Typology: Individual Characteristics.

Table O: Captions

Tomb	Transliteration	Translation
Ty [35]	<i>/// t šht ʿz wr.t r m33 ///</i>	[...] very great fields in order to be seen/looked at/verified [...]
Kagemni [94]	<i>ini.t mḥ.yt m šḥ ʿz m33 [///] sḏf3y n</i>	Bringing fish from the great field, oversee [///] endowment(?)
	<i>imy-r isw.t</i>	Overseer of <i>isw.t</i> (x 4 Seated officials)
	<i>hrp is.t</i>	Leader of <i>is.t</i> (x 6 seated officials)
	<i>sš isw.t</i>	Scribe of the <i>isw.t</i>
	<i>sš m mḥyt?</i>	Document/list of fishes
	<i>3nn wn sk.i t(n) sš isw.t</i>	Receive in haste, I attain to you, scribe of the <i>isw.t</i>
	<i>tni ir.t š.t</i>	Count achieved is 100
	<i>imy-r whr.wwy n pr.ḏt</i>	The two Overseers of the fishermen for the estate
Mehu [121]	<i>ini.t wšnw.w in whḥ</i>	Bringing of an offering of fish by fishermen
	<i>mḥ šhn</i>	Behold! The fish rest/dwell
	<i>hrp is.t</i>	Administrator of the <i>is.t</i>
	<i>imy-r isw.t B3-ḥḥ.w</i>	Overseer of the <i>isw.t</i> B3-ḥḥ.w
	<i>imy-r isw.t</i>	Overseer of the <i>isw.t</i>
	<i>mk mḥyt nfrt [///] mḥyt, ssmw.t? n isw.t'</i>	Behold the beautiful fish///procession/registration/// of fish, leader of the <i>isw.t</i>
	<i>ir m h3</i>	One thousand

Gutting and Dehydration Detail Tables A-K

Table A: Occurrence

Tomb	Location	Date
Nefermaat [2]	Maidum	IV.1E
Rahotep [5]	Maidum	IV.2
Nebemakhet [8]	Giza	IV.4-6
Werirniptah [16]	Saqqara	V.3-5
Iymery [20]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Rakhaefankh [26]	Giza	V.6?
Ramaka [28]	Saqqara	V.6-7
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Kapi [30]	Giza	V.6-8E
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Pehenuika [32]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Sopedhotep (D15) [40]	Saqqara	V.6-9
Ptahshepses [41]	Abusir	V.6L-9
Inti [45]	Deshasha	V.8
Neferirtenef [52]	Saqqara	V.8-9
CG 1562 [53]	Saqqara	V.8-9
Werirni [70]	Sheikh Said	V.9
Nikauhor [64]	Saqqara	V.9
Khunes [67]	Zawyet el Maiyetin	V.9
Iynofert/ Shanef [63]	Saqqara	V.9
Ptahhotep II/ Thefi [74]	Saqqara	V.9M-L
Ptahhotep/Iyniankh [80]	Saqqara	V.9-VI.1
Mereri (Hassan Gutting) [79]	Saqqara	V.9-VI
Nebkauhor/ Idu [73]	Giza	V.9 r/u VI.1
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Niankhnesut [99]	Saqqara	VI.1M-L
Mereri [108]	Saqqara	VI.1L-2E
Henqu/ Iy...f II [120]	Deir el-Gebrawi	VI.2
Munich Ag. Mus GL.115 [126]	Giza	VI.2-4E
Pepyankh/ Khuwi [129]	El-Kom el Ahmar Sawaris	VI.3-4E
Ibi [130]	El-Gebrawi	VI.3-4E
Khenty [132]	El-Khokha	VI.3-4M

Table B: Scene Composition

Tomb	Date	Gutting	Dehydration
Nefermaat [2]	IV.1E	X	X
Rahotep [5]	IV.2	X	X
Nebemakhet [8]	IV.4-6	X	X
Werirniptah [16]	V.3-5		X
Iymery [20]	V.6	X	X
Irenkaptah [22]	V.6	X	X
Rakhaefankh [26]	V.6?	-	X
Ramaka [28]	V.6-7	X	X
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X
Kapi [30]	V.6-8E	X	X
Akhethotep (Louvre) [31]	V.6-8E	X	X
Pehenuika [32]	V.6-8E	X	X
Hotepherakhti [34]	V.6-8	X	X
Ty [35]	V.6-8	X	X
CG 1535 [36]	V.6-8	-	-
Sopedhotep (D15) [40]	V.6-9	X	X
Ptahshepses [41]	V.6L-9	-	-
Inti [45]	V.8		X
Neferirtenef [52]	V.8-9	X	X
CG 1562 [53]	V.8-9	X	X
Werirni [70]	V.9	X	X
Nikauhor [64]	V.9	X	X
Khunes [67]	V.9	X	X
Iynofert/ Shanef [63]	V.9	-	-
Ptahhotep II/ Thefi [74]	V.9M-L	X	X
Ptahhotep/Iyniankh [80]	V.9-VI.1	X	X
Mereri (Hassan Gutting) [79]	V.9-VI	X	X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X
Kagemni [94]	VI.1E	X	X
Mereruka [103]	VI.1M-L	X	X
Niankhnesut [99]	VI.1M-L	-	-
Mereri [108]	VI.1L-2E	X	X
Henqu/ Iy...f II [120]	VI.2	X	X
Munich Ag. Mus GL.115 [126]	VI.2-4E	X	X
Pepyankh/ Khuwi [129]	VI.3-4E	-	-
Ibi [130]	VI.3-4E	X	X
Khenty [132]	VI.3-4M	X	X

Table C: Fish Representation

Tomb	Date	Gutted	Simple Features (Head/Spine/Fin)	Detailed Features (Scales, Eye, Mouth Etc.)	Whole Fish	Roe (Individual)
Nefermaat [2]	IV.1E	3				
Rahotep [5]	IV.2	5	X	X	1	
Nebemakhet [8]	IV.4-6	5	X			
Werirniptah [16]	V.3-5	4	X			
Iymery [20]	V.6	4			3	?
Irenkaptah [22]	V.6	6	X		2	
Rakhaefankh [26]	V.6?	-	-	-	-	-
Ramaka [28]	V.6-7	5			2	
Niankhkhnum and Khnumhotep [27]	V.6-7	17	X		3	44+
Kapi [30]	V.6-8E				1	
Akhethotep (Louvre) [31]	V.6-8E	6	X	X	1	4
Pehenuika [32]	V.6-8E	26	X	X	5	23
Hotepherakhti [34]	V.6-8	8	X		3	
Ty [35]	V.6-8	14	X	X	15	19
CG 1535 [36]	V.6-8	2			1	
Sopedhotep (D15) [40]	V.6-9				1	
Ptahshepses [41]	V.6L-9	4	X		1	
Inti [45]	V.8	6	X			
Neferirtenef [52]	V.8-9	9	X		4	
CG 1562 [53]	V.8-9	3			1	
Werirni [70]	V.9	5	X		1	
Nikauhor [64]	V.9	1			2	
Khunes [67]	V.9	2	X			
Iynofert/ Shanef [63]	V.9	-			1	3?
Ptahhotep II/ Thefi [74]	V.9M-L	8	X	X	1	6
Ptahhotep/Iyniankh [80]	V.9-VI.1	5	X		1	
Mereri (Hassan Gutting) [79]	V.9-VI	4	X		1	2
Nebkauhor/ Idu [73]	V.9 r/u VI.1	11	X		3	28
Kagemni [94]	VI.1E				6	6
Mereruka [103]	VI.1M-L	5	X		1	
Niankhnesut [99]	VI.1M-L	4	X			
Mereri [108]	VI.1L-2E	10	X		2	
Henqu/ Iy...f II [120]	VI.2	7	X		1	
Munich Ag. Mus GL.115 [126]	VI.2-4E	3	X		3	
Pepyankh/ Khuwi [129]	VI.3-4E	1	X			
Ibi [130]	VI.3-4E	6	X		2	
Khenty [132]	VI.3-4M	8	X		1	

Table D.1: Fish Species

(G) – Gutted, (W) - Whole

Tomb	Date	<i>Mugil</i> sp.	<i>Tilapia</i> sp.	<i>B. Bynni</i>	<i>Tetraodon</i> <i>Fahaka</i>	<i>M. Caschive</i>
Nefermaat [2]	IV.1E	-	-	-	-	-
Rahotep [5]	IV.2	1 (W)				
Nebemakhet [8]	IV.4-6					
Werirniptah [16]	V.3-5					
Iymery [20]	V.6					
Irenkaptah [22]	V.6					
Rakhaefankh [26]	V.6?		1 (G)	1(G)		
Ramaka [28]	V.6-7					
Niankhkhnum and Khnumhotep [27]	V.6-7	2 (W)			1(G)	
Kapi [30]	V.6-8E	1(W)				
Akhethotep (Louvre) [31]	V.6-8E	1(W)	1(G)			1(G)
Pehenuika [32]	V.6-8E		1 (G), 1(W)			1(G)
Hotepherakhti [34]	V.6-8					
Ty [35]	V.6-8	9 (G)	2(G), 2(W)			1(G)
CG 1535 [36]	V.6-8					
Sopedhotep (D15) [40]	V.6-9					
Ptahshepses [41]	V.6L-9	1(G)				
Inti [45]	V.8					
Neferirtenef [52]	V.8-9	2(W)	1(W)			
CG 1562 [53]	V.8-9					
Werirni [70]	V.9					
Nikauhor [64]	V.9					
Khunes [67]	V.9					
Iynofert/ Shanef [63]	V.9					
Ptahhotep II/ Thefi [74]	V.9M-L	4(W), 2(G)				
Ptahhotep/Iyniankh [80]	V.9-VI.1					
Mereri (Hassan Gutting) [79]	V.9-VI					
Nebkauhor/ Idu [73]	V.9 r/u VI.1					
Kagemni [94]	VI.1E	2(G)	1(W)			
Mereruka [103]	VI.1M-L	1(W)	1(W)	1(W)		
Niankhnesut [99]	VI.1M-L					
Mereri [108]	VI.1L-2E					
Henqu/ Iy...f II [120]	VI.2					
Munich Ag. Mus GL.115 [126]	VI.2-4E	2(G)			1(G)	
Pepyankh/ Khuwi [129]	VI.3-4E					
Ibi [130]	VI.3-4E					
Khenty [132]	VI.3-4M					

Table D.2 Fish Species

(G) – Gutted, (W) - Whole

Tomb	Date	<i>Synodontis</i> ssp.	<i>Clarias</i>	<i>Schilbe</i>	<i>Petrocephalus/ Gnathonemus/ Hyperopisus</i>	<i>Citharinus</i>	<i>M. Electricus</i>
Nefermaat [2]	IV.1E	-	-	-	-	-	-
Rahotep [5]	IV.2						
Nebemakhet [8]	IV.4-6						
Werirniptah [16]	V.3-5						
Iymery [20]	V.6						
Irenkaptah [22]	V.6						
Rakhaefankh [26]	V.6?						
Ramaka [28]	V.6-7						
Niankhkhnum and Khnumhotep [27]	V.6-7						
Kapi [30]	V.6-8E						
Akhethotep (Louvre) [31]	V.6-8E						
Pehenuika [32]	V.6-8E	1(G), 1(W)	2(G)		16(G)	1(G)	2(G)
Hotepherakhti [34]	V.6-8						
Ty [35]	V.6-8	1(G)	1(W)		3(W)		1(W)
CG 1535 [36]	V.6-8						
Sopedhotep (D15) [40]	V.6-9						
Ptahshepses [41]	V.6L-9						
Inti [45]	V.8						
Neferirtenef [52]	V.8-9		2(W)				
CG 1562 [53]	V.8-9						
Werirni [70]	V.9						
Nikauhor [64]	V.9						
Khunes [67]	V.9						
Iynofert/ Shanef [63]	V.9						
Ptahhotep II/ Thefi [74]	V.9M-L						
Ptahhotep/Iyniankh [80]	V.9-VI.1						
Mereri (Hassan Gutting) [79]	V.9-VI						
Nebkauhor/ Idu [73]	V.9 r/u VI.1			1(G)			
Kagemni [94]	VI.1E						
Mereruka [103]	VI.1M-L				1(G)		
Niankhnesut [99]	VI.1M-L						
Mereri [108]	VI.1L-2E						
Henqu/ Iy...f II [120]	VI.2						
Munich Ag. Mus GL.115 [126]	VI.2-4E						
Pepyankh/ Khuwi [129]	VI.3-4E						
Ibi [130]	VI.3-4E						

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	<i>Synodontis ssp.</i>	<i>Clarias</i>	<i>Schilbe</i>	<i>Petrocephalus/ Gnathonemus/ Hyperopisus</i>	<i>Citharus</i>	<i>M. Electricus</i>
Khenty [132]	VI.3-4M						

Table E: Number of Gutters

Tomb	Date	Number of Gutters
Nefermaat [2]	IV.1E	1
Rahotep [5]	IV.2	1
Nebemakhet [8]	IV.4-6	1
Werirniptah [16]	V.3-5	-
Iymery [20]	V.6	1
Irenkaptah [22]	V.6	2
Rakhaefankh [26]	V.6?	-
Ramaka [28]	V.6-7	1
Niankhkhnum and Khnumhotep [27]	V.6-7	3
Kapi [30]	V.6-8E	1
Akhethotep (Louvre) [31]	V.6-8E	1+ (Assistant)
Pehenuika [32]	V.6-8E	2
Hotepherakhti [34]	V.6-8	2
Ty [35]	V.6-8	2
CG 1535 [36]	V.6-8	1
Sopedhotep (D15) [40]	V.6-9	1
Ptahshepses [41]	V.6L-9	-
Inti [45]	V.8	0
Neferirtenef [52]	V.8-9	1
CG 1562 [53]	V.8-9	2
Werirni [70]	V.9	1
Nikauhor [64]	V.9	1
Khunes [67]	V.9	1
Iynofert/ Shanef [63]	V.9	1
Ptahhotep II/ Thefi [74]	V.9M-L	1
Ptahhotep/Iyniankh [80]	V.9-VI.1	1
Mereri (Hassan Gutting) [79]	V.9-VI	1
Nebkauhor/ Idu [73]	V.9 r/u VI.1	1
Kagemni [94]	VI.1E	2
Mereruka [103]	VI.1M-L	1
Niankhnesut [99]	VI.1M-L	-
Mereri [108]	VI.1L-2E	2
Henqu/ Iy...f II [120]	VI.2	1

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Number of Gutters
Munich Ag. Mus GL.115 [126]	VI.2-4E	1
Pepyankh/ Khuwi [129]	VI.3-4E	0
Ibi [130]	VI.3-4E	2
Khenty [132]	VI.3-4M	1

Table F: Scene Setting

Tomb	Date	Natural Setting	No Detail/ Unknown
Nefermaat [2]	IV.1E	X	
Rahotep [5]	IV.2	X	
Nebemakhet [8]	IV.4-6		X
Werirniptah [16]	V.3-5		X
Iymery [20]	V.6	X	
Irenkaptah [22]	V.6		X
Rakhaefankh [26]	V.6?	X	
Ramaka [28]	V.6-7	X	
Niankhkhnum and Khnumhotep [27]	V.6-7	X	
Kapi [30]	V.6-8E	X	
Akhethotep (Louvre) [31]	V.6-8E	X	
Pehenuika [32]	V.6-8E	X	
Hotepherakhti [34]	V.6-8		X
Ty [35]	V.6-8	X	
CG 1535 [36]	V.6-8	X	
Sopedhotep (D15) [40]	V.6-9		X
Ptahshepses [41]	V.6L-9		X
Inti [45]	V.8		X
Neferirteneft [52]	V.8-9		X
CG 1562 [53]	V.8-9	X	
Werirni [70]	V.9	X	
Nikauhor [64]	V.9	X	
Khunes [67]	V.9	X	
Iynofert/ Shanef [63]	V.9		X
Ptahhotep II/ Thefi [74]	V.9M-L		X
Ptahhotep/Iyniankh [80]	V.9-VI.1		X
Mereri (Hassan Gutting) [79]	V.9-VI		X
Nebkauhor/ Idu [73]	V.9 r/u VI.1		X
Kagemni [94]	VI.1E	X	
Mereruka [103]	VI.1M-L		X
Niankhnesut [99]	VI.1M-L		X
Mereri [108]	VI.1L-2E		X

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Natural Setting	No Detail/ Unknown
Henqu/ Iy...f II [120]	VI.2	X?	
Munich Ag. Mus GL.115 [126]	VI.2-4E	X	
Pepyankh/ Khuwi [129]	VI.3-4E		
Ibi [130]	VI.3-4E	X	
Khenty [132]	VI.3-4M		X

Table G: Fish Placement in scene

Tomb	Date	Random spread	Aligned spread	In Baskets
Nefermaat [2]	IV.1E	X?		
Rahotep [5]	IV.2	X		
Nebemakhet [8]	IV.4-6	X		
Werirniptah [16]	V.3-5		X	
Iymery [20]	V.6	X		
Irenkaptah [22]	V.6	X		
Rakhaefankh [26]	V.6?	X		
Ramaka [28]	V.6-7	X		X
Niankhkhnum and Khnumhotep [27]	V.6-7	X		
Kapi [30]	V.6-8E	-	-	-
Akhethotep (Louvre) [31]	V.6-8E	X		
Pehenuika [32]	V.6-8E	X		
Hotepherakhti [34]	V.6-8	X		
Ty [35]	V.6-8	X		X
CG 1535 [36]	V.6-8	-	-	-
Sopedhotep (D15) [40]	V.6-9	-	-	-
Ptahshepses [41]	V.6L-9	X		
Inti [45]	V.8		X	
Neferirtene[52]	V.8-9	X		X
CG 1562 [53]	V.8-9	X		
Werirni [70]	V.9		X	
Nikauhor [64]	V.9	-	-	-
Khunes [67]	V.9	X		
Iynofert/ Shanef [63]	V.9	-	-	-
Ptahhotep II/ Thefi [74]	V.9M-L	X		
Ptahhotep/Iyniankh [80]	V.9-VI.1	X		
Mereri (Hassan Gutting) [79]	V.9-VI	X		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X		
Kagemni [94]	VI.1E	X		
Mereruka [103]	VI.1M-L		X (On Sub-Register)	
Niankhnesut [99]	VI.1M-L	X		

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Random spread	Aligned spread	In Baskets
Mereri [108]	VI.1L-2E		X	
Henqu/ Iy...f II [120]	VI.2	X		
Munich Ag. Mus GL.115 [126]	VI.2-4E	X		
Pepyankh/ Khuwi [129]	VI.3-4E	-	-	-
Ibi [130]	VI.3-4E		X	
Khenty [132]	VI.3-4M		X	

Table H: Equipment

Tomb	Date	Broad Bladed Knife	Thin Bladed Knife	Short Knife	Knife type Unknown	Board	Seat	Mat	Stool	Exclusion of Seat
Nefermaat [2]	IV.1E				X					X
Rahotep [5]	IV.2	X								X
Nebemakhet [8]	IV.4-6	X				X			X	
Werirniptah [16]	V.3-5	-	-	-	-	-	-	-	-	-
Iymery [20]	V.6	-	-	-	-	X				X
Irenkaptah [22]	V.6	X (1)	X (1)			X (2)		X (1)		1(X)
Rakhaefankh [26]	V.6?	-	-	-	-	-	-	-	-	-
Ramaka [28]	V.6-7	X					X			
Niankhkhnum and Khnumhotep [27]	V.6-7		X (3)			X (3)				X (3)
Kapi [30]	V.6-8E	X					X			
Akhethotep (Louvre) [31]	V.6-8E			X						X
Pehenuika [32]	V.6-8E		X	X		X (2)			X (2)	
Hotepherakhti [34]	V.6-8			X		-				X
Ty [35]	V.6-8		X (2)							
CG 1535 [36]	V.6-8				X				X	
Sopedhotep (D15) [40]	V.6-9		X			X			X	
Ptahshepses [41]	V.6L-9	-	-	-	-	-	-	-	-	-
Inti [45]	V.8	-	-	-	-	-	-	-	-	-
Neferirtenef [52]	V.8-9				X	X				X
CG 1562 [53]	V.8-9				X (2)	X?				X (2)
Werirni [70]	V.9	X				X				X
Nikauhor [64]	V.9				X	X	X			
Khunes [67]	V.9	-	-	-	-	X				
Iynofert/ Shanef [63]	V.9		X			X?	X			

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Broad Bladed Knife	Thin Bladed Knife	Short Knife	Knife type Unknown	Board	Seat	Mat	Stool	Exclusion of Seat
Ptahhotep II/ Thefi [74]	V.9M-L			X		X				X
Ptahhotep/Iyniankh [80]	V.9-VI.1				X		X			
Mereri (Hassan Gutting) [79]	V.9-VI		X				X			
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-	-	-	-	X	-	-	-	-
Kagemni [94]	VI.1E		X (2)			X (2)				X (2)
Mereruka [103]	VI.1M-L			X		X				X
Niankhnesut [99]	VI.1M-L	-	-	-	-	-	-	-	-	-
Mereri [108]	VI.1L-2E			X (2)		X (2)	X (2)			
Henqu/ Iy...f II [120]	VI.2			X			X			
Munich Ag. Mus GL.115 [126]	VI.2-4E				X		X			
Pepyankh/ Khuwi [129]	VI.3-4E	-	-	-	-	-	-	-	-	-
Ibi [130]	VI.3-4E			X (2)		X (2)				X (2)
Khenty [132]	VI.3-4M	-	-	-	-	X				X

Table I: Gutter's Limb Positions
KEY:

Arm Position:

GA: Forearm: - the arm at the forefront of the figure is gutting the fish; and

GB: Other: - (rear arm) gutting the fish.

Tomb	Date	Leg Position D: Kneeling	Leg Position E: Semi Kneeling	Leg Position F.1: Both legs to Chest	Leg Position F.2: One leg to Chest other extended.	Arm Position GA	Arm Position GB
Nefermaat [2]	IV.1E		X			-	-
Rahotep [5]	IV.2		X			X (Var) ¹⁷⁵⁵	
Nebemakhet [8]	IV.4-6			X (Var)		X	
Werirniptah [16]	V.3-5	-	-	-	-	-	-
Iymery [20]	V.6			X (2)		X	
Irenkaptah [22]	V.6			X (2)			X (2)
Rakhaefankh [26]	V.6?	-	-	-	-	-	-
Ramaka [28]	V.6-7				X	X	
Niankhkhnum and Khnumhotep [27]	V.6-7			X (3)		X	X (2)
Kapi [30]	V.6-8E			X		X	
Akhethotep (Louvre) [31]	V.6-8E			X	X	X	
Pehenuika [32]	V.6-8E			X (2)		X	X
Hotepherakhti [34]	V.6-8			X		X	
Ty [35]	V.6-8			X (2)		X	X
CG 1535 [36]	V.6-8	X				-	-
Sopedhotep (D15) [40]	V.6-9			X		X	
Ptahshepses [41]	V.6L-9	-	-	-	-	-	-
Inti [45]	V.8	-	-	-	-	-	-
Neferirtenef [52]	V.8-9			X			X
CG 1562 [53]	V.8-9			X			X
Werirni [70]	V.9			X		X	
Nikauhor [64]	V.9			X		-	-
Khunes [67]	V.9	-	-	-	-	-	-
Iynofert/ Shanef [63]	V.9			X		X	
Ptahhotep II/ Thefi [74]	V.9M-L			X		X	
Ptahhotep/Iyniankh [80]	V.9-VI.1			X			X
Mereri (Hassan Gutting) [79]	V.9-VI			X		X	

¹⁷⁵⁵ Gutter is holding fish across chest.

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Leg Position D: Kneeling	Leg Position E: Semi Kneeling	Leg Position F.1: Both legs to Chest	Leg Position F.2: One leg to Chest other extended.	Arm Position GA	Arm Position GB
Nebkauhor/ Idu [73]	V.9 r/u VI.1			X			X
Kagemni [94]	VI.1E			X (2)		X	X
Mereruka [103]	VI.1M-L		X			X	
Niankhnesut [99]	VI.1M-L	-	-	-	-	-	-
Mereri [108]	VI.1L-2E			X (2)		X	X
Henqu/ Iy...f II [120]	VI.2		X			X	
Munich Ag. Mus GL.115 [126]	VI.2-4E	X				-	-
Pepyankh/ Khuwi [129]	VI.3-4E	-	-	-	-	-	-
Ibi [130]	VI.3-4E		X (2)			X	
Khenty [132]	VI.3-4M			X		-	-

Table J: Individual Characteristics

KEY:

Hair

- A- Full Head of Hair
B- Receding hair

Body:

- A- Athletic
B- Non-Athletic

Clothing:

- C- Kilt

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type C
Nefermaat [2]	IV.1E	-	-	-	-	-
Rahotep [5]	IV.2	X		X		-
Nebemakhet [8]	IV.4-6	X		X		X
Werirniptah [16]	V.3-5	-	-	-	-	-
Iymery [20]	V.6	X		X		X
Irenkaptah [22]	V.6		X (2)	X	X	X (2)
Rakhaefankh [26]	V.6?	-	-	-	-	-
Ramaka [28]	V.6-7	X			X	X
Niankhkhnum and Khnumhotep [27]	V.6-7		X	X (3)		X (2)
Kapi [30]	V.6-8E	-	-	X		-
Akhethotep (Louvre) [31]	V.6-8E		X		X	X
Pehenuika [32]	V.6-8E	X	X	X (2)		X (2)
Hotepherakhti [34]	V.6-8	X		-	-	-
Ty [35]	V.6-8		X (2)	X (2)		X (2)
CG 1535 [36]	V.6-8	-	-	-	-	X
Sopedhotep (D15) [40]	V.6-9	-	-	-	-	X
Ptahshepses [41]	V.6L-9	-	-	-	-	-
Inti [45]	V.8	-	-	-	-	-

Appendix 2: Detail Tables: Gutting and Dehydration

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type C
Neferirtenef [52]	V.8-9	-	-	-	-	-
CG 1562 [53]	V.8-9	X		X	-	-
Werirni [70]	V.9	X		X		X
Nikauhor [64]	V.9	-	-	X		-
Khunes [67]	V.9	X		X		X
Iynofert/ Shanef [63]	V.9	-	-	X		X
Ptahhotep II/ Thefi [74]	V.9M-L		X		X	X
Ptahhotep/Iyniankh [80]	V.9-VI.1		X	X		X
Mereri (Hassan Gutting) [79]	V.9-VI	-	-	X		X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-	-	-	-	-
Kagemni [94]	VI.1E	-	-	X (2)		X (2)
Mereruka [103]	VI.1M-L	X		X		X
Niankhnesut [99]	VI.1M-L	-	-	-	-	-
Mereri [108]	VI.1L-2E	X	X	X	X	X (2)
Henqu/ Iy...f II [120]	VI.2	X		X		X
Munich Ag. Mus GL.115 [126]	VI.2-4E	-	-	X		-
Pepyankh/ Khuwi [129]	VI.3-4E	-	-	-	-	-
Ibi [130]	VI.3-4E	X (2)		X (2)		X (2)
Khenty [132]	VI.3-4M	X		X		X

Table K: Captions

Tomb	Transliteration	Translation
Akhethotep (Louvre) [31]	<i>wšn s</i>	Make offering?
	<i>d(w) m spꜣt</i>	Placing in the Nome
Pehenuika [32]	<i>wgs mhyt</i>	Gutting the fish
Ptahshepses [41]	<i>wgs</i>	Gutting
Ptahhotep /Iyniankh [80]	<i>wgs mhyt</i>	Gutting the fish
Mereruka [103]	<i>ʿymri</i>	Iymeri ? (a Name)
Munich Ag. Mus GL.115 [126]	<i>ṯni</i>	a name?
Ibi [130]	<i>wgs</i>	Gutting

Markets Detail Tables A-H

Table A: Occurrence of Fish in Markets

Tomb	Location	Date
Tepemankh (II) [17]	Saqqara	V.5-6?
Fetekta [25]	Abusir	V.6-?
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1
Ankhmahor [102]	Saqqara	VI.1M

Table B.1: The Presentation of the Fish

Tomb	Date	Whole Carcass	Gutted Carcass
Tepemankh (II) [17]	V.5-6?	X	
Fetekta [25]	V.6-?	X	
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X
Ankhmahor [102]	VI.1M		X

Table B.2: Sale of Fishing Equipment

Tomb	Date	Hooks
Tepemankh (II) [17]	V.5-6?	
Fetekta [25]	V.6-?	X
Niankhkhnum and Khnumhotep [27]	V.6-7	X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	
Ankhmahor [102]	VI.1M	

Table C: Fish Species

Tomb	Date	<i>Mugil sp.</i>	<i>Synodontis</i>	<i>M Caschive</i>	<i>M. Kannume</i>	<i>Citharinus</i>	<i>Gnathonemus</i>	<i>Petrocephalus</i>	<i>Hyperopisus</i>	<i>Clarias</i>	<i>Tilapia sp.</i>	<i>M. Electricus</i>	<i>Schilbe</i>
Tepemankh (II) [17]	V.5-6?	X (3)	X	X?	X?	X		X		X	X?		
Fetekta [25]	V.6-?		X									X	
Niankhkhnum and Khnumhotep [27]	V.6-7	X					X(2)?		X(2)?				
Nebkauhor/ Idu [73]	V.9 r/u VI.1		X										X
Ankhmahor [102]	VI.1M	-	-	-	-	-	-	-	-	-	-	-	-

Table D: Storage/ Transportation Vessels for Fish

Tomb	Date	Vessel	Decoration
Tepemankh (II) [17]	V.5-6?	Flat platform	Equidistant vertical lines
Fetekta [25]	V.6-?	Trapezoidal basket	Yellow with brown outline; basket weave lines.
Niankhkhnum and Khnumhotep [27]	V.6-7	S1- Flat platform	S1- None
		S2- Shallow basket	S2- None
Nebkauhor/ Idu [73]	V.9 r/u VI.1	None-: Floating in register	None
Ankhmahor [102]	VI.1M	S1- Crescent shaped vessel	S1- None
		S2- Conical basket/vessel	S2- None

Table E: Minor Figures

Tomb	Date	Merchant	Male	Female	Customer	Male	Female
Tepemankh (II) [17]	V.5-6?	X	X		X	X	
Fetekta [25]	V.6-?	X (2)	X (2)		X		X
Niankhkhnum and Khnumhotep [27]	V.6-7	X (3)	X (3)		X (2)	X (2)	
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X		X	X	
Ankhmahor [102]	VI.1M	X (2)	X (2)		X (2)	X (2)	

Table F: Merchant Limb Positions and Individual Characteristics**KEY:****Leg Position:***A- Open Stance**E- Semi Kneeling**F.1- Seated: Both legs drawn to chest.***Hair Type:***A- Full head of Hair**B- Receding Hair***Body Type:***A- Athletic***Clothing:***C- Kilt*

Tomb	Date	Arm Position	Leg Position	Hair Type	Body Type	Clothing Type
Tepemankh (II) [17]	V.5-6?	Arms extended either side of body	A	-	A	C

Appendix 2: Detail Tables: Markets

Tomb	Date	Arm Position	Leg Position	Hair Type	Body Type	Clothing Type
Fetekta [25]	V.6-?	Arms extended forwards, one arms elbow turned outwards to top of register	E	-	A	C
		Both hands extended forwards	A	-	A	C
Niankhkhnum and Khnumhotep [27]	V.6-7	S1- Both arms extended forwards	E	B	A	C + linen sack over shoulders?
		S2- Both arms extended forwards	E	B	A	C linen sack over shoulders?
		S2- Both arms extended forwards, forearm is slightly lower.	A	B	A	C linen sack over shoulders?
Nebkauhor/ Idu [73]	V.9 r/u VI.1	Arms extended to either side	A	A	A	C
Ankhmahor [102]	VI.1M	S1- Both arms extended forwards, one pulled close to chest	F.1	A	A	C
		S2- One arm Both arms extended forwards, one pulled close to chest	F.1	-	A	C

Table G: Customer Limb Positions and Individual Characteristics

KEY:

Leg Position:

A- Open Stance

E- Semi Kneeling

Hair Type:

A- Full head of Hair

B- Receding Hair

Body Type:

A- Athletic

Clothing:

C- Kilt

Tomb	Date	Arm Position	Leg Position	Hair Type	Body Type	Clothing Type
Tepemankh (II) [17]	V.5-6?	Arms either side; Arm in front extended downwards, rear arm extended upwards holding item.	A	A	A	C
Fetekta [25]	V.6-?	Arms either side; Arm in front extended downwards, rear arm extended upwards holding item.	A	A	A	Dress
		Arms at rest by sides	A	A	A	C

Appendix 2: Detail Tables: Markets

Tomb	Date	Arm Position	Leg Position	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	S1- Arms extended forwards, one extending Item to Merchant	A	A	A	C
		S2- Both arms in front and pulled closely to torso	E	B	A	C + linen sack over shoulders?
Nebkauhor/ Idu [73]	V.9 r/u VI.1	One arm extended towards Merchant, Other across chest	E?	A	A	C + Staff
Ankhmahor [102]	VI.1M	S1- Both arms extended forwards elbows at right angles	A	-	A	C
		S2- Arms either side; Arm in front extended upwards holding Item, rear arm extended upwards holding item.	A	-	A	C

Table H: Captions

Tomb	Transliteration	Translation
Tepemankh (II) [17]	<i>ḏi irr mhyt... snb ph///???</i>	(Cause to) see the fish... healthy...
Fetekta [25]	<i>//i///y 'I ///m rdī nb.t hrī hr sīw¹⁷⁵⁶</i>	
	<i>mꜣꜣ mn m dt (ḏrt)?</i>	Look, attached /in (my) hand(s)
	<i>rdī m////////</i>	Give/Place etc.////////
	<i>snīh.t</i>	Hooks? ¹⁷⁵⁷
Niankhkhnum and Khnumhotep [27]	S1: <i>īm išt.k r mḥit(.i) swnt</i>	Give your food (in exchange) against my fish (as) purchase price.
	S1: <i>bgst</i>	<i>Mugil</i> ¹⁷⁵⁸
	S2: <i>wḏi hr.f wḏz išt(.i) r ib nḏm swnt</i>	O engraver, the rest of my food (in exchange) a happy heart (as) purchase price
	S2: <i>wḏr(.i) ḥtm</i>	I cut the seal cylinder!
Ankhmahor [102]	S1: (Merchant) <i>mꜣꜣ.k iṣ ndḥ (?) .k pn m ḥt.k ḏd.k wꜣḥ.ti ḥt (?) iṣ pw</i>	Look! Your... is as your thing. Say, may you the put down this thing

¹⁷⁵⁶ Van Elsbergen does not include a translation for this fragmentary text (Van Elsbergen, *Fischerei*, 134 ft [1]).

¹⁷⁵⁷ *snīh* can be translated as 'angler', as seen in Kagemni [94]. Faulkner, *Dictionary*, 230.

¹⁷⁵⁸ Van Elsbergen translates this as '*Mugil*' (Van Elsbergen, *Fischerei*, 251-2).

Appendix 2: Detail Tables: Markets

Tomb	Transliteration	Translation
	S1: (Customer) <i>nfr wrt</i>	very good
	S2: (Merchant) <i>m33 nw n...</i>	look these...
	S2: (Customer) <i>ikr</i>	Excellent

Fish Bearing Detail Tables A-H

Table A: Occurrence of Scene

Tomb	Location	Date
Rahotep [5]	Maidum	IV.1L-2
Akhethotep (G7650) [14]	Giza	IV.2-4
Nebemakhet [8]	Giza	IV.4-6
Persen [9]	Giza	V.1-2
Werirniptah [16]	Saqqara	V.3-5
Nefer and Kahay [18]	Saqqara	V.6E
Rakhaefankh [26]	Giza	V.6?
Iymery [20]	Giza	V.6
Iynofret [19]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ramaka [28]	Saqqara	V.6-7
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Hotepherakhti [34]	Saqqara	V.6-8
CG 1535 [36]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Inti [45]	Deshasha	V.8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Neferirtenef [52]	Saqqara	V.8-9
Hesimin (M22) [56]	El- Hawawish	V.8L-9E
Kaiemankh [57]	Giza	V.8L-9E
Iynofert/ Shanef [63]	Saqqara	V.9
Nebet [62]	Saqqara	V.9
Kairer [66]	Saqqara	V.9
Akhmerutnesut [82]	Giza	V.9-VI.1
Kagemni [94]	Saqqara	VI.1E
In-Snefru-Ishtef [96]	Saqqara	VI.1
Nikauisesi [101]	Saqqara	VI.1M
Ankhmahor [102]	Saqqara	VI.1M
Mereruka [103]	Saqqara	VI.1M-L
Niankhnesut [99]	Saqqara	VI.1M-L
Watetkhet-Hor/Seshseshet [104]	Saqqara	VI.1M-L
Remni/ Merwi [109]	Saqqara	VI.1L-2E
Wedjahateti/ Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E
Meryteti/ Meri [116]	Saqqara	VI.1L-2M
Merefnebef [117]	Saqqara	VI.1L-2L
Mehu [121]	Saqqara	VI.2
Munich Ag. Mus GL. 115 [126]	Giza	VI.2-4E
Ibi [130]	Deir el-Gebrawi	VI.3-4E
Idu 1 [128]	Dendera	VI.3-4E
Meryrenefer/ Qar [133]	Giza	VI.3-4
Khenty [132]	El Khokha	VI.3-4M
Pepyankh/ Henykem [146]	Meir	VI.4L
Mery Aa [158]	El-Hagarsa	VI.L-VIII E
Tjemerery [159]	Naga el- Deir	VI-FIP
Twau [160]	Naga el-Deir	VI-FIP

Table B: Method of Transportation of Fish
KEY:

S: String is threaded through the mouth of the fish

M: The fish is attached to the pole via mouth/ or held by the mouth by a figure

Tomb	Date	Scene	Hand	Pole	Round basket	Rectangular Basket	Held over shoulder/ Back	Other
Rahotep [5]	IV.1L-2			1(M)				
Akhethotep (G7650) [14]	IV.2-4		2 (S)					
Nebemakhet [8]	IV.4-6		3	3 (M)				
Persen [9]	V.1-2		2	2				
Werirniptah [16]	V.3-5		-	-	-	-	-	-
Nefer and Kahay [18]	V.6E		1					
Rakhaefankh [26]	V.6?			3 (S)				
Iymery [20]	V.6		2					1 on platter
Iynofret [19]	V.6		4				1	
Irenkaptah [22]	V.6		2				1	1 on platter
Niankhkhnum and Khnumhotep [27]	V.6-7	S1	6					
		S2	4 (S)					
Ramaka [28]	V.6-7				6			
Akhethotep (Louvre) [31]	V.6-8E		2 1 (S)					2 in a sack
Hotepherakhti [34]	V.6-8				2?	1?		
CG 1535 [36]	V.6-8		2					
Ptahshepses [41]	V.6L-9		2(S) 2	1			2	
Inti [45]	V.8			3(S)				
Kayemnofret (D23) [51]	V.8-9		1(S)	2?		2		2 in trapezoidal basket
Neferirtenef [52]	V.8-9		1(S?)					
Hesimin (M22) [56]	V.8L-9E		3(S)					
Kaiemankh [57]	V.8L-9E		3(S) 1					
Iynofert/ Shanef [63]	V.9		6 2(S)					
Nebet [62]	V.9		4 6(S)			2		
Kairer [66]	V.9		-	-	-	-		

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	Scene	Hand	Pole	Round basket	Rectangular Basket	Held over shoulder/Back	Other
Akhmerutnesut [82]	V.9-VI.1				UK ¹⁷⁵⁹			
Kagemni [94]	VI.1E		1 1(S)					
In-Snefru-Ishtef [96]	VI.1		3	1			1	
Nikauisesi [101]	VI.1M		2			6		
Ankhmahor [102]	VI.1M		-	-	-	-	-	-
Mereruka [103]	VI.1M-L	S1		1(S)	6			
		S2	4(S)	3(S)	4		1	
		S3 ¹⁷⁶⁰	9	3				
Niankhnesut [99]	VI.1M-L		2				1	
Watetkhet-Hor /Seshseshet [104]	VI.1M-L		9				1	
Remni/ Merwi [109]	VI.1L-2E		2?					
Wedjahateti/ Neferseshemtah/ Sheshi [112]	VI.1L-2E		2(S) 4					2 in harnesses of rope
Meryteti/ Meri [116]	VI.1L-2M		13(S) 5	6 (S)	4		3	
Merefnebef [117]	VI.1L-2L		2					
Munich Ag. Mus GL.115 [126]	VI.2-4E			6?(S)				
Ibi [130]	VI.3-4E			5(S)				
Idu 1 [128]	VI.3-4E			16 (S) 4(M)				3 Held above head
Meryrenefer/ Qar [133]	VI.3-4		1					
Khenty [132]	VI.3-4M			8(S)				
Pepyankh/ Henykem [146]	VI.4L		2(S)					7 (min) in trapezoidal baskets
Mery Aa [158]	VI.L-VIIIE			2(S)				
Tjemerery [159]	VI-FIP		-	-	-	-	-	-
Twau [160]	VI-FIP		-	-	-	-	-	-

¹⁷⁵⁹ Description given by D'auria states that the men are carrying home multiple fish within a round basket trap; D'auria, *Mummies and Magic*, 86.

¹⁷⁶⁰ Due to damage to the scene the fish can be shown in numbers but not if they were strung by the mouth or held by mouth.

Table C.1: Fish Species
KEY:

C: The fish is carried by hand:

P: Fish is carried by pole: and

B: Fish is within (any) basket. (BP-

Basket carried on a pole)

UK: Unknown

Tomb	Date	<i>Mugil</i> sp.	<i>Tilapia</i> sp.	<i>Lates</i>	<i>Clarias</i> sp.	<i>Citharinus</i>	<i>Mormyrus</i> <i>Kannume/</i> <i>Caschive</i>
Rahotep [5]	IV.1L-2			1(P)			
Akhethotep (G7650) [14]	IV.2-4		1 (C)				
Nebemakheth [8]	IV.4-6	2 (C)	1 (C)	1 (P)	1 (P)		
Persen [9]	V.1-2		1 (P)		1(P)		1? (C)
Werirniptah [16]	V.3-5	-	-	-	-	-	-
Nefer and Kahay [18]	V.6E						
Rakhaefankh [26]	V.6?		1(P)		1(P)		1? (P)
Iymery [20]	V.6	1(C)					
Iynofret [19]	V.6	1(C)					
Irenkaptah [22]	V.6	2 (C)		1 (C)			
Niankhkhnum and Khnumhotep [27]	V.6-7	3(C)	2(C)		1(C)		2(C)
Ramaka [28]	V.6-7	2(BP)			1(BP)		1(BP)
Akhethotep (Louvre) [31]	V.6-8E		1(C)	1?(BP)	1(C)		1(BP)
Hotepherakhti [34]	V.6-8		1(BP)		1(BP)		
CG 1535 [36]	V.6-8		(C)		1(C)		
Ptahshepses [41]	V.6L-9				2(C) 2(P)		2?(C)
Inti [45]	V.8			1(P)	1(P)		1(P)
Kayemnofret (D23) [51]	V.8-9	1(B)			2(BP) 1(P)	1(C)	1(P)
Neferirtenef [52]	V.8-9	1(C)					
Hesimin (M22) [56]	V.8L-9E			1(C)	3?(C)		
Kaiemankh [57]	V.8L-9E	1(C)	1(C)		1(C)		1(C)
Iynofert/ Shanef [63]	V.9	2(C)			1(C)		1?(C)
Nebet [62]	V.9	5(C)	3(C)			1(C)	
Kairer [66]	V.9	1					
Akhmerutnesut [82]	V.9-VI.1	-	-	-	-	-	-
Kagemni [94]	VI.1E	1(C)		1(C)			
In-Snefru-Ishtef [96]	VI.1	1(C)					
Nikauisesi [101]	VI.1M	1(C)	1(C)				2(B)
Ankhmahor [102]	VI.1M		X				
Mereruka [103]	VI.1M-L	1(B) 1u k	1(P) 2(B)	3(C) 2(P)			

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	<i>Mugil sp.</i>	<i>Tilapia sp.</i>	<i>Lates</i>	<i>Clarias sp.</i>	<i>Citharinus</i>	<i>Mormyrus Kannume/ Caschive</i>
			2 uk				
Niankhnesut [99]	VI.1M-L	1(C)		1(C)			
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	4(C)	1(C)	1(C)			1(C)
Remni/ Merwi [109]	VI.1L-2E						
Wedjahateti/ Neferseshemtah/ Sheshi [112]	VI.1L-2E	2(C)		1(C)	1(C)		
Meryteti/ Meri [116]	VI.1L-2M	3(C)	4(C) 3(P)	8(C) 3(P)		1(C)	2(C) 1(P)
Merefnebef [117]	VI.1L-2L	1(C)					
Munich Ag. Mus GL.115 [126]	VI.2-4E						
Ibi [130]	VI.3-4E		2(P)				
Idu 1 [128]	VI.3-4E		3(P)	3(C) 3(P)	1?(P)	1?(P)	1(P)
Meryrenefer/ Qar [133]	VI.3-4	1?(C)					
Khenty [132]	VI.3-4M					1(P)	
Pepyankh/ Henykem [146]	VI.4L		1(C)		1(C)		
Mery Aa [158]	VI.L-VIII E		2(P)				
Tjemerery [159]	VI-FIP	-	-	-	-	-	-
Twau [160]	VI-FIP	-	-	-	-	-	-

Table C.2: Fish Species
KEY:

C: The fish is carried by hand:

P: Fish is carried by pole: and

B: Fish is within (any) basket. (BP-

Basket carried on a pole)

UK: Unknown

Tomb	Date	<i>Synodontis</i> sp.	<i>Petrocephalus</i> / <i>Gnathonemus</i> / <i>Hyperopisus</i>	<i>M. electricus</i>	Unknown	<i>Barbus bynni</i>
Rahotep [5]	IV.1L-2					
Akhethotep (G7650) [14]	IV.2-4				1(C)	
Nebemakhet [8]	IV.4-6				1(P)	
Persen [9]	V.1-2				1(C)	
Werirniptah [16]	V.3-5	-		-	-	
Nefer and Kahay [18]	V.6E	1(C)				
Rakhaefankh [26]	V.6?					
Iymery [20]	V.6	1(C)				
Iynofret [19]	V.6				3(C)	
Irenkaptah [22]	V.6					
Niankhkhnum and Khnumhotep [27]	V.6-7	1(C)	1(C)			
Ramaka [28]	V.6-7					
Akhethotep (Louvre) [31]	V.6-8E	1(C)				
Hotepherakhti [34]	V.6-8	1(BP)			3(BP)	
CG 1535 [36]	V.6-8					
Ptahshepses [41]	V.6L-9				1(C)	
Inti [45]	V.8					
Kayemnofret (D23) [51]	V.8-9		1(BP)		2(BP)	
Neferirtenef [52]	V.8-9					
Hesimin (M22) [56]	V.8L-9E					
Kaiemankh [57]	V.8L-9E					
Iynofert/ Shanef [63]	V.9				5(C)	
Nebet [62]	V.9		1(C)			
Kairer [66]	V.9				1(C?)	
Akhmerutnesut [82]	V.9-VI.1	-	-	-	-	
Kagemni [94]	VI.1E					
In-Snefru-Ishtef [96]	VI.1				2(C)	
Nikauisesi [101]	VI.1M	1(B)			6(B)	
Ankhmahor [102]	VI.1M				1	
Mereruka [103]	VI.1M-L		1(B)		13 (UK) 3(B) 3(C)	
Niankhnesut [99]	VI.1M-L				2(C)	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L				2(C)	
Remni/ Merwi [109]	VI.1L-2E				2(C)	

Appendix 2: Detail Tables: Fish Bearing

Wedjahateti/ Neferseshemphah/ Sheshi [112]	VI.1L-2E	1(C)	1(C)			
Meryteti/ Meri [116]	VI.1L-2M		2(C) 1(P)		2(C) 3(P) 4(BP)	
Merefnebef [117]	VI.1L-2L		1(C)			
Munich Ag. Mus GL.115 [126]	VI.2-4E				5(P)	
Ibi [130]	VI.3-4E		1(P)	1(P)	2(P)	
Idu 1 [128]	VI.3-4E				10(P)	1(P)
Meryrenefer/ Qar [133]	VI.3-4					
Khenty [132]	VI.3-4M	1(P)	1(P)			2(P)
Pepyankh/ Henykem [146]	VI.4L				6(B)	1(B)
Mery Aa [158]	VI.L-VIII E					
Tjemerery [159]	VI-FIP	-	-	-	-	-
Twau [160]	VI-FIP	-	-	-	-	-

Table D. Arm Positions

KEY:

- BA.1:* Both arms bent at the elbow at forty-five degrees reaching up to hold onto the pole.
BA.2: One arm straight along the body holding a fish; the other arm at waist height or lower.
BA.3: one arm along the side of his body holding a fish; other arm is bent up from waist height or higher.
BA.4: Type 4 figures are holding a large fish with the vertical arm holding the tail and the bent arm in front supporting the head of the fish.
BA.5: One arm of the figure is depicted in front of the chest while the other is raised and bent at 90 degrees with the elbow turned out facing the top of the register, and;
BA.6: The arms are depicted at either side of the body (turned out to either side).
V: Variant explained in footnote.

Tomb	Date	BA.1	BA.2	BA.3	BA.4	BA.5	BA.6
Rahotep [5]	IV.1L-2	2					
Akhethotep (G7650) [14]	IV.2-4			1			1
Nebemakhet [8]	IV.4-6	2 (¹⁷⁶¹)			3		
Persen [9]	V.1-2	2 (¹⁷⁶²)			2		
Werirniptah [16]	V.3-5	-	-	-	-	-	
Nefer and Kahay [18]	V.6E					¹⁷⁶³	
Rakhaefankh [26]	V.6?	2 (¹⁷⁶⁴)					

¹⁷⁶¹ One arm holding pole, other vertical holding his by side.

¹⁷⁶² Both figures are holding pole with one arm, the other by side.

¹⁷⁶³ One arm across torso holding fish, the other arm's elbow is turned towards the top of register at 90° bent and holding fish.

¹⁷⁶⁴ One hand on pole, other arm by side. Second figure has hand draped over pole.

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	BA.1	BA.2	BA.3	BA.4	BA.5	BA.6
Iymery [20]	V.6			1		1 ¹⁷⁶⁵	
Iynofret [19]	V.6			1 (V ¹⁷⁶⁶)	3		
Irenkaptah [22]	V.6		2		1		
Niankhkhnum and Khnumhotep [27]	V.6-7		2	1	2		1
Ramaka [28]	V.6-7	2					
Akhethotep (Louvre) [31]	V.6-8E	2 (V ¹⁷⁶⁷)					1
Hotepherakhti [34]	V.6-8	1	1				
CG 1535 [36]	V.6-8	-	-	-	-	-	
Ptahshepses [41]	V.6L-9	1?	1?	2			
Inti [45]	V.8	2 (V ¹⁷⁶⁸)					
Kayemnofret (D23) [51]	V.8-9	3(V ¹⁷⁶⁹)					
Neferirtenef [52]	V.8-9		1				
Hesimin (M22) [56]	V.8L-9E		2	1			
Kaiemankh [57]	V.8L-9E		1	1	1		
Iynofert/ Shanef [63]	V.9		2	1	2		1
Nebet [62]	V.9	1	3		4		
Kairer [66]	V.9	-	-	-	-	-	-
Akhmerutnesut [82]	V.9-VI.1	-	-	-	-	-	-
Kagemni [94]	VI.1E				1		
In-Snefru-Ishtef [96]	VI.1			1 (V ¹⁷⁷⁰)	2	1 ¹⁷⁷¹	
Niankhnesut [99]	VI.1M-L			1(V ¹⁷⁷²)	1		
Nikauisesi [101]	VI.1M				2		
Ankhmahor [102]	VI.1M	-	-	-	-	-	-
Mereruka [103]	VI.1M-L	3? 3 (V ¹⁷⁷³)		1			1
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L		1	1 (V ¹⁷⁷⁴)	4		
Remni/ Merwi [109]	VI.1L-2E	-	-	-	-	-	-

¹⁷⁶⁵ One arm across torso holding fish, the other arm's elbow is turned towards the top of register at 90° bent and holding fish.

¹⁷⁶⁶ Both hands holding fish on shoulder.

¹⁷⁶⁷ One figure has second hand by side.

¹⁷⁶⁸ One hand by side, other holding pole.

¹⁷⁶⁹ Two figures have short poles; pole is held with one hand, the other is vertical holding fish/birds. Third figure has a long pole. Both arms are raised with one draped over the top of the pole.

¹⁷⁷⁰ Both hands holding a fish over shoulder.

¹⁷⁷¹ One arm across torso holding fish, the other arm's elbow is turned towards the top of register at 90° bent and holding fish.

¹⁷⁷² Both hands holding fish on shoulder.

¹⁷⁷³ Use of short pole over one shoulder by two figures; one also holds a fish strung on rope at waist height. Two examples of a long pole on shoulders; both figures use one or both hands to steady load by touching the rope not holding the pole.

¹⁷⁷⁴ Both hands holding fish on shoulder.

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	BA.1	BA.2	BA.3	BA.4	BA.5	BA.6
Wedjahateti/ Neferseshemtah/ Sheshi [112]	VI.1L-2E		2?				
Meryteti/ Meri [116]	VI.1L- 2M	5 (V ¹⁷⁷⁵)	3	X (4) 5 (V ¹⁷⁷⁶)	3		
Merefnebef [117]	VI.1L-2L				3		
Munich Ag. Mus GL.115 [126]	VI.2-4E	2 (V ¹⁷⁷⁷)	-	-	-	-	-
Ibi [130]	VI.3-4E	1 (V ¹⁷⁷⁸)					
Idu 1 [128]	VI.3-4E	5		3(V ¹⁷⁷⁹)			
Meryrenefer/ Qar [133]	VI.3-4				1		
Khenty [132]	VI.3-4M	2					
Pepyankh/ Henykem [146]	VI.4L	1	2				
Mery Aa [158]	VI.L- VIII E	1					
Tjemerery [159]	VI-FIP	-	-	-	-	-	-
Twau [160]	VI-FIP	-	-	-	-	-	-

Table E: Leg Positions for Bearers

KEY:

Leg Position:

- A. *Open stance position*
- B. *Stride position*¹⁷⁸⁰

Tomb	Date	Number of figures	Type A	Type B
Rahotep [5]	IV.1L-2	2		2
Akhethotep (G7650) [14]	IV.2-4	2		2
Nebemakhet [8]	IV.4-6	4	4	
Persen [9]	V.1-2	3	3	
Werirniptah [16]	V.3-5	-	-	-
Nefer and Kahay [18]	V.6E	1	X	
Rakhaefankh [26]	V.6?	2	2	
Iymery [20]	V.6	2	2	
Iynofret [19]	V.6	4	4	
Irenkaptah [22]	V.6	3	3	

¹⁷⁷⁵ One figure has a long pole; both arms are raised with one draped over the top of the pole. Second long pole example shows the figure reaching out and touching the rope to steady load.

¹⁷⁷⁶ Both hands holding fish on shoulder.

¹⁷⁷⁷ One of the arms is draped over top of pole.

¹⁷⁷⁸ One of the arms is draped over top of pole.

¹⁷⁷⁹ Three examples of fish head above head; two figures use one hand carrying another fish by side.

¹⁷⁸⁰ See Appendix 4: Typology: Basic Leg positions for a full explanation: Type A and B positions.

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	Number of figures	Type A	Type B
Niankhkhnum and Khnumhotep [27]	V.6-7	6	6	
Ramaka [28]	V.6-7	2	1	
Akhethotep (Louvre) [31]	V.6-8E	3	3	
Hotepherakhti [34]	V.6-8	2	1	1
CG 1535 [36]	V.6-8	3?	3?	
Ptahshepses [41]	V.6L-9	5	3	
Inti [45]	V.8	2	2	
Kayemnofret (D23) [51]	V.8-9	3	2	1
Neferirtenef [52]	V.8-9	1	1	
Hesimin (M22) [56]	V.8L-9E	3	3	
Kaiemankh [57]	V.8L-9E	3	3	
Iynofert/Shanef [63]	V.9	6	6	
Nebet [62]	V.9	8	7	1
Kairer [66]	V.9	4	4	
Akhmerutnesut [82]	V.9-VI.1	-	-	-
Kagemni [94]	VI.1E	1	1	
In-Snefru-Ishtef [96]	VI.1	4	3	
Nikauisesi [101]	VI.1M	2	1	
Ankhmahor [102]	VI.1M	-	-	-
Mereruka [103]	VI.1M-L	21	17	4
Niankhnesut [99]	VI.1M-L	-	-	-
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	6	6	
Remni/ Merwi [109]	VI.1L-2E	1	1	
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L-2E	5	5	
Meryteti/ Meri [116]	VI.1L-2M	20	19	1
Merefnebef [117]	VI.1L-2L	2	2	
Munich Ag. Mus GL.115 [126]	VI.2-4E	2	1	1-
Ibi [130]	VI.3-4E	1	1	
Idu 1 [128]	VI.3-4E	8	8	
Meryrenefer/ Qar [133]	VI.3-4	1	1	
Khenty [132]	VI.3-4M	2	1	1?
Pepyankh/ Henykem [146]	VI.4L	4	4	
Mery Aa [158]	VI.L-VIII E	1	1	
Tjemerery [159]	VI-FIP	-	-	-
Twau [160]	VI-FIP	-	-	-

Table F: Individual Characteristics of the Bearers
KEY:
Hair Type:

- A. Full Head of Hair
B. Receding hair

Body Type:

- A. Athletic
B. Non-Athletic

Tomb	Date	Type A Hair	Type B Hair	Type A Body	Type B Body
Rahotep [5]	IV.1L-2	2		2	
Akhethotep (G7650) [14]	IV.2-4			2	
Nebemakhet [8]	IV.4-6	4		4	
Persen [9]	V.1-2	3		4	
Werirniptah [16]	V.3-5	-	-	-	-
Nefer and Kahay [18]	V.6E		1?	1	
Rakhaefankh [26]	V.6?	2		2	
Iymery [20]	V.6	?	?	2	
Iynofret [19]	V.6	3		4	
Irenkaptah [22]	V.6	1	1	3	
Niankhkhnum and Khnumhotep [27]	V.6-7	4		6	
Ramaka [28]	V.6-7	2		2	
Akhethotep (Louvre) [31]	V.6-8E	2(3?)		3	
Hotepherakhti [34]	V.6-8	2		2	
CG 1535 [36]	V.6-8	-	-	--	-
Ptahshepses [41]	V.6L-9	?		4	
Inti [45]	V.8	2		2	
Kayemnofret (D23) [51]	V.8-9		2	3	
Neferirtenef [52]	V.8-9	1		1	
Hesimin (M22) [56]	V.8L-9E	1?		3	
Kaiemankh [57]	V.8L-9E	3		3	
Iynofert/ Shanef [63]	V.9	4		6	
Nebet [62]	V.9	8		8	
Kairer [66]	V.9	-	-	-	-
Akhmerutnesut [82]	V.9-VI.1	-	-	-	-
Kagemni [94]	VI.1E	1		1	
In-Snefru-Ishtef [96]	VI.1	4		4	
Nikauisesi [101]	VI.1M	2		2	
Ankhmahor [102]	VI.1M	-	-	-	-
Mereruka [103]	VI.1M-L	6		8	
Niankhnesut [99]	VI.1M-L	2		2	
Watetkhet-Hor/ Seshseshet [104]	VI.1M-L	6		5	1
Remni/ Merwi [109]	VI.1L-2E	-	-	-	-
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L-2E	-	-	-	-
Meryteti/ Meri [116]	VI.1L-2M	19		20	

Appendix 2: Detail Tables: Fish Bearing

Tomb	Date	Type A Hair	Type B Hair	Type A Body	Type B Body
Merefnebef [117]	VI.1L-2L	2		2	
Munich Ag. Mus GL.115 [126]	VI.2-4E	2	-	2	-
Ibi [130]	VI.3-4E	1		1	
Idu 1 [128]	VI.3-4E			8	
Meryrenefer/ Qar [133]	VI.3-4	-	-	-	-
Khenty [132]	VI.3-4M	2		2	
Pepyankh/ Henykem [146]	VI.4L	3		3	
Mery Aa [158]	VI.L-VIIIE	-	-	1	
Tjemerery [159]	VI-FIP	-	-	-	-
Twau [160]	VI-FIP	-	-	-	-

Table G: Clothing of the Bearers

KEY.¹⁷⁸¹

Clothing:

- A. *Naked*
- B. *Belt*
- C. *Kilt*

(Further differentiated into point (P) or drop (D) style, no denominator is a wrap kilt)

Tomb	Date	Type A	Type B	Type C	Genitals
Rahotep [5]	IV.1L-2		2		
Akhethotep (G7650) [14]	IV.2-4		2 (with pleats)		
Nebemakhet [8]	IV.4-6			2 (1xD)	
Persen [9]	V.1-2			3	
Werirniptah [16]	V.3-5	-	-	-	-
Nefer and Kahay [18]	V.6E			1 (D)	
Rakhaefankh [26]	V.6?			2	
Iymery [20]	V.6			2 (D)	
Iynofret [19]	V.6			4	-
Irenkaptah [22]	V.6	1	2		
Niankhkhnum and Khnumhotep [27]	V.6-7			4 (D) 2	
Ramaka [28]	V.6-7			2	
Akhethotep (Louvre) [31]	V.6-8E		2 (with pleats)		
Hotepherakhti [34]	V.6-8			2	
CG 1535 [36]	V.6-8	-	-	-	-

¹⁷⁸¹ See Appendix 4: Typology: Clothing for a full explanation of types.

Appendix 2: Detail Tables: Fish Bearing

Ptahshepses [41]	V.6L-9	1	2 (1 with pleats)	1	Y(2)
Inti [45]	V.8			2	
Kayemnofret (D23) [51]	V.8-9			2	Y(3)
Neferirteneb [52]	V.8-9			1	
Hesimin (M22) [56]	V.8L-9E			1	-
Kaiemankh [57]	V.8L-9E			3	
Iynofert/ Shanef [63]	V.9			4 2 (Sporting)	
Nebet [62]	V.9			8	
Kairer [66]	V.9	-	-	-	-
Akhmerutnesut [82]	V.9-VI.1	-	-	-	-
Kagemni [94]	VI.1E			1	
In-Snefru-Ishtef [96]	VI.1			4	
Nikauisesi [101]	VI.1M			2 (1xP)	
Ankhmahor [102]	VI.1M	-	-	-	-
Mereruka [103]	VI.1M-L			11	
Niankhnesut [99]	VI.1M-L	-	-	-	-
Watetkhet-Hor/ Sesheshet [104]	VI.1M-L			8 (D)	
Remni/ Merwi [109]	VI.1L-2E			1 (P)	
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L-2E			3	
Meryteti/ Meri [116]	VI.1L-2M			19	
Merefnebef [117]	VI.1L-2L			2	
Munich Ag. Mus GL.115 [126]	VI.2-4E			2	
Ibi [130]	VI.3-4E			1	
Idu 1 [128]	VI.3-4E			8	
Meryrenefer/ Qar [133]	VI.3-4			1 (P)	
Khenty [132]	VI.3-4M			2	
Pepyankh/ Henykem [146]	VI.4L			3	
Mery Aa [158]	VI.L-VIIIE	1			
Tjemerery [159]	VI-FIP	-	-	-	-
Twau [160]	VI-FIP	-	-	-	-

Table H: Captions

Tomb	Transliteration	Translation
Rahotep [5]	<i>ʾInī.t ʿḥꜣ</i> (det. Lates)	Bringing the fighting fish
Akhethotep (Louvre) [31]	<i>ḥꜣm</i>	‘catch’/ To trawl- <i>may be related to dragnet scene</i>
Hotepherakhti [34]	<i>ḥm-kꜣ</i>	The ka servant
	<i>shꜣd ḥmw-kꜣ/wḥꜣ</i>	Inspector of the ka servants/ or mariner
	<i>wḥꜣ</i>	The mariner /fisherman

Appendix 2: Detail Tables: Fish Bearing

Tomb	Transliteration	Translation
Kayemnofret (D23) [51]	<i>pr.t m mḥ.t</i>	Procession from the Delta Marshes
Neferirtenef [52]	<i>s3.f s3b sš pth m k3.w</i>	His son, Chief scribe ptah kau/ kauemptah
Hesimin (M22) [56]	<i>š3.f Nfr-s{..} Mnw</i>	His son, Nefer-s{...}Min
	<i>ʾInt n mḥt in ḥmw-k3</i>	Bringing the fish by the ka-servant
Nebet [62]	S1 <i>ʾInt wšnw in ḥm-nswt Nb.t</i>	S1 Bringing the poultry by the king's servant Nebet
	S2: <i>ʾInt wšnw///mḥyt</i>	S2: Bringing in the poultry and fishes?
Kagemni [94]	<i>s3.f s3n ʿḏ-mr ///f//sš</i>	His son, Chief administrator ///// Scribe.
In-Snefru-Ishtef [96]	///nt////	Bring?
	///m///wr.t	////m//// great
Nikauisesi [101]	<i>ʾImi-r sšr ʿnti</i>	Overseer of the linen, Anti
	<i>ʾInt wšnw</i>	Bringing the poultry
	<i>sš ḥnti-š pr-ʿ3 Ni-k3w- ʾIssi</i>	The chief scribe, Nikauisesi
Ankhmahor [102]	<i>šm3</i>	South
	<i>ʾIn ḥm(w)-[k3] nw ḏt=f</i>	Bringing by the Ka-servants of his estate
Niankhnesut [99]	///shḏ///	///inspector///
Ibi [130]	<i>m33 w f////////š</i>	See //////////
Idu 1 [128]	<i>ʾInt...</i>	Bringing.....
Pepyankh/ Henykem [146]	///sd3wt n mḥyt	///treasure of fish///
	///k3 n sr	(for?) the ka of the nobleman

Preparing Fish for Consumption Detail Tables A-G

Table A: Occurrence of Scene

Tomb	Location	Date	Preparation Method
Nebemakhet [8]	Giza	VI.6-V.1	Boil/ Salting
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7	Boil
CG 1535 [36]	Saqqara	V.6-8	Roast
Ptahshepses [41]	Abusir	V.6L-9	Roast
Neferirtenef [52]	Saqqara	V.8-9	Roast
Werirni [70]	Sheik Said	V.9	Roast
Kairer [66]	Saqqara	V.9	Roast (Unpublished)

Table B: Associated with Gutting and Dehydration Theme

Tomb	Date	Gutting and Dehydration theme
Nebemakhet [8]	VI.4-6	X
Niankhkhnum and Khnumhotep [27]	V.6-7	X
CG 1535 [36]	V.6-8	X
Ptahshepses [41]	V.6L-9	
Neferirtenef [52]	V.8-9	X
Werirni [70]	V.9	X
Kairer [66]	V.9	X (Unpublished)

Table C: Fish Species

Tomb	Date	Gnathonemus/ Petrocephalus	Mugil sp.	Unidentifiable
Nebemakhet [8]	VI.4-6			X
Niankhkhnum and Khnumhotep [27]	V.6-7			X
CG 1535 [36]	V.6-8		X	
Ptahshepses [41]	V.6L-9	-	-	-
Neferirtenef [52]	V.8-9	X		
Werirni [70]	V.9		X	
Kairer [66]	V.9			X

Table D: Equipment

Tomb	Date	Cooking Cauldron	Stoker	Fan	Skewer
Nebemakhet [8]	VI.4-6	X			
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X		
CG 1535 [36]	V.6-8			X	X
Ptahshepses [41]	V.6L-9			X	
Neferirtenef [52]	V.8-9			X	X
Werirni [70]	V.9			X	X
Kairer [66]	V.9	-	-	-	-

Table E: Theme Setting

Tomb	Date	Outdoors Setting (River bank/ Vegetation)	Unidentified or Indoor Setting.
Nebemakhet [8]	VI.4-6	X	
Niankhkhnum and Khnumhotep [27]	V.6-7	X	
CG 1535 [36]	V.6-8	X?	
Ptahshepses [41]	V.6L-9	-	-
Neferirtenef [52]	V.8-9		X
Werirni [70]	V.9		X?
Kairer [66]	V.9	-	-

Table F: Minor Figures Limb Positions and Individual Characteristics

KEY:

Leg position:

E. Semi-Kneeling

F.1. Seated- Both

legs to chest.

Hair Type:

A. Full Head of

Hair

B. Receding hair

Body Type:

A. Athletic

B. Non-Athletic

Tomb	Date	Leg Position	Arm: One arm at rest by side, Other holding fish over caudron	Arm: Forwards, one raised holding fan above Fish, other diagonally down hold stick with fish attached	Hair Type	Body Type	Clothing Type
Nebemakhet [8]	VI.4-6	F.1 (Var) ¹⁷⁸²	X		A	A	C?
Niankhkhnum and Khnumhotep [27]	V.6-7	F.1	X		A	A	C
CG 1535 [36]	V.6-8	F.1		X	A?	-	C
Ptahshepses [41]	V.6L-9	-		X?	A	-	-
Neferirtenef [52]	V.8-9	E		X	B	B	C
Werirni [70]	V.9	E		X	A	A	C
Kairer [66]	V.9	-	-	-	-	-	-

Table G: Captions

Tomb	Transliteration	Translation
Niankhkhnum and Khnumhotep [27]	<i>sḏt</i>	Fire
Ptahshepses [41]	<i>zšrt mhyt</i>	Roasting fish

¹⁷⁸² Figure is seated on a stool not the register base.

Papyrus Boat Construction Detail Tables A-S

Table A: Occurrence

Tomb	Location	Date
Atet [3]	Maidum	IV.1M
Nebemakhet [8]	Giza	IV.4-6
Khnumhotep (D49) [15]	Saqqara	V.2-6
Nefer and Kahay [18]	Saqqara	V.6E
Rakhaefankh [26]	Giza	V.6?
Iymery [20]	Giza	V.6
Irenkaptah [22]	Saqqara	V.6
Akhethotep (Louvre) [31]	Saqqara	V.6-8E
Kapi [30]	Giza	V.6-8E
CG 1697 [37]	Saqqara	V.6-8
Hotepherakhti [34]	Saqqara	V.6-8
Ty [35]	Saqqara	V.6-8
Ptahshepses [41]	Abusir	V.6L-9
Inti [45]	Deshasha	V.8
Kayemnofret (D23) [51]	Saqqara	V.8-9
Akhethotep (D64) [58]	Saqqara	V.8L-9E
Hesimin (M22) [56]	El Hawawish	V.8L-9E
Senedjem-Ib/ Inti [59]	Giza	V.8L-9
Werirni [70]	Sheikh Said	V.9
Khenut [68]	Saqqara	V.9
Khunes [67]	Zawyet el Maiyetin	V.9
Nebet [62]	Saqqara	V.9
Ptahhotep II/Thefi [74]	Saqqara	V.9M-L
Ihy r/u Seshseshet/ Idut [72]	Saqqara	V.9 R/uVI.1
Nebkauhor/ Idu [73]	Saqqara	V.9 r/u VI.1
Kagemni [94]	Saqqara	VI.1 E
Niankhnesut [99]	Saqqara	VI.1M-L
Seshemnofer/ Ifi [134]	Saqqara	VI.3-4
Kahep/ Tjeti-Iker [140]	El Hawawish	VI.4M
Neheri [151]	Zawyet el Maiyetin	VI

Table B: Number of Boats

Tomb	Date	Number of Boats	Scene Possibly Incomplete/Damaged
Atet [3]	IV.1M	1	X
Nebemakhet [8]	IV.4-6	1	
Khnumhotep (D49) [15]	V.2-6	1	X
Nefer and Kahay [18]	V.6E	1	
Rakhaefankh [26]	V.6?	1	X
Iymery [20]	V.6	1	
Irenkaptah [22]	V.6	S1- 1	X
		S2 - 1	X
Akhethotep (Louvre) [31]	V.6-8E	1	
Kapi [30]	V.6-8E	2	
CG 1697 [37]	V.6-8	1	
Hotepherakhti [34]	V.6-8	1	
Ty [35]	V.6-8	3	X
Ptahshepses [41]	V.6L-9	1	X
Inti [45]	V.8	2	
Kayemnofret (D23) [51]	V.8-9	1	
Akhethotep (D64) [58]	V.8L-9E	2	
Hesimin (M22) [56]	V.8L-9E	2	
Senedjem-Ib/ Inti [59]	V.8L-9	2	
Werirni [70]	V.9	4	
Khenut [68]	V.9	2	
Khunes [67]	V.9	1	X
Nebet [62]	V.9	S1- 1	X
		S2- 2	X
Ptahhotep II/Thefi [74]	V.9M-L	3	
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1	1	
Nebkauhor/ Idu [73]	V.9 r/u VI.1	1	X
Kagemni [94]	VI.1 E	3	
Niankhnesut [99]	VI.1M-L	1	X
Seshemnofer/ Ifi [134]	VI.3-4	2	X
Kahep/ Tjeti-Iker [140]	VI.4M	2	
Neheri [151]	VI	1	X

Table C: Boats

KEY:

Boat Structure:

A- Near Horizontal Ends

B- Vertical Ends

A/B- Combination of A and B

Boat Detailing:

A- Lashing and Reed

B- Lashing Only

C- None Visible

Tomb	Date	Structure A	Structure B	Structure A/B	Detailing A	Detailing B	Detailing C
Atet [3]	IV.1M			X			X
Nebemakheth [8]	IV.4-6			X		X	
Khnumhotep (D49) [15]	V.2-6	X				X	
Nefer and Kahay [18]	V.6E			X		X	
Rakhaefankh [26]	V.6?	-	-	-		X	
Iymery [20]	V.6			X (2)		X (2)	
Irenkaptah [22]	V.6	S1-	-	-		X	
		S2-	-	-		X	
Akhethotep (Louvre) [31]	V.6-8E			X	X		
Kapi [30]	V.6-8E			X (2)			X (2)
CG 1697 [37]	V.6-8			X	X		
Hotepherakhti [34]	V.6-8	X?			X		
Ty [35]	V.6-8	X (3)			X (3)		
Ptahshepses [41]	V.6L-9	-	-	-	X		
Inti [45]	V.8			X (2)		X (2)	
Kayemnofret (D23) [51]	V.8-9			X		X	
Akhethotep (D64) [58]	V.8L-9E			X (2)		X (2)	
Hesimin (M22) [56]	V.8L-9E			X (1)			X (2)
Senedjem-Ib/ Inti [59]	V.8L-9	X (2)					X (2)
Werirni [70]	V.9			X (4)	X (2)	X (2)	
Khenut [68]	V.9	X					X
Khunes [67]	V.9			X (1)			X (2)
Nebet [62]	V.9	S1-		X		X	
		S2-	-	-			X
Ptahhotep II/Thefi [74]	V.9M-L			X (3)		X (2)	X (1)
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1	X					X
Nebkauhor/ Idu [73]	V.9 r/u VI.1			X			X
Kagemni [94]	VI.1 E			X (3)		X (3)	
Niankhnesut [99]	VI.1M-L	X					X?
Seshemnofer/ Ifi [134]	VI.3-4	-	-	-			X (2)
Kahep/ Tjeti-Iker [140]	VI.4M	X (2)			X (1)	X (1)	
Neheri [151]	VI	X?					X

Table D: Equipment

Tomb	Date	Wedges (Quantity)	Wedges Decorated	Rope Used	Rope in Coils	Caulking/ Daubing tool
Atet [3]	IV.1M			2		
Nebemakhet [8]	IV.4-6	2		3		
Khnumhotep (D49) [15]	V.2-6	-	-	-	-	
Nefer and Kahay [18]	V.6E	-	-	1	2	
Rakhaefankh [26]	V.6?	-	-	-	-	
Iymery [20]	V.6	3		7		
Irenkaptah [22]	V.6	S1-	-	-	1	
		S2- 1		-	-	
Akhethotep (Louvre) [31]	V.6-8E	2		4		
Kapi [30]	V.6-8E			6		
CG 1697 [37]	V.6-8	2		2	2	
Hotepherakhti [34]	V.6-8	1		3	1	
Ty [35]	V.6-8	5		11		X
Ptahshepses [41]	V.6L-9	-	-	2		
Inti [45]	V.8			4	11	
Kayemnofret (D23) [51]	V.8-9			2		
Akhethotep (D64) [58]	V.8L-9E	1		5	5	X
Hesimin (M22) [56]	V.8L-9E	3		7	3	
Senedjem-Ib/ Inti [59]	V.8L-9	4		2	13	
Werirni [70]	V.9	9		7	8	
Khenut [68]	V.9	-	-	1		
Khunes [67]	V.9			4	4	X
Nebet [62]	V.9	S1- 1		3		
		S2-		3		
Ptahhotep II/Thefi [74]	V.9M-L	6	X	10		X
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1	2		5		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	1		4		
Kagemni [94]	VI.1 E	6	X	8	2	X
Niankhnesut [99]	VI.1M-L	2		3	2	
Seshemnofer/ Ifi [134]	VI.3-4			1		
Kahep/ Tjeti-Iker [140]	VI.4M			4		
Neheri [151]	VI	1		-	-	

Table E: Papyrus Haulers

Tomb	Date	Papyrus carrying	Number of figures	Relation to Construction Scene
Atet [3]	IV.1M			
Nebemakhet [8]	IV.4-6	X	3	Same Register
Khnumhotep (D49) [15]	V.2-6			
Nefer and Kahay [18]	V.6E	X	3	Same Register
Rakhaefankh [26]	V.6?	-		-
Iymery [20]	V.6			
Irenkaptah [22]	V.6	S1- X	2	Above Scene
		S2- X	2	Same Register
Akhethotep (Louvre) [31]	V.6-8E	X	3	Same Register
Kapi [30]	V.6-8E			
CG 1697 [37]	V.6-8			
Hotepherakhti [34]	V.6-8	X	1	Same Register
Ty [35]	V.6-8	X	3	Above Scene
Ptahshepses [41]	V.6L-9	-		-
Inti [45]	V.8	X	2	Same Register
Kayemnofret (D23) [51]	V.8-9			
Akhethotep (D64) [58]	V.8L-9E	X	6	Underneath Scene
Hesimin (M22) [56]	V.8L-9E	X	3	Same Register
Senedjem-Ib/ Inti [59]	V.8L-9	X	4	Same Register
Werirni [70]	V.9	X	7	Above Scene
Khenut [68]	V.9	X	6	Above Scene
Khunes [67]	V.9	X	5	Above Register
Nebet [62]	V.9	S1- -		-
		S2- X	4	Underneath Scene
Ptahhotep II/Thefi [74]	V.9M-L	X?	1	Same Register?
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1	X	4	Same Register
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-		-
Kagemni [94]	VI.1 E			
Niankhnesut [99]	VI.1M-L	X	6	Same Register
Seshemnofet/ Ifi [134]	VI.3-4			
Kahep/ Tjeti-Iker [140]	VI.4M			
Neheri [151]	VI			

Table F: Papyrus Bundle Details

Tomb	Date	Held over back	Held at Side	No. of stems	Tired in One spot	Tied in two spots	Open base	Closed base	Pulled from Ground	Tying a bundle
Atet [3]	IV.1M	-	-	-		-	-	-	-	
Nebemakhet [8]	IV.4-6	3		6		X	X			
Khnumhotep (D49) [15]	V.2-6	-	-	-		-	-	-	-	
Nefer and Kahay [18]	V.6E	2		5				X	X	
Rakhaefankh [26]	V.6?	-		-		-	-		-	
Iymery [20]	V.6	-		-		-	-		-	
Irenkaptah [22]	V.6 (S1)	?		5?	-		-	-	?	
	(S2)	1		?	-	-		X	?	
Akhethotep (Louvre) [31]	V.6-8E	2		6?			X		X	
Kapi [30]	V.6-8E	-		-		-	-	-	-	
CG 1697 [37]	V.6-8	-		-		-	-	-	-	
Hotepherakhti [34]	V.6-8								X	
Ty [35]	V.6-8	2	1	5-8	X			X		
Ptahshepses [41]	V.6L-9	-		-		-	-		-	
Inti [45]	V.8	1	1	Min 2				X	X	
Kayemnofret (D23) [51]	V.8-9	-		-		-	-	-	-	
Akhethotep (D64) [58]	V.8L-9E	4	2	4?	X			X		
Hesimin (M22) [56]	V.8L-9E	1?		Min 4	-	-	-	-		X
Senedjem-Ib/ Inti [59]	V.8L-9	3	1	8	X			X		
Werirni [70]	V.9	3	3	Min 5	X		X		X	
Khenut [68]	V.9	2		5		-	-	-		X
Khunes [67]	V.9	3	2	17	X		X			
Nebet [62]	V.9	4		6-7	X			X		
Ptahhotep II/Thefi [74]	V.9M-L	-		-		-	-		-	
Ihy r/u Seshseshet / Idut [72]	V.9 R/uVI.1	2		?	X?			X		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-		-		-	-		-	
Kagemni [94]	VI.1 E	-		-		-	-		-	
Niankhnesut [99]	VI.1M-L	3		Min 3	X			X	X	X
Seshemnofer/ Ifi [134]	VI.3-4	-		-		-	-		-	
Kahep/ Tjeti-Iker [140]	VI.4M	-		-		-	-		-	
Neheri [151]	VI	-		-		-	-		-	

Table G: Minor Figures Overview
KEY:
Figure Type:

- Type 1:* working on the prow and stern;
Type 2: leaning against or placing one foot within the hull;
Type 3: standing outside a boat;
Type 4: standing within a boat, and
Type 5: seated or kneeling at the centre of a boat

Tomb	Date	Type 1	Type 2	Type 3	Type 4	Type 5	Supervisor
Atet [3]	IV.1M	1		1		1	
Nebemakhet [8]	IV.4-6	2			1		1
Khnumhotep (D49) [15]	V.2-6		1			1	
Nefer and Kahay [18]	V.6E	1	1	2			
Rakhaefankh [26]	V.6?			1			
Iymery [20]	V.6	1	1	2	1	4	1
Irenkaptah [22]	V.6			1			
Akhethotep (Louvre) [31]	V.6-8E	2				2	
Kapi [30]	V.6-8E		3	1	1	2	
CG 1697 [37]	V.6-8	2			1		
Hotepherakhti [34]	V.6-8		2			1	
Ty [35]	V.6-8	5			2	4	
Ptahshepses [41]	V.6L-9			1			
Inti [45]	V.8	4			1		
Kayemnofret (D23) [51]	V.8-9	2			2		1
Akhethotep (D64) [58]	V.8L-9E	4			2		
Hesimin (M22) [56]	V.8L-9E	3				4	
Senedjem-Ib/ Inti [59]	V.8L-9	1	1	2	2	1	
Werirni [70]	V.9	3	5				
Khenut [68]	V.9	1				1?	
Khunes [67]	V.9	2		1	2		
Nebet [62]	V.9	3			1	1	
Ptahhotep II/Thefi [74]	V.9M-L	4	3		2	3	
Ihy r/u Seshseshet/ Idut [72]	V.9 R/u VI.1	2			3		
Nebkauhor/ Idu [73]	V.9 r/u VI.1		2		2		
Kagemni [94]	VI.1 E	4	1	2	2	4	
Niankhnesut [99]	VI.1M-L	2		1	1		
Seshemnofer/ Ifi [134]	VI.3-4	1			1		
Kahep/ Tjeti-Iker [140]	VI.4M		3	1			
Neheri [151]	VI	1			1		

Tables H-R Explanatory Note

The following tables stipulate the limb positions, individual characteristics and clothing of the five types of papyrus boat construction figures. The following **Key** is relevant to all tables.

KEY:

Arm Positions Key:

PB.A1- The arms are in front of torso, one extended in a downward direction grasping rope, other arm is pulled towards the chest, bent at elbow (45 degrees) holding rope closer to torso. The elbows can vary:

- Type O-elbow is facing outwards;
- Type U- elbow is towards the torso.

PB.A2 - The arms are depicted as in front of the torso; bent at the elbow and drawn into the chest.

PB.A3- refers to the arms fully extended vertically (down) or with a slight bend to the elbow

Leg Positions Key:

A- Open Stance

B- Stride

C- Leaning

D- Kneeling

E- Semi-Kneeling

F.1 – Seated with both legs to chest

F.2 - Seated with one leg to chest.

Other extended forwards.

G- Lunge.

Additional Leg positions specific to this theme:

PB. L1- The foot of the figure is over the side of the boat and has the rope wrapped or looped around the foot. The second leg is typically bent and placed on the prow or stern;

PB.L2 – One foot on ground, other foot flat in boat; bent at knee;

PB.L3 – One foot on ground, other foot in boat on heel or toes; bent at knee;

PB.L4 – One foot on ground, other leg folded (as if kneeling) on boat;

PB.L5 – One foot on ground, other leg lifted bent at knee and leaning against boat hull;

PB.L6 – One foot raise to heel or toes.

Hair Type:

A- Full head of hair;

B- Receding hairline

Body Type

A- Athletic; and

B- Non-athletic

Clothing Type:

A- Naked;

B- Belt; and

C- Kilt

(G)- Genitalia represented.

Table H: Limb Positions for Type 1: Figures working on the prow/ stern.

Tomb	Date	Arm Position PB.A1	PBA.1 Elbow type	Arm Position PB.A2	Leg Position A	Leg Position B	Leg Position C	Leg Position D	Leg Position E	Leg Position F.2	Leg Position G	Leg Position PB.L1
Atet [3]	IV.1M			X		X						
Nebemakhet [8]	IV.4-6	X (2)	O (2)					X	X			
Khnumhotep (D49) [15]	V.2-6	-	-	-	-	-	-	-	-			-
Nefer and Kahay [18]	V.6E	X	O						X			
Rakhaefankh [26]	V.6?	-			-							
Iymery [20]	V.6	X	O									X
Irenkaptah [22]	V.6	-			-							
Akhethotep (Louvre) [31]	V.6-8E	X (2)	O (2)					X (2)				
Kapi [30]	V.6-8E	-			-							
CG 1697 [37]	V.6-8	X (2)	O (2)		X		X					
Hotepherakhti [34]	V.6-8	-			-							
Ty [35]	V.6-8	X (2)	O (2)						X		X	X (3)
Ptahshepses [41]	V.6L-9	-			-	-	-	-	-			-
Inti [45]	V.8	X(3)	O(3)	X		X		X	X (2)			
Kayemnofret (D23) [51]	V.8-9	X (2)	O (2)		X	X						
Akhethotep (D64) [58]	V.8L-9E			X (2)	X	X					X	X
Hesimin (M22) [56]	V.8L-9E	X 1x Var. ¹⁷⁸³	O			X (2)						X
Senedjem-Ib/ Inti [59]	V.8L-9	A O							X			
Werirni [70]	V.9	X (3)	O (3)						X		X (2)	
Khenut [68]	V.9	X	O								X	
Khunes [67]	V.9	X (2)	O (2)								X	
Nebet [62]	V.9	X (2)	O (2)						X		X	
Ptahhotep II/Thefi [74]	V.9M-L	X (4)	O (4)						X	X (2)	X	

¹⁷⁸³ One arm extended forward elbow out, other behind torso elbow out

Appendix 2: Detail Tables: Papyrus Boat Construction

Tomb	Date	Arm Position PB.A1	PBA.1 Elbow type	Arm Position PB.A2	Leg Position A	Leg Position B	Leg Position C	Leg Position D	Leg Position E	Leg Position F.2	Leg Position G	Leg Position PB.L1
Ihy r/u Seshseshet/ Idut [72]	V.9 R/u VI.1	X	O								X	X
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-			-	-	-	-	-	-	-	-
Kagemni [94]	VI.1 E	X (4)	O (4)			X		X (2)			X	
Niankhnesut [99]	VI.1M- L	X (2)	O (2)								X	X
Seshemnofer/ Ifi [134]	VI.3-4			X	X							
Kahep/ Tjeti-Iker [140]	VI.4M	-			-							
Neheri [151]	VI	X	O								X	

Table I: Individual Characteristics and Clothing for Type 1: Figures working on the prow/ stern

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type A	Clothing Type B	Clothing Type C
Atet [3]	IV.1M	X		X				X
Nebemakhet [8]	IV.4-6	X (2)		X (2)		X (G)		X
Khnumhotep (D49) [15]	V.2-6	-		-		-		
Nefer and Kahay [18]	V.6E		X	X?				X
Rakhaefankh [26]	V.6?	-		-		-		
Iymery [20]	V.6	X		X		-		
Irenkaptah [22]	V.6	-		-		-		
Akhethotep (Louvre) [31]	V.6-8E		X (2)	X (2)			X (2) (Gx1)	
Kapi [30]	V.6-8E	-		-		-		
CG 1697 [37]	V.6-8	X	X	X (2)		X	X	
Hotepherakhti [34]	V.6-8	-		-		-		
Ty [35]	V.6-8		X(2)	X	X	X (2)(G)		
Ptahshepses [41]	V.6L-9	-		-		-		
Inti [45]	V.8	X (3)		X (3)				X
Kayemnofret (D23) [51]	V.8-9	-		X (2)		-		
Akhethotep (D64) [58]	V.8L-9E	X	X	X (4)		X (2)	X (2)	
Hesimin (M22) [56]	V.8L-9E		X	X (3)?		X		
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	X				X
Werirni [70]	V.9		X	X (3)		X (3) (Gx2)		
Khenut [68]	V.9	X		X		X		
Khunes [67]	V.9	X (2)		X (2)		X (2) (Gx1)		
Nebet [62]	V.9	X		X (3)				X (2)
Ptahhotep II/Thefi [74]	V.9M-L	X (3)	X	X (3)	X		X	X (2)
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1		X	X (2)		X (2)		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-	-	-	-	-	-	-
Kagemni [94]	VI.1 E	X (4)		X (4)		X (1) (G)	X (3) (G x1)	
Niankhnesut [99]	VI.1M-L	X (2)		X (2)?		-		
Seshemnofer/ Ifi [134]	VI.3-4	X		X		X (G)		
Kahep/ Tjeti-Iker [140]	VI.4M	-		-		-		

Table J: Limb Positions for Type 2: Figures leaning against or placing one foot within the hull

Tomb	Date	Arm Position PB.A1	Elbow Position for PB.A1	Arm Position PB.A2	Arm Position PB.A3	Leg Position PB.L2	Leg Position PB.L3	Leg Position PB.L4	Leg Position PB.L5
Atet [3]	IV.1M								
Nebemakhet [8]	IV.4-6								
Khnumhotep (D49) [15]	V.2-6	-	-	-	-		X		
Nefer and Kahay [18]	V.6E			X					X
Rakhaefankh [26]	V.6?								
Iymery [20]	V.6	X						X	
Irenkaptah [22]	V.6								
Akhethotep (Louvre) [31]	V.6-8E	-				-			
Kapi [30]	V.6-8E	X (3)	O (3)			X			
CG 1697 [37]	V.6-8								
Hotepherakhti [34]	V.6-8	X	O		X		X(2)		
Ty [35]	V.6-8								
Ptahshepses [41]	V.6L-9								
Inti [45]	V.8								
Kayemnofret (D23) [51]	V.8-9								
Akhethotep (D64) [58]	V.8L-9E								
Hesimin (M22) [56]	V.8L-9E								
Senedjem-Ib/ Inti [59]	V.8L-9	X	O				X		
Werirni [70]	V.9	X (5)	O (4), U (1)			X	X	X (2)	
Khenut [68]	V.9								
Khunes [67]	V.9								
Nebet [62]	V.9								
Ptahhotep II/Thefi [74]	V.9M-L	X (2)	O (2)		X			X (3)	
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1								
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X			X(2)			
Kagemni [94]	VI.1 E				X	X			
Niankhnesut [99]	VI.1M-L								
Seshemnofer/ Ifi [134]	VI.3-4								
Kahep/ Tjeti-Iker [140]	VI.4M				X(3)	X	X	X	
Neheri [151]	VI								

Table K: Individual Characteristics and Clothing for Type 2: Figures leaning against or placing one foot within the hull

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type A	Clothing Type B	Clothing Type C
Atet [3]	IV.1M							
Nebemakhet [8]	IV.4-6							
Khnumhotep (D49) [15]	V.2-6							
Nefer and Kahay [18]	V.6E		X	X		X		
Rakhaefankh [26]	V.6?							
Iymery [20]	V.6	X		X		X		
Irenkaptah [22]	V.6							
Akhethotep (Louvre) [31]	V.6-8E							
Kapi [30]	V.6-8E	X (2)		X (3)		X (3)		
CG 1697 [37]	V.6-8							
Hotepherakhti [34]	V.6-8	X (2)		X (2)		X (2) (G)		
Ty [35]	V.6-8							
Ptahshepses [41]	V.6L-9							
Inti [45]	V.8							
Kayemnofret (D23) [51]	V.8-9							
Akhethotep (D64) [58]	V.8L-9E							
Hesimin (M22) [56]	V.8L-9E							
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	X			X (G)	
Werirni [70]	V.9	X	X (2)	X (5)		X (5) (Gx4)		
Khenut [68]	V.9							
Khunes [67]	V.9							
Nebet [62]	V.9							
Ptahhotep II/Thefi [74]	V.9M-L	X (3)		X (3)		X (2)	X (G)	
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1							
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X		X (2)		X (2) (Gx1)		
Kagemni [94]	VI.1 E	X		X			X (G)	
Niankhnesut [99]	VI.1M-L							
Seshemnofer/ Ifi [134]	VI.3-4							
Kahep/ Tjeti-Iker [140]	VI.4M	-	-	-	-		X	
Neheri [151]	VI							

Table L: Limb Positions for Type 3: Figures standing outside the boat

Tomb	Date	Arm Position PB.A1	Elbow Position for PB.A1	Arm Position PB.A2	Arm Position PB.A3	Leg Position Type A	Leg Position Type B	Leg Position Type C
Atet [3]	IV.1M				X	X		
Nebemakhet [8]	IV.4-6							
Khnumhotep (D49) [15]	V.2-6	-	-	-	-	X		
Nefer and Kahay [18]	V.6E				X (2)	X (2)		
Rakhaefankh [26]	V.6?				X ¹⁷⁸⁴		X?	
Iymery [20]	V.6				X (2)	X (2)		
Irenkaptah [22]	V.6	X	O					X ¹⁷⁸⁵
Akhethotep (Louvre) [31]	V.6-8E							
Kapi [30]	V.6-8E			X		X		
CG 1697 [37]	V.6-8							
Hotepherakhti [34]	V.6-8							
Ty [35]	V.6-8							
Ptahshepses [41]	V.6L-9	-	-	-	-		X?	
Inti [45]	V.8							
Kayemnofret (D23) [51]	V.8-9							
Akhethotep (D64) [58]	V.8L-9E							
Hesimin (M22) [56]	V.8L-9E							
Senedjem-Ib/ Inti [59]	V.8L-9	X	O				X	
Werirni [70]	V.9							
Khenut [68]	V.9							
Khunes [67]	V.9				X	X		
Nebet [62]	V.9							
Ptahhotep II/Thefi [74]	V.9M-L							
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1							
Nebkauhor/ Idu [73]	V.9 r/u VI.1							
Kagemni [94]	VI.1 E	X (2)	O (1), U (1)			X (2)		
Niankhneseut [99]	VI.1M-L	X	U			X		
Seshemnofer/ Ifi [134]	VI.3-4							
Kahep/ Tjeti-Iker [140]	VI.4M			X		X		
Neheri [151]	VI							

¹⁷⁸⁴ Arms are shown as one braced on knee, other reaching up to stabilize bout above head. Similar to Atet [3] holding up boat.

¹⁷⁸⁵ Similar to PB.L5; See Explanatory Note page for Table H-R; See Appendix 4: Typology Leg Positions of Papyrus Boat Construction Workers.

Table M: Individual Characteristics and Clothing for Type 3: Figures standing outside the boat

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type A	Clothing Type B	Clothing Type C
Atet [3]	IV.1M	X		X				X
Nebemakhet [8]	IV.4-6							
Khnumhotep (D49) [15]	V.2-6							
Nefer and Kahay [18]	V.6E	X	X	X (2)		X		X
Rakhaefankh [26]	V.6?	X		X				
Iymery [20]	V.6	X		X		X (3)		
Irenkaptah [22]	V.6	-	-	X		X?		
Akhethotep (Louvre) [31]	V.6-8E							
Kapi [30]	V.6-8E	X		X			X	
CG 1697 [37]	V.6-8							
Hotepherakhti [34]	V.6-8							
Ty [35]	V.6-8							
Ptahshepses [41]	V.6L-9	-	-	-	-	-	-	-
Inti [45]	V.8							
Kayemnofret (D23) [51]	V.8-9							
Akhethotep (D64) [58]	V.8L-9E							
Hesimin (M22) [56]	V.8L-9E							
Senedjem-Ib/ Inti [59]	V.8L-9	-	-	X				C
Werirni [70]	V.9							
Khenut [68]	V.9							
Khunes [67]	V.9	X		X		X (G)		
Nebet [62]	V.9							
Ptahhotep II/Thefi [74]	V.9M-L							
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1							
Nebkauhor/ Idu [73]	V.9 r/u VI.1							
Kagemni [94]	VI.1 E	X	X	X (2)		X (G)	X (G)	
Niankhnesut [99]	VI.1M-L	-	-	X (2)			X	X
Seshemnofer/ Ifi [134]	VI.3-4							
Kahep/ Tjeti-Iker [140]	VI.4M							
Neheri [151]	VI							

Table N: Limb Positions for Type 4: Figures standing within the boat

Tomb	Date	Arm Position PB.A1	Arm Position PB.A2	Arm Position PB.A3	Leg Position Type A	Leg Position Type B	Leg Position Type C	Leg Position Type G
Atet [3]	IV.1M							
Nebemakhet [8]	IV.4-6	X					X	
Khnumhotep (D49) [15]	V.2-6							
Nefer and Kahay [18]	V.6E							
Rakhaefankh [26]	V.6?							
Iymery [20]	V.6	X			X			
Irenkaptah [22]	V.6							
Akhethotep (Louvre) [31]	V.6-8E							
Kapi [30]	V.6-8E	X			X			
CG 1697 [37]	V.6-8			X	X			
Hotepherakhti [34]	V.6-8							
Ty [35]	V.6-8		X				X (2)	
Ptahshepses [41]	V.6L-9							
Inti [45]	V.8		X			X		
Kayemnofret (D23) [51]	V.8-9	X		X	X	X		
Akhethotep (D64) [58]	V.8L-9E	X+ Var. ¹⁷⁸⁶				X (2)		
Hesimin (M22) [56]	V.8L-9E							
Senedjem-Ib/ Inti [59]	V.8L-9	X (2)						X (2)
Werirni [70]	V.9							
Khenut [68]	V.9							
Khunes [67]	V.9	X (2)				X	X	
Nebet [62]	V.9							
Ptahhotep II/Thefi [74]	V.9M-L	X + var. ¹⁷⁸⁷			X			X
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1	X (2)			X			X (2)
Nebkauhor/ Idu [73]	V.9 r/u VI.1	X	X				X	X
Kagemni [94]	VI.1 E	Var. ¹⁷⁸⁸			X			
Niankhnesut [99]	VI.1M-L	X				X		
Seshemnofer/ Ifi [134]	VI.3-4			X	X			
Kahep/ Tjeti-Iker [140]	VI.4M							
Neheri [151]	VI	-	-	-	X			

¹⁷⁸⁶ One arm drawn completely back fully extended other are along torso.¹⁷⁸⁷ Figures arms are being used to gesture.¹⁷⁸⁸ One hand by torso; one extended horizontally forward holding roll of rope.

Table O: Individual Characteristics and Clothing of Type 4: Figures standing within the boat

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type A	Clothing Type B	Clothing Type C
Atet [3]	IV.1M							
Nebemakhet [8]	IV.4-6	X		X		X		
Khnumhotep (D49) [15]	V.2-6							
Nefer and Kahay [18]	V.6E							
Rakhaefankh [26]	V.6?							
Iymery [20]	V.6	X		X		X		
Irenkaptah [22]	V.6							
Akhethotep (Louvre) [31]	V.6-8E							
Kapi [30]	V.6-8E	X		X		X		
CG 1697 [37]	V.6-8		X	X		X (G)		
Hotepherakhti [34]	V.6-8							
Ty [35]	V.6-8		X	X	X	X (2) (Gx2)		
Ptahshepses [41]	V.6L-9							
Inti [45]	V.8	-	-	X				X
Kayemnofret (D23) [51]	V.8-9	X		X	X	X (2)		
Akhethotep (D64) [58]	V.8L-9E		X	X (2)		X (2)		
Hesimin (M22) [56]	V.8L-9E							
Senedjem-Ib/ Inti [59]	V.8L-9	X (2)		X (2)			X	X
Werirni [70]	V.9							
Khenut [68]	V.9							
Khunes [67]	V.9	X		X (2)		X (2) (Gx2)		
Nebet [62]	V.9	-	-	X		-	-	-
Ptahhotep II/Thefi [74]	V.9M-L	X (2)		X (2)		X		X
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1		X	X (3)		X (3) (Gx3)		
Nebkauhor/ Idu [73]	V.9 r/u VI.1	-	-	X (2)		X (2) (Gx2)		
Kagemni [94]	VI.1 E	X	X	X (2)		X (2)		
Niankhnesut [99]	VI.1M-L	X		X				X
Seshemnofer/ Ifi [134]	VI.3-4	-	-	X				X
Kahep/ Tjeti-Iker [140]	VI.4M							
Neheri [151]	VI	-	-	X				X

Table P: Limb Positions of Type 5: Figures seated in middle of boat

Tomb	Date	Arm Position PB.A1	Arm Position PB.A2	Arm Position PB.A3	Leg Position Type E	Leg Position Type G
Atet [3]	IV.1M		X		X	
Nebemakhet [8]	IV.4-6					
Khnumhotep (D49) [15]	V.2-6					
Nefer and Kahay [18]	V.6E					
Rakhaefankh [26]	V.6?					
Iymery [20]	V.6	X (2)				X (2)
Irenkaptah [22]	V.6					
Akhethotep (Louvre) [31]	V.6-8E	X (2)				X (2)
Kapi [30]	V.6-8E	X (2)			X (2)	
CG 1697 [37]	V.6-8					
Hotepherakhti [34]	V.6-8		X			X
Ty [35]	V.6-8	X (4)				X (4)
Ptahshepses [41]	V.6L-9					
Inti [45]	V.8					
Kayemnofret (D23) [51]	V.8-9					
Hesimin (M22) [56]	V.8L-9E	X (4)				X (4)
Akhethotep (D64) [58]	V.8L-9E					
Senedjem-Ib/ Inti [59]	V.8L-9		X			X
Werirni [70]	V.9					
Khenut [68]	V.9					
Khunes [67]	V.9					
Nebet [62]	V.9	X				X
Ptahhotep II/Thefi [74]	V.9M-L	X (3)			X (2)	X
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1					
Nebkauhor/ Idu [73]	V.9 r/u VI.1					
Kagemni [94]	VI.1 E	X (3)	X		X (2)	X (2)
Niankhnesut [99]	VI.1M-L					
Seshemnofer/ Ifi [134]	VI.3-4					
Kahep/ Tjeti-Iker [140]	VI.4M					
Neheri [151]	VI					

Table Q: Individual Characteristics of Type 5: Figures seated in the middle of the boat

Tomb	Date	Hair Type A	Hair Type B	Body Type A	Body Type B	Clothing Type A	Clothing Type B	Clothing Type C
Atet [3]	IV.1M	-	-	X				X
Nebemakhet [8]	IV.4-6							
Khnumhotep (D49) [15]	V.2-6							
Nefer and Kahay [18]	V.6E							
Rakhaefankh [26]	V.6?							
Iymery [20]	V.6	X (2)		X (2)		X (3)		
Irenkaptah [22]	V.6							
Akhethotep (Louvre) [31]	V.6-8E		X (2)	X (2)			X (2)	
Kapi [30]	V.6-8E	X (2)		X (2)		X (2)		
CG 1697 [37]	V.6-8							
Hotepherakhti [34]	V.6-8		X	X		X		
Ty [35]	V.6-8	X	X (2)	X (4)		X (3) (Gx3)	X	
Ptahshepses [41]	V.6L-9							
Inti [45]	V.8							
Kayemnofret (D23) [51]	V.8-9							
Akhethotep (D64) [58]	V.8L-9E							
Hesimin (M22) [56]	V.8L-9E	-	-	X		X		
Senedjem-Ib/ Inti [59]	V.8L-9	X		X			X	
Werirni [70]	V.9							
Khenut [68]	V.9							
Khunes [67]	V.9							
Nebet [62]	V.9	X		X				X
Ptahhotep II/Thefi [74]	V.9M-L	X (3)		X (3)			X	X (2)
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1							
Nebkauhor/ Idu [73]	V.9 r/u VI.1							
Kagemni [94]	VI.1 E	X(4)		X (4)		X	X (2)	
Niankhnesut [99]	VI.1M-L							
Seshemnofer/ Ifi [134]	VI.3-4							
Kahep/ Tjeti-Iker [140]	VI.4M							
Neheri [151]	VI							

Table R: Supervisor Limb Positions, Individual Characteristics, and Clothing

Tomb	Date	Grasping and Leaning on Staff	Leg Position A	Clothing Type C	Additional Linen Sash	Hair Type A	Body Type A
Atet [3]	IV.1M						
Nebemakhet [8]	IV.4-6	X	X ¹⁷⁸⁹	X	X	X	X
Khnumhotep (D49) [15]	V.2-6						
Nefer and Kahay [18]	V.6E						
Rakhaefankh [26]	V.6?						
Iymery [20]	V.6		X				
Irenkaptah [22]	V.6						
Akhethotep (Louvre) [31]	V.6-8E						
Kapi [30]	V.6-8E						
CG 1697 [37]	V.6-8						
Hotepherakhti [34]	V.6-8						
Ty [35]	V.6-8	X	X				
Ptahshepses [41]	V.6L-9						
Inti [45]	V.8						
Kayemnofret (D23) [51]	V.8-9	X	X	X	X	X	X
Akhethotep (D64) [58]	V.8L-9E						
Hesimin (M22) [56]	V.8L-9E						
Senedjem-Ib/ Inti [59]	V.8L-9						
Werirni [70]	V.9						
Khenut [68]	V.9						
Khunes [67]	V.9						
Nebet [62]	V.9						
Ptahhotep II/Thefi [74]	V.9M-L						
Ihy r/u Seshseshet/ Idut [72]	V.9 R/uVI.1						
Nebkauhor/ Idu [73]	V.9 r/u VI.1						
Kagemni [94]	VI.1 E						
Niankhnesut [99]	VI.1M-L						
Seshemnofer/ Ifi [134]	VI.3-4						
Kahep/ Tjeti-Iker [140]	VI.4M						
Neheri [151]	VI						

¹⁷⁸⁹ One foot is slightly raised off register base.

Table S: Captions

Tomb Owner	Transliteration	Translation
Atet [3]	<i>sp[t]...</i>	Binding
Akhethotep (Louvre) [31]	<i>spt smḥ m r ʒḥ</i>	Binding the boat with a piece of papyrus
Kapi [30]	<i>spt m mḥ.t</i>	Binding (a boat) in the marshes
CG 1697 [37]	<i>spt snbt...</i> <i>ḳꜥ</i>	Binding well? precise/accurate ¹⁷⁹⁰
Hotepherakhti [34]	<i>spt smḥ</i>	Binding the <i>papyrus</i> boat
Ty [35]	<i>stʒ r=k.</i>	Pull to you!
	<i>iri (i) šʒnh</i>	Make
	<i>ḳꜥ wr.t</i>	Great Precision ¹⁷⁹¹
Ptahshepses [41]	<i>[s]pt</i>	Binding
Akhethotep (D64) [58]	<i>[s]pt smḥ m mḥt</i>	Binding the papyrus boat in the marshes
Hesimin (M22) [56]	<i>spt m mḥt</i>	Binding (a boat) in the marshes
Werirni [70]	<i>spt smḥ</i>	Binding the papyrus boat
Khenut [68]	<i>spt sm[h]</i>	Binding the papyrus boat
Khunes [67]	<i>spt smḥ</i>	Binding the papyrus boat
	<i>spt smḥ</i>	Binding the papyrus boat
Ihy r/u Seshseshet/ Idut [72]	<i>spt(?) in...t šsw</i>	Binding by... ropes
	<i>ʾIr.ḯ r ḥšt.k... im swt ḯw</i> <i>n(.ḯ) tn</i>	I will do as you wish... bring this to me

¹⁷⁹⁰ *ḳꜥ* is translated as 'precise/accurate'. No other comparable word is found in the dictionary. Faulkner, *Dictionary*, 50.

¹⁷⁹¹ See n. 1790 above.

Drying and Storage of Equipment Detail Tables A-D

Table A: Occurrence of Motif

Tomb	Location	Date
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7
Ty [35]	Saqqara	V. 6-8
Kagemni [94]	Saqqara	VI.1E
Mereruka [103]	Saqqara	VI.1M-L
Mehu [121]	Saqqara	VI.2
Ankhtyfy [148]	Mo'alla	VI.4L-VIII.E

Table B: Equipment Stored/Drying

Tomb	Date	Type	Quantity	Associated Theme(s)
Niankhkhnum and Khnumhotep [27]	V.6-7	Funnel Trap	1	Funnel Trap/ Weir
Ty [35]	V. 6-8	Large Net	1	Registering the Catch
Kagemni [94]	VI.1E	Large Net	1	Registering the Catch
Mereruka [103]	VI.1M-L	Funnel Trap	2	Funnel Trap/ Lave Net/ Gutting
Mehu [121]	VI.2	Funnel Trap	3	Funnel Trap
Mehu [121]	VI.2	Round Basket Trap	1	Funnel Trap
Ankhtyfy [148]	VI.4L-VIII.E	Round Basket Trap	1	Lave Net Fishing

Table C: Method of Storage/Drying

Tomb	Date	Placed on Shelf	Racking System	Stacked Vertically	Stacked Horizontally	Wedges used
Niankhkhnum and Khnumhotep [27]	V.6-7	X			X	X
Ty [35]	V. 6-8		X		X	
Kagemni [94]	VI.1E		X		X	
Mereruka [103]	VI.1M-L	X		X		
Mehu [121]	VI.2				X	
Mehu [121]	VI.2			X		
Ankhtyfy [148]	VI.4L-VIII.E	X ¹⁷⁹²				

¹⁷⁹² The trap is placed above the Lave Net scene without a sub-register being indicated.

Table D: Racking System Details (Net Drying Only)

Tomb	Date	Number of Rack Undulations	Vertical Rods with Bulbous ends	Horizontal Supports	Accompanying Baskets
Ty [35]	V. 6-8	8	X		2
Kagemni [94]	VI.1E	6 (Poss. 8)	X	X	2

Table A: Occurrence of Scene

Tomb	Location	Date	Net Construction/ Repair	Spinning Cord
Niankhkhnum and Khnumhotep [27]	Saqqara	V.6-7	X	X
Hotepherakhti [34]	Saqqara	V.6-8		X
Ty [35]	Saqqara	V. 6-8		X
Firth and Gunn: Spinning Cord [93]	Saqqara	VI.E		X
Ankhmahor [102]	Saqqara	VI.1M		X
Wedjahateti/ Neferseshemptah/ Sheshi [112]	Saqqara	VI.1L-2E	X	
Mehu [121]	Saqqara	VI.2	X	
Seshemnofer/ Ifi [134]	Saqqara	VI.2-VI.4E	X	X

Table B: Equipment

Tomb	Date	Spindle	Needle	Pole	Seat	Weights	Bowl	Coil of cord	Other
Niankhkhnum and Khnumhotep [27]	V.6-7	X (3)	X (1)	X (2)				X	Pile of equipment ¹⁷⁹³
Hotepherakhti [34]	V.6-8	-	-	-	X	X		X	Small Box
Ty [35]	V. 6-8	X	X	X	X		X		
Firth and Gunn: Spinning Cord [93]	VI.E					X		X	Small box
Ankhmahor [102]	VI.1M	X (2)	-	X	-	-			
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L-2E	-	-	X	X				
Mehu [121]	VI.2		X?	X	X	X?		X	Small box
Seshemnofer/ Ifi [134]	VI.2- VI.4E	X?	X	X (2?)	X	X?			

¹⁷⁹³ Seat, Poles, Weights or spindles, Basket, Circular objects: ball of cord, platforms.

Table C: Knitters Limb Position and Individual Characteristics
KEY:
Leg Positions:

F.1- *Seated; Both legs
drawn to chest*

Hair Type:

A- *Full head of hair*
B- *Receding Hair*

Body Type:

A- *Athletic*
B- *Non-Athletic*

Clothing Type:

C- *Kilt*

Tomb	Date	Leg Position: Type F.1	Arm: One arm Diagonally Downwards, Other extended forwards	Arm: Both arms extended forwards	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	X	X		A	A	C
Hotepherakhti [34]	V.6-8						
Ty [35]	V. 6-8						
Firth and Gunn: Spinning Cord [93]	VI.E						
Ankhmahor [102]	VI.1M						
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L-2E	X	X		A	A	C
Mehu [121]	VI.2	X		X	A	B	C
Seshemnofer/ Ifi [134]	VI.2- VI.4E	X	X (Var)		A	A	C

Table D: Spinner Limb Position and Individual Characteristics**KEY:****Leg Positions:**

A- Open Stance
 E- Semi-Kneeling
 F.2- Seated with One
 leg drawn towards
 chest, other extended
 forwards

Hair Type:

A- Full head of hair
 B- Receding Hair

Body Type:

A- Athletic
 B- Non-Athletic

Clothing Type:

C- Kilt

Tomb	Date	Leg: Type A	Leg: Type E	Leg Type F.2	Arm: One Diagonally Downward holding spindle, other extended forwards	Arm: Forearm extended backwards behind torso, Other extended forwards	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	X (1)		X	X(2)		A (1)	A (1), B(1)	C(2)
Hotepherakhti [34]	V.6-8		X		X		A	-	-
Ty [35]	V. 6-8		X			X	B	A	C
Firth and Gunn: Spinning Cord [93]	VI.E		X			X	A	A	C
Ankhmahor [102]	VI.1M		X (2)		X (2)		-	-	C (2)
Wedjahateti/ Neferseshemptah/ Sheshi [112]	VI.1L- 2E								
Mehu [121]	VI.2								
Seshemnofer/ Ifi [134]	VI.2- VI.4E			X	X		A	A	C

Table E: Other Figures Limb Positions and Individual Characteristics
KEY:
Leg Positions:

A- Open Stance
F.1- Seated; Both legs
drawn to chest

Hair Type:

A- Full head of hair
B- Receding Hair

Body Type:

A- Athletic
B- Non-Athletic

Clothing Type:

C- Kilt

Tomb	Date	Figure Type	Leg Position	Arm Position	Hair Type	Body Type	Clothing Type
Niankhkhnum and Khnumhotep [27]	V.6-7	Overseer	A	One arm along his side other in front holding staff tip	B	B	C with Fringed apron
		Inspector	F.1	One arm Diagonally Downwards, Other extended forwards	A	A	C
Ty [35]	V. 6-8	Shuttle Operator	F.1	Both Hands extended in front operating shuttle	A	B	C

Table F: Captions

Tomb	Transliteration	Translation
Niankhkhnum and Khnumhotep [27]	<i>dsf i3dt in whc hr s3-pr</i>	Making splendid the nets by fishermen at the byre (cattle shed)
	<i>smsw whc.w</i>	Eldest of fishermen
	<i>hsf nwt in whc n pr-dt</i>	Spinning of cord by fishermen of the estate
	<i>sti.t i3dt in whc n pr-dt</i>	Inspecting the nets by fishermen of the estate
Ty [35]	<i>wnni=tn rhw. w...</i>	Hurry yourselves men...'

Explanatory Notes for Detail Tables.

The following symbols are used universally within the Detail Tables and other Tables within this study. They are as follows:

X: Occurrence of detail within tomb.

X?: Possible occurrence of detail within tomb.

1,2,3... : Numerical value of detail within the scene.

X (1,2,3) : Numerical value of detail within the scene when using 'x' to advise of its inclusion.

- : Detail is not available for inclusion due to damage the scene has sustained.

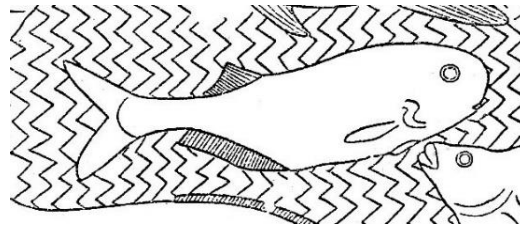
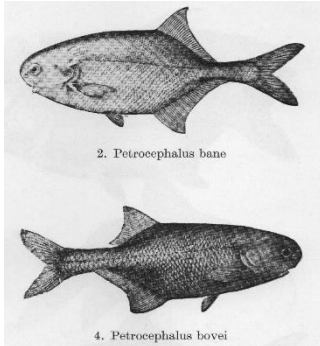
// : Missing or damaged text in Captions.

[...]: Reconstructed text in caption.

Please Note that all 'types', i.e. Limb Positions, Boat Structures, etc. are described in full in the relevant section in Appendix 4: Typology.

Appendix 3: Fish Profiles

Fish Profile: Petrocephalus



Kingdom: *Animalia*

Order: *Osteoglossiformes*

Family: *Mormyridae*

Genus: *Petrocephalus*

Species:

- *P. bovei*
- *P. bane*

Distribution:

- *P. bovei* - Nile river system, especially Lower Nile.
- *P. bane* - Nile Basin.
- Freshwater, open water, and vegetated areas.

Comments:

- No distinction is found between the two species. They are here grouped under *Petrocephalus*. They are also confused with *Marcusenius iisidori*.
- *P. bovei*
 - Generates electric organ discharge.
 - Insectivorous, feeding on the bottom and in vegetation, may consume algae, plankton and small fish.
 - No interest for commercial fishing.
 - Max length 11cm.
- *P. bane*
 - Insectivorous, feeding on the bottom and in vegetation, may consume algae, plankton and small fish.

- No interest for commercial fishing.
- Max length 20 cm.

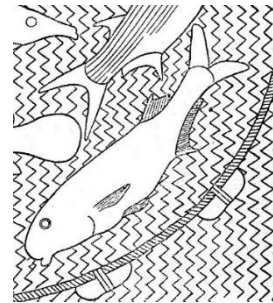
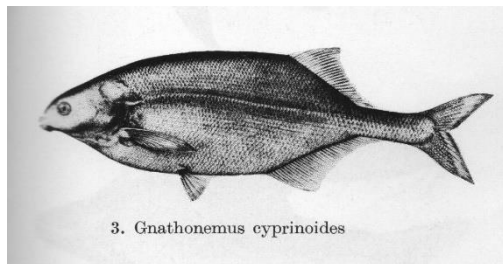
References:

- Brewer-Friedman, *Fish and Fishing*, 48-49.
- Gamer-Wallert, *Fische*, 5, Taf. III [2, 3].
- Sahrage, *Fischfang*, 71.
- Boulenger, *Fishes of the Nile*, 32-38.
- Gosse, 'Mormyridae.' 63-122.

Image One: Gamer-Wallert, *Fische* 5, Taf. III [2,3]

Image Two: From the dragnet scene of Ty [35]

Fish Profile: Gnathonemus



Common Name: Anooma; om-shifefe

Kingdom: *Animalia*

Order: *Osteoglossiformes*

Family: *Mormyridae*

Genus: *Gnathonemus*

Species:

- *Gnathonemus sp. (most likely cyprinoides)*

Distribution:

- Nile and Congo.
- Species in the Nile River system have been recovered from the Delta, Bahr el-Gebel, and Sudan.

Comments:

- Brewer and Freidman state that there are five known species within the Nile River, however *Gnathonemus cyprinoids* is the most likely candidate for tomb representations.¹⁷⁹⁴
- This species frequents areas of the waterbody which have aquatic vegetation, especially found in areas such as the Delta.
- It is possible that this species is nocturnal.
- Long body of up to 30 cm (male).
- Mouth in the terminal position.

- Dorsal and anal fins are present and mostly equal in length.
- Has a forked caudal fin, the lobes thinning to a point.
- A globular or swollen appearance to the chin.
- Silver or brownish colouring above uniform or dark blotches on body.
- Currently minimal commercial value.

References:

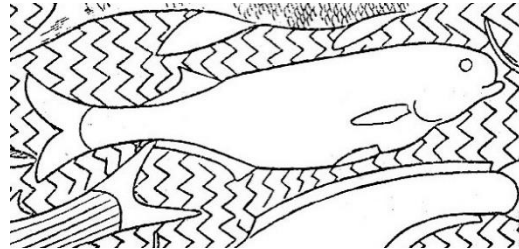
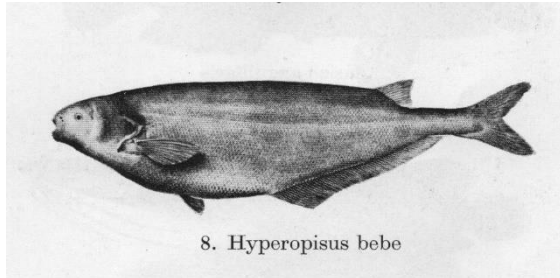
- Brewer-Friedman, *Fish and Fishing*, 50.
- Gamer-Wallert, *Fische*, 5, Taf. III [3].
- Sahrhage, *Fischfang*, 71.
- Boulenger, *Fishes of the Nile*, 48-54.

Image One: Gamer-Wallert, *Fische*, 5, Taf. III [3]

Image Two: From the Dragnet scene of Ty [35]

¹⁷⁹⁴ Brewer- Freidman, *Fish and Fishing*, 50.

Fish Profile: *Hyperopisus bebe*



Common Name: *Hyperopisus*, Phagrus

Kingdom: *Animalia*

Order: *Osteoglossiformes*

Family: *Mormyridae*

Genus: *Hyperopisus*

Species:

- *H. bebe*

Distribution:

- The species previously inhabited the entire Nile system in Egypt (from Delta to Aswan), but is now only known from Lake Nasser.
- Freshwater- both still and flowing water.

Comments:

- Diets consists of phytoplankton and possibly molluscs and aquatic insects.
- Is capable of emitting an electric discharge.
- This species is now rare in the Lower Nile System.
- Max length 51 cm, Max weight is 1kg.
- Has a small dorsal fin and longer dorsal fin.
- Anal fin originates at mid-body.
- Caught for commercial fishing.

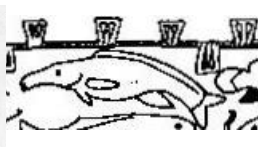
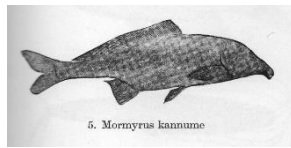
References:

- Brewer-Friedman, *Fish and Fishing*, 53.
- Gamer-Wallert, *Fische*, 6-7, Taf. II [8].
- Sahrhage, *Fischfang*, 71.
- Azeroual et-al. *Hyperopisus bebe*, The IUCN Red List of Threatened Species 2010.
- Boulenger, *Fishes of the Nile*, 70-73.

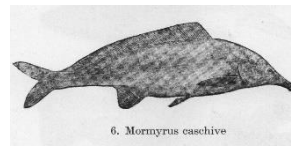
Image One: Gamer-Wallert, *Fische*, 6-7, Taf. II [8]

Image Two: From dragnet scene of Ty [35]

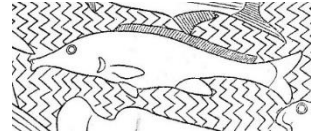
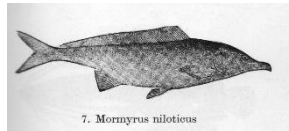
Fish Profile: Mormyrus



M. kannume



M. caschive



M. niloticus

Common Name: Elephant snout fish, bottlenose fish.

Kingdom: *Animalia*

Order: *Osteoglossiformes*

Family: *Mormyridae*

Genus: *Mormyrus*

Species:

- *M. Kannume*
- *M. Caschive*
- *M. Niloticus*

Distribution:

- *M. Kannume*- This species distribution extends from Egypt along the entire length of the Nile, and into Tanzania.
- *M. Caschive*- This species is found the entire length of the Nile.
- *M. Niloticus*- Historically found along the length of the Nile River system to Uganda. Now extinct in Egypt.
- Freshwater: widespread in both inshore and offshore waters.

Comments:

M. Kannume

- This is a solitary, nocturnal species.
- It feeds on benthic animals, with chironomid larvae as major food source.
- It has a curious habit of swimming backwards.
- The snout is thick and curved.

- This is a commercial species, caught in fair quantities in Upper Egypt.
- Max length 100cm.

M. Caschive

- Similar in behaviour to *M. Kannume*.
- Diet consists mainly of aquatic insects, particularly chironomid larvae and small shrimps, worms and vegetation.
- It is active mainly at night, and favours deep water with a soft muddy bottom.
- The snout is more slender than *M. Kannume* and is curved.
- Max length 100 cm.

M. Niloticus

- Commercial species for human consumption.
- This species has a straight and narrow snout, distinguishing it from *M. caschive* and *M. Kannume*.
- Max length 46 cm.

References:

- Brewer-Friedman, *Fish and Fishing*, 51-2.
- Gamer-Wallert, *Fische* 6, Taf. III [5, 6, 7].
- Sahrhage, *Fischfang*, 71.
- Azeroual, et al. *Mormyrus kannume*. The IUCN Red List of Threatened Species 2010.

- Azeroual, et al. *Mormyrus caschive*. The IUCN Red List of Threatened Species 2010.
- Gosse., *Mormyridae.*, 63-122.
- Azeroual, et al. *Mormyrus niloticus*. The IUCN Red List of Threatened Species 2010:
- Boulenger, *Fishes of the Nile*, 61-69.

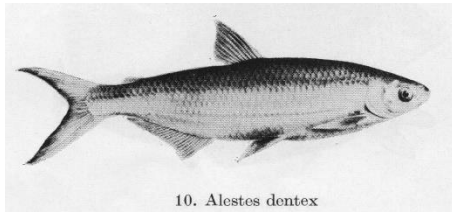
Photographic Images One, Three and Five: Gamer-Wallert, *Fische* 6, Taf. III [5, 6, 7].

Line Drawing One: From Hesi [110] Dragnet scene. (*M. Kannume*).

Line Drawing Two: From Spearfishing scene in Mereruka [103]. (*M. Caschive*) .

Line Drawing Three: From Dragnet Scene in Ty [35]. (*M. Niloticus*).

Fish Profile: Alestes



Common Name: Alestes, Characin, Nile Robber, Pebbly Fish.

Kingdom: *Animalia*

Order: *Characiformes*

Family: *Alestioidea*

Genus: *Alestes*

Species:

- *A. dentex*
- *A. baremose*
- *A. nurse*

Distribution:

- Nile River system including the White and Blue Nile.
- Freshwater, primarily found in inshore zones of the lakes and rivers.

Comments:

- Generally similar in appearance to the Tigerfish (*Hydrocynus*), only smaller. *A. dentex* and *A. nurse* reach up to 33 cm. *A. baremose* may reach 40 cm.
- Consumes insects, small fish, debris from bottom of river, snails, and vegetation.
- Brewer-Friedman suggests the only known representation of this fish is found in the 20th Dynasty Temple complex of Medinet Habu.¹⁷⁹⁵ Vandier identifies this fish in the scenes from Ankhtyfy [148].¹⁷⁹⁶



- Often found in schools at the water's surface.
- Used as salted fish especially in Upper Egypt. It is currently overfished.

References:

- Paugy, 'Characidae', 195-236
- Akinyi et al., *Alestes dentex*. The IUCN Red List of Threatened Species 2010.
- Brewer-Friedman, *Fish and Fishing*, 55.
- Gamer-Wallert, *Fische*, 7-8, Taf. III [10].
- Boulenger, *Fishes of the Nile*, 113-117.

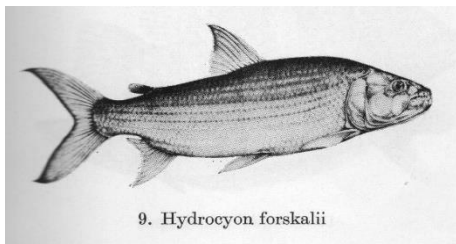
Image One: Gamer-Wallert, *Fische*, 7-8, Taf. III [10].

Image Two: From Ankhtyfy [148] Fowling Scene.

¹⁷⁹⁵ Brewer-Friedman, *Fish and Fishing*, 55.

¹⁷⁹⁶ Vandier, *Mo'alla*, 133.

Fish Profile: *Hydrocynus* spp.



Common Name: Tigerfish

Kingdom: *Animalia*

Order: *Characiformes*

Family: *Alestidae*

Genus: *Hydrocynus*

Species:

- *H. forskalii* (most likely candidate)
- *H. brevis*
- *H. lineatus*

Distribution:

- *H. forskalii*: Entire Nile river system.
- *H. brevis*: Luxor and Lower Nile.
- *H. lineatus*: Southern sector of Upper Egypt and Lake Nasser
- Freshwater only.

Comments:

- Scaleless head, sharp teeth and cylindrical body are distinctive in the art representations.
- Feed on fish (most frequently *Alestes* and *Tilapia sp.*), insect larvae and crustaceans. Known to cannibalize own species.
- Only known Old Kingdom representation is found in Ankhtyfy [148].
- Open water predator, often found in schools at the water's surface.
- Currently used for game fishing.



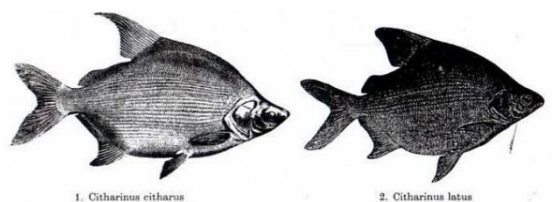
References:

- Brewer-Friedman, *Fish and Fishing*, 54-5.
- Gamer-Wallert, *Fische*, 7, Taf. III [9]
- Sahrhage, *Fischfang*, 72-3.
- Akinyi, et al., *Hydrocynus forskahlii*, The IUCN Red List of Threatened Species 2010.
- Boulenger, *Fishes of the Nile*, 100-104.

Image One: Gamer-Wallert, *Fische*, Taf. III [9]

Image Two: From the tomb of Ankhtyfy [148]

Fish Profile: *Citharinus* sp.



Common Name: Moon Fish

Kingdom: *Animalia*

Order: *Characiformes*

Family: *Citharindae*

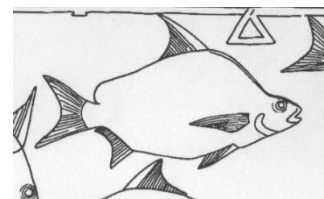
Genus: *Citharinus*

Species:

- *Citharinus Citharinus*
- *Citharinus latus*

Distribution:

- *Citharinus Citharinus*: Africa: Senegal, Gambia, Niger, Volta, Ouémé and Chad.
- *Citharinus latus*: Africa: Senegal, Casamance, Niger, Volta, the Chad basin and Guinée-Bissau, Togo and Benin. Also in the Nile and Lake Mobutu.
- Both inhabited the Nile River, however they are now rare. ¹⁷⁹⁷
- Freshwater, preferring mid to low depths.
- Inhabits open water and vegetated areas in lakes and flowing water.



Comments:

- Ingests mud containing benthic and sediment algae, phytoplankton, detritus and benthic animals.
- Defining characteristics include a short snout, rounded dish like body. Reaches up to 60 cm.
- It is a commercially fished species.

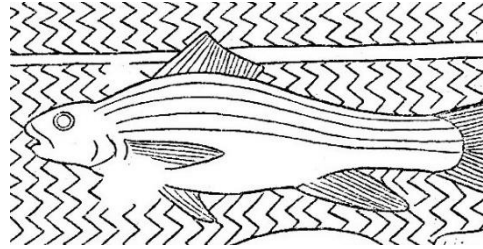
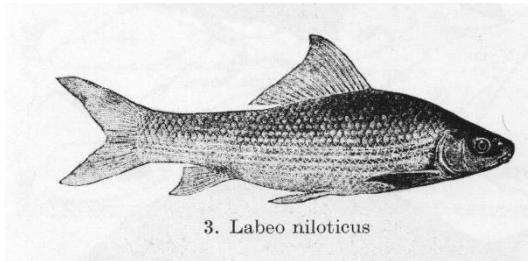
References:

- Brewer-Freidman, *Fish and Fishing* 56.
- Gamer-Wallert, *Fische*, 8, Tafel IV [1, 2].
- Azeroual, et al. *Citharinus latus*. The IUCN Red List of Threatened Species 2010.
- Sahrhage, *Fischfang*, 71-72.
- Boulenger, *Fishes of the Nile*, 153-156.

Image One: Gamer-Wallert, *Fische*, 8, Tafel IV [1, 2].

Image Two: From the dragnet scene in Akhetotep (Louvre) [31].

Fish Profile: Labeo Niloticus



Common Name: labeo, lebis, debs, Nile Carp

Kingdom: *Animalia*

Order: *Cypriniformes*

Family: *Cyprinidae*

Genus: *Labeo*

Species:

- *L. niloticus*

Distribution:

- Found along the length of the Nile River system; as well as other parts of Africa and South Asia.
- Freshwater.

Comments:

- Predominantly herbivorous; mainly diatoms, blue green algae. May feed on crustaceans, rotifers, nematodes and organic debris.
- Caught for human consumption.
- Identified in tomb art by the longitudinal lines applied to the body.

- Max length 47 cm.
- Only one definite identification of this fish is found in the tomb of Ty [35] (Image Two).

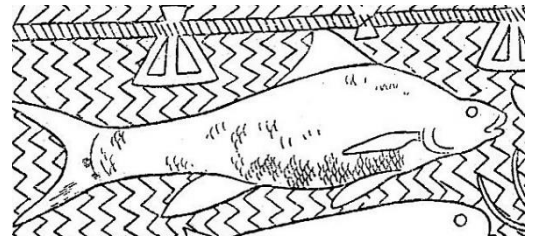
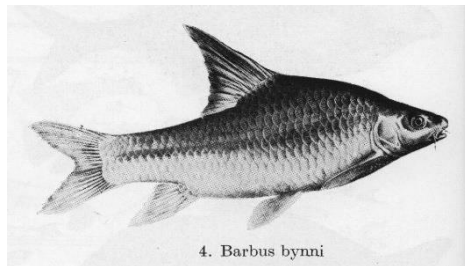
References:

- Brewer-Friedman, *Fish and Fishing* 57-58.
- Gamer-Wallert, *Fische* 9, Taf. IV [3].
- Azeroual, et al. *Labeo niloticus*. The IUCN Red List of Threatened Species 2010.
- Reid, *A revision of African species of Labeo (Pisces: Cyprinidae) and a re-definition of the genus.*, 322.
- Boulenger, *Fishes of the Nile*, 161-167.

Image One: Gamer-Wallert, *Fische* 9, Taf. IV [3].

Image Two: From dragnet scene of Ty [35].

Fish Profile: *Barbus bynni*



Common Name: bynni

Kingdom: *Animalia*

Order: *Cypiniiformes*

Family: *Cyprinidae*

Genus: *Barbus*

Species:

- *B. bynni*

Distribution:

- Africa: The Nile river and all lakes that are or were connected to it.
- May be found in ponds and irrigation trenches.
- Freshwater only.

Comments:

- Feed on crustaceans, insects, molluscs and organic debris.
- Maximum length of 82 cm. Weights of 5.5 kg have been recorded.
- It has an ossified spinal fin; the mouth located at the terminus of the head.
- Caught for human consumption and game fishing.

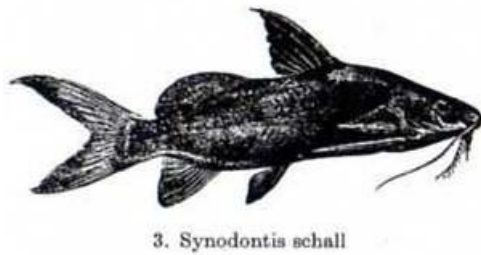
References:

- Lévêque- Daget, 'Cyprinidae'. In Daget-Gosse-Thys van den Audenaerde, (eds.) (CLOFFA). Vol. 1, 217-342.
- Brewer-Friedman, *Fish and Fishing*, 59.
- Gamer-Wallert, *Fische*, 9, Taf. IV [4].
- Sahrhage, *Fischfang*, 71-2.
- Azeroual- Getahun, *Barbus bynni*. The IUCN Red List of Threatened Species 2010.
- Boulenger, *Fishes of the Nile*, 203-208.

Image One: Gamer-Wallert, *Fische*, 9, Taf. IV [4].

Image Two: From the dragnet scene in Ty [35].

Fish Profile: *Synodontis Schall*



Common Name: *Synodontis Schall*

Kingdom: *Animalia*

Order: *Siluriformes*

Family: *Mochokidae*

Genus: *Synodontis*

Species:

- *S. Schall*

Distribution:

- Africa: Nile basin, Abaia, Stephanie, Rudolf, Lake Chad, Niger, and Senegal.
- Fresh water; deep and Inshore waters.

Comments:

- Maximum length 37 cm.
- Omnivore, feeds on insects, larvae, eggs and detritus. Also, feeds on fish, bivalves and snails.
- Breeding occurs during the flood season.
- Utilized for human consumption.
- The *S. Schall* and *S. Batensoda* are almost indistinguishable in the artistic representations.
- Colouration variations include greenish-yellow to pale brown; some individuals may have pattern of fine spots.

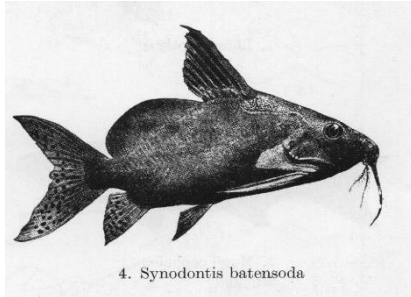
References:

- Brewer-Friedman, *Fish and Fishing*, 67-9.
- Gamer-Wallert, *Fische*. 12, Taf. V [3].
- Sahrhage, *Fischfang*, 72.
- Paugy- Roberts, 'Mochokidae', 195-268.
- Boulenger, *Fishes of the Nile*, 353-358.

Image One: Gamer-Wallert, *Fische*. 12, Taf. V [3].

Image Two: From the dragnet scene of Ty [35]

Fish Profile: *Synodontis Batensoda*



Common Name: Up-side down catfish, Nile catfish.

Kingdom: *Animalia*.

Order: *Siluriformes*

Family: *Mochokidae*

Genus: *Synodontis*

Species:

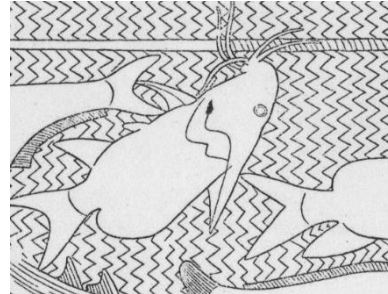
- *S. Batensoda*

Distribution:

- The entire Nile River, Senegal, Gambia, Niger and Chad basins.
- Fresh water; deep and Inshore waters.

Comments:

- Omnivore: Feeds on plankton, algae and detritus. May also feed on surface insects, benthic crustaceans and molluscs.
- Can be viewed swimming 'up-side' down.
- Venomous.
- Max length 20.5 cm, Max weight is 1.5 kg.
- Difficult to distinguish *S. schall* and *S. batensoda* in tomb art.



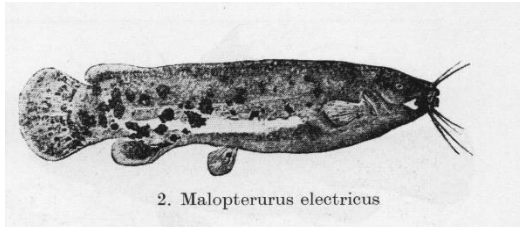
References:

- Brewer-Friedman, *Fish and Fishing*, 67-69.
- Gamer-Wallert, *Fische*. 12, Taf. V [4].
- Sahrhage, *Fischfang*, 72.
- Paugy- Roberts, 'Mochokidae'. 195-268.
- Boulenger, *Fishes of the Nile*, 350-352.

Image One: Gamer-Wallert, *Fische*. 12, Taf. V [4].

Image Two: From the dragnet scene in Ty [35].

Fish Profile: *Malapterurus electricus*



Common Name: Electric catfish

Kingdom: *Animalia*

Order: *Siluriformes*

Family: *Malapteruridae*

Genus: *Malapterurus*

Species:

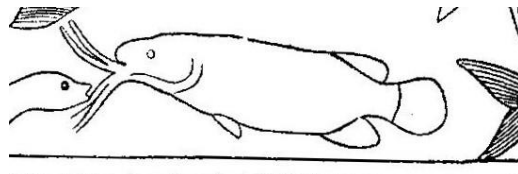
- *Malapterurus electricus* (*M. electricus*)

Distribution:

- Africa: occurs in the majority of the Nile system (exclusive of Lake Victoria), Lake Turkana, Lake Chad and Senegal basins, the Niger system, and in smaller southward flowing basins in west Africa.
- Generally, found among rocks or roots in black waters with low visibility. They favor sluggish or stagnate water.

Comments:

- The eyes are small, the snout is rounded with widely separated nostrils.
- *Malapterurus* species have three pairs of barbels, and lack a dorsal fin. The pectoral, pelvic, and caudal fins are rounded.



- A fish that is 50 cm in length can discharge up to 350 volts.
- *M. electricus* can grow as large as 122 cm and 20 kg.
- It uses its electrical discharges to stun prey. It will feed on any readily available prey in the habitat.
- The electrical discharge of *M. electricus* is not known to be fatal to humans.
- *M. electricus* is eaten as food in certain parts of Africa.

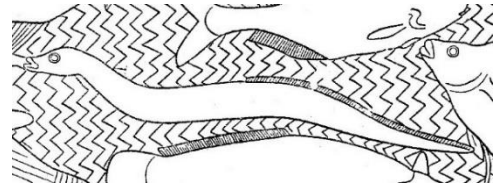
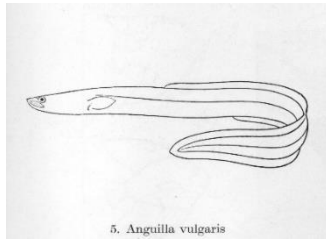
References:

- Brewer-Friedman, *Fish and Fishing*, 70.
- Sahrhage, *Fischfang*, 70.
- Gamer-Wallert, *Fische*, 12, Tafel V [2].
- Boulenger, *Fishes of the Nile*, 395-400.
- Roberts, 'A review of the African electric catfish', 1-15.

Image One: Gamer-Wallert, *Fische*, 12, Tafel V [2].

Image Two: From the weir scene in Ty [35]

Fish Profile: *A. vulgaris*



Common Name: Eel

Kingdom: *Animalia*

Order: *Anguilliformes*

Family: *Anguillidae*

Genus: *Anguilla*

Species:

- *A. vulgaris* synonym for *Anguilla anguilla*

Distribution:

- Found in marine, freshwater and brackish environments. A wide spread distribution; in Egypt, they are known along the length of the Nile, yet rarely south of Cairo.

Comments:

- Reaches lengths of up to 70 cm.
- Has a delicate taste.
- Multiple phased lifespan: from birth to maturity with change colour phase based on maturity. Full change is experienced for males between ages 9-12 years, females typically mature at 9-20 years. Life span is 15-20 years.

- Migrates from the Nile into the Mediterranean Sea for reproduction.
- It is agreed that the adults either stay in the sea after breeding or they die after reproduction.
- Used for both commercial and game fishing.
- Listed as critically endangered as of 2008.

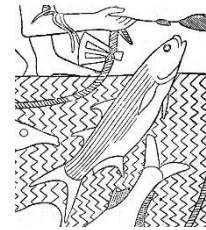
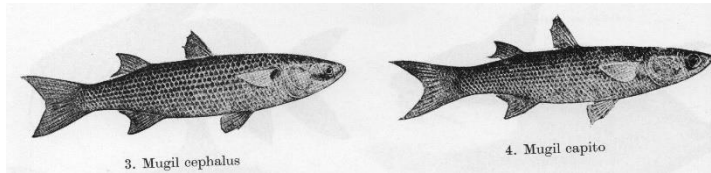
References:

- Jacoby-Gollock, *Anguilla anguilla*. The IUCN Red List of Threatened Species 2014.
- Brewer-Friedman, *Fish and Fishing*, 71.
- Gamer-Wallert, *Fische*, 12, Taf. V [5].
- Sahrhage, *Fischfang*, 72.
- Boulenger, *Fishes of the Nile*, 401-405.

Image One: Gamer-Wallert, *Fische*, 12, Taf. V [5].

Image Two: From Ty's [35] dragnet scene.

Fish Profile: Mugil sp.



Common Name: Mullet, Stripped Mullet, Bouri, Tobar, and Garan

Kingdom: *Animalia*

Order: *Mugiliformes*

Family: *Mugilidae*

Genus: *Mugil*

Species:

- *Mugil cephalus*
- *Mugil capito*
- *Mugil auratus*

Distribution:

- These species are found all along the Nile river system.
- *Mugil cephalus* are found in highly salty to fresh waters that are warm or temperate.
- Inhabits areas close to shore, around the mouths of streams and rivers or in brackish bays, inlets, and lagoons. They often enter estuaries and freshwater environments.

Comments:

- In the artistic depictions, the individual species cannot be differentiated therefore, they are grouped under *Mugil sp.*

- Striped mullet is regarded as an excellent food fish. They are prized for their roe.
- They are diurnal feeders, consuming mainly zooplankton, dead plant matter, and detritus.
- The maximum length is 120 cm, with a maximum weight of 8 kg. Maturity is reached at seven years for males and eight years for females, with a probable average lifespan of five years.
- Adults form huge schools near the surface, they are known for leaping meters out of the water.

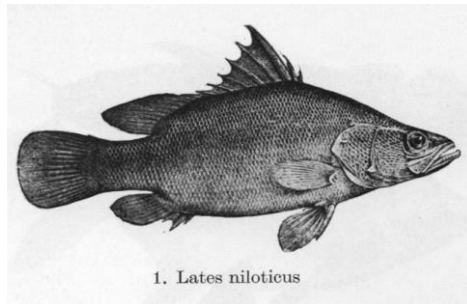
References:

- Brewer-Friedman, *Fish and Fishing*, 72-3.
- Gamer-Wallert, *Fische*, Tafel VI [3, 4].
- Sahrhage, *Fischfang*, 62-66.
- Boulenger, *Fishes of the Nile*, 427-435.

Image One: Gamer-Wallert, *Fische*, Tafel VI [3, 4].

Image Two: From Ty [35] dragnet scene.

Fish Profile: Lates



Common Name: Nile Perch

Kingdom: *Animalia*

Order: *Percomorphi*

Family: *Latidae*

Genus: *Lates*

Species:

- *L. niloticus*

Distribution:

- Nile River, connecting lakes and parts of the African continent.
- Adult Nile perch occupy all habitats in lakes and rivers 10-60 m in depth. Excludes swamps, and the pelagic zone.

Comments:

- Nile perch are silver in color with a blue tinge. They have a distinctive dark black eye with a bright yellow outer ring.
- The fish is easily identifiable in the representations due to its rounded caudal fin, and dorsal spines in front of dorsal rays.



- Nile perch are typically 2-4 kg, yet have been caught at sizes up to 200 kg. They average 85-100 cm in length but can grow to 193 cm. The females are generally larger than males.
- The diet of Nile perch consists of fishes (frequently *Tilapia sp.* and *Alestes*), insects, crustaceans and mollusks. The type of prey ingested by the predator depends on the predator size.
- Highly commercial, used as game fish.

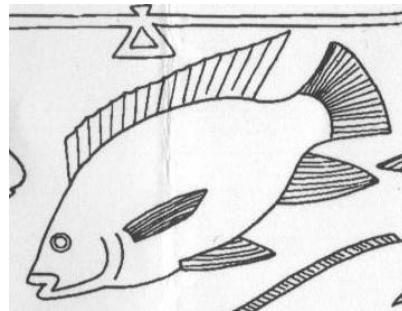
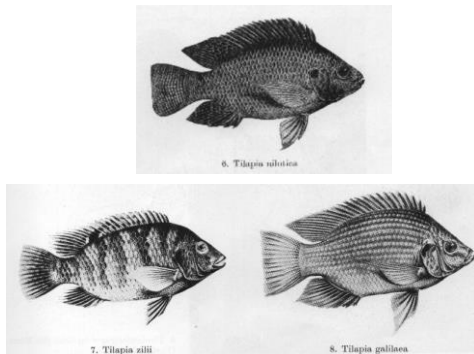
References:

- Brewer- Friedman, *Fish and Fishing*, 74-5.
- Gamer-Wallert, *Fische*, 13, Tafel VI [1].
- Sahrhage, *Fischfang*, 68-9.
- Boulenger, *Fishes of the Nile*, 452-458.

Image One: Gamer-Wallert, *Fische*, 13, Tafel VI [1].

Image Two: From the dragnet of Akhethotep (Louvre) [31].

Fish Profile: Tilapia



Common Name: Nile Tilapia

Kingdom: *Animalia*

Order: *Percomorphi*

Family: *Cichlidae*

Genus: *Tilapia*

Species:

- *T. nilotica*
- *T. galilaea*
- *T. zillii*

Synonym: *Oreochromis niloticus* (Linnaeus, 1758)

Distribution:

- Wide distribution within Africa: Great Lakes, East Africa, Senegal, Chad basin and Niger.
- Nile River: Inshore waters with vegetation.

Comments:

- The three species cannot be distinguished in depictions, collectively referred to as *Tilapia* sp.
- Mouth brooders (exception *T. zillii*).
- Inhabit fresh water, less commonly found in brackish waters.
- Omnivorous with preference for soft aquatic vegetation.
- Become pests when introduced to new habitats.

- Large species with rapid growth, can reach lengths of 53 cm.
- These fish are well liked as a food fish and are low in mercury.
- Control some plant and mosquito population; due to their diet on mosquito larvae.
- Highly commercial.

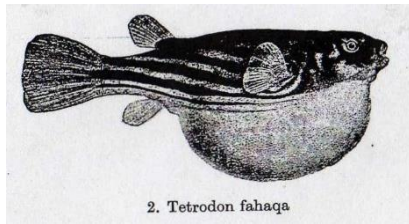
References:

- Brewer-Friedman, *Fish and Fishing*, 67-9.
- Gamer-Wallert, *Fische*, 13-14, Tafel V [6, 7, 8].
- Trewavas, 'Tilapiine fishes of the genera *Sarotherodon*, *Oreochromis* and *Danakilia*.', 583.
- Sahrhage, *Fischfang*, 66-9.
- Boulenger, *Fishes of the Nile*, 525-534.

Photographic Images One -Three: Gamer-Wallert, *Fische*, 13-14, Tafel V [6, 7, 8].

Image Four: From the dragnet scene of Akhethotep (Louvre) [31].

Fish Profile: Tetraodon Fahaka



Common Name: Puffer Fish, Nile Puffer, Fahaka puffer

Kingdom: *Animalia*

Order: *Tetraodontiformes*

Family: *Tetraodontidae*

Genus: *Tetraodon*

Species:

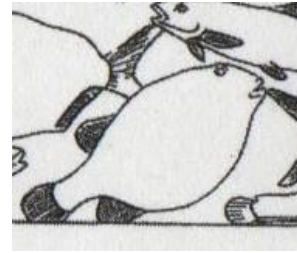
- *Tetraodon fahaka*; *Tetraodon lineatus* (synonym to *Tetraodon fahaka*)

Distribution:

- Found in large rivers, open water, weed beds and vegetated areas. Usually at depths of up to 5 meters.
- Africa: Nile, Chad basin, Niger, Volta, Gambia, Geba and Senegal Rivers.
- Fresh-brackish water only.

Comments:

- Poisonous: neurotoxin which induces paralysis leading to respiratory arrest. No known antidote.
- Aggressive to other fish and towards own species.
- Main food source is molluscs and crustaceans.
- Will inflate with air or water as a defence mechanism.
- The representations in the art typically show the fish inflated with a globular body.



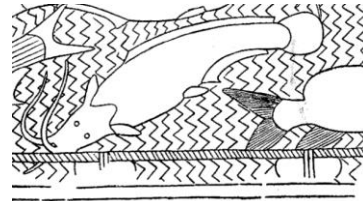
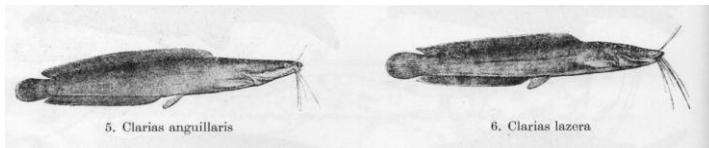
References:

- Brewer-Friedman, *Fish and Fishing*, 80-1.
- Gamer-Wallert, *Fische*, 14-15, Tafel VI [2].
- Roberts, 'Tetraodontidae'. 434-436.
- Sahrhage, *Fischfang*, 72.
- Boulenger, *Fishes of the Nile*, 544-547.

Image One: Gamer-Wallert, *Fische*, 14-15, Tafel VI [2].

Image Two: Pleasure Cruise scene in Kagemni [94].

Fish Profile: *Clarias* sp.



Common Name: Catfish, Air breathing mudfish.

Kingdom: *Animalia*

Order: *Siluriformes*

Family: *Clariidae*

Genus: *Clarias*

Species:

- *C. Anguillaris*
- *C. Lazera*

Distribution:

- Most of Africa and surrounding areas. The *C. lazera* and *C. anguillaris* inhabit the Nile river system; the *C. anguillaris* most common in the Lower and Middle Nile River system.
- Freshwater only.

Comments:

C. lazera

- Able to leave the water, typically at night, by utilizing its strong pectoral fins and spines so that it may search for food or can move into the breeding locations.
- Omnivorous bottom feeders which occasionally feed at the surface; prey includes insects, plankton, invertebrates, and fish. Known to take young birds, rotting flesh, and plants.
- Highly prized food fish in Africa; eaten broiled, fried, and baked.
- Known to be caught with dragnets.
- Can generate electric discharges lasting from 5-260 milliseconds.
- Considered nocturnal and a pest.

C. anguillaris

- Are able to survive dry spells by burying themselves in mud.
- Feeds mainly on fish and molluscs; but also, crustaceans, detritus and bottom organisms.
- Length of body for West African examples can reach 65cm.

References:

- Brewer-Friedman, *Fish and Fishing*, 60-1.
- Gamer-Wallert, *Fische*. 9, Taf. IV [5,6].
- Sahrhage, *Fischfang*, 72.
- Teugels, 'A systematic revision of the African species of the genus *Clarias*', 199.
- Boulenger, *Fishes of the Nile*, 276-299.

Image One: Gamer-Wallert, *Fische*, 9, Taf. IV [5,6].

Image Two: From the dragnets scene in Ty [35].

Fish Profile: Schilbe



9. *Schilbe mystus*



10. *Schilbe uranoscopus*

Common Name: Egyptian Butter Catfish

Kingdom: *Animalia*

Order: *Siluriformes*

Family: *Schilbeidae*

Genus: *Schilbe*

Species:

- *S. mystus*
- *S. uranoscopus*

Distribution:

- *S. uranoscopus*: Africa: Nile, Niger, Chad and Turkana systems. The *S. uranoscopus* has a southern distribution in the Nile River system.
- *S. mystus*: Africa, including the Nile and the Zambesi system. *S. mystus* is common to the lower Nile River. It may also be found in irrigation canals and small bodies of water such as ponds.

Comments:

- The depictions in wall scenes do not differentiate the two species when represented in art. They are collectively called *Schilbe* in this study.
- A *Schilbe* is depicted with a feather like anal fin whereas the



Barbus bynni will have a 'v' shaped anal fin. It is distinctive in the art due to its humped nape and pectoral and dorsal spines.

- Both species can reach lengths of 33-34 cm.
- Fish are found close to the surface; diet consists of insects.
- This species has commercial value and is used as a game fish.

References:

- Brewer-Friedman, *Fish and Fishing*, 64-5.
- Gamer-Wallert, *Fische*, 12, Taf. IV [9,10].
- Sahrhage, *Fischfang*, 70-1.
- De Vos, 'A systematic revision of the African Schilbeidae (Teleostei, Siluriformes). 271:1-450.
- De Vos, 'Schilbeidae', 97-116.
- Boulenger, *Fishes of the Nile*, 311-317.




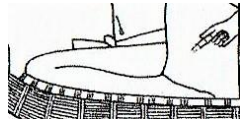
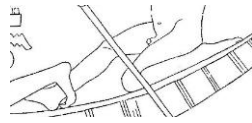
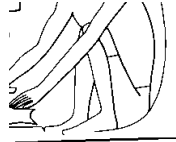
Image One: Gamer-Wallert, *Fische*, 12, Taf. IV [9,10].

Image Two: From the returning boatmen scene in Kagemni [94].


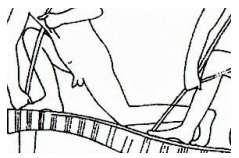
Appendix 4: Typology

Leg Positions

Basic Leg Positions


Type	Description	Image
A	<i>Open Stance</i> : One foot is placed in front of the other; the soles of the feet are flat against the register base/boat etc.	Akhethotep (Louvre) [31] 
B	<i>Stride</i> : One foot is placed in front of the other with a large gap between them. One is raised to the balls of the foot (usually the back foot)	Mereri [108] 
C	<i>Leaning stance</i> : legs are close together, some are shown with one or both feet on their heels and/or toes.	Akhethotep (Louvre) [31] 
D	<i>Kneeling</i> : Both legs are folded underneath the buttocks with either the top of the feet flat on the register base /boat, or the toes supporting the weight of the figure.	Kagemni [94] 
E	<i>Semi-Kneeling</i> : One leg is folded under the body in the same manner as a kneeling figure, the second leg extended in front at a 90°-180° degree angle.	Ty [35] 
F.1	<i>Seated</i> : The buttock is on the register base/boat with both legs bent in front of the torso with the knees drawn to the chest.	Niankhkhnum and Khnumhotep [27] 

Appendix 4: Typology


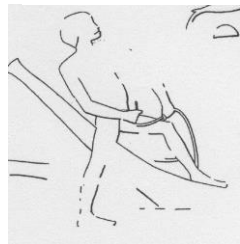
F.2	<i>Seated</i> : The buttock is on the register base/boat with one leg bent, the knee drawn to the chest, the other is extended at a 100°-180° degree angle.	<p>Ramaka [28]</p> 
G	<i>Lunge</i> : The body is bent over the forward leg (typically at 90°), the back leg may be extended backwards diagonally or bent with knee resting on surface.	<p>Kagemni [94]</p> 

Leg Positions: Other




Leg Positions: Lave Net Haulers

Type	Description	Image
L.1	Bent: one or more of the legs is bent at the knee	<p>Ihy r/u Seshseshet/ Idut [72]</p> 

Leg Positons: Papyrus Boat Construction Workers


Type	Description	Image
PB.L1	A foot of the figure is over the side of the boat and has the rope wrapped or looped around the foot. The second leg is typically bent and placed on the prow or stern.	<p>Ty [35]</p> 
PB.L2	One foot on ground, other foot flat in boat; bent at knee	<p>Kapi [30]</p> 

Appendix 4: Typology

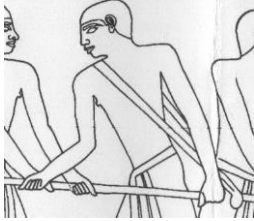

PB.L3	One foot on ground, other foot in boat on heel or toes; bent at knee	Weriri [70] 
PB.L4	One foot on ground, other leg folded (as if kneeling) on boat	Kapi [30] 
PB.L5	One foot on ground, other leg lifted (in front bent at knee) and leaning against boat hull.	Nefer and Kahay [18] 

Arm Positions


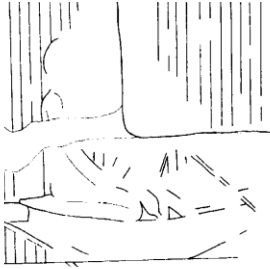
Arm Positions: Dragnet Haulers

Type	Description	Image
DA.A	<i>Forwards:</i> both arms are in front of the body, grasping the rope of the dragnet	Akhethotep (Louvre) [31] 


Appendix 4: Typology

DA.B	<i>Either side:</i> the arms are shown on either side of the body, one is behind, the other in front of the body;	Akhethotep (Louvre) [31] 
DA.C	<i>Behind:</i> both arms are shown crossing the chest and holding the rope behind the torso	Ty [35] 



Arm Position: Angling

Type	Description	Image
A	One hand holds the fishing line, the other raises a club.	Nikauisesi [101] 
B	One hand holds a fishing line, the other is by the side at rest.	Nimaatre [60] 


Appendix 4: Typology

C	One hand holds a fishing line, the other is in a unique/rare position.	<p>Kagemni [94]</p> 
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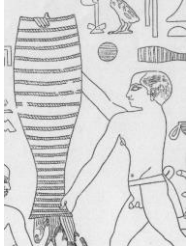

Arm Position: Lave Net Fishermen

Type	Description	Image
LA.1	<i>Forward:</i> both arms and hands are in front of the body, the elbows bent and pointed towards the base of the register.	<p>Kayemnofret (D23) [51]</p> 
LA.2	<i>Rotated:</i> both arms are in front of the body but one arm is rotated, its elbow positioned towards the top of the register	<p>Kagemni [94]</p> 

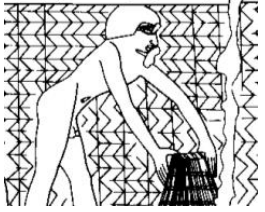
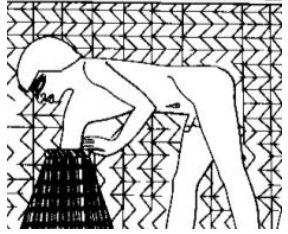
Arm Position: Funnel Trap Attendants

Type	Description	Image
FA.1	Hand at the front grasping the mouth of the trap at an invariably 45° angle to body. The other arm extends forward at approximately 90°, the hand placed on the trap's body, securing it firmly in place	<p>Ty [35]</p> 

Appendix 4: Typology

FA.2	The hand depicted in the forefront grasps the open base of the trap while the other holds the trap's mouth; ¹⁷⁹⁸ and	<p>Ty [35]</p> 
FA.3	The hand in front is placed on the mouth of the upside-down trap, and the other is at the base.	<p>Hesi [110]</p> 

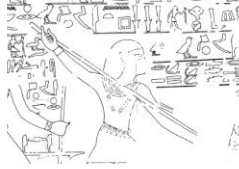



Arm Position: Round Basket Trap Attendants

Type	Description	Image
A	Arms are at an acute 45° angle to the body, typically attested for figures with a torso bent at 135°.	<p>Niankhkhnum and Khnumhotep [27]</p> 
B	Arms are at a 90° angle from the body, used for minor figures with a 90° bend to the waist.	<p>Niankhkhnum and Khnumhotep [27]</p> 


¹⁷⁹⁸ The trap is inverted when emptying, thus the base is at the bottom.

Appendix 4: Typology


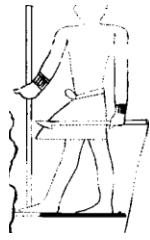


Arm Position Spearfishing Major Figure/ Active Son

Type	Description	Image
SFA	Arms are held horizontally holding spear with little bend to elbows.	<i>Henqu/ Iy...f II [120]</i> 
SFB	Arms are held horizontally with a bend to the elbows. Arms are held in this position at or below shoulder height	<i>Shepsipumin/ Kheni [147]</i> 
SFC	Arms are held horizontally with an < 90° bend to the elbows. Arms are held in this position at or below shoulders height	<i>Khewen-wekh/ Tjetji [122]</i> 
SFD	The rear arm is shown raised above the shoulders with elbow bent; the fore arm held at or below shoulder height.	<i>Niankhkhnum and Khnumhotep [27]</i> 


Arm Positions: Spearfishing Inactive Son

Type	Description	Image
SF.S.A	One arm at rest/ one to mouth; variation one arm to chest, other at rest (holding object)	<i>Shepsipumin/ Kheni [147]</i> 





Appendix 4: Typology

SF.S.B	One arm touching tomb owner, other holding object.	<i>Henqu/ Kheteti I [105]</i> 
SF.S.C	Both hands holding object(s)	<i>Idu I [128]</i> 
SF.S.D	One hand holding object, other at rest.	<i>Ibi [130]</i> 
SF.S.E	Both hands/ arms at rest.	<i>Nekhebu [119]</i> 

Arm Positions: Spearfishing: Wife/Female Figure

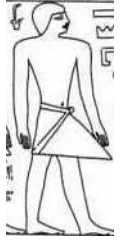




Type	Description	Image
SF.W.A	Active gesturing forwards; rear arm touching tomb owner	<i>Seankhuipah [106]</i> 

Appendix 4: Typology

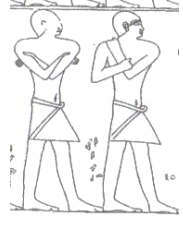
SF.W.B	One arm holding object, other touching tomb owner.	<p>Niankhkhnum and Khnumhotep [27]</p> 
SF.W.C	One arm to chest or at rest; other touching tomb owner.	<p>Remni/Merwi [109]</p> 
SF.W.D	One arm holding object; other at rest by side /on lap.	<p>Mereruka [103]</p> 
SF.W.E	One arm across chest; other at rest.	<p>Niankhkhnum and Khnumhotep [27]</p> 

Appendix 4: Typology



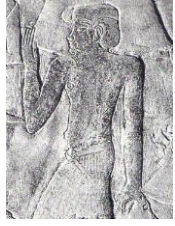
Arm Positions: Spearfishing Attendants

Type	Description	Image
SFA.A	Arms are either side of body with slight bend to elbows (may or may not be holding object).	Inumin [111] 
SFA.B	One arm at rest by side, other extended forwards at any degree (may be holding object).	Niankhkhnum and Khnumhotep [27] 
SFA.C	One at rest by side; other hand is raised towards or above shoulder	Hesimin (M22) [56] 
SFA.D	Both arms are holding an object across the torso	Kaiemankh [57] 
SFA.E	One arm/hand is raised across the chest: other arm either by side or extended forwards to any degree (including to shoulder height).	Kaiemankh [57] 

Appendix 4: Typology





SFA.F	Both arms are crossed at chest- either with forearms crossed or one hand on shoulder; other hand tucked under armpit/opposite arm.	Mereruka [103] 
SFA.G	Other; Infrequent or unique arm position.	No Image

Arm Positions Registering the Catch Bearers


Type	Description	Image
A	Both arms are bent 45° at the elbow, each reaching up to hold onto the end of a pole.	Mehu [121] 
B	One arm is placed straight at the body, its hand holding a fish either directly or by rope; the other arm is bent at a 90° angle, holding the fish against the chest or at chest height.	Kagemni [94] 
C	One arm is placed straight at the body, its hand holding a fish; the other arm is bent up at a 45° angle, holding a fish slung over the shoulder or placed in a basket balanced on the shoulder.	Mehu [121] 

Appendix 4: Typology


Arm Positions: Registering the Catch Seated Official's

Type	Description	Image
A	The arms are crossed over the chest and the hands are under the armpits.	<p><i>Mehu [121]</i></p> 
B	One arm is across the chest, its hand placed on the opposite shoulder; the second hand holds the first arm's elbow.	<p><i>Mehu [121]</i></p> 
C	A variation of Type B, where the second hand is not holding the elbow but the forearm of the arm crossed over the chest.	<p><i>Mehu [121]</i></p> 
D	Both arms are extended forwards to receive fish. This position is reserved for the first two officials of the sub-registers.	<p><i>Mehu [121]</i></p> 

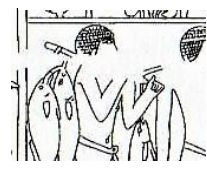
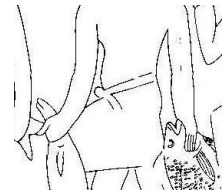


Arm Position: Gutters Arm Position

Type	Description	Image
GA	Arm at the forefront of the figure is gutting the fish	<p><i>Kapi [30]</i></p> 


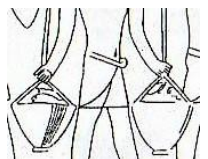
Appendix 4: Typology

GB	Other (rear) arm is gutting the fish	<p><i>Niankhkhnum and Khnumhotep [27]</i></p> 
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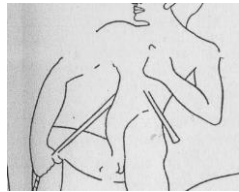
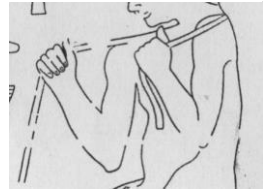
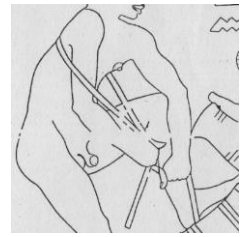
Arm Position: Bearers

Type	Description	Image
BA.1:	This type refers to both arms bent at the elbow at forty-five degrees reaching up to hold onto the end of the pole.	<p><i>Mereruka [103]</i></p> 
BA.2:	This type includes figures with one arm straight along the body holding a fish either by rope or its body with the other arm at waist height or lower.	<p><i>Watetkhet-Hor/ Seshseshet [104]</i></p> 
BA.3:	In opposition to type 2, this type refers to the figure with one arm along the side of his body holding a fish while the other arm is bent up from waist height or higher. This type included figures holding a fish that is slung over his shoulder, held up in his hand/platter or in a basket balanced on the shoulder.	<p><i>Mehu [121]</i></p> 
BA.4:	Figures are holding a large fish with the vertical arm holding the tail and the bent arm in front supporting the head of the fish. The vertical arm may be bent upwards slightly or across the waist at 90 degrees.	<p><i>Mehu [121]</i></p> 

Appendix 4: Typology


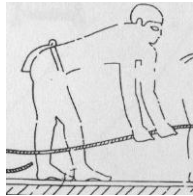
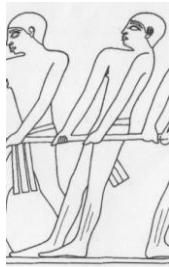
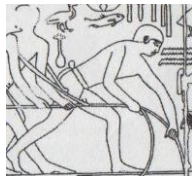
BA.5:	One arm of the figure is depicted in front of the chest while the other is raised and bent at 90 degrees with the elbow turned out facing the top of the register.	lymery [20] 
BA.6	The arms are depicted at either side of the body (turned out to either side), each showing a bend to the elbow at various degrees.	Mereruka [103] 

Arm Positions: Papyrus Boat Construction Workers

Type	Description	Image
PB.A1	The arms are in front of torso, one extended in a downward direction grasping rope, other arm is pulled towards the chest, bent at elbow (45 degrees) holding rope closer to torso.	Ty [35] 
PB.A2	The arms are depicted as in front of the torso: both bent at the elbow and drawn into the chest.	Ty [35] 
PB.A3	Refers to the arms fully extended vertically (down) or with a slight bend to the elbow	Ty [35] 

Body Positions

Dragnet Haulers Body Positions

Type	Description	Image
A	<i>Upright position:</i> figures stand upright, and could slightly lean backwards with feet separated.	<p>Nikauhor [64]</p> 
B	<i>Bent position:</i> figures are bent at the waist at various degrees.	<p>Kahep/ Tjeti-Iker [140]</p> 
C	<i>Leaning position:</i> figures can be either leaning forwards or backwards while hauling the net. The feet are together, the weight distributed onto the ball (leaning forward) or on the heels of the feet (leaning backward).	<p>Akhethotep (Louvre) [31]</p> 
D	<i>Lunge position:</i> figures are shown with the torso lowered over the bent front leg, the other leg extended behind.	<p>Kagemni [94]</p> 

Appendix 4: Typology

Lave Net Fishermen Body Positions

Type	Description	Image
A	<i>Leaning forwards</i> : the figure leans forward or is bent at the waist at various degrees, typically between 90° and standing upright.	Niankhkhnum and Khnumhotep [27]
B	<i>Vertical</i> : the body is depicted as vertical, the figure standing upright.	Mereruka [103]
C	<i>Leaning back</i> : the figure leans backward at a slight angle, usually with the weight distributed on the back leg with its knee often bent.	Nimaatre [60]
D	<i>Other</i> : any other position	No Image


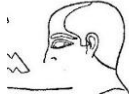
Individual Characteristics and Clothing

Individual Characteristics: Body


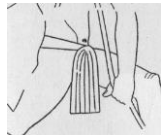
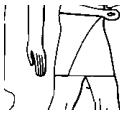


Type	Description	Image
A	Athletic	Inumin [111]
B	Non- Athletic	Ty [35]

Appendix 4: Typology




Individual Characteristics: Hair

Type	Description	Image
A	Full head of hair	<i>Akhethotep (Louvre) [31]</i> 
B	Receding hairline	<i>Ty [35]</i> 

Clothing

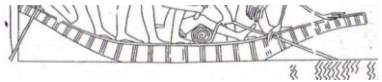

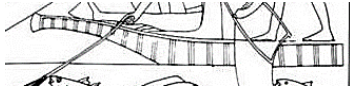
Type	Description	Image
A	Naked	<i>Ty [35]</i> 
B	Belt/ Loincloth	<i>Ty [35]</i> 
C	Kilt (Wrap Around)	<i>Niankhkhnum and Khnumhotep [27]</i> 
	Kilt (Point)	<i>Mereruka [103]</i> 
	Kilt (Drop/ Herdsmen)	<i>Mereruka [103]</i> 

Appendix 4: Typology

	Kilt (Fringed Apron)	Niankhkhnum and Khnumhotep [27] 
	Kilt (<i>Shendty</i>)	Mereruka [103] 
D	Apron/ Tunic	Kahep/ Tjeti-Iker [140] 


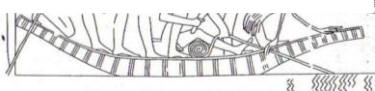
Boats

Boat Structure

Type	Description	Image
A	<i>Near horizontal position</i> : the prow and stern are curved to near horizontal position over the water's surface.	Nikauisesi [101] 
B	<i>Vertical position</i> : the prow and stern are turned sharply and vertically away from the water.	Iynofert/ Shanef [63] 
C	<i>Varying position</i> : one end shows a Type A prow whilst the other end is rounded, terminating at the water's surface.	Ihy r/u Seshseshet/ Idut [72] 

Appendix 4: Typology

Boat Detailing

Type	Description	Image
A	Lashing and reed visible on hull	<p><i>Mereruka [103]</i></p> 
B	Lashing only is visible on hull	<p><i>Nikauisesi [101]</i></p> 
C	No detailing is applied to hull	<p><i>Kayemnofret (D23) [51]</i></p> 