



An Analysis of the Behavior of Bovine Figures in Ancient Egyptian New Kingdom Afterlife Books

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Keywords

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Bovine figures
Bovine-horned iconography
Behavior of theriomorphic deities.

Abstract

This paper investigates the behavior of bovine figures in four New Kingdom afterlife books: the Amduat, the Book of Gates, the Book of Caverns and the Book of Earth. While prior studies have focused primarily on theology and the roles of deities in the afterlife, the behaviors and symbolic actions of theriomorphic deities have received less attention. To address this gap, this study employs textual and iconographic analyses, examining the epithets, attributes, and actions of these bovine figures. Occasionally, however, examples from private tombs are consulted to provide a comparative iconographic analysis of a certain deity. The findings show that the majority of these figures are concentrated in the Amduat. Also, the findings show that the studied figures can be grouped into four groups according to their epithets: swallowing, horns-related epithets, kA(bull)-related epithets, and unique epithets. The analysis shows that there is a further relationship between the bull-horned deities associated with swallowing and the action of burning, while the deities whose epithets are associated with the term kA “bull” are associated with ‘vocalization’. The study also shows that the terms for vocalization were carefully selected to suit the actions of these figures. Further, the analysis of actions associated with these figures reveals a relationship between actions done and bovine attribute gained by representing these figures with bulls’ horns. It was also found that the terms employed for horns vary depending on action done by the figure. Hence, while ab “horn” horn is associated with tackling enemies, wp, also horn, is associated with creation.

Introduction:

In ancient Egyptian funerary contexts, animal figures, particularly bovine and bovine-headed entities, held significant symbolic and functional roles. This paper explores these roles by analyzing the behavior and attributes of bovine figures in New Kingdom afterlife texts, especially as depicted in Netherworld guides such as the *Amduat*. The study aims to provide a nuanced understanding of the conceptualization and representation of these figures through a framework based on epithets, iconography, and actions.

Unlike studies on human behavior, which often rely on verbal data, researching nonverbal species requires carefully formulated behavioral criteria. This challenge becomes even more complex in a mythological context, where interpretations are shaped by cultural and symbolic layers rather than observable animal actions. Here, particular attention is paid to cattle horns, a recurring motif in the *Amduat*, and their symbolic contribution to the identities of these netherworld entities. By examining textual references alongside pictorial representations, this paper prioritizes ancient Egyptian perspectives over modern interpretations to avoid constructing an anthropocentric or anachronistic view of these figures.

It is necessary to stress at the outset of this paper that, as Galan correctly opines, the scene and its surrounding context, along with related religious and funerary practices of the time, indicate that these representations are symbolic rather than literal depictions.¹ Also, it is noteworthy that the use of animal features heavily relies on the ‘context’. To put it more bluntly, the king’s enemies were referred to as ‘shrews’;² while in the *Amduat*, a shrew-headed deity is identified as snD.n=f-imntyw “He-who-frightens-the-westerners.”³

Scholarship has generally leaned toward anthropocentric interpretations, often overlooking the independent symbolic agency of animals in ancient Egyptian belief systems. This study aims to address this gap, offering a culturally grounded exploration of bovine entities in the context of the New Kingdom’s rich funerary literature. To address this gap, this study examines the bovine figures through textual and iconographic analyses, focusing on their epithets, attributes, and depicted actions. This study aims to explore the following key questions:

- Is there a relationship between the figures’ epithets, iconography, and actions?
- How do the physical attributes of the studied figures, such as horns, correlate with their behaviors?

By addressing these questions, the study aims to gain a deeper understanding of the functions of these figures by examining their actions within the broader context of their behaviors.

¹ Galan, J. M., ‘Bullfight Scenes in Ancient Egyptian Tombs’, *JEA* 80 (1994), (1994), 81.

² Abo El Magd, *JARCE* 52 (2016), 334.

³ Hornung, *Das Amduat* I, 83.

Previous Research:

Research into animal behavior in ancient Egypt, especially within Netherworld texts, remains limited. Evans examined animal behavior extensively, though this study does not aim to replicate that work.⁴ Galán provided a detailed analysis of bullfighting scenes in private tombs, contributing to the understanding of these animals in ritual contexts.⁵ In her 2018 Master's Thesis, Bateman focused on the "Domestic Cattle Breeds in Ancient Egypt from the Predynastic Period Through the End of the Old Kingdom."⁶ Meanwhile, El Bayoumi Mohamed explored "Scenes of Oxen and Cows Participating in the Funeral Procession from the Old Kingdom to the End of the New Kingdom" in an Arabic publication, further broadening insights into cattle symbolism and ritual significance.⁷

Methodological Framework:

This paper employs a multidisciplinary approach to analyze the behavior of bovine figures in selected New Kingdom afterlife books, focusing on the epithets, iconography and actions of the studied figures.

Corpus Selection:

A survey of New Kingdom Netherworld guides – the Amduat, the Book of Gates, Book of Caverns, and Book of Earth – was conducted to identify the presence of bovine, bovine-headed, or bovine-horned figures. Results showed seven references in The Amduat, one instance in the Book of Gates, and one more in the Book of Caverns. The interpretation of the figures from the Book of Gates and Book of Caverns is discussed in the context of the figure sSmw-kA-imnt in the Amduat below.

Criteria for Analysis:

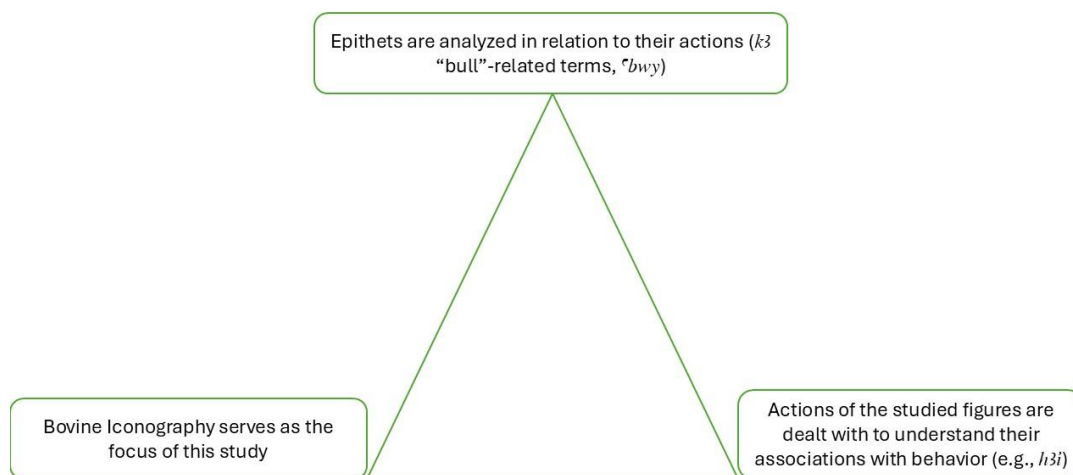
The diagram below shows the criteria employed in this paper to analyze the behavior of the bovine figures in New Kingdom afterlife Books

⁴Evans, L., *Animal Behaviour in Egyptian Art*. Representations of the Natural World in Memphite Tomb Scenes, England, Aris and Phillips Ltd, 2010.

⁵ Galan, *JEA* 80 (1994), 81-93.

⁶ Bateman, K., "Domestic Cattle Breeds in Ancient Egypt from the Predynastic Period Through the End of the Old Kingdom", Unpublished Master Thesis, Cairo: AUC, 2018.

⁷ البيومي، محمد البيومي، مشاهد الثيران والأبقار المشاركة في الموكب الجنائزي من الدولة القديمة حتى نهاية الدولة الحديثة، مجلة الاتحاد العام للآثار بين العرب، المجلد 22 العدد 2 (2021)، ص300-257.



(Figure 1) Criteria employed in this paper to analyze the behavior of bovine figures in a selection of New Kingdom afterlife books

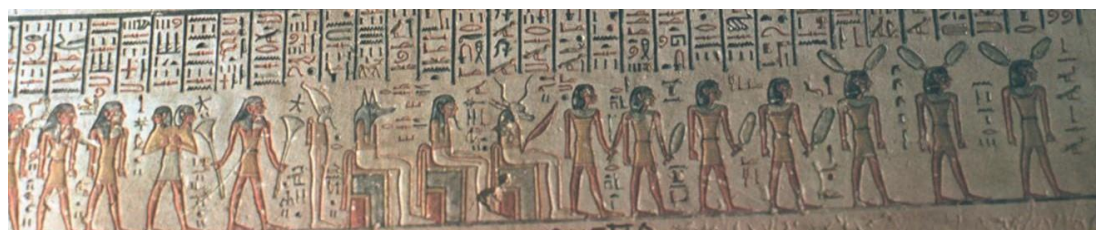
Thematic Subcategories by Behavior or role:

For the ease of discussion, the analysis will be structured around the following thematic subcategories: Swallowing, Horn-related, Vocalization, and Unique epithet.

1. Swallowing (am-aA; amw):

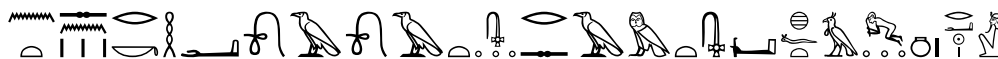
1.1. am-aA “He-who-swallows-the-donkey”:

am-aA is represented on the lower register of the second hour of the Amduat among a group of twenty-three other deities. He is represented as a mummiform bull-headed figure with short horns, seated on a short throne with a knife on his lap. The horns length varies in representation in the tombs of Thutmose III and Ramesses VI (Corridor G, left wall (center part)), with the latter showing relatively longer horns (Figs.1).



(Figure 2) am-aA is represented as a bull-headed figure in the tomb of Ramesses VI (TMP)

Mention is also made of am-aA in the earlier Coffin Texts.⁸ In the scene from the Amduat, am-aA, together with the other deities depicted on this register are said to:



⁸LGG II, 110; CT III 169h (Spell 212). Cf. Vandenbeusch, *Sur les pas de l'âne dans la religion égyptienne*, 85.

ntsn rkHw wAwAt r sAmt xftyw nw Ra ntsn wdd HAWt Hr sDt “It is they who light the fire to burn up the enemies of Re. It is they who put hearts on the fire.”⁹ The locale where these figures are represented is named sxt “field.” One cannot stop wondering, therefore, if there is a deliberate wordplay between sAmt “burn up” and sAm “wild bull,”¹⁰ on one hand, and sxt “field” and sxytw “cattle” or “class of cattle”,¹¹ on the other.

The afterlife mirrored this life in ancient Egypt, and thus the swallowing of a donkey by a bovine-headed deity seems contradictory to the fact that cattle chew food before swallowing it and were, as attested by the abundant tomb scenes, *herbivores* (plant-eaters).¹² However, in terms of mythology, the devoured donkey here symbolizes the isftyw “sinners”, confederates of Seth, in the Netherworld as Hornung remarked.¹³



(Figure 3) Hematite gem showing a donkey-headed figure carrying a mummy (British Museum EA 56038)

The interpretation of the epithet am-aA operates on many levels. Firstly, in terms of the deity’s epithet and iconography, there is a clear association between donkeys and the mummiform Osiris. As Figure 3 shows, on the reverse of a hematite gem at the British Museum (BM EA 56038), the mummy of Osiris is carried by figure with the head of a donkey.¹⁴ This scene evokes the aftermath of the murder of Osiris by his brother Seth where the latter had to carry his brother Osiris on his back. Secondly, the act of ‘swallowing’ is intriguing and carries rich symbolic meaning. The verb aAm evolved to mean “to know”, and by the Coptic period, it had effectively supplanted the traditional verb of “knowing.”¹⁵ Swallowing is abundantly attested in the textual record, both literal and ritual,¹⁶ particularly in relation to netherworld beings well long before the New Kingdom guides appeared. For example, in Pyramid Texts Utterance 318, the king, in his capacity as the Bull of the Ennead, swallows seven serpents: Dd mdw pw naw kA psDt am sfxt iarwt xrp n sfxt nbHwt “Speaking of words: it is the king, the snake Bull of the Ennead, swallowing his seven serpents and his seven necks

⁹ Hornung, *Das Amduat* I, 34.

¹⁰ *Wb* IV, 124; Faulkner, *CDME*, 226.

¹¹ *Wb* IV, 231; Faulkner, *CDME*, 240.

¹² Evans, *Animal Behaviour*, 85.

¹³ Hornung, *Das Amduat* II, 68.

¹⁴ Augstinus, A., Griffith, G., ‘Seth or Anubis?’ *JWCI* 22 (1959), 367-371.

¹⁵ Ritner, *Mechanics*, 106; Compare *Wb* I, 183-4 “to swallow” and 184/4 “to know.”

¹⁶ The best example of ‘swallowing’ is in the Tale of the Two Brothers when the dead hero eats water and then swallows Bata’s removed and dried-out heart, reviving him, see Lichtheim, M., *Ancient Egyptian Literature*. Vol. II: The New Kingdom, University of California Press, Berkeley, Los Angeles, London 1976, 206 and 208-209.

come to existence.”¹⁷ The epitome of ‘swallowing’ texts is the Cannibal Hymn (Pyramid Texts 273-4) in which the king says:

§400	
	The king is the one who eats men and lives on the gods...
§403	
	The king eats their magic, swallows their spirits:
§404	
	Their big ones are for his morning meal,
	Their middle ones are for his evening meal,
	Their little ones are for his night meal...
§409	
	He has smashed bones and marrow,
§410	
	He has seized the hearts of the gods,
	The king feeds on the lungs of the wise...
	and likes to live on hearts and their magic. ¹⁸

When swallowed, the qualities and powers of an object are believed to be absorbed by the one who consumes. Further, as Ritner notes, swallowing often implies a nasty function since “to swallow” suggests a concept of “destruction” where also the concept of obtaining power can be maintained.¹⁹ Such practice of “destroying” donkeys, as symbols of Seth, was also attested in the fourth century BC. A graffito from Deir el-Bahari reveals that every year a group of iron workmen would bring a donkey to the broken-down shrine of Amenhotep son of Hapu at Deir el Bahari. These workers used to offer a donkey as a *thusia*²⁰ whereas it would be slaughtered in front of the deity, then they would hold a banquet. The burning of the donkey would symbolize the ‘destruction’ of chaotic forces.²¹

¹⁷ Allen, *The Egyptian Coffin Texts* Volume 8. Middle Kingdom Copies of Pyramid Texts, The Oriental Institute of the University of Chicago, Chicago. Illinois, 2006, 294.

¹⁸ Faulkner, *Pyramid Texts*, 80-84.

¹⁹ Ritner, *Mechanics*, 103.

²⁰ QuVsia: “offering” or “mode of offering”, see Lidell, G., Scott, *A Greek-English Dictionary*, American Book Company: New York, Chicago. Cincinnati, 1897, 668.

²¹ Lajtar, A., *Deir el-Bahari in the Hellenistic and Roman Periods: A Study of an Egyptian Temple Based on Greek Sources*, Journal of Juristic Papyrology Supplement 4, Warsaw: Institute of Archaeology, 2006, inscription 168.

1.2. amw “Swallower”:



(Figure 4) Representation of amw in the Tomb of Ramesses VI
(after Piankoff, *Tomb of Ramesses VI*, fig.78)

amw is represented as a bull-headed deity with long horns in the fifth hour of the Amduat (Fig.4). He is preceded by a short-horned bull-headed figure identified as mst who will be dealt with below under the subcategory “Unique”, as his epithet does not align with the ‘swallowing category’. As Figure 5 below shows, both figures, amw and mst, belong to a group of eight deities designated nmtyw “executioners”.²² Re addresses this group saying:



ntsn aHaw Hr ont mwtw m
dwAt

They are those who stand beating the dead in
the Netherworld.

irrt=sn pw sAmt XAwT mwtw

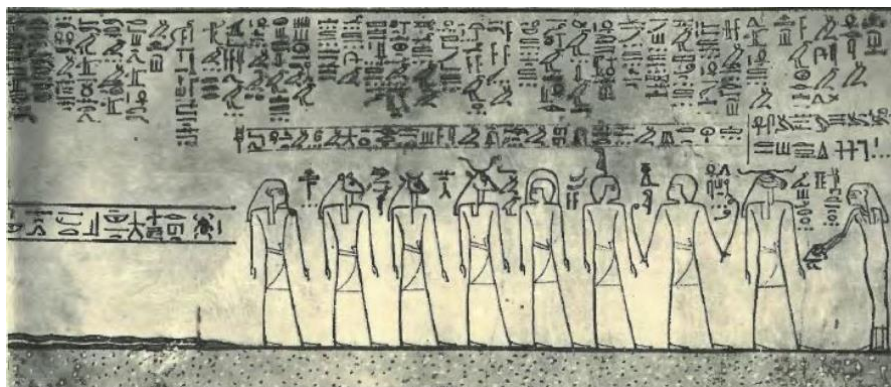
What they do is to burn up the corpses of the
dead,

m hh n r=sn m Xrt hrw

with the flames of their mouth every day.²³

²² The epithet is derived from nmt “a butcher’s knife”, for terms of slaughterhouse, see Verner, *MDAIK* 42 (1968), 185.

²³ Hornung, *Das Amduat* I, 82.



(Figure 5) *amw*, the fourth figure from the right-hand side, is depicted with long horns in the tomb of Thutmose III (after Bucher, *MIFAO* 60 (1932), pl.XXXII)

Combining the epithets, bovine iconography, and actions (hh “burn up”) of these two bovine figures reveals what can be described as ‘inevitable ambivalence.’ By this, I mean that the cattle, associated here with the *nmt*-knife of butcher, “stand up beating the dead (symbols of offerings)” to the gods, rather than being offered themselves, as would be the case in a secular slaughterhouse. Cattle, reddish bovine in particular, specific fowls, antelopes and crocodiles were symbols of Seth.²⁴ Cattle were slaughtered in slaughterhouses to provide meat for the cult. Nevertheless, the slaughtered cattle, and fowls, alluded to the elimination of the enemies, of Egypt and the Pharaoh.²⁵ I have dealt in some details with the concept of ‘swallowing’ above. However, in terms of ‘swallowing’/‘devouring’ enemies in the form of cattle a few more words can be added. Consumption (by swallowing) of cattle, after they were incinerated (hh in the current annotation),²⁶ meant a “complete elimination from temporal surroundings of the parts of the animal thus destroyed or eaten.”²⁷ Killing, deduced from the epithet *nmtyw* “executioners” and their action (*ont*), in Frankfurter’s words, was only a way to an end, not the end.²⁸

To sum up, the analysis of the behavior of these two swallowing deities, *am-aA* and *amw*, reveals a clear association between swallowing and burning, as expressed through the verbs *sAm* and *hh*.

2. Horn-related Epithets (*Tst-wpt*, *abwy*)

2.1. *Tst-wpt* “She-who-raises-the-horn”:

Tst-wpt is represented in a half sitting position with long horns on her head (Fig. 6). To the best of my knowledge, an occurrence of this figure outside of the Amduat does

²⁴ Te Velde, *Seth, God of Confusion*, see also the recent work of Taylor, *Deconstructing the Iconography of Seth*, PhD Thesis, University of Birmingham, 2016, 2, 49.

²⁵ Fischer, H. G., ‘Five Inscriptions of the Old Kingdom’ *ZÄS* (1978), 57.

²⁶ Morschauer opines that *hh* indicates to the flame that is intensified by breathing, see Morschauer, *Threat-Formulae*, 99.

²⁷ Hubert, H., Mauss, M., *Sacrifice: Its Nature and Functions*, translated by W. D. Halls, Chicago University Press, 1964; reprinted 1981, 38.

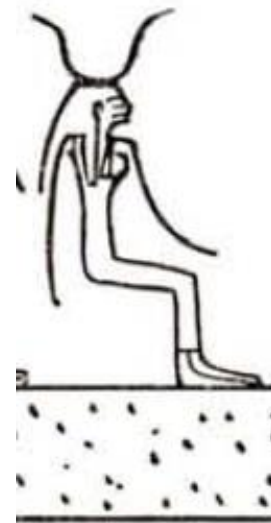
²⁸ Frankfurter, in: Knust, J. W., Varhelyi, Z. (eds.), *Ancient Mediterranean Sacrifice*, 75.

not exist.²⁹ Tst-wpt is preceded by a group of deities including two humanoid goddesses, a mummiform baboon seated on a throne, a lioness-headed standing goddess. The annotation reads:



wnn=sn m sxr pn m sSmw ir.n Hr	They are like this as an image Horus has made,
aHa=sn m tA r wATbnt StAt nt imHt	They stand in the earth at this secret way of Imhet, ³⁰
aot=sn n tsp tpy m tA	which they enter, belonging to the creation in the earth. ³¹

As Figure 6 shows, Tst-wpt is the orphaned horned female example in this paper. I will touch upon the difference between horns of ‘bulls’ and ‘cows’. Sexual dimorphism in horn length and shape is evident in cattle, with females typically having longer, thicker horns that extend farther beyond the bony core than those of males or young calves.³² Bulls, in contrast, generally exhibit shorter, crescent-shaped horns with well-developed bony cores. Their horn casings are thinner compared to cows, and the bony core nearly reaches the tip, leaving only a compacted horn patch near the end.³³ Castration in oxen often results in more slender and elongated horns, reflecting the impact of hormonal changes.³⁴



(Figure 6) Tst-wpt is represented as a female deity with long horns on her head in the Amduat (after (after Piankoff, Tomb of Ramesses VI, fig.77)

Horned cows’ head butts and rapid head movements put farmers and other herd members at risk for harm.³⁵ In particular, horned cows have less agonistic encounters involving body contact and maintain larger inter-individual distances than hornless cows. However, Garf discovered that dehorned cows behaved more aggressively than horned cows, particularly by making more body contact.³⁶

In the Amduat, Imeht designates the deepest part of the underworld during the fourth and fifth hours, specifically the domain of Sokar within Rosetau, where (re)creation occurs and Re is born.³⁷ Furthermore, an address to the deceased introduced Imeht and Duat as two potentially parallels, or at least overlapping, realms:

²⁹ LGG VI, 497.

³⁰ Wb I, 88.1-4.

³¹ Hornung, *Egyptian Amduat*, 130.

³² Neff et al. ‘Why Cows Have Horns. Bio Dynamic Farming and Gardening Association, Bio Dynamic Association of India BDAI, Bioland e.V., FiBL (Hrsg.)’, 2016, 8; fig. 3.01.

³³ Neff et al. ‘Why Cows Have Horns’, 10

³⁴ Boessneck, J., *Die Tierwelt des Alten Ägypten: Untersucht Anhand Kulturgeschichtlicher und Zoologischer Quellen. München: Beck, 1988.*

³⁵ Lutz, J., et al. ‘Horned and dehorned dairy cows differ in the pattern of agonistic interactions investigated under different space allowances’ *Applied Animal Behaviour Science* 218 (2019), 1.

³⁶ Garf, B., *Aktivitäten von enthornten und nicht enthornten Milchkühen auf der Weide.* PhD thesis. Swiss Federal Institute of Technology in Zurich (EHT), Switzerland, 1974.

³⁷ Assmann, *Altägyptische Totenliturgien*, 260.



dwA Tw imyw mHt sAx Tw imyw dwAt “May those who are in Imhet praise you, may those who are in the Duat ritualize you.”³⁸ The association of the group of deities mentioned herein, and Tst wpt in particular, with the first creation is reminiscent of the bovine goddess Mehet-Weret who was thought to have risen from the waters of creation and to have given birth to Re.³⁹

2.2. abwy “He-of-the-two-horns”:

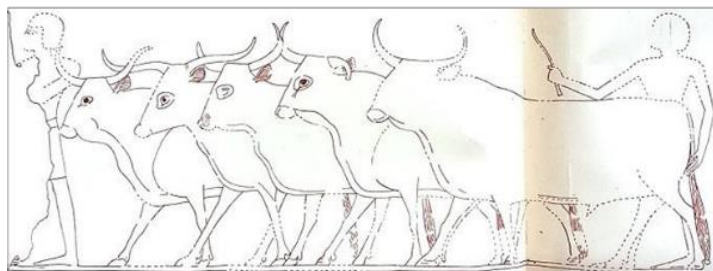
abwy is represented as a humanoid figure looking backwards with the sign for shadow behind his head (Fig.7) in the fifth hour of the Amduat. The significance of ‘horns’, present in all examples, is here emphasized textually. These horns, whether long or short, are represented symmetrical, and free from deformities. Horns of both bulls and cows could have been modified in ancient Egypt and set aside for a future sacrifice. As such, not only did cattle change physically but also were inhibited from fighting during mating time.⁴⁰

Comparative Material from Private Tombs:

For the sake of clarity, I will consult an example that shows how the modified horns differ from those of the figures concerned here. This example, illustrated by Figure 8, comes from the tomb of Kheper-Resnb no. 86, at the necropolis of Sheikh Abdel Qurna. This daily life scene shows a group of cattle led by a man. The second bull from the right-hand side is depicted with one of his horns modified.⁴¹



(Figure 7) Representation of abwy in the Amduat (after Bucher, MIFAO 60 (1932), pl.XXXII)



(Figure 8) A group of cattle led by a herder, including a bull with a modified horn, depicted in the tomb (no. 86) at Sheikh Abdel Qurna. This image highlights the physical alteration of horns. The modified horn contrasts with the symmetrical and intact horns of bovine figures in New Kingdom afterlife books, emphasizing the symbolic rather than practical representation of horns in these contexts. (Source: Davies & Davies, *The Tombs of Menkheperresnb*, Pl. XIV)

³⁸ CT VII, 329c-330a (Spell 1068); Zago, S., ‘Imagining the Beyond: The Conceptualization of Duat between the Old and the Middle Kingdoms’, *JARCE* 54 (2018), 210.

³⁹ Wilkinson, *Complete Gods and Goddesses*, 174.

⁴⁰ El Saeed & Khalifa, ‘A Comparative Study of Modified Animal Horns in Ancient Egypt & Modern African Tribes’, 169.

⁴¹ For different ways used to modify the horns of both bulls and cows as well as the purposes of such modifications, see El Saeed & Khalifa, ‘Modified Animal Horns in Ancient Egypt & Modern African Tribes’, 166-187; Chaix, L., Bœufs à cornes déformées et béliers à sphéroïde : de l’art rupestre à l’archéozoologie, in Gauthier, Y., Le Quellec, J. & Simonis, R., (eds.), *Hic sunt leones. Mélanges sahariens en l’honneur d’Alfred Muzzolini*, *Cahiers del’Association des Amis de l’Art Rupestre Saharien* 10, 2006, 50.

The symbolic engagement of the involvement of abwy “two horns” in a fight against an enemy is evident in the employment of the dual abwy. In the Sixth-Dynasty tomb of Iteti-Shedu in Deshasheh,⁴² a bullfighting scene shows a bull sticking its horns into another bull’s belly and overthrowing it. Behind, a man is hitting the bull with a stick on the rear thigh and says: sfx=k kA can be drawn nxt ‘Fight⁴³ (charging your horn),⁴⁴ victorious kA-bull’.⁴⁵ In a similar manner, a symbolic connection can be drawn between this deity “He-of-the-two-horns” and the enemies he violently confronts where the horns serve as a powerful tool of fighting for a victorious bull.

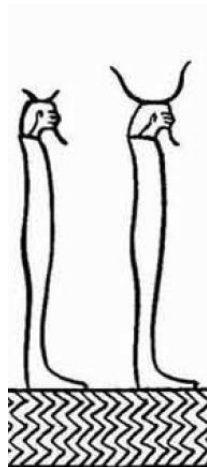
ab, unlike wpt discussed above, has clearer associations with divinities where iconographic characteristics are employed to kill an enemy. Thus, ab, as Morschauser argues, invokes ‘horn of god’. Hathor, in her capacity as cow-headed, places her horn in the enemy (ds=s abw=s s im=f).⁴⁶ That is not to say, however, that ab is associated only with gruesome deeds of gods. In the Coffin Texts, ab is an epithet of a figure invoked to ferry him who is in his shrine (i ab DA imy kAr=f).⁴⁷ abwy is also an epithet attributed to several deities in ritual scenes, as, for example, Atum in the rite of Driving the Calves in Edfu.⁴⁸

In conclusion, the analysis of these two deities reveals a distinct relationship between the terms for “horn” and the behaviors associated with them. While ab is linked to the action of beating the dead—an association further clarified through comparisons with texts from private tombs—wpt is connected to the act of creation.

3. Vocalization (kA-irw, bA-pf, sSmw-kA-imnt):

3.1. kA-irw “Bull-of-forms”:

3.2. bA-pf “That-ba”:



A group of twenty-four figures represented with different iconographies and identified with distinctive epithets are represented on the upper register of the third hour of the Amduat. Of these, two mummiform figures are represented with horns on their heads; kA-irw (represented with short horns), and bA-pf (represented with long horns) (Fig. 9).⁴⁹

(Figure 9) Representations of kA-irw and bA-pf in the tomb of Ramesses VI (after Piankoff, *Tomb of Ramesses VI*,)

the Egyptian Exploration Fund, London, 1897, 43.

⁴² Faulkner translates sfx as ‘fighting animal’, see Faulkner, *CDME*, 225; Montet, , translates it as “délivres-tu le taureau fort?”

⁴⁴ Galan, *JEA* 80 (1994), 82.





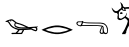

⁴⁵ Galan, *JEA* 80 (1994), 81-82.

⁴⁶ Morschauser, *Threat-Formulae*, 109.

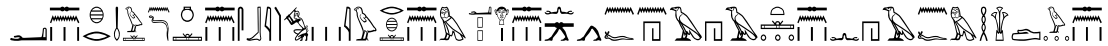
⁴⁷ *CT* VII 52a (Spell 848).

⁴⁸ E IV, 242, 8.

⁴⁹ To the best of my knowledge, another deity associated with gruesome behavior and bears an epithet dealing with the ba is mnHwy who is identified as bA tkk in the temple of Dendera, see D VII, 183, 13.

KA “bull” is a component of the epithets of two figures in this paper: kA-irw and sSmw-kA-imnt, the latter is dealt with below. Terms for ‘bull’ are various and are abundantly attested in both royal and private tombs. Each term denotes a distinctive feature of bull. For example, iwA  means “cattle/ox/steer” that is prepared for sacrifice.⁵⁰ A fighting bull, or an enduring was named imnw .⁵¹ Surface terms for cattle include iH ,⁵² id ,⁵³ and wr .⁵⁴ A fattened ox was called wnm .⁵⁵ Adjectives, though lacking with the figures of the study, might be used to highlight a specific characteristic of the bull such as dSr “red”, or wAD which described the bulls participating in funerary scenes in private tombs.⁵⁶

The behavior of kA-irw and bA-pf, identified as deities (nTrw) in the accompanying text, can be better understood by combining their visual representations with textual descriptions. The text underlines some features that relate to cattle behavior: vocalization, and bullfights. Collectively, the group of deities represented on the upper register of the third hour of the Amduat “roar” causing the enemies to perish:



(r)di=sn xrw nD=sn sbiw iw rx sn m app Hr=sn n sbi.n=f n hmhmt=sn n hAi.n=f m HAdw=sn “They cry out (give voice) when they grind the rebels. The one who knows them is the one who passes by them; he does not perish because of their roar; he does not go down in their traps.”⁵⁷

The sounds attributed to this group of deities include hmhmt “roar, war-cry”,⁵⁸ and xrw “voice”.⁵⁹ The basic term for ‘uttering a bellow’ is khA.⁶⁰ Cattle use both visual and vocal signals to display threats. Visual cues, such as lowering the head, drawing the chin toward the torso, and angling the horns against an adversary, are common. However, the focus in the current scene is on vocal rather than visual threats.

Cattle, being gregarious grazing animals, are inherently vocal and call in response to a variety of conditions, including threats. Bulls, cows, and calves each have distinct vocalizations. These sounds can serve to draw attention to the animal making them, or may result from pain or fear, especially if the animal feels threatened.⁶¹

⁵⁰ *Wb* I, 49.9-11.

⁵¹ *Wb* I, 85.9.

⁵² *Wb* I, 119.15-120.4.

⁵³ *Wb* I, 152.2.

⁵⁴ *Wb* 331, 12.

⁵⁵ *CDME*, 62.

⁵⁷ Hornung, *Das Amduat* I, 46-47.

⁵⁸ *Wb* II, 490.9-17.

⁵⁹ *Wb* I III, 324.7-352.11.

⁶⁰ *Wb* V, 136.14-15.

⁶¹ Evans, *Animal Behavior*, 148.

⁵⁶ البيومي، مشاهد الثيران والأبقار، ص259.

Kiley,⁶² in her study of cattle calls, classified them based on characteristics such as amplitude, pitch, and the emotion conveyed. She identified a spectrum of calls ranging from a mild increase in excitement, commonly referred to as a ‘moo,’ to a more intense expression of agitation, such as a ‘holler’ or ‘roar.’

The inclusion of bull-headed deities in the third hour of the Amduat aligns with the fact that bulls tend to bellow more frequently than cows. However, in a fight, cows emit a distinct, high-pitched call.⁶³ As an animal becomes more agitated, the length, amplitude, and pitch of its calls increase.⁶⁴ Bulls vocalize more often than steers (iWA), further highlighting the relevance of their selection in this scene.⁶⁵

Another aspect of bulls’ aggressiveness can be seen in the hA-ing of the rebels. The surface meaning of hA is to “go down, ascend.”⁶⁶ However, it can also be used as a transitive verb to mean ‘to throw to the ground, to tackle’.⁶⁷ Bullfights were part of tomb scenes that were borrowed from farmyard and bucolic life in ancient Egypt.⁶⁸ The opponent concerned here could be envisaged either as ‘human’ adversary or another bull. Enemies are symbolically slaughtered like cattle.⁶⁹ Also, Seth, represented as the bull Bata, carried Osiris according to Pap. Jumilhac.⁷⁰

Comparative Material from Private Tombs:

The bullfights theme is an abundant motif in tombs. Since bullfights are not the concern of this paper, a sample of examples suffice. In the tomb of Ibi at Deir el-Gebrawi, a caption describing the fight between two bulls reads: “A fight (aHA) of kA-bulls”.⁷¹ Also, the tomb of Kahetep called Tjeti at El-Hawawish is dated to the reign of Pepi II. The owner is depicted leaning on a staff, inspecting a fight (aHA) of kA-bulls’.⁷² In funerary context, the deceased wished he could maintain his earthly status as a social leader in the Netherworld. The leadership of the deceased was challenged and his adversary who questioned his right was defeated. The dispute between the two parties resembled the fight between two bulls. Therefore, the kA-bulls in the funerary context not only refer to the bulls involved in the fight, but also identify deities as well as the deceased who was identified with Osiris.⁷³ To wrap up, Fig. 10 illustrates the relationship between the epithets, iconography, and actions of these figures with their behaviors.

⁶² Kiley, M., The Vocalization of ungulates, their causation and function. *Z, Tierpsychol.* 31, 171-222.

⁶³ Evans, *Animal Behavior*, 149.

⁶⁴ Phillips, C., *Cattle Behaviour and Welfare*, 96.

⁶⁵ Phillips, C., *Cattle Behaviour and Welfare*, 99; Hinch, G. N., Lynch, J. J. Thwaites, C. J., ‘Patterns and frequency of social interactions in young grazing bulls and steers’, *Applied Animal Behaviour Sciences* 9 (1982), 15-30. Also, in the tomb of Pepynakht at Qubbet el-Hawa, iWA refers to that cattle that were taken by force from Nubia, see Strudwick, N. C., ‘Inscriptions of Pepynakht called Heqaib from his tomb at Qubbet el-Hawa’2005, 335.

⁶⁶ *Wb* II, 472.

⁶⁷ *Wb* II, 474.25; Galan, *JEA* 80 (1994), 90.

⁶⁸ Galan, *JEA* 80 (1994), 93.

⁶⁹ See the discussion of amw below.

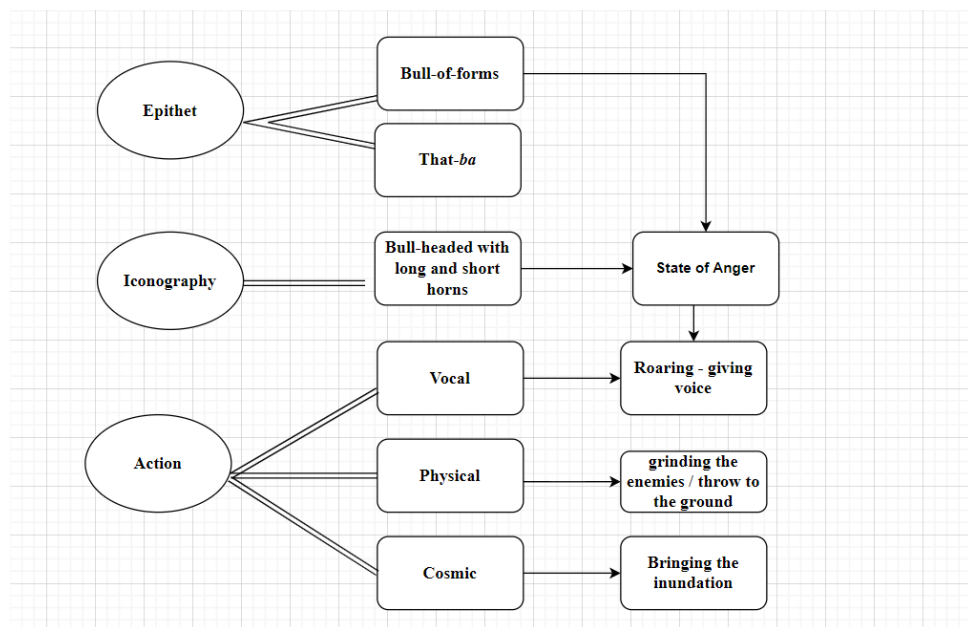
⁷⁰ Te Velde, *Seth, God of Confusion: a study of his role in Egyptian mythology and religion*, Leiden, 1967, 97; Hoffman, *SAK* 23 (1996), 167-200.

⁷¹ Davies, *The rock tombs of Deir el Gebrâwi I*, London, 1902, 17.

⁷² Kanawati, N., *The rock tombs of El-Hawawish: the cemetery of Akhmim*, Macquarie Ancient History Association, 1980, 13f.

⁷³ Galan, *JEA* 80 (1994), 92.

Then, and only then, the positioning of these two deities is worth a comment. Directly before these two bull-headed deities, four humanoid goddesses are represented with epithets that denote ‘mourning’. namely, these are “She-who- weeps”, “The-mourner”, “The-mourning-one”, and “She-who-mourns.”⁷⁴ The placement of bull-headed figures followed by ‘mourning’ female deities is intriguing. It is reminiscent of funerary scenes in which the cows depicted are identified with the two kites, Isis and Nephthys, accompanied by red bulls. Redness is a motif associated with bA-pf. bA-pf is documented in the textual record as early as the Pyramid Texts where Re is identified with this epithet.⁷⁵ In Coffin Texts, bA-pf is associated with blood (red)-offerings (...im Hr Tms Htpw).⁷⁶



(Figure 10) Analysis of the Behavior of Bull-of-forms and That-ba in terms of their epithets, iconography and actions (developed by the author)

⁷⁴ Hornung, *Das Amduat I*, 49; Hornung, E., T. Abt (ed.), *The Ancient Egyptian Amduat: The Book of the Hidden Chamber*, Zurich, 2007, 85.

⁷⁵ *Pyr.* 854a.

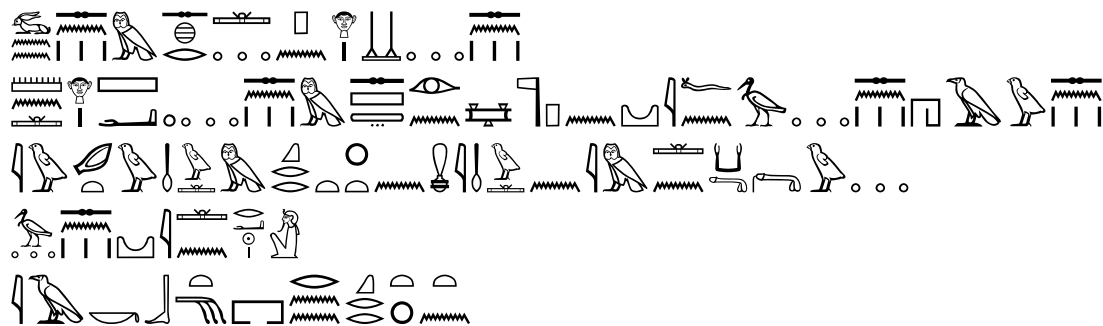
⁷⁶ *CT III*, 285a (Spell 228).

3.3. sSmw-kA-imnt “Image-of-the-Bull-of-the-West”:



(Figure 11) sSmw-kA-imnt represented bull headed in the Eighth Hour of the Amduat (after Bucher; MIFAO 60 (1932), pl.VII)

The eighth hour of the Amduat displays ten caverns distributed to the upper and lower registers. Each of the caverns represented on the upper register contains three deities seated on the sign for cloths (Fig. 11). The fourth cavern, from the right-hand side, begins with a bull-headed deity identified as sSmw kA imnt “Image of the Bull of the West.”⁷⁷ The annotation that accompanies this cavern reads:



wnn=sn m sxr pn Hr mnxwt=sn	They are like this on their clothing,
mnw Hr Say=sn m sStA iri.n Hr	remaining on their sand, as a mystery made by Horus.
nTr pn Dw=f n bAw=sn r hAw=sn	This god, he calls to their <i>ba</i> -souls near them.
iw sdm.tw Xrw ixt m orrt=sn	A sound is heard from this cavern
mi xrw nim n kAw Taw	like the bellowing of male bulls, ⁷⁸
bAw=sn Dwi n Ra	when their <i>ba</i> -souls call to Re.
iAkbyt rn n orrt tn	Mourning is the name of this cavern. ⁷⁹

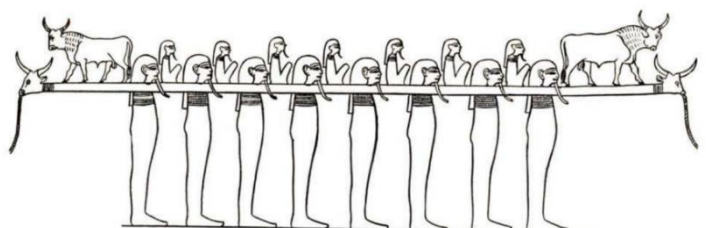
Two other figures can be linked to sSm-kA-imnt. The first, from the Book of Gates, is represented as a bull completely that also does *nim* (bellows). In the middle register of the third hour, the solar bark of Re is drawn forward by four deities. It moves towards a rod topped with a bull’s head, carried by eight mummiform gods. Along this rod sit seven figures and two bulls facing opposite directions (Fig. 12). The bark of Re

⁷⁷ He appears on the later papyrus of DjedKhonsoiuesankh as one of the deities who tow the barque of Re, see Piankoff, *Mythological Papyri* I, 205.

⁷⁸ Darnell and Manassa-Darnell reads kAw TAw as kA kAw “Bull-of-Bulls”,

⁷⁹ Hornung, *Egyptian Amduat*, 256.

appears to pass through this rod, as indicated by a rope that enters and exits the mouths of the two bulls. On the far side of the rod, four towers emerge, where they are greeted by four figures with shrouded bodies and arms. The accompanying annotation reads: “The earth quakes (twice); as the *ba*-soul grows strong so the double bull bellows in pleasure.”⁸⁰



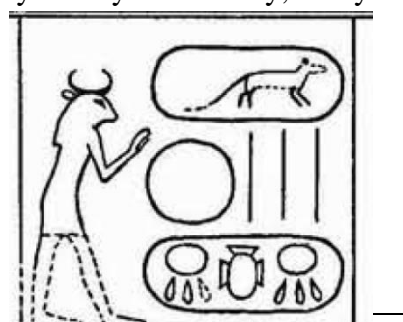
(Figure 12) bovine representations in the Book of Gates (after Piankoff, Tomb of Ramesses VI, 153)

The other instance, from the Book of Caverns, is a bull-headed figure, designated *kA-imnt*,⁸¹ who is represented worshipping an oval that contains a heart and a sun disc with rays emerging from it (Fig. 13).⁸² *kA-imnt* is a designation of several gods, including Osiris and Sokar, which is attested in the textual record since the Middle Kingdom. The iconography of *kA-imnt* is variable: mummiform bull-headed god,⁸³ bull-headed god raising his arms (as in the current scene),⁸⁴ and a bull-headed god in an oval.⁸⁵

The related annotation reads:



Ra Dd=f r orrt tn i Hr M-xnty-n-irty nb xprw m dwAt iw (n)=k irty=k mAA=k im Htp ib=k m=xnw x(t)=k m smn=k it=k wTs=(f) XAt=k Asir *kA-imnt* iw=i sHD XAt=km itn
 “Re speaks to this cavern: O Horus, the Eyeless one, the Ichneumon, lord of forms in the Netherworld, (to you belong) your two eyes so that you may see thereby, that your heart may rest in peace inside your body in your image, and when your father lifts up your body, O Osiris Bull of-the-West, I will illumine your body with my desk, O Ichneumon, which is in its western coffin.”⁸⁶



⁸⁰ Darnell., Darnell Manassa, *The Ancient Egyptian Netherworld Books*, 267.

⁸¹ *kA-imnt* was an epithet held by a number of deities including Sokar and Osiris, See *CT III 328a* (Spell 242): iw rdi(tw).n=i mAa xrw r ir=i m-bAH Asir *kA imnt* “I am vindicated concerning what I do in front of Osiris, Bull-of-the-West”; for the epithet used as a designation of Sokar, see Caminos, *JEA* 58 (1972), 220.

⁸² Power, D., *Aspects of Iconography and Transmission in the Book of Caverns*, Unpublished PhD thesis, University of Liverpool, 2018, 191

⁸³ Darnell., Darnell Manassa, *The Ancient Egyptian Netherworld Books*, 474.

⁸⁴ Piankoff, A., ‘Le Livre des Quererts’, *BIFAO* 42 (1944), 37.

⁸⁵ Piankoff, A., *La Création du Disque Solaire*. Bibliothèque d'étude 19, Le Caire: IFAO, 1953, 51.

⁸⁶ Piankoff, *BIFAO* 42 (1944), XLVI; Piankoff, *Romb of Ramesses VI*, 82.

The rarity of *nim* in textual records and the fact that studies of the emotions of cattle, apart from being complex, are lacking make an interpretation of the association of this figure with the verb *nim* challenging. (Figure 13) *Bull of the West in the Book of Caverns* (after Piankoff, *Tomb of Ramesses VI*, 79) Manassa interpreted the sound *nim* here as a sound of the Bull-of-bulls being satisfied (sexually).⁸⁷ In the Litany of Re, *nim* is associated with the bull being “pleased” in Kenset:

xa Ra m xnty dwAt	Re shall appear in the foremost part of the netherworld,
nim rf kA m knst	so that the bull becomes pleased in Kenset.
ntk Ra Htp=k (Hr) XAwT=k	You are Re, may you rest (upon) your corpses! ⁸⁸

Male bovine deities such as Apis, Mnevis, and the Sky Bull (Bull of the West) often held cosmic connections while primarily symbolizing the strength and fertility that the bull represented.⁸⁹ The association of the deities in this cavern with creation is further backed with the mention of sand which was linked to the beginning of creation: mtr wAst r nwt nbt pA mw tA im=s m sp tpy ii.n Sat r Hnb AHwt r sxpr sTaw=s Hr oAi xpr tA “Thebes is the model for every city: water and land were in it at the First Occasion. Sand came to measure the arable lands, to make its soil come into being on the primeval mound, that the land might come into being.”⁹⁰

In conclusion, the analysis of these two figures reveals that their vocalizations are skillfully employed to convey a range of sounds that reflect either aggression (*hnhmt* “war-cry”) or a state of contentment (*nim*).

Unique Epithet (mst):



(Figure 14) Representation of *mst* in the Tomb of Ramesses VI (after Piankoff, *Tomb of Ramesses VI*, fig.78)



⁸⁷ Manassa, C., ‘Sounds of the Netherworld’, in: B. Rothöhler and A. Manisali (eds.), *Mythos & Ritual: Festschrift für Jan Assmann*. Berlin, 2008, 121.

⁸⁸ Assmann, *Anbetung I*, 157. The English translation here is after Manassa, ‘Sounds of the Netherworld’, 122.

⁸⁹ Wilkinson, *Complete Gods and Goddesses*, 170.

⁹⁰ Fecht, *ZÄS* 91 (1964), 39; The English translation here is after Assmann, *Search for God*, 25.

mst is represented as a short-horned bull-headed figure in the fifth hour of the Amduat (Fig. 14). He is depicted among a group of eight deities identified as nmtyw “executioners”.⁹¹ Together, these executioners “stand beating (ont) the dead in the Netherworld. What they do is to burn up the corpses of the dead, the flames of their mouth every day.”⁹²

mst is attested twice in the Amduat: once in the fifth hour and the other is in the first hour. The epithet is difficult to interpret but Hornung and Piankoff translate it as “staff” or “stick” respectively.⁹³ The epithet is determined with a forked stick  which is often associated with hieroglyph for an old man , A20 in Gardiner’s Sign List.⁹⁴ Though difficult to interpret, a relationship can be drawn between the figure’s epithet (mst) and the action he does ont “beat”. Both in daily life scenes and mythological scenes, sticks and staves were used to beat prisoners,⁹⁵ and enemies respectively.

Final Word:

That said, as a final word, I would like to present the discussion above in a diagram that more clearly illustrates the relationships between the figures of the study and their behavior (Fig. 15).

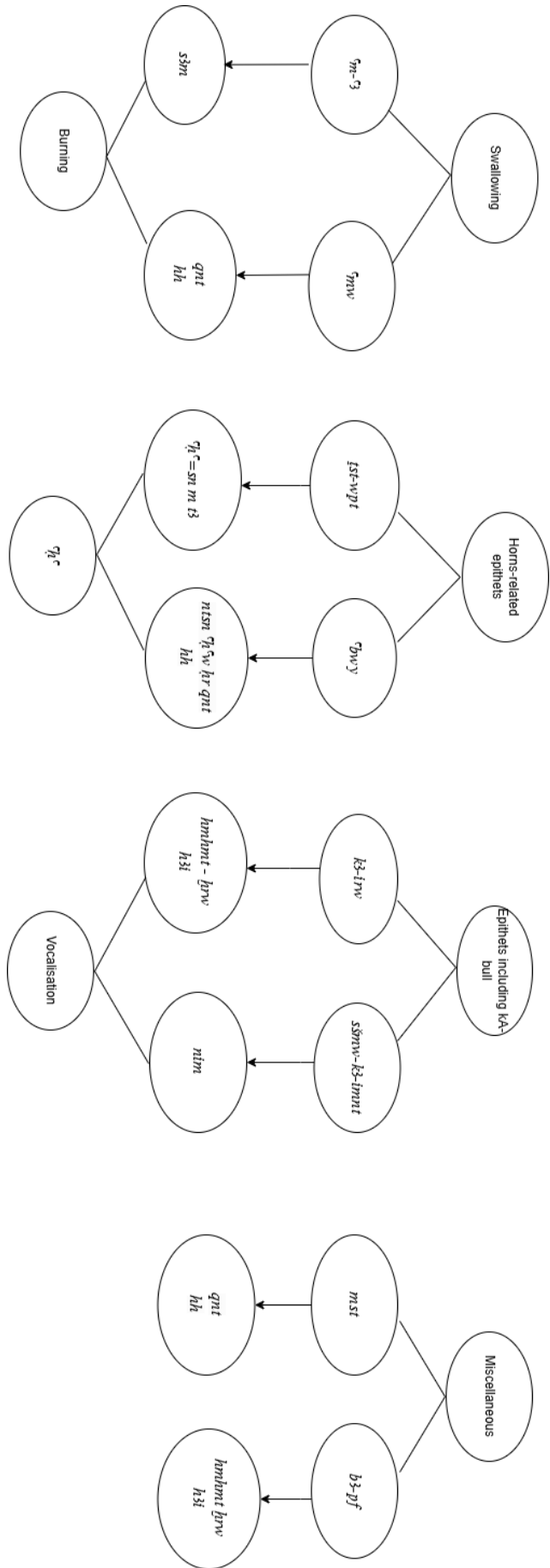
⁹¹ See the discussion of the figure amw under the subcategory “Swallowing” above.

⁹² Hornung, *Das Amduat* I, 82.

⁹³ Hornung, *Das Amduat* II, 99; Piankoff, *Tomb of Ramesses VI*, 264.

⁹⁴ Hornung, *Das Amduat* I, 83.

⁹⁵ Davies, Norman, De Garis, *The Tomb of Nefet- Hotep at Thebes*. Volume I, New York: Publications of the Metropolitan Museum of Art, 1933, pl.43.



(Figure 15) A diagram summarizing the relationship between the studied figures in terms of their epithets and behaviors (developed by the author)

Conclusions:

This paper has examined the appearances of bovine figures across four New Kingdom afterlife texts: the Amduat, Book of Gates, Book of Caverns, and Book of Earth. While previous research has predominately centered on theological aspects and role of deities in the hereafter, the behaviors and actions of these theriomorphic deities remain underexplored. The study, adapting a criterion of epithets, iconography, and actions, has shown that most of these figures appear in the Amduat, which contains seven out of the nine figures identified.

Notably, these figures feature horns of varying lengths, and in the Amduat, two figures display bull heads while the rest have horns. The majority of the studied figures—apart from the orphaned case of Tst-wpt—exhibit violent behavior toward enemies. The selection of a female figure in Tst-wpt’s case demonstrates a sophisticated understanding of iconography, positioning, and epithets. The study has demonstrated an association between actions and a bovine attribute of bull-horned deities as is the case with the verb hAi in the third hour of the Amduat whose surface meaning is to “descend, go down” but also could mean to “tackle, throw to the ground” when considering the broader image of a deity with bull horns eliminating an enemy in the afterlife.

Additionally, it is interesting to observe how specific terms for horns (*wpt*, *ab*) correlate with different behaviors. While the former is associated with ‘creation’, the latter indicates a violent action against an enemy. The study has also shown that terms for vocalizations of the studied figures are skillfully employed to convey a range of sounds that reflect either aggression (hnhmt “war-cry”) or a state of contentment (*nim*). This agrees with studies conducted on cattle vocalization.

Finally, the study demonstrates that it is possible to categorize these bovine figures into subcategories based on their epithets. One subgroup comprises figures with epithets denoting “swallowing,” which are associated with the act of burning. Another subgroup includes two figures with epithets containing kA “bull”, which were found to be linked to varying vocalizations.

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Abbreviations

CDME	Faulkner, R. O., <i>A Concise Dictionary of Middle Egyptian</i> , Oxford, 1962.
Wb	Erman, A., and Grapow. H., (eds.), <i>Worterbuch der agyptischen Sprache</i> , 7 Vols and 5 Belegstellen, Leipzig and Berlin 1926-1963.
CT	De Buck, A., <i>The Ancient Egyptian Coffin Texts</i> , 7 vols, Chicago, 1935-1961.
E	Chassinat, E., <i>Le temple d'Edfou I</i> , MMAF 10, Le Caire, 1897; <i>Le temple d'Edfou II- VIII</i> , MMAF 11 and 20-31, Le Caire, 1918-1933.
D	Chassinat, E., Dumas, F., (2006). <i>Le Temple de Dendera VI-VIII</i> , Le Caire: IFAO., 1965-1987. Vols. VI-VIII, 2 nd edition: Le Caire, IFAO.

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