# A Comparative Stylistic and Technical Analysis of Four Ancient Egyptian Bronzes from Ditsong Museum, South Africa

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## **Abstract**

The Ditsong National Museum of Cultural History in Pretoria, South Africa, is a holding institute for thousands of objects that are accessioned in its collections, including a small collection of Egyptian antiquities. As a multitude of these objects have been donated to the museum over many decades by private collectors, some information regarding object provenance and provenience is unknown. Missing details often include the object's place of origin, its relative production date, production materials, as well as production methods and techniques. The archaeology collection features a small collection of ancient Egyptian bronze statuettes, also known as votive figures. Four bronzes, Sekhmet, Bastet/Cat, the Jackal/Dog, and the ibis, were investigated as part of the author's doctoral study, which employed a mixed methodological approach that combined surface investigations, tomography, and comparative stylistic analysis to provide insights into ancient production. This article focuses on a comparative stylistic analysis in which online museum collections were consulted alongside published descriptions of similar objects and the gods/goddesses they depict. Following the analysis, recommendations are made towards the re-identification of two of the figures, while additional insights gained about their possible function could be incorporated into the Museum's object catalogue.

**Keywords:** ancient Egyptian bronzes; casting methods; comparative stylistic analysis; votive statuettes; relative chronology



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## Introduction

The archaeology collection of the Ditsong National Museum of Cultural History (henceforth Ditsong Museum) in Pretoria, South Africa, plays host to thousands of artefacts, some of which have never undergone in-depth analysis. Selected items from the ancient Egyptian collections have been analysed by South African researchers over the past two decades, including numerous bronze statuettes from the Egyptian collection. These include a Horus falcon (De Beer et al. 2009), a child Horus (De Beer et al. 2009; Smith et al. 2011), a gilded Osiris (Gravette 2011; Masiteng et al. 2010), a seated Osiris, a nursing Isis, and an Apis bull (Masiteng et al. 2010).

The non-destructive techniques employed in the above-mentioned studies include neutron tomography (NT), X-ray diffraction (XRD), X-ray fluorescence (XRF), and energy dispersive X-ray spectroscopy (EDS). However, none of the studies employed microfocus X-ray computed tomography, despite its potential to reveal complementary datasets to the aforementioned techniques. This technical gap was filled by the author's doctoral study (Harcombe 2018).

In addition, the aforementioned studies, with the exception of Gravette (2011), focused primarily on technical analysis and included very brief discussions regarding style, if any. Gravette's (2011) dissertation focused mainly on a stylistic and technical analyses of a gilded bronze Osiris statuette from the Middle Kingdom period. The study sought to verify the object's authenticity, provenance, and probable date of origin in order to place it, and others like it, within its proper cultural context(s). In addition to the gilded Osiris statuette, the study also briefly considered three small Osiris figures (ARG 85/20, 9687, and 4098), a seated Osiris (ARG 9301/1), a nursing Isis (ARG 85/26a) with separate infant Horus (ARG 85/26b), and Child Horus (ARG 85/23). Sekhmet, a seated cat representing the goddess Bastet, and a crouching ibis are briefly mentioned, but no further analysis of these objects was provided. No specific mention was made of the dog statuette

In their 2009 study, De Beer et al. investigated an Egyptian bronze falcon and Child Horus statuette from the Ditsong Museum. Tomographs were used to obtain information on the core material, the state of corrosion, and casting practices. Authenticity was confirmed based on chaplet sizes, uniformity in core material appearance, as well as internal corrosion. Unfortunately, the study focused on technical analysis and did not include stylistic analyses.

Smith et al. (2011) continued with an investigation of the Child Horus using XRD and XRF, which gathered elemental data on the exposed clay core. Once again, the study focused on technical investigations, and how these contribute towards the conservation of the statuette and in determining its authenticity, rather than elucidating stylistic attributes. The article concludes with a list of physical characteristics that confirm the authenticity of the object.

Masiteng et al. (2010) investigated the gold leaf (gilded) Osiris (ARG 85/22), the seated Osiris (ARG 9301/1), the small upright Osiris (ARG 85/20), the nursing Isis (ARG 85/26a), and an Apis bull (ARG 85/25) using a combination of X-ray tomography, NT, and EDS. The aim of the study was to investigate aspects of the ancient Egyptian metallurgical industry with a focus on the manufacture of bronze figures. Once again, the focus was on technical rather than stylistic analysis.

Considering the above-mentioned studies, it is clear that existing research into the Museum's bronze collection focused on a single methodology (technical analysis) rather than a complementary mixed-methodology approach. The author's (2018) doctoral study therefore had a similar objective to that of Gravette (2011): a combination of non-destructive evaluation and stylistic analysis was used to provide complementary datasets towards the (possible) authentication and improved historical contextualisation of the objects. This article focuses on a stylistic analysis of four ancient Egyptian bronzes: Sekhmet, the Cat/Bastet, the ibis, and the Dog/Jackal.

# Methodology

According to Renfrew and Bahn (2004, 427), "style is any distinctive and therefore recognizable way in which an act is performed or an artefact made." To be more precise, objects made during a certain period, at a specific location, by a particular group of people, typically reflect an individualistic, recognisable style.

Stylistic analysis has been used in art, archaeology, and museum curation for many decades. In art, style is defined as "the resemblance [that] works or art have to one another" (Mustenberg 2009, 5). In archaeology, it has been used as an analytical tool to "pinpoint visual similarities between artworks, in order to map their spatial distribution and/or create stylistic sequences" (Domingo Sanz and Fiore 2014, 7104). To define a style, "enough visual elements must be shared by enough works to make their combination distinctive and recognizable" (Mustenberg 2009, 5).

When conducting comparative stylistic analysis, a match should only be made to multiple well-curated objects that share near-identical stylistic features (Ghoniem 2014). Since stylistic analysis is comparative in nature, meaning that unknown objects have to be compared with objects that have been positively curated, our stylistic analysis relied heavily on existing published works that describe the physical and symbolic characteristics of the deities depicted by the statuettes.

Online museum catalogues were also consulted to provide comparative examples of curated statuettes. Entries that are supplemented by published works were shown preference, and those that include inscriptions were considered "benchmark" examples. All examples are presented with their accession numbers, and those with an inscription will be indicated as "+ inscription"; however, it must be noted that museum catalogues are not exempt from misidentification. Any items from these catalogues that are

believed to be misidentified will be discussed and arguments posed as to their possible re-identification.

Visual observations of stylistic elements, such as body posture, gestures, facial features, and decorations of objects from online catalogues will be compared with those of the Ditsong sample group.

# The Sample Group

Throughout much of ancient Egypt's history, small to medium-sized statuettes, made from a variety of materials, were used as votive figures. These were used in small household shrines or were purchased (usually from a temple workshop) and donated to a local shrine or temple with the hope of receiving divine blessings or protection in return (Ambers et al. 2008). Their portable nature meant that they also featured as part of festivals or ritual processions (Robins 2005). Larger votive figures could also be affixed atop wooden poles as standards<sup>1</sup> of the gods, thereby representing their respective deities during such events.

The Ditsong Museum's acquisition register notes that most of the bronzes in the Egyptian collection were donated to the museum by a Lieutenant Bowyer, who obtained them from an antiquities dealer in Cairo between 1944 and 1946 (Gravette 2011). Gravette mentions that while the Ditsong Museum's bronze statuettes were broadly curated as belonging to the Middle and New kingdoms, some displayed stylistic attributes that are more akin to specific periods, such as the Twelfth and Eighteenth through Twentieth dynasties. Although further investigation of object dates is required, dating falls beyond the scope of this article, because the focus is on identifying the deities depicted.

#### Sekhmet

The seated Sekhmet (ARG 85/19) (Figure 1) is approximately 12.5 cm high, 3 cm wide, and features a hollow core. She wears a tight-fitting dress with a modest traditional uraeus (hooded cobra) headdress, and her hands rest flat (palms down) on her lap. The now-empty eye-sockets would probably have featured eyes made of clay, faience, or semi-precious stones during antiquity, while the earholes would have been adorned by earrings. A tang extends downwards from the feet, suggesting that it was affixed to a pedestal or base, as was typical of votive figures (Harcombe 2018).

<sup>1</sup> Although there are functional and ideological differences between statues, votive figures, and standards, the focus of this article falls on the stylistic markers that can be used to identify the deity being depicted.

The statuette was broken in two along the lap area, but repair work by the museum reattached the two sections. The uraeus and her left foot were also broken off, but not repaired. The statuette was cleaned of external corrosion; however, patination is still visible on the internal cavity of the throne and torso, as well as the breakage point along the lap area.



**Figure 1**: Sekhmet, as viewed from the right (A), front (B), and close-up (C) (Harcombe 2018, 12). Image credit: Author, courtesy of Ditsong Museum (ARG 85/19).

## Bastet/Cat

The sitting Bastet/Cat (ARG 85/17) (Figure 2) is roughly 5.5 cm high, 2 cm wide, and less than 4 cm from nose tip to tail. 3D tomographic imaging revealed that the object is solid cast and features a relatively smooth surface with polishing striations that are visible with the aid of a microscope (Harcombe 2018). The presence of a small metal tang suggests the use of a platform to facilitate its use as a votive figure.



**Figure 2**: Bastet/Cat, as viewed from the right (A), front (B). Image credit: Author, courtesy of Ditsong Museum (ARG 85/17).

## **Ibis**

The ibis statuette (ARG 85/21) (Figure 3) is approximately 6cm tall and 6.5 cm long from beak to tail. The item is broken along the legs, with the feet and base separated from the rest of its body. The museum has not performed any restoration work on the item, allowing one to observe layers of metal alloy and corrosion products along the breakage line with the naked eye. Restoration work had cleaned the surface of patination, apart from green-blue patination on the underside of the base/pedestal, a typical result of bronze oxidisation. 3D imaging revealed an internal clay core and metal pins that penetrate through the outer layer of metal and into the clay core (Harcombe 2018).



**Figure 3**: The Ibis, as viewed from the right (A), and the broken-off feet, as viewed from the top (B). Image credit: Author, courtesy of Ditsong Museum (ARG 85/21).

## Anubis/Dog/Jackal

The museum records describe the item (ARG 85/19) (Figure 4) as either a dog or a jackal, or possibly the god Anubis. At less than 4cm tall, this item is the smallest in the collection. The animal stands atop a sled-like structure and features a collar that extends into a loop behind its neck. Given its size, it is no surprise that 3D imaging revealed its solid cast nature (Harcombe 2018).



**Figure 4**: The dog/jackal/Anubis, as viewed from the left. Image credit: Author, courtesy of Ditsong Museum (ARG 85/19).

# Stylistic Analysis of the Four Bronzes

## **Sekhmet**

Several feline deities were known to the ancient Egyptians, most notably Bastet, Sekhmet, and Wadjet. While Herman (1994, cited in Apostola 2015) believes that most lion-headed figures should be identified as Sekhmet, this recommendation oversimplifies the identification process. Because a myriad of leonine goddesses existed within the Egyptian pantheon, and because so many were depicted without inscriptions, their identification is multifaceted and "relies upon an understanding of their coded visual messages" (Bianchi 2022, 4).

Sekhmet is widely regarded as the oldest feline goddess. In our earliest example, which dates from the Old Kingdom, around 2600 BCE, she is depicted as a lion-headed woman (Diesel 2008). As a physical manifestation of the Eye of Ra, she served as the avenger of pharaoh, representing war, strife, fire, and heat. Yet, despite her warrior-like status, she was also a goddess of love and healing (Gahlin 2010; Watterson 1999). From the Old Kingdom, Sekhmet was associated with the cat-headed goddess Bastet, who came to represent Sekhmet's aspect as goddess of love and fertility (Apostola 2015). As another manifestation of the Eye of Ra, she was often assimilated with deities such as

Hathor, Tefnut, and Wadjet (Lesko 1999). Wadjet, commonly depicted as an uraeus, was also identified with the Eye of Ra, as were Tefnut and Bastet (Vandier 1967, cited in James 1982). Mut, the principal goddess of Thebes, was also frequently depicted as a lion-headed goddess, while also being worshipped as a cat (Diesel 2008). Although multiple goddesses were depicted as lion-headed women, finer stylistic details and inscriptions can be used to distinguish between them (in most instances, but not all).

As a "half-woman, half-lioness," Sekhmet has distinctive leonine features and usually boasts a sun disk-uraeus combination as part of her headdress (Draper-Stumm 2018), as well as a lion's mane underneath a tripartite wig. Interestingly, although Sekhmet is clearly a female deity, she has a mane, which is usually associated with male lions. However, since the ancient Egyptians did not specify design tenets that visually distinguish between depictions of a lioness and a cat, the inclusion of a mane was an intentional coded device to depict a lioness (Bianchi 2022).

While Gahlin (2010) and Watterson (1999) note that the sun disk-uraeus combination characteristically identifies Sekhmet as the daughter of Ra, this association was not limited to Sekhmet, but also extended to the goddess with whom she was assimilated, such as Wadjet. This meant that Wadjet could also display a sun disk-uraeus combination. For example, the Metropolitan Museum of Art (MET; https://www.metmuseum.org/art/the-collection), in its description of a "lion headed goddess, possibly Wadjet" (89.2.574) makes the following observation:

several iconographic elements [that are] common to many lion-headed goddesses including the upright standing posture, the lion's mane combined with a tripartite wig, the long gown, and the sun disk. The sun disk, when worn by a lion-headed goddess, is sometimes linked with Wadjet, and alludes to her role as the daughter and eye of the sun god Re, but many goddesses shared this aspect and similar inscribed statuettes name several different deities; without an inscription or context, it is difficult to assign a precise identity to this figure. (Metropolitan Museum of Art, n.d. "A Lion Headed Goddess")

Bianchi's (2022) investigation of a bronze reliquary dedicated to the Egyptian goddess Wadjet draws a similar conclusion. The standing figure (see Figure 1 in Bianchi 2022) holds both arms tightly against her sides with both hands open. The figure's only attribute is a sun disk-uraeus combination and is void of any identifying inscriptions. What stands out in this example is the size ratio between the sun disk and the uraeus, with the latter extending to half the height of the sun disk. According to Bianchi (2022, 4):

the design of this particular hooded cobra is subtly different from the expected norm because its height is disproportionately larger than expected, measuring approximately the length of a radius of the circular design of the sun disc. This iconographic, coded visual message suggests that the leonine goddess represented in this bronze object

possesses a second hypostasis, or alternate form, namely, that of a cobra. This observation suggests that the goddess must be identified as Wadjet.

To support the argument, Bianchi provides an example of a similar object from the Rijksmuseum van Oudheden (F1953; https://www.rmo.nl/en/collection/search-collection/), which bears a sun disk-uraeus combination. The object is misidentified as Sekhmet, even though an inscription on the base identifies her as wADj.y ("she of the papyrus") (Bianchi 2022, 5). The example also depicts a uraeus that is quite large compared to the sun disk behind it.

Another reliquary, this time from the Ägyptisches Museum und Papyrussammlung in Berlin (AM 13142; https://sammlung.smb.museum/), is inscribed with the name Wadjet, but instead of having a sun disk-*uraeus* combination, this seated figure bears "a composite crown consisting of lyre-formed horns framing a sun disc and two tall plumes, which link her theologically with the goddess Hathor" (Bianchi 2022, 9). The figure's fists are clenched and positioned on her lap, one horizontal and the other vertical. A similar example comes from the Los Angeles County Museum of Art (LACMA)(50.4.14; https://www.lacma.org/).

Based on these observations, the presence of a sun disk-uraeus combination alone cannot be used to confirm a figure as being either Sekhmet or Wadjet. Instead, we must look at a combination of additional stylistic features. For example, Scott (2007) mentions the presence of an ankh in the left hand of seated Sekhmet figures, which rests on the goddess's left knee, while James (1982) observes that standing Sekhmet figures were often depicted holding a papyrus-shaped sceptre in the left hand. In discussing the characteristics of Sekhmet, Draper-Stumm (2018, 3)<sup>2</sup> notes that:

The standing type holds a papyrus sceptre in the left hand and an ankh (symbol of life) in the right, while seated examples hold an ankh in the left hand. Other common details include a collar necklace and a traditional wig beneath a stylised leonine mane, which frames the face.

Object 35.9.2 (MET) (Bull and Winlock 1935, Fig. 4; Roeder 1956) features a sun disk and uraeus but is free from the ankh and papyrus staff that could otherwise have identified it as Sekhmet. An inscription identifies her as Wadjet.

The British Museum has 39 statues that have been identified as Sekhmet (Draper-Stumm 2018). From these examples, Sekhmet is characterised by one or more of the following stylistic attributes: a sun disk-uraeus combination (EA57, 63, 72, 76, 80, 89, 517), standing with an ankh in the right hand and/or a papyrus sceptre in the left hand (EA41, 45, 49, 50, 69, 84, 519), and seated with an ankh in the left hand (EA37). Some

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<sup>2</sup> For a visual comparison, refer to Fig I (EA 76, 57, 62, 80, British Museum) (Draper-Stumm 2018, 2).

examples of Sekhmet are depicted without a sun disk or uraeus but feature either an ankh or papyrus staff (EA60, 520) or inscriptions of her name (British Museum EA37, 57, 62, 68, 88, 518; Museo Egizio Cat.245, https://collezioni.museoegizio.it/) that support the identification.<sup>3</sup> A large amuletic figure (EA27544; Masson 2015, 78, fig. 3.9a) is an example of Sekhmet without any of the above-mentioned features. The only thing that identifies her as Sekhmet is an inscription on the back.

In none of the examples consulted above was Sekhmet depicted with a solitary uraeus, and very few examples are depicted without either an ankh or papyrus staff. The solitary uraeus has a strong connection with the goddess Wadjet, tying in with Watterson's (1999) observation that Wadjet was initially depicted as a cobra or cobra-headed goddess. It was only during Egypt's later history that Wadjet became associated with the cat goddess Bast/Bastet, effectively transforming her into the lion-headed Wadjet-Bast (Gahlin 2010).

The British Museum does not feature a large collection of Wadjet objects. One inscribed figure of Wadjet (EA74111), features a circular modius and uraeus, as well as clenched fists. This example does not feature an ankh, papyrus staff or sun disk. A Wadjet statue from the MET (30.8.100; Delvaux 1998) depicts an almost identical design, featuring a circular modius and uraeus, and clenched fists. The object's identity is confirmed by an inscription that Wadjet grant life and health to the original owner, Minirdis, son of Pahnesy and Aarwt (Metropolitan Museum of Art, n.d. "Statue of Wadjet").

What is crucial to note here is the clenched fist pose common among Wadjet figures (LACMA 50.37.14, 50.4.14, MET 35.9.2 +inscription, MET 30.8.100 + inscription, British Museum EA7411, Brooklyn Museum 36.622). The objects that include an inscription of Wadjet provide a positive link between Wadjet and the clenched-fist pose. However, it must also be noted that Wadjet does not always boast clenched fists, as is the case with an item from a private collection (discussed by Bianchi 2022), whose identity as Wadjet is also confirmed by an inscription.

To illustrate how the clenched fists can be used to identify Wadjet, object 04.2.587 (MET) features a sun disk-uraeus combination and is described as Sakhmet (Wadjet?) in the catalogue. The one clenched fist resembles the Wadjet figures listed above, while the larger size of the uraeus supports the identification of Wadjet over Sekhmet.

A similar uninscribed example comes from the Brooklyn Museum (https://www.brooklynmuseum.org/). Object 37.405E exhibits the clenched fists, but the catalogue description lists it as "either Bastet or Sakhmet" (Brooklyn Museum, n.d.)

<sup>3</sup> EA57 (James 1971; Strudwick 2006), EA63 (Pinch 1994, fig.75), EA72 (Antoine and Vandenbeusch 2016, 170), EA76, 80, 89 (Strudwick 2006, 156–57), EA517 (Pinch 1994, 290), EA41, A49, 50, 69, 519, 520 (Pinch 1994, 265), EA45 (Taylor and Strudwick 2005, 14–15), EA84 (Yoyette 1980, 47–75), EA41 (Desti and Ziegler 2004, 254), EA37 (Pinch 1994, 264), EA60 (Wiese 2001).

Based on the position on the hands, it is possible that the item is Wadjet rather than Sekhmet. Another example of a possible misidentification comes from a blue glazed amuletic figure (EA26238) from the British Museum. The item is identified as "Wadjet(?)", with the question mark inferring uncertain identification. While the object does feature a tall uraeus in front of a sun disk, if one considers the papyrus staff, her identification befits Sekhmet more than Wadjet.

Although Ditsong's lion-headed goddess is identified by its museum records as Sekhmet, the absence of a combined sun disk and uraeus adornment, and the presence of a solitary uraeus on her headdress, suggest that she could in fact be Wadjet. According to Gahlin (2010), as the daughter of Ra, Sekhmet was religiously depicted with a sun disk or combination of sun disk and uraeus. However, based on the examination of objects presented above, some Sekhmet statues were presented without a sun disk and uraeus, and are confirmed as Sekhmet, either through the presence of an ankh and/or papyrus staff, or through an inscription of her name. In addition, if a larger uraeus could help to identify Wadjet (see Bianchi 2022, 4), then the complete absence of a sun disk and the presence of a solitary uraeus would support a connection with Wadjet.

In further support of the Ditsong Sekhmet's identity as Wadjet, we now turn to item 36.622 (Brooklyn Museum). The item features a solitary uraeus, which is broken along the exact same line as the Ditsong Museum's example. The figure is seated, and the left fist is held upright, while the right hand is flat on her lap. While the item is named "Seated Wadjet", the catalogue description does mention that it could also be Sekhmet. However, considering the presence of a solitary uraeus, the lack of an ankh or papyrus staff, and her the clenched left fist, 36.622 "s identity as Wadjet is much more likely.

While it could be argued that the Ditsong Museum's statuette's sun disk broke off, this is unlikely, as the sun disk-uraeus adornments are usually cast in unison and close investigation of the statuette was unable to detect any signs of a broken-off sun disk.

What is most intriguing is the position of the Ditsong statuette's hands. While seated examples of Sekhmet commonly feature an ankh in the left hand, as described by Draper-Stumm (2018), and Wadjet typically displays clenched hands, the Ditsong example's hands are positioned palms down and flat on her lap. This could be indicative of a connection with the goddess Bastet, who represents a more docile aspect of Sekhmet. In conclusion, based on these stylistic markers, the recommended reidentification for this statuette would be either Wadjet or Wadjet-Bast.

#### Cat/Bastet

Archaeological evidence has revealed that cats were domesticated and introduced to Egypt around 2100 BCE. The earliest known depiction of a domestic cat appears in a tomb at Beni Hasan (circa 1950 BCE); by 1450 BCE, cats were fully integrated into Egyptian society as domestic pets (Malek 1993). From the Middle Kingdom onward,

the benevolent cat-headed goddess Bastet was worshiped throughout much of Egypt (Watterson 1999), especially in cult centres such as Bubastis (Schorsch and Frantz 1998).

Bastet is considered a later development of Sekhmet, with whom she was associated from around 1850 BCE (Diesel 2008). According to Egyptian mythology, an enraged Sekhmet once stormed off into the desert to return as the charming and mild-mannered goddess Bastet (Ambers et al. 2008). A representation of Bastet from around 2800 BCE depicts her as a lion-headed woman with a sceptre in one hand and an ankh in the other (Diesel 2008), highlighting her development from Sekhmet. Several faience examples from the UCL Petrie Museum (LDUCE-UC62331, UC62332, UC52874, UC52875; https://www.ucl.ac.uk/) list lion-headed goddesses as Bastet, with LDUCE-UC62331 and UC62332 featuring inscriptions that identify the figures as Bastet.

Bastet was also depicted as a cat-headed woman, clothed in a tight-fitting dress and wearing golden earrings (Capel and Markoe 1996), or as a seated cat adorned with earrings and often a nose ring (Diesel 2008). According to Schorsch (2015, 573), Bastet was "depicted as a cat or lioness, depending on the context and/or date." However, later periods shifted their representation of Bastet to that of a cat. As Malek (1993) notes, while Bastet was initially depicted as a lioness, she was typically represented as a cat by the Late period (664–332 BCE). More specifically, Johnson (1994) states that Bastet became a cat goddess around 1000 BCE.

Most cat figures, large and small, are depicted in a seated position and often display typical cat-like characteristics of aloofness, dignity, and grace. However, there is a great difference in style, ranging from lifelike figures to those that focus on highly stylised facial patterns and ornaments (Scott 1958). According to Gahlin (2010), statues of deities are decorated with moulded or incised motifs that form part of the bronze itself, or with coloured inlays that were pressed into sockets. The presence of ear holes indicates that cat statues were often adorned with jewellery.

One such example, standing 28 cm tall and featuring a hollow cast body, is a statuette dated to the 26th Dynasty or later (334–30 BCE) (Schorsch and Frantz 1998). The cat's neck and upper chest area is incised with a broad collar and a pectoral that features the Eye of Ra (see Figures 7 and 8 in Schorsch and Frantz 1998, 20). A second figure (see Figure 6 in Schorsch and Frantz 1998, 18) wears a raised moulded chain with a winged scarab pendant. A third cat (see Figures 9 and 10 in Schorsch and Frantz 1998, 21) boasts an incised collar with what appears to be lotus-like triangular designs. The hairs on cats' ears are commonly stylised in such a way that they represent the feather symbol of the goddess Ma'at (Ambers et al. 2008). This practice is reflected on the examples presented by Schorsch and Frantz (1998).

Perhaps the most beautiful example is the Gayer-Anderson cat examined by Ambers et al. (see Figures 1 and 2 in Ambers et al. 2008, 2). This slender bronze feline wears an

incised multi-layered collar that closely resembles those worn by humans during funerary processions, as well as an *udjat*-eye on a square pendant. Below the pendant is a finely incised winged scarab holding the morning sun (representing birth and creation). Another incised scarab is observed on its forehead. Replica gold earrings have been attached as part of the museum display to represent what the statue would have looked like during ancient times.

The authors also discuss a cat figure from the Louvre Museum (E 2533; https://collections.louvre.fr/en/) (Ambers et al. 2008). The cat wears a pendant of what appears to be a winged scarab around its neck, and the ears are incised. The inscription on the figure's base mentions the owner, Mer-sopdu, who offered up the statuette to receive a blessing from the goddess Bastet (Ambers et al. 2008).

With these insignia considered, and the inscription referencing Bastet noted, the divinity of both objects can be inferred as a manifestation of the goddess Bastet. However, Ambers et al. (2008, 2) sound a word of caution:

Which god does the Gayer-Anderson cat represent? Due to the nature of Egyptian religion, it is impossible to say with certainty, as gods could typically manifest in a variety of anthropomorphic, theriomorphic, and hybrid forms. However, the best candidate is Bastet. This goddess could be represented as a lioness, as in her principal temple at Bubastis in northern Egypt, reflecting her association with Sekhmet. The latter goddess is described in the Destruction of Mankind, an ancient Egyptian mythological text, as attempting to destroy mankind. In another myth, an enraged leonine Sekhmet leaves Egypt but returns as an appeased cat. Thus, Bastet as a cat could be interpreted as the benign form of Sekhmet. Votive figurines of Bastet always represent her as a cat, or cat-headed woman, not as a lioness.

Another stylistic marker associated with Bastet is the uraeus, which can be observed on an example from the British Museum (EA11556). The item is only 12.69 cm tall, but features tiny holes in its ears, which would have been used to attach metal earrings. Examples of Bastet from the British Museum that feature the above-mentioned stylistic markers include EA58517 and EA61546.

Very few examples of undecorated cats were identified from online collection catalogues. One such example is object 1905,0612.3 from the British Museum, which is completely free of decorations, but does include an inscription on its base that identifies it as being dedicated to Bubastis (Thomas and Higgs 2017). This highlights the fact that even undecorated cats could be a representation of Bastet. It is, of course, possible that these undecorated cats were adorned with real jewellery instead of cast-in motifs.

Upon close observation of the Ditsong Museum's cat statuette, no incised or raised collars or pendants could be observed. The ears are also free from the incisions that typically associate Bastet with the feather of Ma'at (as posited by Ambers et al. 2008).

While it could be argued that the small size of the Ditsong cat would have prevented it from being decorated, the skillsets of the ancients would have allowed them to include some form of insignia, like collars and pendants featuring a winged scarab or the *udjat*-eye, incised ears, or even a uraeus. The fact that no insignia was identified on our statuette cannot exclude the possibility that it is a representation of Bastet. One stands to argue that ever since cats became house pets during the Middle Kingdom (2040–1640 BCE) and were thereafter closely associated with Bastet (Schorsch and Frantz 1998), even a statuette representing a beloved house pet could inherently represent the goddess Bastet. In addition, as noted from object 1905,0612.3, undecorated cat statues could be dedicated to Bubastis. It could therefore be argued that a visual distinction between "a cat that is Bastet" and "a cat that is just a cat" is a modern dilemma, as the ancient Egyptian would have seen no difference.

Although we cannot positively confirm that the Ditsong example is not Bastet, the lack of insignia supports the theory that the object was either a statuette intended as an offering to the goddess, or a representation of a beloved pet, rather than a direct and implicit representation of Bastet. The lack of insignia is significant, especially considering the fact that the ancient Egyptians were very particular in terms of official artistic styles and coded visual messages.

#### **Ibis**

The African sacred ibis (*Threskiornis aethiopicus*) is the sacred animal of the ibisheaded god Thoth. As a mediator between good and evil, and the inventor of hieroglyphs, Thoth himself is depicted as a scribe.

Representations of the ibis in copper alloy were popular and small ibis statuettes were often found alongside mummified ibis remains in catacombs and in the caches associated with temples and shrines. Life-size ibis statues often had a body of carved wood, with the legs and neck being cast in bronze, as can be seen from a number of examples discussed by Schorsch (1988). The wooden body not only saved on expenses in terms of bronze usage but could also serve as a small sarcophagus in which ibis mummies could be stored. A beautiful example of one of these life-sized (42.5 x 20.3 x 55.9 cm) coffins is housed by the Brooklyn Museum (49.48a-b) and is made from wood, silver, gold leaf, and gesso.

In some instances, ibis figures that appear to be stand-alone figures mounted on a base were actually covers/lids for animal coffins or reliquaries. Coffin or reliquary lids usually feature a distinct edge or lip that would keep the lid secured on the underlying vessel (see Brooklyn Museum 08.480.64). These small rectangular vessels often contained mummified ibis chicks or other small bird mummies and were mostly solid cast due to their small size.

Some coffins and reliquaries were cast as a single unit, with an opening at the base or side(s) through which the mummified animal remains were inserted. One example of

such an ibis reliquary from the British Museum (EA64515) depicts a squatting ibis on a plinth that is positioned on top of the reliquary. The object appears to be moulded as a single unit; in other words, the plinth does not function as a lid. An example from the Brooklyn Museum (37.417E) depicts a squatting ibis atop a coffin that features an opening on one side. Similar objects are housed by the Louvre (E 2411; Guichard 2014, 52, 128) and Rijksmuseum van Oudheden (F 1931/2.2).

Ibises could also be cast separately from the coffin and inserted into the superstructure by means of a tang that was cast in unison with the solid-cast body (Brooklyn Museum 37.412Ea-c, 86.226.19, 57.165.8).

Ibises were often assembled from different components that would mimic the colouration of the animal itself. Examples from the Louvre (E 5854, E 22964, E 27469) feature bodies made from alabaster, with the legs and necks made from copper alloy. In other instances, the bodies would be carved from wood while the necks and legs would be made from bronze (Rijksmuseum GN-K\_1532, GN-K\_1751, GN-K\_2675). To create the impression that solid cast statues featured components made from different materials, the bodies of these figures were often gilded with gold leaf (Rijksmuseum F 1956/11.1; Schneider 1997, 27).

A few examples depict squatting ibises on a solid base plate (see MET 04.2.459, 89.2.512; Brooklyn Museum 37.383E; Louvre E 22174, N 5028, E 473, N 4118 F; Gillet 1898, no. 1420). As no edge or lip is visible on these objects, one can assume that they were used as free-standing votives, rather than lids.

The primary consideration when examining the Ditsong ibis was not to determine whether it was correctly identified as an ibis, but rather to determine whether the object was a free-standing statuette, or if it served as a coffin or cosmetics container lid.

Firstly, considering the small size of the Ditsong ibis, along with its clay core, one can exclude its function as a coffin/reliquary. Secondly, based on comparisons with museum examples of coffin lids, the base of our ibis does not feature a defined edge or lip that would allow it to fit securely atop an underlying coffin structure. These factors suggest that the Ditsong ibis was a free standing votive.

## Dog/Jackal

The Pharaoh Hound (*Canis lupis familiaris*), often depicted as a slender, reddish-brown dog, was popular during much of ancient Egypt's history (American Kennel Club, n.d.). One theory proposes a genetic relation to the Kelb tal-Fenek (commonly known as a "rabbit dog"), which traces its origins to the Maltese islands (Rice 2006). Another theory suggests that it may be related to the Cirneco, a Mediterranean dog that was popular in ancient Sicily (Cortellari et al. 2021). Because of the striking similarity between the Pharaoh Hound and jackals, it is easy to mistake one for the other. What complicates

the issue is that the "Egyptian jackal" was recently reclassified through genetic studies as an African Golden Wolf<sup>4</sup> (*Canis anthus*) (Hance 2021).

The jackal<sup>5</sup> was the sacred animal of the jackal-headed god Wepwawet, whose name translates as "The Opener of Ways." The god, in his jackal form, guided the deceased along the treacherous paths of the underworld, leading them to Osiris and final judgement (Watterson 1999).

As with the Ditsong Museum's identification of "Sekhmet," the description of this statuette as a dog/jackal or the god Anubis is flawed. Our suggested reidentification is based on a process of elimination, firstly explaining why it is not a dog or a representation of Anubis, before detailing why the figure represents the jackal-headed god Wepwawet.

The god Anubis was a "canine-headed" figure, with no absolute consensus on whether it represents a Pharaoh Hound or jackal. It may also be that the Anubis canine combines physical features from these canines, and even adds some characteristics (like its solid black appearance) that correspond to neither Pharaoh Hounds nor jackals Whatever the case may be, depictions of the god Anubis in his full canine form bear striking similarities to Wepwawet in his canine form. However, there are stylistic differences that can help to differentiate between the gods.

Anubis canines are usually depicted in a recumbent pose. In one such example from the British Museum (EA35831), the Anubis canine is laying down with its long front paws extended forward, and its hind legs flanking its belly. The ears are typically quite large, upright, pointed, and facing forward (Petrie Museum LDUCE-UC30565). In some instances where surface treatments have survived, a simple red band adorns the neck, which is reminiscent of the red strips of cloth or leather (known as "stola") commonly depicted around the neck of Anubis from New Kingdom tomb paintings. This appearance is echoed by examples of Anubis from the British Museum (EA61508, EA61506, EA61522, EA35832), Manchester Museum (11498), Brooklyn Museum (37.1478Ea-b), and the Louvre (E 19174, N 4094, E 5700).

Another characteristic of Anubis canines is the long, smooth tail. In some instances, recumbent Anubis figures are depicted with their tails hanging down from the pedestal on which they are placed. An example of this style is item 37.1478Ea-b from the

Despite its reclassification as a type of wolf, the article still refers to Wepwawet's animal as a "jackal," as this is the existing standard terminology. In addition, Evans (2011, 104) notes, "As it cannot be classified as belonging to any one species, the Wepwawet figure is hence perhaps best viewed as a generic or composite canid."

<sup>5</sup> Although modern genetic research has reclassified the Egyptian jackal as a type of wolf, there is no question that the sacred animal of Wepwawet was a jackal, or at least what the ancients presumed to be a jackal.

Brooklyn Museum. The tail's smooth appearance resembles that of a Pharaoh Hound much more closely than that of the African Golden Wolf, with the latter having a thick, bushy tail. The tail of Wepwawet, on the other hand, is noticeably thicker (British Museum EA22928, Brooklyn Museum 16.580.168) and often features incisions to mimic hair (MET 04.18.8, 04.18.12).

An example of a seated dog figure is listed by the British Museum (86.178; Villing et al. 2015) as either Anubis or Wepwawet. However, this seated pose is less common among Anubis and Wepwawet figures, and the dog itself appears heavyset compared with the slim, streamlined physiques that are typical of both Anubis and Wepwawet. The figure also has a broad face compared with the sleek appearance of Anubis and Wepwawet. The figure dates from the Ptolemaic period when Sothic dogs became quite popular. They were associated with the Isis cult and were often depicted as wearing a pendant or bulla around the neck (Bailey 2008). Examples include objects EA57356 (Bailey 2008) and 86.429 (Villing et al. 2015, DD.192) from the British Museum. It is therefore possible that 86.178 represents a Sothic dog rather than Anubis or Wepwawet.

Because it is often difficult to distinguish between dogs and jackals based on physical canine features alone, one has to consider additional stylistic clues. Most noteworthy here is the shedshed, a barge or slide-like device upon which many figures of Wepwawet are placed. Evans (2001, 103) notes that the shedshed is "a curious balloon-shaped object [or spheroid object] associated with the canine god Wepwawet, [which] has yet to be identified conclusively."

Evans (2011, 105) notes that representative examples of shedsheds indicate a chronological development from a "thin hook that simply extends the narrow baseline" to a "projection in front of the animal [that] begins to expand." Evans (2011, 105) further notes that:

An ivory label from the reign of Den (fig. #f) is also the first Wepwawet standard to incorporate a cobra, which rears at the junction between the baseline and the shedshed; the snake did not become a common feature of the sign until after the Third Dynasty, but once established it was usually positioned so that its body either attached to, or emerged from, the base of the shedshed.

Interestingly, shedsheds appear on votive statuettes and amulets as well as larger standards, but the device itself should not be misinterpreted as the base of a processional standard (as many Wepwawets on shedsheds are too small to have functioned as standards). Examples of shedsheds can be observed on figures and amulets from the MET (30.8.108, 23.6.6), British Museum (EA36448, Andrews 1994), and Petrie Museum (LDUCE-UC79094).

In instances where the shedshed is missing, or not clearly identifiable, the presence of two uraei flanking the front paws is a coded reference to Wepwawet. This association between the uraei and Wepwawet is exemplified by a figure from the British Museum

(EA22928), whose identity as Wepwawet is confirmed by an inscription. Furthermore, the snakes represented on *shedsheds* are not simply cobras, as Evans (2011, 104) explains that "a rearing cobra ('uraeus') placed between the animal and the spheroid object completed the composition, and further asserted Wepwawet's connection with the king."

Statues of Wepwawet may also feature incised or painted collars featuring vertical lines between two horizontal bands (MET 1989.281.103; Roehrig and Hill 1992), and typically display long tails that extend downwards to reach the shedshed (MET 04.18.8; Hayes 1953).

Smaller objects of this nature may have features as accoutrements on small processional barges, as may have been the case with item 23.6.6 from the MET (Metropolitan Museum of Art, n.d., "Jackal[a]"). Alternatively, the loop behind the Ditsong jackal's neck could suggests that it was an amulet, rather than a free-standing statuette, as is the case with EA 36448 from the British Museum. However, while amulets feature loops so that they can be suspended, some loops on Wepwawets (such as 30.8.108 from the MET) appear to be aesthetic rather than functional, suggesting that they might be coded references. The argument to support the loop as a stylistic feature is two-fold; either the object is too large to be a pendant, or the loop itself is not open or shaped in a way that would facilitate its suspension. In fact, the Metropolitan Museum, in its commentary on object 30.8.108 notes that:

The presence of suspension loops, however, is not always a straightforward indicator for how a piece may have been displayed, and thus the display and function of these types of pieces is still ambiguous without more contextual evidence from archaeological sites. (Metropolitan Museum of Art, n.d., "Jackal[b]")

In conclusion, the Ditsong jackal possesses a base structure that is most similar to the shedshed of a Wepwawet figure from the MET (23.6.6). While the uraeui flanking the front paws are not detailed in their physical representation, they are nonetheless present and complete the connection with the shedshed's spheroid device. Based on this similarity, we can safely propose that our figure is a representation of Wepwawet and not simply a domestic dog or jackal.

## Conclusion

Based on the comparative stylistic analyses that were applied in this study, the author would like the Ditsong Museum to reconsider the identities of two of the four statuettes. The statuette previously identified as Sekhmet is probably either Wadjet or Wadjet-Bast. This assumption is based on the absence of a sun disk-uraeus combination and the presence of a solitary uraeus. As the absence of a sun disk-uraeus combination on its own is not enough to discredit her identification as Sekhmet, the absence of other stylistic markers that are common among Sekhmet figures, such as the ankh and papyrus

staff, is worth noting. The absence of clenched fists can in turn not be used to discredit the Wadjet aspect of the goddess, as the solitary uraeus suggests a possible association. Lastly, the flat-palmed position of her hands on her lap could be a coded reference to the item's more docile nature, possibly connecting it with the cat goddess Bastet.

The statuette previously identified as a dog or jackal is most likely a representation of the jackal god Wepwawet. This conclusion is mainly drawn from the presence of a shedshed, a sled-like device featuring a balloon-shaped or spherical edge and two uraei that flank Wepwawet's front paws. Based on the object's size, and the presence of a loop behind its neck, the item could have been an amulet rather than a votive figure. However, the possibility remains that the loop is a hereto unidentified stylistic element rather than a functional component, which could indicate that the object might have served as part of a small funerary barge.

The identification of the cat figure as being either a cat or the goddess Bastet is correct. Although the object does not feature any adornments, the possibility exists that the item could have been adorned with real-life jewellery, thereby excluding the need for cast-in or incised motifs. One could also argue that the close association between cats and the goddess Bastet would make all cats inherent representatives of the goddess.

The ibis statuette requires additional information on its possible use, rather than reidentification. Based on its size and solid-cast nature, the item could not have functioned as a coffin for an ibis or small bird mummy. The shape of the base on which it stands suggests that the item was probably a free-standing votive, as a coffin lid would have featured a prominent lip or edge that would have allowed it to fit atop a small coffin or reliquary.

To conclude, the study has shown the potential of using a combination of online museum catalogues alongside published research on the stylistic elements of deities towards comparative stylistic analysis. Examples from online collections that feature inscriptions of the deities they represent can be used as benchmark examples, as the stylistic features they exhibit are positively associated with the object through the named inscription.

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