

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/144711/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Nicholson, Paul 2023. Between humanity and the gods: sacred animals and their place in popular religion at Saqqara. Journal of Ancient Egyptian Interconnections 38-39, pp. 221-230.

Publishers page: https://egyptianexpedition.org/articles/the-three-...

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Between humanity and the gods: sacred animals and their place in popular religion at Saqqara.

Paul T. Nicholson School of History, Archaeology and Religion, Cardiff, U.K.

Introduction

Interest in the sacred animals of ancient Egypt is currently enjoying something of a renaissance, as reflected in a series of recent publications based around museum exhibitions (e.g. Bleiberg, Barbash and Bruno 2013, Ikram 2019, McKnight and Atherton-Woolham 2015). Animal mummies in particular are a source of interest amongst the general public as staging of such exhibitions and the making of television programmes featuring sacred animals testifies.

Votive animal mummies were also important to the ancient Egyptian population at large, from at least as early as the 26th Dynasty (664-525 BCE) and lasting into the Roman period (from 30 BCE onwards). During this time animals were buried in considerable numbers and must have formed an important part of the economy. But what do we really know of the 'pilgrim experience' of the cults, if such a thing really existed?

This speculative paper attempts to highlight gaps in our knowledge about the operation of the animal cults in so far as the procurement and preparation of the animal mummies is concerned and considers what the ancient Egyptians who made votive dedications really knew about the animal cults of Saqqara (Figure 1) (and elsewhere) and whether they are an interface between what we normally consider as private and state religion.

Sacred Animals

Ikram (2019: 171) has identified six types of animal mummy: (1) pets, (2) victual or food mummies, (3) sacred animals worshipped in their own lifetime, (4) votive mummies dedicated by pilgrims, (5) false/amalgam mummies (sometimes referred to as pseudo-mummies and (6) 'other'. The latter two categories extend the four originally proposed in 2005 (Ikram 2005:1) and category 5 may be of particular importance.

Ikram's categories 1 and 2 are not relevant to this paper which concentrates on the burials of animals at Saqqara in categories 3 and more particularly 4-5. Sacred animals worshipped in their own lifetime are typified by the Apis bull, an animal whose burial at Saqqara is attested from as early as the 1st Dynasty (Dodson 2005) and which was buried with royal honours. This is not the place to speculate upon the origin of such sacred animals, but it is highly probable that they originate in the earliest religious practice of ancient Egypt and so are very deeply rooted in Egyptian belief (Woods 2015). They may be said to be characteristically Egyptian.

There would usually be only one sacred animal worshipped in its own lifetime alive at any given moment, thus a single Apis, Buchis or Mnevis bull, and these creatures would be selected with great solemnity by the priests responsible for their respective cults (Dodson 2005). However, it is apparent that over time whole species of animal came to be revered.

The Apis was the living image, the *ba* of Ptah, creator god of Memphis (Dodson 2005: 72) and as such was unique. What then was the status of those many tens of thousands of animals which were dedicated by visitors to Saqqara and elsewhere, and what was status of those

visitors who made the dedications? Are we right to see the dedication of votive animals and objects as part of private piety?

Votive animals and their donors

It is well known that Egyptian religion operated at a number of different levels (Baines 1991; Kemp 1995; Quirke1992; Stevens 2009). For example, whilst the inhabitants of Deir el-Medina 'officially' worshipped the deified Amenhotep I and his wife Nefertari as their patrons (Romer 1984: 21) in practice much of their devotion was focussed on Meretseger, 'she who loves silence', a snake goddess associated with the Qurn in the Valley of the Kings (Wilkinson 2003: 224; Stevens 2009: 10-11). Similarly, Stevens (2006) has demonstrated the importance of so-called 'private religion' even within the context of Akhenaten's monotheistic/henotheistic city of Amarna, illustrating the strength and pervasiveness of these private beliefs.

Private beliefs did not, of course, exclude adherence to state level religion, and individuals would doubtless have celebrated regional and national religious festivals with the same enthusiasm as they did village or household-level events. It will be argued here that the animal cults provided a link between personal piety and state-level religion. It should be emphasised, as Baines (1991:123) has noted that there is no single ancient Egyptian term for 'religion' and as such the divisions made by scholars between state-level and private beliefs would not be a familiar to people who regarded religion as part of life and saw different aspects of that religion as appropriate to particular life events.

There is not sufficient evidence to suggest any given time at which the lines between what modern scholars consider private and state religion became blurred, it may be that to some extent that they were always so. However, one suspects that it may be that the blurring process may have been accelerated by Egypt's increased contact with her neighbours as a result of the development of the empire in the New Kingdom (regarding changes at this time see Baines 1991: 179). At this time new deities and ideas were imported into Egypt and this may have had the effect of both widening the scope for personal adherence to particular deities for some while conversely focussing interest on what might be seen as 'traditional' religious practices for others. It may be no coincidence that votive animal mummies seem to appear first from the late New Kingdom (Teeter 2011: 91). The worship of animals had its roots deep in Egypt's past and the elevation of these creatues to prominence seems to have reached a peak in the Late Period and Ptolemaic era. This raises the question of how the animals fitted between the most private and the most public of religious practices, but before this can be examined it is necessary to consider whether the numerous votive animal mummies really were an aspect of private belief.

Dieter Kessler in his important work *Die heiligen Tiere und der Konig* (1989) has taken the view that dedications of votive animals were not made by pilgrims, a view strongly re-stated in his 2003 paper dealing with supposed misconceptions concerning the animal cults (Kessler 2003a). Kessler, whose work focusses on Tuna el-Gebel, sees the animal mummies as a long established part of royal cult. The English summary to his 2003 work makes clear his view that "animal cult never has been a phenomenon of locally based peasant piety but always an element of royal cult" (Kessler 2003b) with its focus on the New Year Festival (von den Driesch *et al.* 2013: 236-237). However, this view has not been widely shared by those working at Saqqara (Davies and Smith 2005; Nicholson 2019; Ray 2001a).

John Ray (2001a: 346) believes that the animal cults were in fact part of popular religion, stating that "they attracted worshippers and pilgrims in the thousands" and that this "mass appeal is evident in the large numbers of oracular questions and responses that survive". He goes on to state that "Oracles were a mechanism for decision making...in a sense they occupied the niche nowadays filled by personal therapists and professional advisors... they were tangible and accessible in a way that conventional cults were not" (Ray 2001a: 346).

There may, however, be areas of common ground between the views of Kessler (1986; 2003a, b) and von den Driesch et al. (2005) whose work has focussed on Tuna el-Gebel, and the view taken here and by others at Saggara. These are two separate sites and need not be analogues of one another: one might expect some differences as local traditions became incorporated into wider Egyptian themes. Baines (1991: 198) notes that from the Late Period urban communities were more "integrated" than previously and that the central state "intervened less in local affairs", phenomena which would tend to enhance religious diversity between regions. Kessler is surely correct in stating that common 'pilgrims' would not be allowed to enter the catacombs or take any very active role in the ceremonies and officials known as 'Carriers of the Ibis" are known to have taken the birds into the catacomb (Kessler and Nur el-Din 2005: 134). From Saggara the Archive of Hor (Ray 1976; 2001a) makes it clear who is to be formally present at the mass burial of the ibis, but that does not preclude a procession in front of onlookers, and it seems entirely plausible that the burial procession might be witnessed by members of the general population, perhaps with the choicest positions being given to those who belonged to particular cult organisations as von den Driesch et al. (2005: 236-7) note . Some such burial events may have been linked to New Year or other state-level celebrations but that does not preclude their being an aspect of popular devotion and celebration (c.f. Scalf 2015: 366). The presence of oracle texts (Ray 2001a: 346) makes it clear that the cults, at least at Saggara, had popular appeal even though they were the subject of state-level regulation (Ray 1976: 73-90).

Whatever the status of the cults at Tuna el-Gebel, Ray's view that the cults "were tangible and accessible in a way that conventional cults were not" (Ray 2001a: 346) seems evident at Saqqara. It may be that some of the apparent differences between Saqqara and Tuna el-Gebel are chronological. There is some evidence to suggest that many of the burials at Saqqara belong to the Ptolemaic era when Kessler (2005:142) notes that there was a move to mass burial of ibises and a change in the organisation of the cult.

There is no evidence to suggest that Saqqara was in any sense a 'closed' locale. Although it Ptolemaic times it is known that there was a police force at the site (Thompson 2012: 105) its purpose does not seem to have been to prevent entry but rather to maintain law and order amongst the community who lived on the plateau and who provided services for visitors. There are numerous points at which the Saqqara plateau might be accessed (Nicholson 2016; Williams 2018) one of the main ones of which, from the Late Period, may have been via the Anubieion temple, a significant structure on the site and one intimately associated with the animal cults (Jeffreys and Smith 1988).

Who then were the pilgrims who accessed Saqqara and why did they come to the site? The view taken by most of those working on the animal cults at Saqqara is that these were ordinary Egyptians who came to honour a deity or deities and to visit a place of great religious antiquity. This latter is evidenced from New Kingdom graffiti left in the House of the South within the Djoser complex (Peden 2001: 61). In thinking of Saqqara as a necropolis it is easy to overlook the fact that in ancient times it was also home to a thriving community of individuals who served not only the temples but also the visitors to the site. Ray (2001b) provides a lively

account of this community of seers, hoteliers, priests etc. based on his work with the *Archive of Hor* (Ray 1976).

Many of those visiting would have come from nearby Memphis and its environs, but there may well have been a similar number coming from elsewhere in Egypt. Society was not static – journeys were made for purposes of trade, to visit relatives, trans-ship goods and so on. All of these would provide opportunities for a religious visit, quite apart from visits made especially for that purpose. The New Kingdom visitors who left graffiti found the Djoser Temple "as though heaven were within it, Re rising from it" and wish that "all good and pure things fall [from heaven] to the *ka* of the justified Djoser" while asking that the gods "presiding over the sacred land grant them "a good lifetime serving their *kas*" and "a good burial after a fine old age, in sight of the West of Memphis, like a great honoured one" (Lauer 1976:90). While the writers may have come to marvel at the ancient monuments it is clear that they also had a religious motive.

A newly arrived visitor to Saqqara would not have been acquainted with all that it had to offer and one must suppose that like most 21st Century tourists the visitors would not be prepared for the scale and variety of tombs and temples they encountered They may not even have been fully prepared for the scale of the trade in votive objects which they might be offered!

Harry Smith's 1974 book 'A Visit to Ancient Egypt', which is a pioneering example of narrative archaeology, attempts to describe something of the experience of visitors to the funeral of a Mother of Apis and in so doing he opens a window onto how Saqqara may have looked and felt to newcomers. Smith's visitors are Greeks, unfamiliar with the locale, but who are guided by an Egyptian friend and who seek to follow the customary rituals of Egyptian visitors. The friend takes his guests "to his uncle Psenptah's shop to see the ready wrapped birds; some just sewn in a cloth are sold for vive obols, others plain but bound most elegantly in pleated strips of linen for a drachma or more, but there were others decorated with painted linen figures of the ibis Thoth, of the Baboon and other gods, some even overlaid in gold. These were far too expensive for us; but we escaped with buying nice middle priced ibis with a figure of Thoth in linen, a faience baboon and a fine bronze figure of the falcon Horus. It had a hollow base in which we could place our plea to the god, written on papyrus..." (Smith 1974:69-70).

Smith's fictional account draws on evidence from the study of votive caches found by Emery at Saqqara (e.g. Green 1987) along with information from the *Archive of* Hor (Ray 1976) which strongly suggest that the overall picture of religious practice with a strongly commercial arm is correct for Saqqara. The colour is provided by experience of any modern tourist taken to see his or her guide's relatives shop selling perfume, papyrus or woven carpets.

It is worth considering also the role of the votive bronzes. A cache of several hundred was discovered in the 1990s (Nicholson and Smith 1996) and is a good illustration of the numbers and varieties of objects left by pilgrims. The cache consisted mainly of *situlae*, these were in a range of sizes with some plain and others elaborately decorated. Their handles too vary greatly in size and are frequently not in proportion to the vessels. Many situlae have every appearance of having been produced quickly and with very little care. The accompanying figures of deities are often also of fairly crude manufacture. It is notable that even seated figures which may once have had a wooden throne commonly have a suspension loop on the back. It seems likely that these, along with the *situlae* were suspended from pegs in the walls of the shrines they served. When the shrine became overfilled it was emptied and most of the

votives, probably mainly the older and the cheaper ones, were buried on site. They could not be recycled as they were the property of the god hence their burial within sacred ground.

The large number of bronzes recovered from the temple terrace of the Sacred Animal Necropolis from the work of Emery and that of the writer well illustrates the scale of production of these items. There must have been numerous workshops at Saqqara and/or nearby Memphis making them just as there are today turning out cheap (to produce, if not always to buy!) figurines and amulets for sale to visitors. These items were things to be given by an individual to a god, as such they are a very personal part of religious material culture.

It is the opportunity for a private individual to partake in something which is rooted in ancient Egyptian tradition and which is also monitored by the state which places the sacred animal cults at the interface between private and state religion. However, there is more the ancient visitor experience, or perhaps lack of experience, than immediately meets the eye.

Scholars have tended to focus on the act of donation itself and on the material culture associated with it. Thus it is clear that pilgrims, such as those imagined by Smith (1974), made purchases in order to perform a religious act. There was a transaction between the buyer of a mummified ibis, or a bronze figure of a god, or a bronze situla and its vendor but there was also another intended interaction, perhaps transaction, between the donor of the item and the god. It is apparent that donors often made their offering in the hope that the mummified animal would act on their behalf with the deity it represented and bring them good fortune. Alternatively, the donor may been making their offering in thanks for some good fortune received. Some no doubt, were simply pious and wished to honour a god for whom they felt some special connection. Still others may have felt the need to purchase something in order to escape the high pressure selling of vendors to whom they had been led by guides or whose wares they had inadvertently glanced at for too long. The dedication of an actual mummy, a (formerly) living representative of the deity, may have been regarded as the most effective form of dedication (Ikram 2015: 213) but it is not clear if any kind of hierarchy existed, and the picture is complicated by the existence of fake/pseudo mummies (below).

However, the donation is only the most visible part of the pilgrim (in)experience. One should ask where the mummies came from. How were animals in great number procured and how did they meet their ends?

The archaeological statistician Nick Fieller (1947-2017) who worked with the writer at Saqqara in the 1990s estimated that the North Ibis Catacomb at Saqqara contained one million mummies, the South three quarters of a million and the Falcon Catacomb half a million. Nicholson, Ikram and Mills (2015: 655) have estimated almost eight million mummies for the Catacombs of Anubis. Whilst it is not clear for how long each of these catacombs was in use, and therefore how many animals were buried each year, the numbers required annually would have been very large. This has led to suggestions of captive breeding of birds (see Ikram 2015) or perhaps more likely to the fostering of bird populations by providing additional food and maintaining their habitat, a likely scenario for the ibises of Saqqara (Wasef et al. 2019; Linglin et el. 2020, Ikram *et al.* 2015; Ikram 2017). The procurement of raptors is a more difficult question and may account for what is, anecdotally, seen to be a higher number of 'pseudo' or 'false' mummies in the Falcon Catacomb than in those of the ibises. The very large number of dog mummies estimated for the Catacombs of Anubis results mainly from the very small size of many of them, itself the result of the very young age of many of the individuals. Some of the animals were probably only hours or days old at the time of their mummification (Nicholson

Ikram and Mills 2015). The procurement of large numbers of dogs suggests that they were deliberately bred for the cult and it has been suggested that puppy farms probably existed at Memphis and perhaps at Saqqara itself (Nicholson, Ikram and Mills 2015).

In recent years it has become clear that many of the mummified animals did not die naturally but were in some way hastened to their deaths. In the case of the cats they often had their necks broken or had been beaten over the head (Armitage and Clutton-Brock 1981; Zivie and Lichtenberg 2015:117-118), puppies were probably separated from their mothers and left to die of dehydration on the sand, thus obviating any need for artificial desiccation or evisceration, while birds might be drowned or have their necks broken. This picture is, of course, completely at odds with the vision of the relationship between Egyptians and Sacred Animals which is given by Herodotus (Histories).

One must ask whether or not the pilgrims to Saqqara knew that the animal mummies they were donating were the bodies of creatures deliberately bred and killed for the cult or whether they were 'encouraged' toward a different vision. It may be that a visitor to Saqqara, probably entering the site via the Anubieion, would have seen a pack of healthy, adult dogs kept in the temple as representatives of the god. The visitor may have been encouraged to dedicate a dog mummy and if so they might well have assumed that it would be of an animal like those they saw before them and that it would have died naturally. They may have been completely unaware that what they were actually paying for was probably a new born puppy from a farm in Memphis. This would be particularly true if they did not actually see the mummy, a visitor with only a day to see Saqqara may well have left the transaction in the hands of a priest or a guide and would not be present for the annual burial event. Even if they were present they would not have been able to identify their purchase amongst the great mass of other mummies.

However, if Smith's (1974) picture of a stall selling bird (or indeed other) mummies is correct then at least some visitors might have seen the animal mummy that they were going to dedicate (see also Martin 1981:9). But did they know what lay inside the wrappings? The appearance of a wrapped mummy is not a good guide to its contents or their size, Zivie and Lichtenberg (2015: 118) note that some large cat mummies contain only a very small cat, the same is no doubt true of the dog mummies while some mummy bundles, particularly of birds, contain no remains at all. Studies of animal mummies in museum collections (e.g. McKnight 2015) have shown what has also been observed in the field, namely that many votive mummies contain little or nothing of the animal itself. Because the *Archive of Hor* (Ray 1976: especially 77-79) deals with irregularities in the Ibis cult (notably the practice of putting more than one bird mummy into a pot and thus charging pilgrims for mummy plus pot, when in fact some were actually getting only a mummy), the assumption has tended to be that these mummies were 'fakes' deliberately made to deceive the donor. However, recent opinion has been more nuanced. Some of these 'fakes' contain a feather or a bone and it may be that a part could magically represent the whole, indeed it may be that an image of the animal containing no actual part of the creature was equally as good as the creature itself (Ikram 2005: 14). Just as the Opening of the Mouth ritual might be performed on a statue to give it 'life' so might a similar practice have made these so-called 'fakes' real (Kessler and Nur el-Din 2005: 134). As a result the term 'pseudo-mummy' has come to be preferred by some scholars.

In passing, it may be noted that some support for the view that many pilgrims did not see their purchase may come from the irregularities of the ibis cult. If pilgrims had seen that several birds were going into a single pot they might have been reluctant to pay for the vessel which was deemed necessary for each mummyⁱⁱ. They clearly did not see the mummy being potted

and it seems possible that some did not see the mummy either as one suspects may have been the case for those small dog mummies which had similarly small mummy bundles.

In the end, did it matter to the pilgrim whether their animal was whole, part or pseudo? Did they care if the animal which belonged to the same species as the god was killed or died naturally? Perhaps not. The pilgrim was providing an eternal burial fit for a representative of the god, that its earthly life might have been short (exceedingly short in the case of some of the puppies) was perhaps an irrelevance compared to an eternity in paradise. Pilgrims obviously did not think that they were doing any mis-deed to the animal, killed or not, since they wanted it to act beneficially on their behalf so either the killing did not matter, was not known about or was an uncomfortable truth which pilgrims heard rumour of but chose not to investigate.

Conclusion

With the expansion of the animal cults from the Late Period onwards it seems likely that visitor numbers to Saqqara, and probably to other sites, increased markedly and offered opportunities for temple and state to prosper. Ray (2001b: 124) notes that "...religiosity and the economy went hand in hand, for the Thirtieth Dynasty as well as for its predecessors. It is notable that Cleopatra...[was] favouring the native temples and encouraging their economic expansion as a means of paying for the defence of the country and restoring its former glory." Dedication at such a temple might be seen as both an affirmation of Egyptian-ness and of personal piety.

The large numbers of votive *situlae*, figures of deities and the oracular questions themselves seem clearly support the view that those who made dedications of such things, as well as mummies, at Saqqara should be regarded as pilgrims. Kessler's "Peasant piety" (Kessler 2003b) perhaps does not do justice to the scale of the cults from the Late Period onward, but there seems little doubt that even very humble visitors to Saqqara wished to make dedications, in much the same way that ordinary people leave offerings today at major religious shrines such as Lourdes.

Bleiberg (2013: 81-82) stresses that the votive mummies are not simply inducements or offerings of thanks but their "souls acted as messengers between people on earth and the gods" (Bleiberg 2013: 81-82). Ray (2001a: 347) makes the important point that some of those who made dedications of bronzes (in this instance temple furniture at the Falcon Catacomb) were women. He therefore suggests that the animal cults (in this case that of Thutmose in his ibis form) appealed to both genders and gives us an all too rare glimpse into female interaction with religious cults (though Scalf 2015: 370 notes that caution is necessary here). The dedication of an actual mummy however, a (formerly) living representative of the deity, may have been regarded as a still more effective dedication (Ikram 2015: 213; Ikram 2018) and one must consider the relationship between donor, dedication and deity.

Acknowledgements

I am grateful to the Supreme Council for Antiquities and Ministry of State for Antiquities for their permission to work at Saqqara over many years and to their representatives at the Saqqara *Taftish*.

There is not space here to thank individually all those who have taken part in the work at Saqqara, but I am grateful to all my team members, not least to our Egyptian excavators and house staff. Particular thanks are due to Dr. Sue Davies, Dr. Nick R.J. Fieller, Mr. Kenneth J.

Frazer, Professor Salima Ikram, Professor Caroline Jackson, Dr. David Jeffreys, Dr. Steve Mills, Professor Harry S. Smith and Dr. Scott Williams.

I am grateful to Professor Dr. Renata Tatomir for her invitation to join the scientific committee for the conference *Gods and Humans in Ancient Egypt* and for accepting my paper for the meeting.

References

Armitage, Philip L., and Juliet Clutton-Brock. 1981. A Radiological and Histological Investigation into the Mummification of Cats from Ancient Egypt. *Journal of Archaeological Science* 8:185–96.

Baines, John 1991. Society, morality and religious practice. In Byron E. Shafer (ed.) *Religion in Ancient Egypt.* London: Routledge, 123-200.

Bleiberg, Edward, Yekatarina Barbash and Lisa Bruno (eds.) 2013. *Soulful Creatures: animal mummies in ancient Egypt.* London: Brooklyn Museum and D. Giles.

Davies, Susan and Smith, Harry S. 2005. *The Sacred Animal Necropolis at North Saqqara: The Falcon Complex and Catacomb: The Archaeological Report.* London: E.E.S.

Dodson, Aidan 2005. Bull cults. In Salima Ikram (ed.) *Divine Creatures*. Cairo: AUC Press, 72-105.

Driesch, Angela von den, Dieter Kessler, Frank Steinmann, Veronique Berteaux and Joris Peters. 2005. Mummified, deified and buried at Hermopolis Magna—the sacred birds from Tuna el-Gebel, Middle Egypt. Ägypten und Levante 15, 203-244.

Green, Christine Insley. 1974. *The Temple Furniture from the Sacred Animal Necropolis at North Saggara 1964-1976.* London: E.E.S.

Herodotus Histories. (The Histories, Trans. A. de Selincourt. Harmondsworth: Penguin 1954).

Ikram, Salima 2005. Divine creatures: animal mummies. In Salima Ikram (ed.) *Divine Creatures*. Cairo: A.U.C. Press, 1-15.

Ikram, Salima 2015. Speculations on the role of animal cults in the economy of ancient Egypt. In Magali Massiera, Bernard Mathieu and Fr. Rouffet (eds.) *Apprivoiser le sauvage—Taming the Wild: Glimpses on the Animal World in Ancient Egypt.* Montpellier: CENiM 11, 211-228.

Ikram, S. 2017. The Hunter and the Hunted: The Brief Story of an Animal Mummy, *Imaging and Imagining the Memphite Necropolis: Liber Amicorum René van Walsem.* Vincent Verschoor, Arnold Jan Stuart, and Cocky Demarée (eds.). Leiden: Nederlands Instituut voor Het Nabije Oosten/Peeters, 43-46.

Ikram, S. 2018. Animal Mummies. In Roger S.Bagnall, Kai Brodersen, Craige B. Champion, Andrew Erskine, and Sabine R. Huebner (eds) *The Encyclopedia of Ancient History*. Oxford/New York: Wiley-Blackwell, 429-431.

Ikram, Salima 2019. Shedding new light on old corpses: developments in the field of animal mummy studies. In Stéphanie Porcier, Salima Ikram and Stéphane. Pasquali (eds.) *Creatures of Earth, Water and Sky: Essays on Animals in Ancient Egypt and Nubia*. Leiden: Sidestone Press, 169-181.

Ikram, Salima, Slabbert, Ruhan, Cornelius, Izak, . du Plessis, Anton, Swanepoel, Liane Colette, and Weber, Henry. 2015. "Fatal force-feeding or Gluttonous Gagging? The death of Kestrel SACHM 2575", *Journal of Archaeological Science* 63: 72-77.

Jeffreys, David G. and Harry S. Smith. 1988. The Anubieion at Saggara. London: E.E.S.

Kemp, Barry J. 1995. How religious were the ancient Egyptians? *Cambridge Archaeological Journal* 5 (1), 25-54.

Kessler, Dieter 1989. Die heiligen Tiere und der Konig, Teil 1. Weisebaden: Harrassowitz.

Kessler, Dieter 2003a. Tierische missverstandnisse: grundsätzliches zu fragen des tierkultes. In Fitzenreiter, M. Kirchner, S. and Kireleit, O. (eds.) *Tierkulte im pharaonischen Ägypten und im Kulturvergleich*. Internet-Beitraege zur Aegyptologie und Sudanarchaeologie IV, 33-68.

Kessler, Dieter 2003b. Tierische missverstandnisse http://www2.rz.hu-berlin.de/nilus/net-publications/ibaes4/summary.html#kessler Accessed 3-30-2019

Kessler, Dieter, and Nur el-Din, Abd el Halim, 2005. Tuna el-Gebel, millions of ibises and other animals. In Salima Ikram (ed.) *Divine Creatures Animal Mummies in Ancient Egypt*. Cairo: A.U.C., 120-63.

Lauer, Jean-Philippe (1976) Saggara. London: Thames and Hudson.

Linglin, Marie, Amiot, Romain, Richardin Pascale, Porcier, Stéphanie, Antheaume, Ingrid, Berthet, Didier, Grossi, Vincent, Fourel, François, Flandrois, Jean-Pierre, Louchart, Antoine, Martin, Jeremy E. and Lécuyer, Christophe 2020. Isotopic systematics point to wild origin of mummifed birds in Ancient Egypt. *Science Reports* 10, 15463. https://doi.org/10.1038/s41598-020-72326-7

Martin, Geoffrey T. 1981. The Sacred Animal Necropolis at North Saggara. London: E.E.S.

McKnight, Lidija. 2015. What lies beneath: imaging animal mummies. In L McKnight and S. Atherton-Woolham (eds.) *Gifts for the Gods.* Liverpool: Liverpool University Press, 72-81.

McKnight, Lidija and Stephanie Atherton-Woolham (eds.) 2015. Gifts for the Gods. Liverpool: Liverpool University Press.

Nicholson, Paul T. and Smith, Harry S. 1996. An unexpected cache of bronzes. *Egyptian Archaeology* 9, 18.

Nicholson, Paul T. 2016. The Sacred Animal Necropolis at North Saqqara: narrative of a ritual landscape. In Campbell Price, Roger Forshaw, Andrew Chamberlain and Paul T. Nicholson

with Robert Morkot and Joyce Tyldesley (eds.) *Mummies, Magic and Medicine in Ancient Egypt: multidisciplinary essays for Rosalie David.* Manchester: Manchester University Press, 19-31.

Nicholson, Paul T. 2019. The North Ibis Catacomb at Saqqara. In Stéphanie Porcier, Salima Ikram and Stéphane. Pasquali (eds.) *Creatures of Earth, Water and Sky: Essays on Animals in Ancient Egypt and Nubia.* Amsterdam: Sidestone Press, 251-258.

Nicholson, Paul T., Ikram, Salima and Mills, Steve 2015. The Catacombs of Anubis at North Saqqara. *Antiquity* 89 (345), 645-61.

Peden, Alexander J. 2001. The Graffiti of Pharaonic Egypt. Leiden: Brill.

Quirke, Stephen 1992. Ancient Egyptian Religion. London: British Museum Press.

Ray, John D. 1976. The Archive of Hor. London: E.E.S.

Ray, John D. 2001a. Animal cults. In Donald B. Redford (ed.) *The Oxford Encyclopedia of Egyptology*. Oxford: O.U.P., 345-348.

Ray, John D. 2001b. Reflections of Osiris. London: Profile Books.

Romer, John 1984. Ancient Lives. London: Guild Publishing.

Scalf, Foy 2015. Resurrecting an Ibis cult: demotic votive texts from the Oriental Institute Museum of the University of Chicago. In Fayza Haikal (ed.) *Mélanges offerts à Ola el-Aguizy*. Cairo: I.F.A.O., 361-381.

Smith, Harry S. 1974. A Visit to Ancient Egypt. Warminster: Aris and Phillips.

Stevens, Anna 2006. Private Religion at Amarna: the material evidence. Oxford: BAR International Series 1587.

Stevens, Anna 2009. Domestic religious practices. In Jacco Dieleman and Willeke Wendrich (eds.), *UCLA Encyclopedia of Egyptology*. Los Angeles: eScholarship. https://escholarship.org/uc/item/7s07628w, accessed 28/8/2020.

Teeter, Emily 1991. Religion and Ritual in Ancient Egypt. Cambridge: C.U.P.

Thompson, Dorothy 2012. *Memphis Under the Ptolemies*. Princeton: Princeton University Press (2nd edn.).

Wasef, Sally, Subramanian, Sankar, O'Rorke Richard, Huynen, Leon, El-Marghani, Samia, Curtis Caitlin, Popinga, Alex, Holland, Barbara, Ikram, Salima, Millar, Craig, Willerslev, Eske, and Lambert, David. 2019. Mitogenomic diversity in Sacred Ibis Mummies sheds light on early Egyptian practices. *PLoS ONE* 14(11): e0223964. https://doi.org/10.1371/journal.pone.0223964

Wilkinson, Richard H. 2003. *The Complete Gods and Goddesses of Ancient Egypt*. London: Thames and Hudson.

Williams, Scott 2018. Visualising a Complex Ritual Landscape: Gaining a New Perspective on the Late Period/Early Ptolemaic Sacred Landscape of North Saqqara Through the Application of Digital Technologies. Cardiff University School of History, Archaeology and Religion: Unpublished PhD Thesis.

Woods, Gillian 2015. *In the Beginning...The Origins of Predynastic Religion*. Cardiff: Cardiff University Unpublished PhD Thesis.

Zivie, Alain and Lichtenberg, Roger 2015. The cats of the goddess Bastet. In S. Ikram (ed.) *Divine Creatures*. Cairo: A.U.C. 106-119.

ⁱ There is no word for 'pilgrim' in ancient Egyptian (Smith pers. comm.) but the term seems to be appropriate for those making a visit to a sacred place for religious reasons.

ii Kessler and Nur el-Din (2015:126) suggest that the birds might be place in their jars once inside the catacomb, and thus away from public view. However, Davies and Smith (2005: 62) suggest that at Saqqara the potting may have been done at the 'house of waiting' prior to burial. See also Scalf (2015: 364).