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Ancient Egyptian Fauna : a lexicographical study

(Two volumes)

Volume 1

Belinda Ann Wassell

Thesis submitted for the degree of doctor of philosophy to the University of Durham.

School of Oriental Studies, 1991.

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Ancient Egyptian Fauna : a lexicographical study

PhD : 1990

Belinda Ann Wassell

This thesis has sought to assemble and evaluate a comprehensive corpus of texts and secondary material relating to the fauna of ancient Egypt. It is in the first instance a philological study, using as a starting point the Wörterbuch der ägyptischen Sprache produced in the 1920s and '30s, though evidence from archaeological and representational material has been included where appropriate.

Previous work in this field has been sporadic and of varying quality. Much of it is not recent or is based on older reference sources. It therefore seemed appropriate to attempt a compilation and updating of existing studies. Much effort has been put into using recent zoological works to provide lists of species from modern Egypt with which to compare both the ancient records and the taxonomic information given in other Egyptological studies.

The thesis is divided into 20 chapters. The first examines, by way of introduction to the rest of the study, aspects of zoological classification in ancient Egypt, making comparisons with work carried out by anthropologists on classificatory systems used by modern 'primitive' cultures. The remainder of the thesis is divided into three parts. The first, comprising chapters 2 to 14, examines the names given by the ancient Egyptians to various mammals; each chapter discusses a certain group of mammals (eg Cattle; Dogs and Similar Animals; Lions and Other Cats). The second part, comprising chapters 15 to 17, concerns birds. Part three comprises chapters 18 to 20 on fish, reptiles and amphibians, and insects respectively.

The advantage of this type of study lies in the avoidance of translations formulated in isolation from related material. Altogether some 600 animal names, spanning c.3000 to 500 BC, have been discussed; a number of previous translations have been revised and many new or more precise translations suggested.

No material contained within this thesis has previously been submitted for a degree in this or any other University.

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List of Abbreviations

For abbreviated forms of articles and monographs cited in the thesis see the Bibliography at the end of the text.

General

Ar.	= Arabic
cf	= *confer*, compare
col.	= column(s)
DAI	= Das Deutsche Archäologische Institut, Kairo
det.	= determinative
Dyn	= Dynasty
ed.	= edition, edited (by)
EES	= Egypt Exploration Society
eg	= *Exempli gratia*, for example
esp.	= especially
etc.	= *et cetera*, and so on
IFAO	= L'Institut Français d'Archéologie Orientale
id.	= idem
ie	= *id est*, that is
IP	= Intermediate Period
fem.	= feminine
fig.	= figure(s)
frag.	= fragment
Fs	= Festschrift
Gr.	= Greek
l.	= line(s)
LP	= Late Period
masc.	= masculine
max	= maximum
MK	= Middle Kingdom
ms	= manuscript
n.	= note(s)
NK	= New Kingdom
no.	= number
OK	= Old Kingdom
p.	= page(s)
P.	= papyrus
pl.	= plate(s)
pt.	= part(s)
publ.	= published (by)

rep(s)	= representation(s)
rto	= *recto*
rev.	= revised
suppl.	= supplement
tr.	= translated (by)
vol.	= volume
vso	= *verso*

Periodicals & Series

ÄF	Ägyptologische Forschungen
AFO	Archiv für Orientforschung
AJA	American Journal of Archaeology
AnOr	Analecta Orientalia
ASAE	Annales du Service des Antiquités d'Égypte
BdE	Bibliothèque d'Étude
BIE	Bulletin de l'Institut d'Égypte
BIFAO	Bulletin de l'Institut Français d'Archéologie Orientale du Caire
BiOr	Bibliotheca Orientalis
BSEG	Bulletin de la Société d'Égyptologie de Genève
BSFE	Bulletin de la Société Française d'Égyptologie
CdE	Chronique d'Égypte
FIFAO	Fouilles de l'Institut Français d'Archéologie Orientale du Caire
GLECS	Groupe Linguistique d'Études Chamito-Sémitiques
GM	Göttinger Miszellen
HÄB	Hildesheimer Ägyptologische Beiträge
HAS	Harvard African Studies
JARCE	Journal of the Americal Research Centre in Egypt
JEA	Journal of Egyptian Archaeology
JNES	Journal of Near Eastern Studies
JRAS	Journal of the Royal Asiatic Society of Great Britain and Ireland
KDVS	Der Kongelige Danske Videnskabernes Selskab, Historisk-filologiske Medelelser
MÄS	Münchner Ägyptologische Studien
MDAIK	Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo
MIE	Mémoires de l'Institut d'Égypte
MIFAO	Mémoires publiés par les Membres de l'Institut Français d'Archéologie Orientale du Caire
MMAF	Mémoires publiés par les Membres de la Mission Archéologique Française au Caire
NAWG	Nachrichten von der Akademie der Wissenschaften zu Göttingen, Phil-hist Klasse
OLZ	Orientalistische Literaturzeitung
OMRO	Oudheidkundige Mededelingen uit het Rijksmuseum van Oudheden te Leiden
PSBA	Proceedings of the Society of Biblical Archaeology

RdE	Revue d'Égyptologie
Rec.Trav.	Recueil de Travaux rélatifs à la Philologie et à l'Archéologie égyptiennes et assyriennes
RHR	Revue de l'Histoire des Religions
SAK	Studien zur Altägyptischen Kultur
SBAW	Sitzungsberichte der Bayerischen Akademie der Wissenschaften, Phil-hist Abteilung
SPAW	Sitzungsberichte der Preußischen Akadamie der Wissenschaften, Phil-hist Klasse
Unt	Untersuchungen zur Geschichte und Altertumskunde Ägyptens
WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes
ZÄS	Zeitschrift für ägyptische Sprache
ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft

INTRODUCTION

Egypt provides unique evidence on the existence and naming of an ancient fauna. Reliefs and paintings, especially those of the Old and Middle Kingdoms, illustrate a diverse mammal-, fish- and avifauna. The hieroglyphic script itself, representing a number of basic sounds with the figures of animals and comprising many other animal figures as determinatives, gives an insight into the importance of the animal world for the ancient Egyptians not offered by other languages.

In the past, studies of the fauna of ancient Egypt have been somewhat haphazard. Modern publications, notably those of Störk, Boessneck, Gamer-Wallert and Brunner-Traut, are, like the older works, of varying emphasis and quality. The first collection of animal names was made by Hartmann in 1864; he gave translations of some 30 terms.[1] Later, more specific, studies were made by, for example, Gaillard[2] and Loret,[3] whose interest and sponsorship prompted the extensive and generally excellent work of Keimer on a wide range of subjects.[4] Keimer had hoped to write a 'grand ouvrage' covering the whole field of botany and zoology in ancient Egypt[5] - a similar wish was also expressed by de Rachewiltz[6] - but neither lived to fulfil their ambitions.

There seems to be a case, therefore, for producing a work which brings together all recorded animal names, together with references to the studies made of them, and also to update and evaluate this material. Particular attention has been paid in this study to the recent zoological record, as this subject has (as Keimer noted)[7] been much neglected in the past. Nevertheless it does not aim to be a complete zoological treatise, and archaeological evidence, which would furnish information on fauna both during and before dynastic times, has been ignored except where of particular interest. It is often difficult to know how far to trust identifications proffered in archaeological works, especially the older studies, yet it would require a considerable degree of zoological and palaeontological knowledge to check or revise them. Such a study is beyond the scope of this thesis but is a subject which would repay further investigation.[8]

The assembling of a complete corpus of texts pertaining to animal names would be a vast task and various restrictions have been placed on the body of material presented here. Greco-Roman temple inscriptions and demotic texts, which form (from the point of view of grammar and orthography) discrete groups of documents, have only been cited where

comparative references are of especial interest. A similar position has been adopted with regard to Coptic material. This has resulted in a restriction of the period from which references have been taken to c.3000 to 500 BC. This has the further effect of excluding certain animals which, although now considered typically Egyptian, were not introduced into Egypt until after those dates, such as the camel.

Symbolism has been considered to a limited degree only and a distinction has been drawn between those animal names which occur solely in 'rational' texts (for example, those recording historical or medical information) and those which are attested exclusively in texts of a religious nature (such as the books concerning the Underworld). Thus 'Fabeltiere' are not considered, and a number of the names of snakes from the Underworld recorded by Wb, many of which appear to have solely descriptive or epithetical force, have been omitted.[9]

The use of an ancient language as the basis for any study entails specific problems. Texts are inevitably limited in number and can be preserved from sometimes widely differing dates and provenances. Dialectal variations may be undetectable or easily misinterpreted.[10] A word's meaning may change dramatically over a decade, yet translations may rest on only a few attestations scattered over several centuries. Deduced meanings cannot be checked by asking native speakers.

The search for translations of animal names in the face of these difficulties has often led to the comparison of Egyptian words with those of other languages, notably Semitic languages, Coptic and, via Coptic, Greek and Arabic. Weeks[11] has recently drawn attention to the dangers of being influenced by one's own culture when attempting translations, and the same can be said of the influences of other - even ancient - cultures. The relationship between these languages is extremely complex (and inadequately researched) and simple comparisons do not take into account these complexities, although they may be of some use when all other evidence is lacking.

There is a certain element of chance at work in the preservation of records in any ancient language. In Egypt literature of a religious nature far outweighs other texts surviving from ancient times, and this will inevitably have restricted the type and number of animal names to have been preserved. Many animal names must have been used which are not to be found in the extant texts. The highly specialised medical corpus contains many terms unknown from other sources and the same can

be said of the unusual tomb paintings at Beni Ḥasan which show birds not depicted or named elsewhere; these examples indicate that other specialised texts (had they survived) would also reveal their own specific terms. Many names are found largely, if not solely, in descriptions of kings or gods - obviously not all animals are suitable for such comparisons.

The translation of animal names is both aided and hindered by the representations which survive from ancient Egypt. Loret believed that collecting all the representations of animals would result in a complete record of the ancient fauna.[12] This is undoubtedly untrue; species lists from modern Egypt generally show a very much greater diversity than the ancient records, pictorial or textual.[13] Although the Egyptians divided the animal kingdom into classes of beings they did not develop the systematic analysis of the modern Linnaean classification. The animals drawn and named were those of greatest significance; for example, cattle were frequently shown and were assigned a great variety of names but the zoologically vast class of insects received little attention.[14]

In many instances animals were depicted accompanied by their names, though in some cases it is obvious that the wrong name has been chosen. In other cases, especially when a word is but infrequently attested, it can be difficult to decide whether the association of picture and name is to be trusted.[15] In yet other cases the representation itself may be unhelpful, either because it is badly drawn by an inept artist or so stylised that the animal is unrecognisable. In general, the Egyptians did not draw animals purely out of scientific curiosity (the Beni Ḥasan paintings mentioned above seem to be a notable exception) and this should be borne in mind when interpreting the tomb scenes.

This last point is seldom taken into account by climatologists who have referred to evidence from Egypt when reconstructing the palaeoclimate of Africa.[16] It is known from rock drawings in the central Sahara that this desert at one time supported abundant life, both human and animal, on extensive watercourses, and it is evident that considerable desiccation has led to the desert conditions prevailing today. The Saharan rock drawings and the reliefs of ancient Egypt have been used to date the progress and degree of this desiccation, since they show animals which are no longer native to northern Africa, but only to more temperate regions. Old and Middle Kingdom Egyptian scenes have been held to support the theory of a

'Neolithic wet phase' in the third millennium BC when savannah conditions prevailed in now arid areas;[17] Butzer[18] in particular has concentrated on the relationships between climatic fluctuations and Egyptian evidence, though not without receiving considerable criticism.[19]

The animals of ancient Egypt have undoubtedly not succumbed to climatic change alone but also to the effects of man; indeed some of the species depicted in ancient reliefs and paintings became extinct in Egypt only in the last century or at the beginning of this.[20] Hunting may well have eliminated species such as the fallow deer and bear before the climate could affect what may in any case already have been marginal populations[21] supported only by locally favourable conditions.[22]

The evidence is also distorted by the varied provenance of the representations. Old Kingdom records tend to be from the Memphite area in the north of the country, where the king and capital were established, an area cooler and wetter that other parts of Egypt. Middle and New Kingdom sources from more southerly, drier, areas inevitably show a more restricted fauna.

As Shaw[23] has pointed out, there are a number of problems associated with the interpretation of pictorial data, especially in view of the present paucity of knowledge about animal ecology and the extent to which animals (particularly large animals) - and, therefore, pictures of animals - are a reliable indicator of environmental conditions.[24] Ancient Egyptian art, being static rather than dynamic, is particularly prone to misinterpretation - depictions of animals may have been copied from tomb to tomb because of their suitability as subject matter rather than because the artist drew his inspiration from life.[25] Textual evidence is similarly unreliable. Phrases such as 'roaring like a leopard' can obviously survive in a language long after the animal of the simile has disappeared. This is even more the case with texts which use archaising language or are rigid in their phraseology, such as those describing the exploits of New Kingdom pharaohs.

Despite these reservations the Egyptian evidence is of considerable interest in the study of climate and zoogeography, giving at least some indication of faunal movement since the beginning of the third millennium BC. Even today the Nile Valley is regarded as an important

transitional zone between the Palaearctic and Ethiopian faunal regions[26] and this importance seems to have been even greater during dynastic times. The presence in Egypt of now purely Palaearctic species, such as the fallow deer and bear, and purely sub-Saharan forms, such as the baboon and African elephant, attest to this. It is notable that some species were absent from ancient records which, because of their present distribution, would have been expected to occur. The zebra today shares much of the same habitat as the giraffe, which was known to the ancient Egyptians, yet was not encountered by them even on their journeys to the more southerly land of Punt. Accurate analysis of faunal remains would certainly help to clarify the pattern of - and perhaps be able to suggest reasons for - ancient distributions and increase current understanding of animal ecology.

As the title of this study indicates, information on Egyptian fauna has been taken in the first instance from written records. Material was collected initially from the Wörterbuch der ägyptischen Sprache, and was supplemented from the original record slips of this dictionary in Berlin and from other dictionaries and collections, notably Meeks' Année Lexicographique.

Some 600 words are discussed in 20 chapters, arranged, for ease of reference, with words denoting similar animals grouped together. An index of terms indicates the pages where the main discussion of the term (or animal) takes place. The Bibliography is arranged in four sections. Those sections concerned with zoological and Egyptological works contain both abbreviated and full references. Other references, which appertain only to single or small groups of words or animals, are cited in full in the appropriate place in the text. They may be found by referring to the Index for the animal name in question.

I wish to thank many people for their assistance in bringing this study into existence: my supervisor, Dr.W.J.Tait; the staff of the libraries of the University of Durham and the Griffith Institute, Oxford; the staff of the DAI, Cairo; all those 'im Wörterbuch' at the Akademie der Wissenschaften in (East) Berlin, especially Dr.A.Burkhardt and Dr.C.Tietze; and my infinitely patient typists, Mr.G. & Mrs.F. Lawson. My thanks go particularly to the relatives and friends who have supported and sustained my endeavours, and to whom this thesis is dedicated.

Chapter 1 : Zoological Classification in Ancient Egypt

Research since the 1950s into folk biosystematics, 'prescientific man's classification of his biological universe',[1] has indicated a considerable degree of consistency in the ways in which societies categorize the animals with which they are familiar.

The most inclusive category, which has been termed the 'unique beginner',[2] and which corresponds to English 'animal', is seldom named in pre-scientific classificatory systems, even if the category is perceived: there may be no single term for 'plant' or 'animal' in a language, though 'plants' and 'animals' are never confused. The next most inclusive categories are almost always named. These 'life form' groups are, in English, 'mammal', 'bird', 'fish', 'reptile', 'insect'. Work done on these 'life form' terms suggests that these categories are universally recognised, though not all need be named.[3] The life form classes most commonly named are those focusing on birds, fish and snakes. The next most commonly named class focuses largely, but seldom exclusively, on insects (it may comprise, for example, other small creatures such as worms or frogs). The 'mammal' class is 'encoded' last of all, probably because of the greater visibility and (economic) importance of mammals to man - the distinction horse/pig may be as significant to man as fish/bird.[4]

No work has been carried out previously on zoological classifications in ancient languages, though various studies of animal names in Greek, Latin, Akkadian and Hebrew do exist.[5] Despite the disadvantages of using a 'dead' language as a data base - there can be no truly objective way of checking evidence, which in itself is distorted by chance of survival - it is of interest to see whether the ancient material corroborates the modern. Ancient Egyptian does seem to provide notable parallels.

A demotic myth describing the griffin notes that its body was made up of parts of various creatures, including man (Spiegelberg's translation[6]): 'Da sagte der Hör-Vogel zu dem Seh-Vögel : In Wahrheit (XV,I) weißt du nicht, daß der Greif der ...[...] ist, der Hirt von allem, was (2) auf Erden ist, der Vergelter, dem kein Vergelter vergilt? Sein Schnabel ist der des Falken, seine Augen (3) die eines Menschen, sein Leib der eines Löwen, seine Ohren wie des Chenfi-Fisches (oder) des <u>ꜣbꜣḥ</u>-Fisches des Meeres, (4) sein Schwanz der einer Schlange'. These creatures are called 'the five that draw breath upon

the earth' and this has been adduced as evidence that the Egyptians employed a system of 'five-fold classification', ie man, mammal, bird, fish and snake, to categorize all living things.[7]

A number of texts from the Middle and New Kingdoms, many of them hymns recounting the creation of the world, do indeed specifically name categories of animal often corresponding in some degree to the life form classes identified by anthropologists:

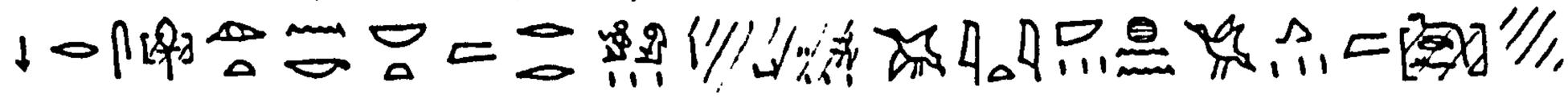
1. P. Ermitage 1116A, rto 1.132-133:[8]

'He [Shu, as creator god] created for them [mankind] plants, ʿwt, (3pdw) and rmw to feed them'.

2. Turin Stela No.104, 1.4:[9]

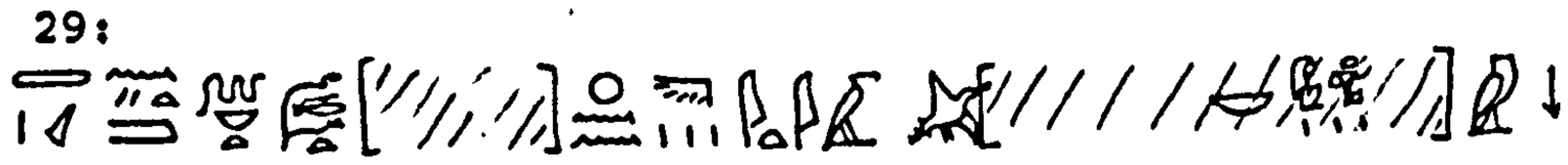
recording some kind of census 'de tous les boeufs, de tout la volaille, de tout le petit bétail'.

3. Amarna I, 36 (= LD III, 97a):



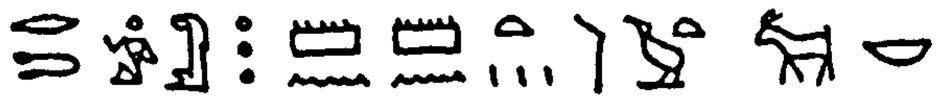
tr. Davies, p.50: 'to give life to all that thou hast made, viz. mankind, cattle, flying and fluttering things, with [all kinds] of reptiles which are on the earth ' (reading ḏdft nbt nty).

4. Amarna III, 29:



tr. Davies, Amarna, p.31: 'viz. all mankind, [cattle] flying and fluttering things [with] all kinds of reptiles which are on the earth'.

5. Amarna IV, 32:



tr. Davies, p.28: 'mankind and all herds and flocks, and the trees which grow on the ground'.

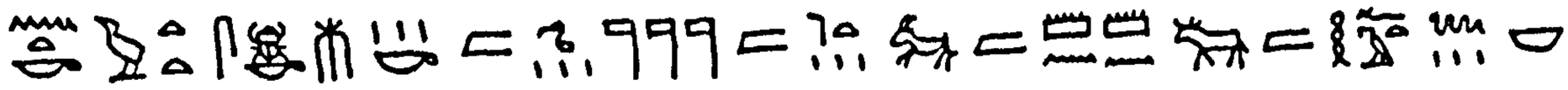
6. Bibl Nat 20, 11 (hymn to Osiris):

'all his mnmnt, all things which fly (up), all things which fly down, his ḏdft, his ʿwt of the desert'.[10]

7. P. Tur PuR 131, 13 (= HO I, pl.3, No.2: O. Petrie 7):

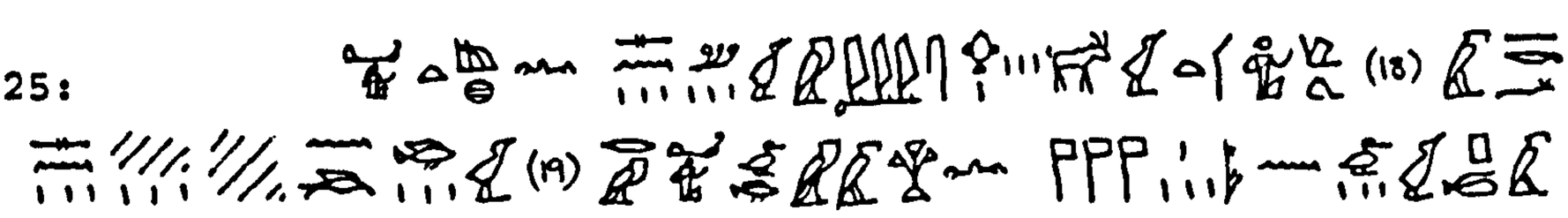
'gods, people, ꜥwt, mnmn, ddft, p3yw, r(mw)'.

8. KRI V, 404, 10-11:[11]



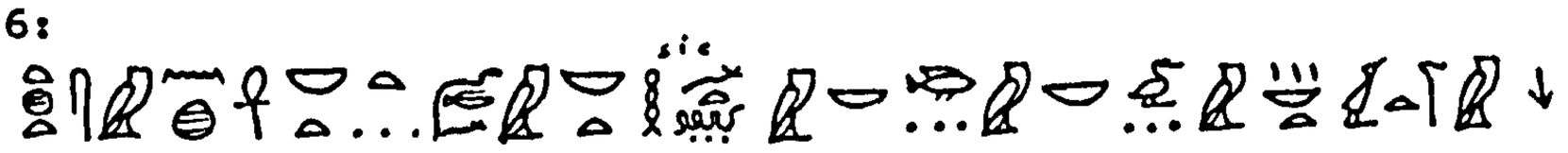
'You [the sun god] are the engenderer who brings into being your creatures, consisting of mankind (and) gods, of ꜥwt, of mnmn (and) of all ḥf3t'.

9. BOD 125:



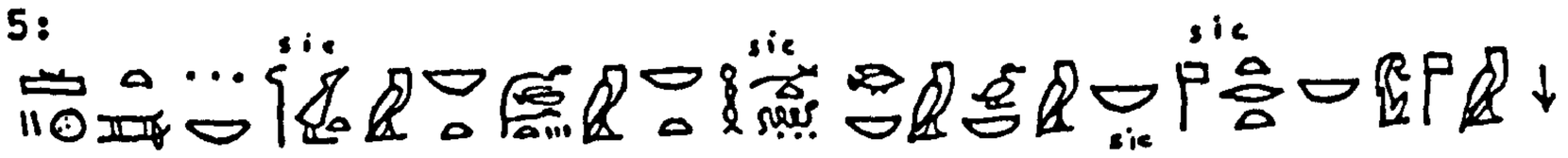
tr. Allen, BOD, p.97: 'I have not driven small cattle from their herbage. I have not snared birds for the gods' harpoon tips; I have not caught fish of their [lagoons]'.

10. BOD 154, 6:



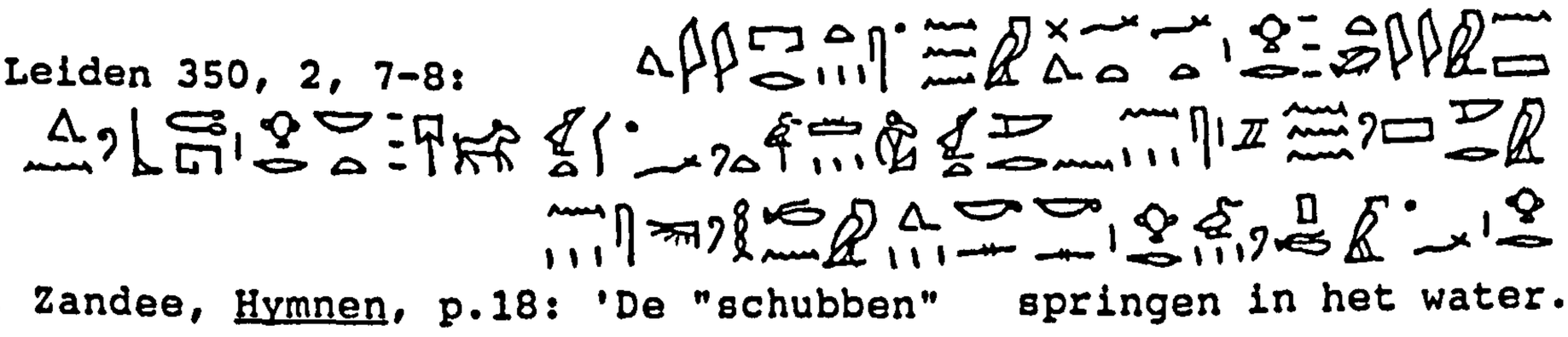
tr. Allen, BOD, p.154: 'But every creature likewise that shall die, the whole of them altogether - even all quadrupeds, all fowl, all fish, all snakes, all worms - living or dead, they are yonder, having passed on, after all the worms have finished (their work)'.

11. BOD 154, 5:



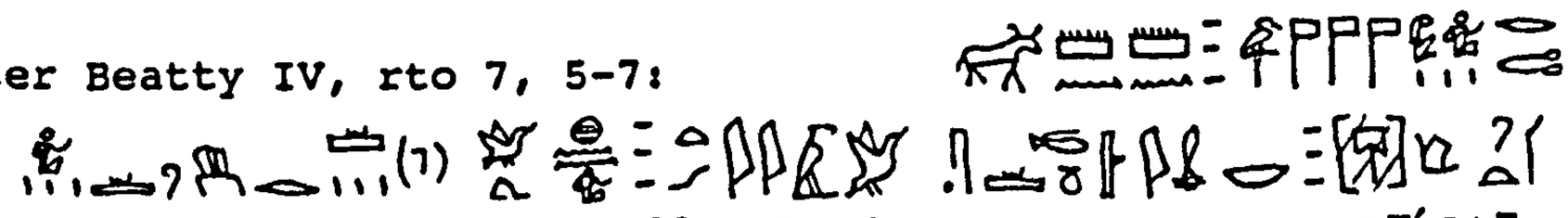
tr. Allen, BOD, p.154: The deceased rots when he has gone to Shu, as do gods, goddesses 'all fowl, all fish, all snakes, all worms, all quadrupeds, the whole of them altogether'.

12. P. Leiden 350, 2, 7-8:



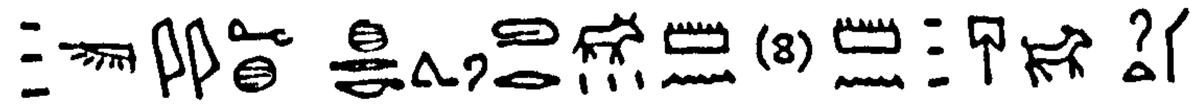
tr. Zandee, Hymnen, p.18: 'De "schubben" springen in het water. Zij komen uit hun vijvers II,8 terwille van hem. Al het kleinvee springt voor hem. De vogels dansen met hun vleugels'.

13. P. Chester Beatty IV, rto 7, 5-7:



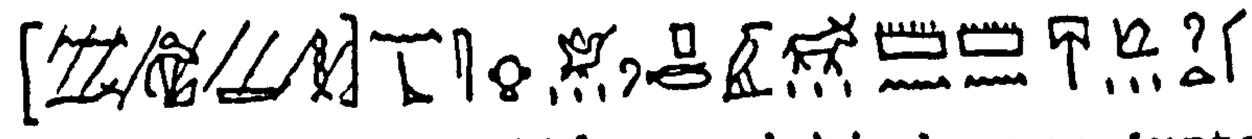
tr. Gardiner, HPBM 3rd ser., p.32: 'Praise to thee, Amen-Rē-Atūm-Harakhti, who spoke with his mouth and there came into being men, gods, cattle and all goats in their totality, (yea and) all that flieth and alighteth'.

14. P. Ch. B IV, rto 10, 7:



tr. Gardiner, op.cit., p.34: 'Goats and cattle turn to thee. Flying things spring aloft unto thee' (same hymn as previous example).

15. P. Ch. B IV, rto 12, 5:

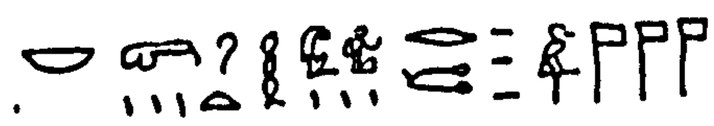


tr. Gardiner, op.cit., p.35: 'goats, cattle, and birds cry [unto him]'. (hymn as before).

16. Abyd Mar II, 54, 5:

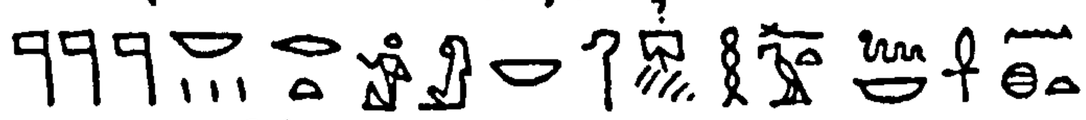
tr. Korostovtsev: 'parmi les dieux comme (parmi) les hommes, les quadrupèdes, les oiseaux et ceux qui habitent les eaux également'.[12]

17. P. Berl 3038, 8, 2 (hymn to Ptaḥ):



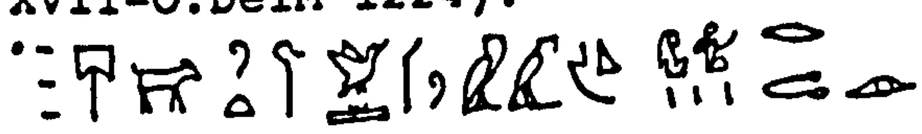
'mankind, gods and all ḫwt'.[13]

18. BM 797 (Shabaka Stone):



tr. Erman,[14] p.937: 'alle Götter, alle Menschen, alle Tiere und alle Würmer, die da leben, indem er denkt(?) und indem er alles befiehlt, was er will'.

19. Amonshymn Kairo 1, 1-2, 1 (P. Boul XVII=O.DelM 1224):[15]



In order to understand properly the various terms found in these texts it is essential to study them in other contexts. Most are very common. (A few more terms with apparently similar significance are found in Ptolemaic texts but will not be discussed here for reasons given in the Introduction).

The term ʿwt (Wb I, 170,7 - 171,1: vierfüßige Tiere... Kleinvieh...Wild...Ein bestimmtes Tier), written ỉ3wt[16] (Wb I,29,15-16: Vieh...Wild) after the Amarna period, is attested with a great variety of determinatives. These may show both domesticated livestock - goats, sheep, donkeys, cattle, or a combination of these[17] - and, especially in the phrase 'ʿwt of the desert' (ʿwt (n) ḫ3st), wild animals - gazelle, oryx and ibex.[18] If only a single determinative appears this

tends to be the goat [19] or gazelle according to context, though ʾiꜣwt only ever shows the 'cow's skin' as a determinative[20]. Two seldom-attested sub-groups of ꜥwt (ꜥwt ndst and ꜥwt ḥdt) show goat and sheep determinatives (if any) respectively.[21] The phrase tp-n- ꜥwt/ʾiꜣwt (Wb V, 267, 4: das beste an Tieren) is used of goats (but also contrasted with them)[22] and with a cattle determinative[23] as well as in the phrase tp-n-ʾiꜣwt-ḥꜣst[24] and elsewhere,[25] and would seem, therefore, to be little different in meaning from ꜥwt/ʾiꜣwt alone. The phrase is the precursor of Coptic ⲦⲂⲚⲎ,[26] applied to the ox, ass, camel, sheep and goat as distinct from wild animals, ⲑⲏⲣⲓⲟⲛ.[27]

ʾIꜣwt (nbt/šbn) may be used as a broad category followed by the names of specific animals[28] or may be used (eg in the phrase ꜥwt šbn) to summarize a list of animals.[29] ʾIꜣwt are described as 'going on all fours';[30] ꜥwt is applied to mammals other than livestock,[31] and even to birds.[32] ꜥwt are mentioned in the fields[33] - where they could be a nuisance [34] - and kept in byres (ʾiḥy)[35]. They were tended by ʾimy-r ꜥwt[36], fed and watered,[37] branded[38] and brought in from the fields[39]. They appear to have been a prized possession.[40] The ꜥwt is contrasted with various types of animals, notably cattle[41] and goats,[42] and is mentioned once in parallel with a lion, and once with a goose.[43]

ꜥwt is contrasted with mankind[44] or with the gods themselves.[45] Man is sometimes referred to as the ' ꜥwt of god' (ꜥwt nṯr) or the 'noble ꜥwt' (ꜥwt špst[46]); ꜥwt nṯr is also used of sacred animals.[47] (Mnmnt too appear among 'the god's possessions').[48] ꜥwt are also mentioned in connection with Seth[49] and Rē.[50]

The mnmnt (Wb II,81,17-23 : die Herde, das Herdenvieh) which occurs with ꜥwt in the classificatory lists usually has a cattle determinative and may be contrasted with ꜥwt in other contexts as well.[51] It occasionally shows a similar variety of determinatives to ꜥwt,[52] and mnmnt may be used to mean 'herd' in much the same way as ʾidr[53] (Wb I, 154,12-14: Herde (von Vieh u. Geflügel)); herds (ʾidrw,[54] mnmnt,[55] tst,[56] ḥnmw[57] and hꜣrt[58]) of ꜥwt are also attested. ꜥwt also occurs paired with other terms from the classificatory lists (ꜣpd, rmw, mḥyt)[59] and may be contrasted with plant foodstuffs.[60]

The word ꜥwt itself may be derived from the term for the (shepherd's) crook,[61] which appears in early writings of the word.

It may be deduced from the above, therefore, that ꜥwt/ỉꜣwt, when contrasted with 'the gods' or 'mankind', has the force of 'animal' in its broadest sense. The translation 'animal' is further supported by a single text in which birds are clearly covered by the term ꜥwt. This meaning has been proposed for tp-n-ỉꜣwt by Nims[62] and it has been shown above that this phrase was largely synonymous with ꜥwt/ỉꜣwt alone. In other contexts ꜥwt/ỉꜣwt names a group of animals parallel to fish, birds and reptiles, and as such seems to designate the class of mammals. ꜥwt/ỉꜣwt is sometimes contrasted with cattle, and may then represent mammals (especially livestock) excluding cattle (mnmnt)[63] ; these classes are also separated in certain Old Testament texts.[64] When contrasted with goats, pigs etc., the meaning of ꜥwt may be 'mammal (excluding those named)'.

Of all animals ꜥwt/ỉꜣwt seems to have been most closely associated with the goat (less often the sheep), and it may be that this is to be understood when ꜥwt/ỉꜣwt appears to refer to a single animal (as in the medical texts).[65] The broad meaning of ꜥwt could also be restricted as required by the choice of determinatives.

(Tp-n-)ꜥwt/ỉꜣwt may, therefore, be said to occupy the 'unique beginner' and mammal 'life-form' categories in ancient Egyptian, and is probably best translated 'beast', or, where appropriate, as Gardiner has suggested,'any (other) kind of animal'.[66]

A word with apparently similar meaning is mꜣ (not in Wb), to be separated from mꜣỉ 'lion', as some texts quote both together.[67] Like ꜥwt it is contrasted with mankind,[68] and other groups of animals.[69] (The meaning of the word is made explicit in an Old Kingdom and a Middle Kingdom text;[70] in the former it describes a number of desert creatures, in the latter a group of horned animals.) This is also true of mnmnt, already mentioned above,[71] though the term is most often attested alone.[72]

Mnmn appears as a verb of motion (Wb II, 80, last entry - 81, 15) which may lie behind the meaning of mnmnt used as a collective noun, especially of cattle; Paton, therefore, suggested a literal translation of mnmnt as 'droves'.[73] Mnmnt is never applied to wild animals, only domesticates, and mnmnt are mentioned several times 'in the fields' (ꜣḫt).[74] Its determinative indicates that its most important application was to cattle though it could be contrasted with these.[75] In one text mnmnt appears as a variant of wnmt 'provisions'

which may be indicative of the significance of cattle as a source of food.[76] Mnmnt were prized as booty[77] and were kept in temples to provide sacrifices.[78] Mnmnt were looked after by herdsmen (m-r);[79] the king was called 'leader' (tsw) of the mnmnt as a metaphor for his care of his people.[80]

In the classificatory lists given above, birds are often denoted by the phrase pꜣyt nbt ḥnnt nbt , 'all those which fly and alight'[81] (see Wb I, 494,1-12: fliegen, auffliegen, fortfliegen; Wb III, 287,3-288,3: niederschweben). This description also occurs in other texts.[82] Pꜣyt (Wb I,494,13-14: 'das was fliegt' als Bez. der Vögel) appears alone in two other instances, in an offering list and in one of the medical texts.[83] The similar form pꜣyw (Wb I, 494,15-17: 'die Fliegenden' als Bez. der Vögel) is generally confined to Ptolemaic texts, though it does appear in a Dynasty 20 classificatory list (see above). Ḥnnt (Wb III, 288,4-6: das Geflügel) also occurs independently.[84]

Coptic did not retain these words, using instead ϩⲁⲗⲏⲧ , also derived from a word meaning 'to fly'.[85] This term appears to cover flying insects as well as birds - in one text a grasshopper is described as a ' ϩⲁⲗⲏⲧ which can jump'.[86] It is likely that flying insects were comprised within the earlier phrase pꜣyt ḥnnt, given that the names of several such insects are given a bird determinative. It may also be that bats were included in the bird class - a representation at Beni Ḥasan shows two bats together with a number of birds, and another writing of the name of one of the bats depicted has a bird determinative (see Ch.3: Bats).

Another, fairly rare, term apparently applied to all birds also alludes to their powers of flight - ꜣryw-pt (Wb I, 104, 4: die Vögel), lit. 'those on the sky'.[87] An otherwise unattested word smꜣw occurs as a variant of this.[88] The word ḥrꜣw, lit. 'those above', has also been taken as a general term for birds.[89]

ꜣpd (Wb I, 9, 5-8: allgemein Vogel), attested from all periods of Egyptian history, appears to have a general meaning 'bird' though it is seldom attested in the classificatory lists. Writings ꜣpdwt, and later ꜣpt, are also known.[90] Like ꜥwt it could show a number of different determining signs,[91] usually a type of duck;[92] Coptic ⲱⲃⲧ, derived from this word, designates only the goose.[93] It often occurs in parallel with other types of animals, commonly 'fish' (rmw),[94] but also cattle, goats, donkeys, mules(?), pigs, lions(?) and other goods.[95] Phrases

such as ꜣpd nb or ꜣpd šbn (cf ꜥwt above), sometimes at the end of lists of bird names[96] likewise indicate the rôle of ꜣpd as denoting a 'life form'. In one text 'waterbirds' (ꜣpd n mw), comprising cranes, geese and ducks, are separated from other types of birds (eg pigeons) chosen as offerings.[97] ꜣpd mr 'channel bird', comprising at least two types of duck, is also known.[98]

Waterbirds were elsewhere given the names ḫnm (Wb, III, 381, 14: als Bez. für Sümpfvögel)[99] or ḳbḥ (Wb V, 30, 8: die Wasservögel)[100] which again could show a variety of determinatives. The phrase ꜣpdw nty m ḳbḥ[101] (cf ꜣpdw m šꜣ)[102] may designate the same birds, as perhaps does 'pꜣyw from the ḳbḥ.'[103] 'Foreign birds' (ꜣpdw ḏrḏr) are recorded as coming to the Delta to nest, in a passage which describes the overturning of the natural order of things.[104] The blood (snf) of ꜣpd is mentioned in a magical charm[105] (note that many parts of birds - written without phonetic complements - occur in the medical texts, and are not discussed here).

In the Pyramid Texts ꜣpdw occurs in parallel with other words which seem to designate individual species of bird - bꜣk, smn and ḏryt[106] - though in one case bꜣk has multiple determinatives also. In one Text ꜣpd is given in parallel with ḫpr, the scarab beetle;[107] and this parallelism is also found in other contexts.[108] Elsewhere in the Pyramid Texts it is specifically a 'green ꜣpd' (ꜣpd wꜣḏ) which appears with the Nile Goose smn,[109] which suggests that ꜣpd denoted a type of bird. In the New Kingdom stools with legs ending in ducks' heads were described as having legs 'as the faces of ꜣpdw'.[110]

Faulkner[111] has suggested, therefore, that ꜣpdw originally meant 'duck', perhaps including other species of small waterfowl; the term was then later extended to embrace all birds 'possibly because in the undrained marshes of early Egypt ducks probably greatly outnumbered the other species of birds'. The latter was very probably true - the abundance of birds and fish in the papyrus marshes was doubtless the reason for the overtones of everlasting potency and rebirth in the 'fishing and fowling' tomb scenes.[112] It may be that, as with the goat and ꜥwt, some species of bird (especially ducks) were considered typical of ꜣpd, though the word usually had general significance. This would explain the appearance of various parts of (ꜣpd) in the medical texts - either the type of bird to be used was not important, or ꜣpd already suggested some particular bird. Something similar would probably have been suggested by the phrase ꜥ n ꜣpdyw[113] , precursor of

Coptic (B) ⲁⲛⲁⲡⲁⲓ 'chick'.[114]

After the Pyramid Texts ꜣpdw seldom appear other than as offerings[115] though some literary references occur.[116] Birds were held or tied at the wings (dnḥ, lit. 'winged') to prevent them from flying and this was used as a metaphor of helplessness.[117] The feather (šwt) of a bird was also used in this way to denote something easily overcome.[118] ꜣpd is also attested as a verb, meaning apparently 'flutter (like a bird)', or similar (Wb I, 9,12-14: herbeieilen).[119] The young of ꜣpdw were called smsw[120] ; it was said in one text that in times of disorder birds would no longer lay eggs in their nests.[121] In another text birds are recorded in trees (m ḫt).[122] In another a spell is to be recited over 'seven birds'.[123]

The word which appears to designate 'fish' in the classificatory lists, rm (Wb II, 416,12-17: der Fisch), has already been mentioned in connection with ꜣpd. Like ꜣpd, and ꜥwt and mnmnt, the word could show several determinatives;[124] this, together with the use of the word almost exclusively in the plural, 'beweisen die allgemeinere Bedeutung "Fische als Gesamtheit" ohne Spezifizierung der Art'.[125]

Although most commonly paired with ꜣpd, rmw occurs in parallel with the names of other animal classes[126] and other (specific) types of fish.[127] Rmw šbn at the end of lists of fish, giving the totals of the numbers of fish mentioned, indicates that rmw was a broad term embracing various individual species.[128]

Unsurprisingly, there are many references to fish in the water,[129] in the river,[130] or a lake,[131] or in the sea;[132] defeated enemies were compared to fish stranded on land.[133] Fish in this condition were eaten by jackals; in the normal course of events they were the prey of crocodiles.[134] There are numerous mentions of the catching[135] and eating[136] of fish - even by Rēʿ - [137] though the eating of fish could be taboo.[138] One text records the feeding of fish to the sacred crocodile of Sobek.[139] Rmw are attested frequently in the ostraca[140] (or similar records)[141] though writings often show only the determinative and plural strokes.[142] Various parts of fish - scales,[143] fins[144] (lit. 'hands'), fat[145] and bones[146] - are noted; whole or 'split' fish, dried or fresh,[147] are attested as are 'fat' fish and wdḥ fish.[148] The eggs of fish had a proverbially bad odour.[149] Fish also seem to have been associated with the stars; one text says that stars began their existence as fish, formed from the gods' tears.[150]

Other animals than fish may have been included in the category rmw. The crocodile god Sobek is designated 'the great fish' (rmw wr)[151] and the words for turtle (šṯw) and tadpole (ḥfn) occasionally have fish determinatives.[152] The mention of rmw as dangerous animals[153] also indicates that the term might include other creatures.

Various less common terms designating fish, and perhaps other creatures as well, can be isolated. Mḥyt (Wb II, 127,10-12: Kollektivum: die Fische), lit. 'swimmer', can show multiple determinatives,[154] and in one case appears to be a general term comprising at least one other species.[155] Like rmw, mḥyt are recorded as being caught[156] and eaten.[157] The phrase 'nb mḥyt' (cf nb rmw) appears on an ostracon.[158] ʾImyw-mw (Wb II, 50, 16: die Wassertiere),[159] lit. 'those in the water', ỉmyw-bʿḥ (not in Wb),[160] lit. 'those in the inundation', tb (Wb V, 261, 5:Fische), with variant writings dpy,[161] lit. 'floater'[162] tpy (Wb V, 296, 7: Art Fische),[163] and tpywt,[164] nšmyt (Wb II, 340, 7: die Fische),[165] lit. 'scaly ones' and sšnw (Wb IV, 294, 5-6: die Fische),[166] are also attested.

Of these, mḥyt, ỉmyw-mw, ỉmyw-bʿḥ and tpt reflect the watery habitat of this class of animals,[167] while nšmyt and sšnw describe the appearance of fish. Tpt and variants may be the precursors of Coptic ⲦⲂⲦ 'fish'. Mḥyt and ỉmyw-mw are demonstrably parallel to other class names and should therefore be considered as life-form labels.[168] Three further terms for fish are confined to Ptolemaic texts. These are ḫnn (Berlin Zettel), ḫww (Wb III, 247, 9: die Fische) and gr (Wb V, 180, 12: Fische). The first two are in classificatory lists of the type mentioned above and would, therefore, seem to designate the class 'fish'.[169]

The final terms in the classificatory lists are generally ḏdft (Wb V, 663, 6-634, 2: Wurm, Gewürm...Schlange)[170] and ḥfꜣw (Wb III, 72, 14-20: Schlange), fem. ḥfꜣt (Wb III, 73, 1-5). They are the least frequently mentioned class in the lists, and ḏdft are elsewhere recorded with insects as the least significant of creatures.[171]

Both terms consistently show snakes as determinatives though ḏdft also occasionally has the cow's-skin.[172] The king's uraeus is once described as a ḏdft[173] as is a boat with snakes at the prow and stern,[174] so the connection of ḏdft and snakes was obviously close. In one of the Book of the Dead lists given above the terms ḥfꜣt and ḏdft are used together, so there was clearly some difference in their

meaning.[175] This may have been slight, given the description of the uraeus and boat above and the fact that a prescription from P. Ebers against ḥft in the body ends with the claim to dispel ḏdft in the body.[176] Both were used as terms for ground-dwelling creatures inhabiting holes;[177] ḥf3w might also be found in the water, ḥf3t in the grain and ḏdft in the valleys of the desert.[178] Ḏdft occurs in magical texts[179] and ḥf3w on an ostracon.[180] Ḥf3w was also a toponym.[181]

The bites of ḥf3w and ḏdft were recorded[182] and spells for 'shutting the mouths' of these creatures are known.[183] Ḥft were noted in the medical texts as a cause of illness and to be eradicated,[184] and a magical spell records ḏdft as a cause of illness also.[185] In one diagnosis of illness a patient's flesh is said to be like that of a ḏdft,[186] in another his breath like the venom of a ḥf3w.[187] Ḏdft appear in another text in connection with the toes (s3ḥw), but the context is too broken to allow a proper interpretation.[188] Elsewhere in the medical texts the fat (mrḥt) of ḥf3w is used in prescriptions,[189] the skin(?) of a snake rubbed on the head cured pain,[190] and in other texts too ḥf3w evidently denotes an actual creature.[191] Killing a snake (ḥf3w) in a dream was considered a good omen.[192] Magical texts calling for the protection of the limbs from ḥf3w and ḥf3t might refer to both real snakes and to bodily parasites such as may be meant by the ḥf3t of the medical prescriptions.[193] Mythological snakes were also called ḥf3w.[194]

In a number of cases, therefore, both ḥf3w/ḥf3t and ḏdft seem to be translatable by 'snake' alone, though some other meaning is probably to be found for the ḥft as inducers of disease and ḏtf (for ḏdft) as consumers of corpses.[195] There is a small degree of evidence to indicate that other creatures were included in this class. A lizard appears as the determinative of ḥf3 in an Old Kingdom inscription[196] and the designation [illegible] (Wb V, 634, 3: als allgemeine Bez. für Reptilen) is applied to lizards depicted on a Late Period sarcophagus.[197] 'Toes of [illegible]' are mentioned in Ebers.[198] A crocodile deity is called 'foremost snake' (ḥf3 tpy).[199] At Edfu also the scorpion Selket is described as 'the noble ḏdf',[200] and in one New Kingdom text wḥꜥ 'scorpion' has a snake as determinative.[201] At Esna a frog (written as the name of the deity Ḥeḳet) also has a snake determinative.[202]

Certain other terms appear to designate similar creatures. Two highly descriptive terms, which may apply to snakes generally rather than to specific types, are sḏrw 'those which lie' (Wb IV, 392, 10: die

Schlangen)[203] and ḥrỉw-ḫt.sn 'those on their bellies' (Wb III, 135, 3: Schlange, Wurm...).[204] Both are uncommon, and a more precise translation cannot be offered.

The word r (Wb II, 393, 7-10: Schlange; rrw: Wb II, 438, 12: Art Schlange, is probably a different word[205]) appears a number of times in oracular amuletic decrees in parallel with terms for sundry dangerous beasts, notably msḥ, ḥf3w, wḥʿt, ḏdft and ḥrr[206] (Wb III, 150, 2-3: eine Schlange in der Unterwelt...alles Gewürm,cf Wb III, 150, 1: Art Eingeweidewürmer ('im Bauch') als Krankheitserreger). Certain of these texts give writings of r without snake determinative;[207] others show no determinative at all.[208] In the latter case the word may easily be read 'mouth' (Wb II, 389, 9: der Mund) and this was indeed the translation used by Edwards in his publication of the decrees.[209] Meeks also believed this to be the literal meaning of r [snake].[210] Elsewhere snakes (ḥf3w) are described as 'biting with their mouths and pricking with their tails (sic!)'[211] and one amuletic decree has the similar phrase 'the mouth of every ḏdfy',[212] both reminiscent of the 'every biting r' of other decrees. Nevertheless r are also attested as 'biting with their mouths and pricking with their tails',[213] and, like ḥf3w and ḏdft, r appear in connection with 'their holes'.[214] This indicates that the words had similar meanings.

R and ḏdft appear in parallel in a text concerned with the decay of the corpse;[215] in another, ḥf3w nb, ḥf3t nbt and r appear as variants[216] in a spell to protect the limbs against these creatures. R attacking a corpse is also mentioned on a Late Period sarcophagus[217] and in the Book of the Dead.[218] Spells against the r are also found in papyri from Turin[219] and in the Metternich Stela.[220]

Another word to be considered here is ḥrr, attested in a small number of texts.[221] In the medical texts a prescription against ḥrr is found among those against ḥft.[222] The writing ḥrrt appears when contrasted with other 'life forms'.[223] In one text the word appears in parallel with ḏdft.[224] The word usually has a snake as determinative, though one Ptolemaic text adds a scorpion.[225] (See also ḥrrt in Ch.20: Insects).

Ḥf3w probably meant originally 'creeping thing' (unless the verb ḥf3 meant 'to move like a snake' and was derived from the name of the animal).[226] Gardiner suggested that ḏdft meant literally that 'which says fff'.[227] This seems to be the very opposite of their eventual

meanings in Coptic - ϩⲟⲩ 'snake' and ϫⲁⲧⲩⲉ 'reptile'.[228] Edwards' renderings of ḥfꜣw, ḏḏft and r in the amuletic decrees as 'serpent', 'snake' and 'ophidian', with ḥrr as 'reptile', seem to represent an attempt to distinguish the terms in his English translations rather than to give real equivalents to the Egyptian words. Of the four terms r is the only one which does not appear in the classification lists naming (apparently) one of the classes of the animal kingdom. In the amuletic decrees ḏḏft, ḥrr and r are followed by nb whereas ḥfꜣw is not, like msḥ and wḥꜥt. This seems to indicate some sort of distinction between ḥfꜣw/msḥ/wḥꜥt and ḏḏft/ḥrr/r - 'the snake', 'the crocodile', 'the scorpion' as opposed to 'all sorts of' (nb) '[other noisome creeping creatures]'. In some of the decrees r seems to have replaced ḏḏft and ḥrr, which suggests that there was some degree of similarity between the terms. Evidence from later texts suggests that r was a broad term which embraced various poisonous types of snake[229] and the same might, therefore, be concluded of ḏḏft and ḥrr. Indeed, Meeks has suggested that ḥrrt was a term for 'small animals', embracing snakes, scorpions and insects.[230]

The use of a snake to determine these general terms would indicate that snakes were the most important element of the class and explain the appearance of the specific ḥfꜣw/ḥfꜣt in the classificatory lists. The snake determinative was considered appropriate for creatures which are evidently not snakes, nor even reptiles, such as the insect larvae which destroy paper or wood, so it is clear that the Egyptians' perception of a class separate from mammals, fish and birds was fairly inclusive. This feature is found in other languages. Brown[231] surveyed the 'life form' categories of 112 languages and found 'snake' to be the most inclusive of all, comprising 'featherless, furless, elongated creatures adapted to crawling, usually lacking appendages. (This life form in its greatest extension includes worms, snakes, lizards and, occasionally, other elongated creatures such as reptilelike insects)'.

Ancient Egyptian is unusual in having no separate term for the 'wug' ('worm' + 'bug') class which is identifiable from many other languages, though terms for individual insects are known. The need for such a term may have been avoided by the apparent inclusion of winged insects in a class of flying things and various 'creepy-crawlies' in a group of creeping things.

The groupings of the classification lists are echoed in a title from the Middle Kingdom: 'overseer of horn, hoof, feather and

scale'.[232] This gives a clear insight into the divisions perceived by the Ancient Egyptians within the animal kingdom, which might be expressed as follows:

(a) things which walk (mammals, not including mankind and sometimes excluding cattle, representative of the whole animal kingdom - compare the vernacular use of English 'animal')
(b) things which fly (birds; also bats and certain insects)
(c) things which swim (fish; also crocodiles, turtles, hippos)
(d) things which crawl (snakes; also scorpions, lizards).[233]

Ancient Egyptian provides useful comparative material to the folk classification of other cultures, though it does not entirely follow the common pattern. It has a unique beginner, ꜥwt,[234] and three life form labels, ꜥwt, pꜣyw (more specifically ꜣpd 'bird'), mḥyt (more specifically rmw 'fish') and ḏḏft (more specifically ḥfꜣw/ḥfꜣt 'snake'). Other terms, some obviously descriptive (such as ỉmyw-mw 'those things in the water'), are also used to name these life-forms. This has not been noted as a feature of modern primitive languages. Ancient Egyptian is also unusual in encoding the 'mammal' group (ꜥwt) before the 'wug' group and it would be interesting to know from future studies whether this was characteristic of ancient man.

PART 1 : MAMMALS

Chapter 2 : Antelopes and Similar Animals

The most commonly represented of the non-bovine ruminants were the gazelle, oryx and ibex. They were depicted wild or semi-wild in hunting scenes and captured or domesticated in various offering scenes. All three occur as determinatives of ꜥwt ḫꜣst, referring to desert fauna, though the gazelle occurs most frequently in this context (see ꜥwt).

Of the ancient terms for these animals only that for the gazelle, ḏꜥḥs and variants[1] (Wb V, 191, 1-9: die Gazelle), survived into Coptic (ϩⲟⲥ, ϩⲟϩⲥⲉ, ϩⲁϩⲥⲉ).[2] The word is usually taken to denote the Dorcas Gazelle (Gazella dorcas L.),[3] a small species occurring today in semi-desert plains from Senegal to Morocco and through Northern Africa and Iran to India.[4] Unlike many other gazelle species it does not show a distinct flank band, and this is true of the gazelles in ancient Egyptian representations where colouring survives.[5] Both the male and female carry horns.

Another animal which has been considered a gazelle is that named gsꜣ (Wb V, 206, 2: Art Antilope) in the tombs of Ti and Idut,[6] identified by Keimer as G.isabella Gray (now known as G.dorcas isabella).[7] This species was also identified by Lortet and Gaillard from mummified remains.[8] Another writing, gsỉ, was noted by Keimer from the tomb of Nḏtỉ at Giza.[9] In the tomb of Ti the gsꜣ is distinguished from the ḏꜥḥs by having its horns shown from the front rather than in profile as the ḏꜥḥs is usually drawn, though unnamed representations should not be divided into species on these grounds alone.[10]

Mꜣwḏ appears in one representation over a man carrying two gazelles and three hedgehogs in a box suspended from a pole over his shoulder. The term refers to the carrying pole, however, and not to these or any other animals as has been suggested.[11]

A gazelle-like species, the gerenuk (Litocranius walleri Brooke), has also been identified from ancient Egypt, though not from historic times.[12]

The gazelle (ḏꜥḥs) is shown frequently in hunting scenes, sometimes named,[13] and is often named in depictions or lists of offerings[14] where it is usually accompanied by other antelopes. Like the oryx and ibex and other highly prized animals gazelles were imported from Nubia.[15] As

with many animals its parts are mentioned in medical preparations.[16] Gazelles also appeared in literary texts.[17]

The feminine form, ghst, occurs as a toponym[18] and as the name of a type of loaf (cf ỉḥ etc; see Ch.4 : Cattle).[19]

The species of oryx most likely to have occurred in ancient Egypt are the Scimitar(-horned) or North African Oryx (Oryx dammah[20] (Cretschmar)), which was once common across north Africa but is now restricted to a small area in the southern Sahara,[21] and the White or Arabian Oryx (O.leucoryx Pallas), which once inhabited the Sinai Peninsula, Jordan, Israel, Arabia, Iraq and Syria and is now extinct in the wild.[22] These oryxes have recently been considered subspecies of O.gazella(L).[23] It has also been suggested that the Beisa oryx (O.(g.)beisa Rüppell) was known to the ancient Egyptians;[24] this subspecies occurs on the Red Sea coast of Ethiopia and previously also inhabited Sudan and Eritraea.[25]

Although O.leucoryx is most commonly mentioned in Egyptological literature the species recorded by Flower[26] from Egypt is O.dammah, though it became extinct there in the mid 19th century. Ancient representations of oryxes differ somewhat, particularly in the curvature of the horns (straight horns appear on O.leucoryx and O.beisa, but sweeping curved horns on O.dammah).[27] Colouring (where it is preserved) is usually consistent, showing a white coat with brown markings on the face, flank, thighs, chest and sometimes back of the oryx,[28] which accords well with descriptions of O.dammah.[29]

The Egyptian name for the oryx appears in its fullest form as mꜣḥd (Wb II, 11, 4-9: die weiße Säbelantilope (oryx leucoryx))[30] or rn (n) mꜣḥd[31] but also occurs as mꜣ (Wb II, 11, 3: Antilope),[32] rn mꜣ (Wb III, 210, 10: als Abkürzung für mꜣ-ḥd 'die weiße Säbelantilope'),[33] ḥd[34] or rn ḥd[35] and in an abbreviated form, mḥ (Wb II, 121, 11-12: die Säbelantilope),[36] in Ptolemaic texts (for the abbreviation of names in a similar context cf sr, trp; see Ch.15 : Waterbirds). Certain New Kingdom writings showing the cow's skin determinative (Sign List F27)[37] after the mꜣ led Loret to assume for mꜣ a general meaning: 'bête désertique'; mꜣḥd was thus 'bête blanche du désert'[38] (cf mꜣ; see Ch.1: Classification).

As may be seen from some of the examples quoted in the notes above, and elsewhere,[39] the oryx appears in various scenes or lists from tombs. It was sometimes shown being fattened (wšꜣ)[40] and was perhaps tamed.[41] It also occurs as a sacrificial beast[42] and associated with Seth[43] and Horus.[44]

The Coptic term for antelope (as distinct from gazelle)[45] is the descendant of Egyptian šsꜣw (Wb IV, 543, 5-6: die Kuhantilope), with the feminine form šsꜣwt.[46] From certain excellent named representations[47] showing the characteristically long face of this antelope it may be identified as a hartebeest (Alcelaphus buselaphus Pallas).[48] The ỉw hieroglyph (Gardiner, Sign List, E9: 'newborn bubalis or hartebeest (Alcelaphus buselaphus)') was identified as a young hartebeest by Keimer (he suggested both A.buselaphus and A.major) from representations of the young animals in various tombs and from a detailed hieroglyph from the Hatshepsut obelisk at Karnak.[49]

Another antelope, named ḏbnw (Wb V, 568, 2: Art Antilope) by the Egyptians, was considered by Vandier[50] and Meeks[51] to be a hartebeest also, but from the sole complete drawing of this animal (in the tomb of Mereruka),[52] which lacks the hartebeest's characteristic head (and has longer horns), it is clear that it was not. Ḏbnw was identified by Gaillard[53] as another species altogether, the 'addax à nez tacheté' (Addax, Addax nasomaculatus Blainville).[54] He believed this to be the same species as the antelope called nwḏw (Wb II, 226, 15-16: die Mendesantilope (addax nasomaculatus)),[55] because of the similarity of the two in the scene in the tomb of Mereruka to two nwḏw in the tomb of Ti. In Mereruka the ḏbnw, brown, with horns drawn from the front precedes the nwḏw, grey like the ḫs and mꜣḥḏ, with horns drawn from the side. In Ti[56] a nwḏw (horns drawn from the front) precedes a nwḏwt (horns in side view). Gaillard believed the terms were chosen according to the animals' colour and that the Egyptians distinguished between addaxes in winter and in summer pelage - the winter coat of the addax is grey-brown while in summer its coat becomes sandy or almost white.[57] This is indicated in representations at Maidûm[58] where in one tomb two addaxes are coloured differently (sandy brown and greenish); they are, however, given the same name (nwḏw). It should be noted that some animals in the Mereruka scene were misnamed,[59] and the name ḏbnw may simply have been placed over the wrong animal - it is unfortunate that the only other known representation of a ḏbnw is largely lost and cannot provide corroborative material.[60]

While the nwdw appears mostly in offering scenes[61] (it is shown only once in the desert[62]) the šsꜣw is found, in addition to these contexts,[63] in the animal list of the Ramesseum Onomasticon,[64] in the medical texts,[65] as an animal not born in winter[66] and as a metaphor for wasteful idleness.[67] The toponym read ꜥḥsty by Sethe[68] was considered by Keimer to be šsꜣwt because of the shape of the horns on the animal determinative.[69]

Two large wild ruminants which belong to the goat and sheep families (Caprinae) are included here because they were represented by the Egyptians together with antelopes and there is no evidence to indicate that they were considered to fall into a separate category.[70] These are the Nubian Ibex (Capra ibex nubiana Cuvier) and the Barbary Sheep or Aoudad (Capra lervia ornata Audouin).[71]

The Egyptian names for these animals were niꜣ[72] and ỉbꜣw[73] respectively and they were included (and sometimes named) in hunting scenes[74] and in scenes and lists[75] of offerings. Meeks also recorded a word, ...ky as 'un nom de l'ibex?'.[76]

From the number of times each species was depicted or mentioned the ibex would seem to have been the more common, or at least more frequently encountered, and its parts were frequently used in the medical texts.[77] Its sweeping annulated horns may have been associated with the sign or ; thus classical authors' reports that the Egyptians used the deer (ἔλαφος) to signify the year could be explained as a case of mistaken identity.[78]

The presence of these mountain animals among antelopes of the desert plains such as the gazelle, oryx and addax brings into question the accuracy of Egyptian representations. This subject was discussed at length by Keimer[79] who was of the opinion that the ancient craftsmen intentionally (from artistic convention) depicted together animals which did not belong in the same habitat.[80] In Africa and the Near East today the Barbary Sheep and ibex overlap in a fairly extensive area bounded by the Nile and the Red Sea,[81] the ibex being the more widely spread. The edge of the area covered in Egypt by the ibex seems to correspond broadly to the 200m contour. Given that this is not far distant, on average, from the Nile and that the Egyptians explored the Eastern Desert thoroughly in search of mineral deposits in connection with routes to the Red Sea they would no doubt have been familiar with the fauna of the Wadis (cf the inscription from the Wadi Hammamat

mentioning a gazelle - see ḫst above). They must either have depicted together all animals of the ḫꜣst, regardless of their precise habitat, or saw the hill-species sufficiently frequently on the flatter desert to regard them all as animals of 'the red land'. (See also on deer, below.)

ʾImꜣt (Wb I, 79, 1-2) was understood by Wb as 'Weibchen des Steinbocks',[82] ie the female equivalent of niꜣ for which no feminine form with .t is known. Two tombs are quoted where both the ʾimꜣt and niꜣ-w are shown[83] and their gross morphology is remarkably similar. However, the phrase ḥmt ʾimꜣt,[84] 'female ʾimꜣt', which occurs in the tomb of Ti, would indicate that ʾimꜣt was a species name in its own right, with the female specifically designated here (again the animal shown is ibex-like).[85] In the same scene appears the similarly named ḥmt nwḏw, and this construction (ḥmt + animal name) to designate the female of the species is by no means uncommon.[86] The example of ʾimꜣt from Dendera with triple determinative[87] should not, therefore, be taken as 'eine allgemeinere Verwendung für die Weibchen anderer Wildarten' (Wb)[88] but as denoting a single species; the determinatives are not of three different animals, but merely successively more cursive forms of the same hieroglyph.

It is possible that this animal was a wild goat, Capra aegagrus Erxleben.[89] The males of this species have horns very similar to those of the ibex. The horns of the females of both wild goat and ibex are smaller than those of the males - note the difference in size between the horns of the ʾimꜣt and niꜣ in Ti.[90]

An untranslated animal name which has been considered to apply to the female hartebeest is ḥbn (Wb II, 487, 6: Art Kuhantilope) attested at Beni Ḥasan;[91] it follows a pair of šsꜣw and is very similar to these. Loret[92] concluded, 'Il est donc certain que ce mot... est le nom spécial de la femelle du Bubale' and compared mꜣi 'lion' and rw-ꜣbw 'lionne', and the terms for bull and cow, boar and sow (sic).[93] The terms ḥbn and šsꜣw also appear in a fragment of papyrus preserving part of a list of offerings.[94] It is unlikely that ḥbn in a list of this type names a female; the only female animal regularly mentioned in offering lists is the cow, and other female animals as offerings are restricted to Old Kingdom tomb scenes. Ḥbn would appear, therefore, to designate an additional type of antelope similar to the hartebeest; the Tiang or Korrigum (both subspecies of Damaliscus lunatus Burchell) appear to be possibilities.[95]

A number of representations of deer occur in ancient Egypt, though they were by no means abundant in the tomb reliefs. The greater proportion of the representations are on pre-Middle Kingdom objects; from that time onwards their numbers appear to have been on the decline.[96] Evidence for the disappearance of deer from Egypt is supported by a change in the word denoting this animal.[97] The ancient term, hnn (Wb II, 495, 19: der Damhirsch), is found up until the New Kingdom, appearing in certain reliefs[98] and in a number of medical texts;[99] the latest reference is in a list of tribute from Syria.[100] This term was replaced subsequently by a semitic word (ỉry) an early writing of which may occur in a Dynasty 19 text.[101]

It has been considered that the lack of skill with which the antlers of deer were portrayed indicated the Egyptians' unfamiliarity with the animal,[102] and that deer were, therefore, always rare in Egypt. In general the antlers shown are not palmated (there are a few exceptions[103]) which has led to the identification of the ancient Egyptian deer with the types of Red deer which occur today in North Africa and Arabia.[104] However, the Persian Fallow Deer (unlike the European type identified from one of the exceptional examples mentioned above[105]) does not have antlers palmated solely at the upper end; palmation occurs rather near the base.[106] Nevertheless, because of the absence of palmation in most Egyptian representations it has been considered that both the Persian Fallow deer, D.d.mesopotamica Brooke,[107] and the Barbary Red Deer, Cervus elaphus barbarus Bennett (sometimes referred to as C.barbarus Gray), should be considered as translating hnn (and ỉry).[108]

It seems (failing the discovery of a post-Dynasty 18 example of hnn) that the deer may well have disappeared from Egypt in a relatively short time c.1300BC (max. c.1450-1250BC) when hnn disappeared from the language. Joleaud[109] considered that they were lost from the wild even earlier than this, remaining only in parklands; these can no longer have been maintained after the Saite period, when representations of deer cease altogether.

The presence of deer in ancient Egypt is of particular interest in the reconstruction of African palaeoclimates, as today deer (Cervus elaphus barbarus) in Africa are confined to that part of coastal North Africa most closely related in climate and vegetation to Southern Europe.[110] Joleaud[111] found evidence that this species had at some time reached even Eastern Africa. He also believed that the fallow deer

(Dama dama(L))[112] occurred in prehistoric Africa, perhaps as far west as Tunisia where it may have been imported by the Phonecians. This deer is a native of the Mediterranean area[113] and thus seems a likely prototype for the deer represented in ancient Egypt. Hilzheimer identified the Egyptians' deer (referring to the representation in the tomb of Montuḥirkhopshef) as Dama schaeferi, a species which he described from a specimen taken (possibly) from Tripoli.[114] Joleaud considered that this example should be considered merely as a subspecies of the common fallow deer, and that it was this subspecies which was found in Egypt.[115] Hilzheimer's binomen is today considered to be invalid;[116] the only fallow deer types now recognised are D.d.dama L , the European Fallow Deer, and D.d.mesopotamica Brooke, the Persian Fallow Deer.[117] The latter was until recently believed to be extinct;[118] in the 1950's a small group was discovered north-west of the Persian Gulf near the Iranian border with Iraq.[119] It is noteworthy that this is an area of steppe[120] land rather than the woodland with which the European subspecies is associated.[121] Thus the presence of fallow deer in ancient Egypt cannot be used as proof that there was considerable forest surviving there until historic times as has been suggested.[122] Doubtless the deer would have been able to extend its territory into previously inhospitable steppe or semi-desert areas of northern Africa during a period of increased rainfall such as is held by geographers to have occurred c.5000 BC. During the subsequent desertification in Egypt it would have survived only in the most favourable areas of the Nile Valley until environmental factors - or hunting - forced the population below its critical survival level.[123] From such evidence as survives this seems to have been the likely fate of the deer in ancient Egypt. It should, however, be noted that fallow deer, possibly introduced into Egypt, may have continued to live in the Wadi Natrun until the 19th century.[124]

Giraffes (Giraffa cameleopardalis L)[125] are known from a number of rock drawings[126] and a few later Egyptian representations,[127] in one of which the animal is named mmy[128] (Wb II, 58, 14: die Giraffe). This term is known from only two other texts[129] : the tribute list in the tale of the Shipwrecked Sailor,[130] and the list of animals from the Ramesseum Onomasticon.[131] A giraffe hieroglyph also appears in the Nauri Decree,[132] and as the determinative of a word mwmw in the Coffin Texts.[133]

The word sr 'foretell' (Wb IV, 189, 15 - 190, 17: vorhersagen, verkünden) is written with giraffe determinative, the connection being

presumably that the long-necked giraffe can see in advance those things about to affect smaller beings. Wb had (before IV, 189, 15) an entry for sr as an animal name (Wb IV, 189: das Tier, welches das Schriftzeichen darstellt, die Giraffe) but referred only to writings of sr as a verb.[134]

The term sdnf (not in Wb), noted by Edel[135] from the temple of Niuserrēʿ, appears over what remains of the hindquarters of a short-tailed animal in the process of giving birth. Edel suggested that this block was the continuation of another scene showing a number of named animals giving birth, in the top register of which is an ibex (or ibex-like animal), the hind parts of which are lost. However, if the base lines of the registers are made to correspond correctly, it can be seen that the ibex's back has an unexpected slope which indicates that the blocks probably do not fit together, and that sdnf cannot name the ibex.

Pḳrḫ, also from the temple of Niuserrēʿ,[136] might apply to an antelope-like creature too - all that remains of it is the lower part of one hind leg. It must have been small (c.20cm) as in these scenes the animals' names were generally written near the top of the register, and almost all of the next animal's name (qsfnw) is visible. (Pḳrḫ therefore seems to extend the entire depth of the register.) Although the leg appears to have a hoof no antelope is this small, but the fragmentary nature of the representation makes it difficult to suggest any alternative.

Gardiner transcribed a term t[ḳ]ꜣ from the Ramesseum Onomasticon, where the word appears between ꜣbꜣw (ibex) and mmꜣ (giraffe) in a list of mammals.[137] He did not consider another reading possible, but perhaps the tꜣ (Wb V, 231, 4) of various offering lists of Ptolemaic date at Edfu[138] should be compared, as tꜣ could be read from the traces on the Onomasticon.[139] Both these contexts would seem to indicate a large ruminant. It is interesting to note here an unnamed antelope in an Old Kingdom relief, identified by Keimer[140] as the Roan/Horse antelope (Hippotragus equinus Desmarest), which today inhabits thinly treed grasslands from the Gambia to Somalia and from central to south Africa. It may also have been known in the Middle Kingdom,[141] and should, therefore, be considered as a possiblity in the translation of tꜣ. The Kudu (Tragelaphus sp) has also been mentioned in Egyptological literature,[142] and may be another possible candidate.

Chapter 3 : Bats

Only four drawings of bats are known from ancient Egypt; three of these are from the tomb of Bakt III at Beni Ḥasan[1] and the fourth is on an ostracon from Deir el-Medîna .[2] Two of the Beni Ḥasan examples are named; the larger is called sꜣḫmw (Wb IV, 24, 17: Art Fledermaus) the smaller dꜣgy (Wb V, 419, 3: Art Fledermaus). Three-dimensional representations of bats are also rare. Vandier d'Abbadie[3] mentioned a glazed pottery amulet of Dynasty 19[4], Ptolemaic bronzes of bats standing, with pierced ears and wings folded, in the manner of cat figures of the same date[5], and a schist palette in the form of a stylized bat.[6]

The Beni Ḥasan bats have been the subject of various attempts at identification. Allen[7] suggested the Egyptian Fruit Bat[8] (Rousettus aegyptiacus E.Geoffroy)[9] and the Tomb Bat (Taphozous perforatus E.Geoffroy).[10] It should be noted that Allen thought the bats with wings outstretched (ie those named as sꜣḫmw and dꜣgy) were both R.aegyptiacus, despite the difference in size of their wing spans (51.0 and 26.5cm respectively) and that the unnamed example with wings folded was T.perforatus; it should also be noted that the nose to tail-tip measurements of the sꜣḫmw and bat with folded wings are almost identical, while that of the dꜣgy is about half this length. Kingdon[11] too noted the presence of R.aegyptiacus in Egyptian tomb paintings. Dawson[12] remarked only that the bats depicted were of the family Emballonuridae (Sheath-tailed Bats, of which T.perforatus is a member). Houlihan and Goodman[13] merely allocated the Beni Ḥasan bats to the order Pteropodiada (Old World Fruit Bats), 'Owing to the rather poor condition of the representations today and because of the similarity between the many species of bat in present day Egypt'. Davies, in her publication of the bird and bat drawings at Beni Ḥasan,[14] recorded only the bats' colours, 'drab brownish pink' (the sꜣḫmw) and 'darker browny red' (the dꜣgy).

Two of the bats at Beni Ḥasan (the largest, sꜣḫmw, and the unnamed bat with folded wings) and the bat on the Deir el-Medîna ostracon are all shown with tails free of any interfemoral membrane. (The same might have been true of the dꜣgy, but the representation is damaged at this point.) This feature of the Deir el-Medîna bat was commented upon by Houlihan and Goodman[15] as being 'a characteristic feature of the rat-tailed bat' (Rhinopoma sp.). Although the tails of some present day bats are only half enclosed in this membrane very few have entirely

free tails as seems to be the case in the ancient Egyptian drawings.[16] No leaf-nosed bats exhibit this characteristic[17], and indeed the Egyptian representations show bats with mouse-like heads. From Hoogstraal and Sanborn's[18] descriptions of the various bats inhabiting Egypt today[19] the following species therefore seem most likely as identifications of the ancient bats : Rousettus aegyptiacus[20], Taphozous perforatus[21], T.nudiventris[22], Tadarida aegyptiaca[23], T.teniotis rüppelli[24], Rhinopoma hardwickei cystops[25], and R.microphyllum[26]. Of these, the two most likely are those mentioned by Allen (above).

A term very similar to one of the bat names, dqyt, occurs as a bird name in the same scene[27] at Beni Ḥasan - the bird to which it applies may be a Painted Snipe (Rostratula benghalensis L).[28] This spelling, but with a bird rather than a man with raised arms[29] as determinative, also occurs in the medical texts, three times in preparations for eye complaints, two of which specifically involve the growth of hair in the eye. In all three cases the blood (snf) of the dqyt is used.[30] Another beast with a similarly spelled name, the drqyt, is used whole in a prescription in P.Ebers to treat a neck complaint.[31]

Barns[32] compared the use of bat's blood in a Coptic prescription to prevent the growth of eyelashes[33] and concluded: 'We may, therefore, confidently assume that "bat" is meant here [in P. Ebers]'. Bat's blood causing blindness was mentioned in a demotic papyrus;[34] in another Coptic text bat's urine was used to cure dim sight.[35] Dawson[36] noted also that the most frequent use of bats in medicine of all ages was as a depilatory agent. This recalls the Ebers examples and lends weight to Barns' argument. It does not seem impossible that the Egyptians might have chosen a bird as the determinative for the name of a bat; the same sign determines the names of various insects which appear to have been included in a class of 'flying beasts' (see Ch. 1: Classification and Ch.20: Insects).

Černý, Westendorf and Vycichl all believed that Coptic ϭⲓⲛϭⲗⲱ 'bat' could have been descended from any or all of Egyptian dꜣqy, dqyt, and drqyt.[37] Vycichl noted two distinct Coptic forms, a southern type with N (such as ϭⲓⲛϭⲗⲱ) and a northern type without (eg ϫⲁⲗϫⲟⲩ). The latter form only was represented in the ancient Egyptian language, though the former is apparent in demotic qnqlꜣ.[38]

No firm conclusion regarding the translation of dqyt can, therefore, be drawn from the available evidence. The word, which can be directly translated as 'the hidden one', is appropriate to both the skulking behaviour of the Painted Snipe and the nocturnal habits of most bats.

Chapter 4 : Cattle

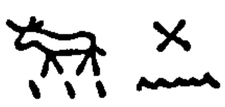
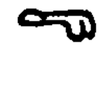
Zeuner[1] stated that all domestic cattle were derived from the wild European Aurochs (Bos primigenius Bojanus), extinct since 1627, and described three variants as subspecies of this. These he called B.(B.)p.taurus L (European humpless domestic cattle), B.(B.)p.longifrons Owen (European short-horned cattle, sometimes given specific status as B.longifrons) and finally B.(B.)p.indicus L (the domestic zebu).[2] (Bos brachyceros Rütimeyer, he considered to be synonymous with and superseded by B.p.longifrons, but Boston considered them 'quite different').[3] The ancient Egyptian race found in Neolithic deposits in the Faiyûm was described by Zeuner as 'a wild cattle, probably the southern form of B.primigenius'.[4] Boston considered the first domesticates to be examples of 'the original native African cattle' with a light-coloured short-horned type, B.brachyceros, being imported from the Middle East during a population movement thence in the Neolithic period,[5] a theory put forward by Dürst but left unconfirmed by Lortet and Gaillard after their samples failed to yield short-horned examples.[6] They described the ancient cattle as B.africanus (Brehm) 'qui vit encore aujourd'hui en troupeaux immenses dans les plaines du Haut-Nil'[7] although no longer found in Egypt itself (Schweinfurth).[8] Dürst also described as B.taurus macroceros a breed which survives in some modern central African breeds.[9]

The most modern records include Bos primigenius and B.indicus within the species of domesticated European and African cattle, B.taurus L,[10] and all the cattle terms discussed here will be considered to designate this species or the ancestors thereof.

The shape of the horns of the cattle represented by the Egyptians seems to have struck researchers forcibly, and some have interpreted names of cattle at least partly in terms of these horn shapes.[11] Zeuner divided the native B.primigenius of Egypt into four breeds on the basis of horn types - a breed with small horns, a breed with lyriform horns, one with 'double lyre' horns and a hornless variety.[12] Andersson distinguished three types (long-horned, short-horned, hornless)[13] as did Wilkinson (short-horned, long-horned and humped (zebu)).[14] Hartmann further sub-divided long-horned cattle into those with lyriform, those with half-moon-shaped and 'mehr oder minder weit von einander abstehenden Hörnern'.[15] Ghoneim,[16] Darby[17] and Kees[18] all expressed similar views.

A closer examination of the representations and texts reveals this to be an inadequate approach. About eighty words were used by the ancient Egyptians to designate cattle - according to sex, age, colour and use,[19] but apparently not horn shapes, though the precise import of some terms has remained elusive.

The most commonly occurring, and most general term for the cattle was ỉḥ (Wb I, 119,15 - 120,4: das Rind (das gewöhnliche Wort)).[20] It is possible that words written merely or are to be read ỉḥ as these sometimes vary with full writings in the same text.[21] Writings with cattle determinative (Sign List E1) but without phonetic complements will not be included here; such writings are extremely common, particularly in the ostraca or offering lists and should simply be understood as 'cow', 'bull' or 'cattle', as the context requires.

Wb (loc.cit) decided that , could also be read nꜥ or kꜣ[22] and in a limited number of cases this does appear to be true. Within cattle lists alone is perhaps to be read kꜣ, 'bull', since (sometimes  'various [cattle]') may appear at the end of such lists referring to all the cattle mentioned.[23] In the Pyramid Texts ỉḥ pt sometimes varies with kꜣ (written only  ;[24] Wb read certain of these examples even so as ỉḥ in an 'ideographische Schreibung'[25]), which would indicate that the words had similar import. Kꜣ and ỉḥ could also both be used in the same phrase where some contrast seems to have been intended.[26] also appears in lists of livestock parallel to 'goats' (ꜥnḫ), 'sheep' (sr) and 'horses' (ḥtrỉ) which again indicates that this was a very general term.[27]

The male ỉḥ is recorded in the stables (mdt), treading grain[28] and eating grass (sm)[29] - a proverbially uncontrolled activity. White and red ỉḥ are noted;[30] see below for 'white' and 'red' as terms for types of cattle. ꜣḥ were slaughtered[31] and their hides (dḥrỉ) and other parts[32] were used. They are attested in lists of offerings[33] and are recorded as being bought and sold and as the subject of court cases.[34] They were looked after by overseers (ỉmy-r).[35]

ꜣḥ had a feminine equivalent ỉḥt (Wb I, 120, 5-6: die Kuh),[36] sometimes specified as ỉḥ(t) ḥmt.[37] In other cases the gender of ỉḥ is indicated only by the definite article or possessive adjective.[38] Kꜣ 'bull' and ḥmt 'cow' seem to have been used where the gender of the animal needed to be emphasized; ỉḥ(t) seems to have been a rather neutral term. The ỉḥt is also mentioned accompanied by or in

association with its calves (bḥs)[39] and in the stables (ỉhy).[40] This word was used to describe Hathor[41] (note the similar term ỉḥy naming the son of this 'cow' goddess).[42]

The terms given to fully mature cattle were k3 'bull' (Wb V, 94, 7-96, 8 : der Stier; Wb V, 97, 1-16 : das männliche Rind, der Ochse) and ḥmt 'cow' (Wb III, 76, 4-14: Kuh, weibliches Tier) (also read ỉdt,[43] k3t[44] or ḫnrt).[45] Both terms were applied to other animals denoting 'male'[46] and 'female'[47] respectively (note that both are written with signs representing the reproductive organs).

Bulls and cows are labelled k3 and ḥmt in various tomb scenes[48] and the terms appear together in several other texts.[49] In one text from Medinet Habu the words head two lists of cattle - the first of males, the second of their female equivalents.[50] Writings as k3 t3y 'male bull' may be errors.[51]

The bull appears in representations and in texts as potent[52] and aggressive[53] - death by trampling was feared[54] - and as such was considered a suitable metaphor for the reigning or deceased king.[55] The king and his soldiers in battle were occasionally likened to bulls.[56] References to the king as the 'strong bull' (k3 nḫt - Wb V, 95, 8 : der starke Stier) are extremely numerous, and not listed here, though it is worth noting that in modern Africa the bull is still identified with 'political influence, authority or office'.[57] K3 nḫt was also used as an epithet of deities, together with k3 rnp (Wb V, 95, 10-11 : der jugendstarke Stier, see too Wb V, 97, 14), k3 stt (Wb V, 95, 12-14: ...begattender Stier...) and k3 nk (Wb V, 95,12-14 : begattender Stier);[58] 'bull of the west' (k3 ỉmntt) was also used of Osiris.[59] K3 named people[60] as well as deities[61] and places.[62] Cows were also associated with various deities,[63] notably Hathor,[64] and seven cows were held to inhabit the sky.[65]

Bulls were sacrificed[66] and appear in tribute or offering lists[67] (sometimes the phrase 'bull of the herd' (k3 (n) ỉdr: Wb V, 98, 1: als Bez. einer bes. Rinderart) is used)[68] and were evidently considered valuable (more so than cows)[69] - a rich man could be described as ʿš3 k3w 'with many bulls'.[70] A bull's hide is mentioned in one text and its horns in another,[71] and various other parts of bulls were used in the medical texts[72] (see below for the use of cows' milk in these texts); medical treatment for a bull itself is recorded in a veterinary papyrus.[73] Vessels were described as being decorated with the 'faces of

bulls'[74], and cakes in the shape of bulls are also recorded.[75] Both red and white bulls[76] are mentioned; see ỉḥ above and ḥd and dšr below. Bulls were recorded as 'bellowing' (hmhm)[77] and as state property.[78] They were attended by overseers.[79]

Cows also appear in offering lists;[80] the designation ḥmt wrt (cf k3 wr)[81] occurs as a variant of ḥmt in this context.[82] Wrt (Wb I, 331, 15: göttliche Kuh) is also attested alone as the name of a deity in the form of a cow;[83] wrw (Wb I, 331, 14 [in the toponym hwt wrw]) also seems to have denoted cattle.[84] The phrase ḥmt nfrt is also found.[85] Nfrt (Wb II, 261, 13-14 : die Kühe) is attested independently elsewhere as a designation for cows, and had an apparent masculine counterpart nfrw (not in Wb) which appears in a list of cattle.[86] Both were used in agriculture; nfrt are depicted ploughing (cf rwnyt)[87] among other things,[88] and nfrw treading seed.[89] Nfrt were also used to pull coffins.[90] They were especially attached to the temples of Amun,[91] and also associated with the cow-deity Hesat.[92] Nfrt were apparently of sufficient maturity to be mated;[93] the term nfrt was also applied to women between childhood and maturity[94] and Clère[95] noted of the word: 'ce n'est donc sans doute pas un terme général significant "vacher", mais un mot de sens plus restreint s'appliquant à des bêtes encore jeunes, des gémisses ou les vaches qui viennent d'avoir leur premier veau'.

Cows were often depicted in tomb scenes giving birth to or together with calves and being milked;[96] many terms for cows other than ḥmt are derived from these images.

ʾIryt (Wb I, 114, 18: Milchkuh)[97] is related to ỉrtt 'milk' (Wb I, 117, 1-6: die Milch). Wb recorded a similar term ỉrty (Wb I, 116, 6: 'zur Milch gehörig'; Wb I, 116, 7: Auch allein für Milchkalb)[98] but this only occurs in the phrase bḥs ỉrt and would seem to indicate a calf before weaning still dependent on its mother for food. Mnʿt, a 'nursing-cow'[99] (Wb II, 78, 10: die Milchkühe; compare Wb II, 78, 1-9 : die Amme and Wb II, 77, 10-13: säugen), was also used for milking, like the ỉryt[100], and occurs in offering lists[101] and elsewhere.[102] In one text[103] it is mentioned in parallel with the mhyt (Wb II, 113, 16 : Milchkuh), the name of which may be associated with mhr 'milkjug' (Wb II, 115, 5-8 : Milchkrug) var. mhỉ (Wb II, 113). Mhr also occurs as a verb 'to milk, to suckle' (Wb II, 115, 9-16) and as a noun designating dairymen (Wb II, 115, 18 : der Melker), and in the Ptolemaic Period, cows (Wb II, 115, 17 : die Milchkuh).

A further term apparently denoting a cow appears only once in a description of the goddess Anat; this is ʿmryt (Wb I, 187, 4 : Milchkuh).[104] In a text from Tanis Ramesses II is described as 'the suckling (mhr) of Anat'[105] which again identifies her as a cow. In Sumerian the very similar amar means 'young bullock',[106] but no masculine equivalent of ʿmryt is known at present from the ancient Egyptian texts. A variant writing of ʿmryt in 'syllabic orthography' on an ostracon would indicate that it was a loan-word from a Semitic original.[107]

Another term recorded by Wb as denoting cows, sbnt (Wb IV, 90, 1: Bez. für Kühe), appears with cow determinative only in the Pyramid Texts;[108] the verb sbnt has been translated 'suckle'[109] - compare Wb IV, 90, 2 (ḫrd n sbnt): Säugling - though Vandier compared bnn 'engender' (Wb I, 460, 6-7).[110]

A cow in calf was described as bḳꜣt 'pregnant' (Wb I, 81, 14: Mutterkuh; compare Wb I, 481, 1-11: schwanger werden, s. sein; schwängern),[111] a term also used of other animals - a gazelle (ḏḥs bḳꜣt) and a pig (ỉbḳꜣ). Cows (ḥmt) were noted for their care of their young,[112] and their contentedness in so doing - the verb ꜣms 'be pleased' (Wb I, 11, 7 : Verbum. Von der Freude der Kuh am saugenden Kälbchen oä) has as determinative a cow turning her head towards her suckling calf. The contentedness of cattle is also reflected in the verb ỉwꜣ (Wb I, 49, 12: sich freuen) with cow determinative; ỉwꜣ is well attested as the name for a type of cattle (see below).

Other words applied to cows are (or may be) female equivalents of terms for male cattle : wnḏt (not in Wb), var. wnḏyt (Wb I, 326, 4: Rindvieh), rwnyt (Wb II, 409, 1: Kuh, die noch nicht gekalbt hat), ḥrsꜣt (Wb III, 135, 8), ḏrt (Wb V, 585, 9), bḥst (Wb I, 469, 11), wšbt (not in Wb) and smꜣt (Wb IV, 128, 8-10). These are discussed together with the masculine terms below.

Much of what has been written concerning the ỉwꜣ (Wb I, 49, 9-11: Rind)[113] and the nḏ (Wb II, 349, 1-5 : Art große Rinder mit langen Hörnern), apparent variant ḏw,[114] seems to have been derived from the ideas of Montet,[115] whether or not the source is acknowledged.[116] The only substantial earlier work was by Jéquier on the nḏ,[117] and this type was also the subject of an article by Otto.[118]

Montet distinguished the ỉw3 and nq in terms of appearance and habitat : 'le ioua, plus corpulent, demeurait généralement à l'étable, tandis que le neg, plus farouche, vivait dans les prairies'. The nq, he noted, 'est moins corpulent et plus haut sur pattes'; 'les cornes sont magnifiques, très acérées, généralement évasées aussi bien chez le mâle que chez la femelle, quelquefois elles sont droites et petites', though he also remarked occasional hornless examples.[119]

Examination of the representations in which the two types appear together[120] shows that the differences in build quoted above are by no means consistent, and variations in the build of cattle labelled with the same name is also visible.[121] Most of the representations discussed below show the rn ỉw3 or rn nq as well as animals named ỉw3 or nq alone. Rn does not seem to denote an outward characteristic of the beasts; the term is discussed further below. The nq does often have medium-length or long horns, but occasional hornless examples,[122] together with one showing abnormally shaped horns,[123] are known. Horn deformation is more common among the ỉw3[124] which may have horns of any length[125] or be hornless.[126] Hornlessness is a naturally occurring phenomenon[127] and the presence of hornless cattle in the tomb scenes is not in itself evidence that the ancient Egyptians practised polling. Even though zoologists have divided breeds of cattle according to horn shape, this was clearly not the way the ỉw3 and nq were distinguished,[128] and care should be taken not to divide unnamed animals in the reliefs into ỉw3 and nq solely on the grounds of their appearance.[129]

Jéquier described the nq as semi-wild, caught by lassoing (sph), though it was evidently differentiated from true desert animals as it was never depicted with them. This lassoing appears to have had some ritual significance;[130] though there is a picture of a ỉw3 being lassoed this was obviously of lesser importance as it never became part of a ritual.[131] Jéquier deduced from comparison with the term nq 'kill' that this animal was for sacrifices and to be butchered.[132] (Note, however, that there is also a term nq (Wb II, 348, 4-5) meaning 'cry out' which might indicate that the name nq was derived from the animal's lowing.) Montet asserted, on the other hand, that 'le boeuf ioua était l'animal de boucherie par excellence',[133] and its importance in this respect was also noted by Ghoneim.[134] Fattened examples (ỉwỉddỉ: Wb V, 631, 7-9: Rind uä) are mentioned several times.[135] They were often sacrificed[136] and mentioned in connection with festivals.[137] Both ỉw3 and nq are very frequently attested in offering[138] and

tribute[139] lists and in tomb scenes.[140] Nq also appears in the Pyramid Texts.[141] The ꜣwꜣ was recorded from Kush,[142] and the parts of its body were used in the medical texts, and elsewhere.[143]

ꜣwꜣ are frequently mentioned in conjunction with mdt 'stalls'[144] (Wb II, 185, 1-7: Viehhof, Stall), like other domesticated (or semi-domesticated) animals,[145] though the nq are not. Both ꜣwꜣ and nq are shown in the fields (mr)[146] and could be tethered,[147] led,[148] driven[149] and similarly bedecked with flowers.[150] This evidence gives the lie to the assertion that the nq and ꜣwꜣ were from different habitats and stages of domestication and treated substantially differently.[151] The nq was also used for transport[152] and for treading seed into the ground.[153]

The females of both types are mentioned in Egyptological literature.[154] The female equivalent of nq seems to have been simply ḥm(t) or ḥm(t) wr(t).[155] A feminine form of ꜣwꜣ, ꜣwꜣt (Wb I, 49, 13: Kuh), is attested though the term is applied to males[156] as well as females[157] (Wb I, 49, 14: als Kollektivum : Rindvieh?) and appears as the name of a type of loaf (Wb I, 49, 15: Art Weißbrot in Form eines Rinderkopfes) and of the children of Hathor.[158] The masculine form ꜣwꜣ is also used of cows.[159]

In the list of male and female cattle at Medinet Habu mentioned above, where the lists are headed by kꜣ and ḥm(t), nq follows kꜣ in the list of males and has no specific female equivalent. This would indicate that the female nq was called ḥm(t), as is suggested by the parallelism of nq and ḥm(t) in the offering lists. Sometimes, a 'male nq' (nq tꜣy) is specifically named;[160] this, like kꜣ tꜣy (see above) may be an error. The Medinet Habu lists end with the terms bḥs and bḥst, denoting calves (see below), from which it may be concluded that the lists are arranged in order of age. Nq would, therefore, be a sub-adult male.[161] As most representations of the nq do not show the animals' testicles it might be assumed that nq was a castrated adult; in a few cases, however, they are shown intact[162] (compare representations of kꜣ)[163] and in a few cases kꜣ 'bull' replaces or parallels nq in variant texts.[164]

ꜣwꜣ almost always seem from the tomb scenes to have been castrated, though in other cases they evidently were not,[165] and the specific mention of 'castrated ꜣwꜣ' (ꜣwꜣ sbꜣ) likewise suggests that ꜣwꜣ does not necessarily denote a castrated bullock.[166]

ʾIw3 also appears in combination with the names of other animals (as do k3, ḥm(t) and bḥs)[167] - the oryx,[168] gazelle[169] and ibex[170] and possibly also the nq.[171] As these were animals which the ancient Egyptians at least attempted to domesticate Junker[172] explained iw3 thus : 'Am wahrscheinlichsten ist die Bezeichnung der auf Fleisch gezogenen Tiere, der Mastrinder'. In one text iw3w nw ni3w is parallelled by wnm(w) n ib3w;[173] which would indicate a connection between iw3w and wnmw. Wnmw with cattle determinative is obviously related to wnm 'eat' (Wb I, 320,1 - 321,12: essen) so Junker's suggestion may well be correct.

ʾIw3 itself is sometimes qualified in the phrase rn(n)(n)iw3.[174] Since both iw3 and this phrase can appear together[175] it is evident that some differentiation between the two was intended, though in one text 5 rniw3 are described in an accompanying inscription as iw3 only.[176] Rn (Wb II, 429, 1-5: Jungtier oä als auszeichnende Bezeichnung für Vierfüssler, die zum Schlachten bestimmt sind) also appears combined with k3, nq and bḥs[177] as well as the names of other animals which were (semi-)domesticated, including hyaenas.[178] The original Zettel for the Wb entry compared Coptic ⲣⲟⲟⲩⲛⲉ 'virgin',[179] and this comparison has been made by other authors.[180] A similar translation was put forward for the feminine term rwnyt (Wb II, 409, 1: Kuh, die noch nicht gekalbt hat).[181] Although the masculine rn(n) first appears as a qualifier it later occurs independently denoting cattle (Wb II, 435,13: Art Rind - or should this read rnn iḥ ?)[182] and variant forms rny, variant rnw, rnyw (Wb II, 429, 8: Jungstier) are also attested.[183]

It has been suggested that rn denoted animals which were suitable for sacrifice either in terms of purity (ie 'virgin')[184] or because of their youth. As rn is applied to apparently adult animals it would, therefore, indicate young adults;[185] however, this would not explain the appearance of a rn bḥs (see below).[186] Nevertheless, animals not described as rn were often named as offerings so rn must indicate an additional (desirable) quality. This is not a quality which can be detected from the reliefs. Some have suggested 'domesticated'[187] as a translation, but rn is also applied to animals described as 'of the desert'.[188] In view of these problems it seems best to leave the translation of rn until some unequivocal evidence comes to light.

The Medinet Habu cattle list has already been referred to above in connection with the discussions of k3 and nq and what is apparently their female equivalent, ḥmt. The last member of the list of terms for

male cattle is bḥst tꜣy and for females bḥst (Wb I, 469, 4-10: das Kalb; Wb I, 469, 11 (bḥst): fem. zum vorstehenden Wort). In various other texts bḥs appears to designate young cattle[189] (note especially the records citing bḥs with cows and their 'mothers'[190] and representations showing obviously young calves[191]) and sometimes even new-born animals.[192] A representation of a bḥs at Deir el-Gebrâwi showing a calf being encouraged to drink from a bowl[193] may indicate that bḥs designated the young unweaned animals. From this evidence it may be deduced that the Medinet Habu list arranges the cattle in descending order of maturity, with bḥs the lowest age group. Certain phrases, however, seem to belie this interpretation, as does the representation of the rn bḥs in Copenhagen; the animal shown, although hornless, is as large and heavily built as the two rn ỉwꜣ which precede it (for further discussion of this animal see rn above). Wb clearly also saw this as a problem, noting various references to bḥs under the heading 'hornlose erwachsene? Rinder'.[194] Bḥs wꜣḏ 'young bḥs'[195] (compare the kꜣ wꜣḏ and ỉḥ wꜣḏ[196]) and bḥs šrỉ 'little bḥs'[197] (cf the ỉḥ šrỉ mentioned by Janssen[198]) could indicate different age groupings within the group 'bḥs'. Bḥs sʿb, 'castrated calf', (Wb IV, 81, 16: kastriertes? Kalb), indicates a further subdivision of bḥs.[199]

Bḥs was used of animals other than cattle, notably sheep and oryxes,[200] and thus appears to have been a general term for young animals, as ḥmt 'cow' was for all female animals. (The phrases bḥs ḫꜣbw and bḥs ḫwrr are perhaps not to be included among such usages although both ḫꜣb and ḫwrr are attested as animal names;[201] note, however, the phrase ỉḥ km ḫꜣbw from P.Boulaq VI [202] and the spotted calf described as bḥs ḫwrrty in the Book of the Dead.[203])

Bḥs were given as offerings,[204] most notably in the ritual ḥwt bḥsw[205] in which four calves of different colours (black, white, red and variegated) appear. Bḥs appears in the medical texts[206] and man's heart is compared in a song to a sickly calf;[207] in the Pyramid Texts bḥs occurs in parallel with an otherwise unattested term ḫꜣḏ (Wb III, 237, 1: parallel zu 'Kalb (bḥs) von Gold') as the child of the ḥsꜣt-cow.[208] Bḥs has been compared with an Arabic word and may be derived from a common Semitic root.[209]

Ms, which also designates the young of cattle,[210] is a later term; while bḥs appears in the Pyramid Texts,[211] ms does not. Both are found in Coptic -ⲙⲁⲥ 'young, mostly of animal or bird'[212] and ⲃⲁϩⲥⲉ 'heifer'.[213]

Another term for a calf (Wb V, 361, 1: Kalb) may be found in the writing of the toponym tb-ntr (Coptic ϫεμνογϯ, Gr. Σεβέννυτος) which sometimes shows a calf alone or lying at the feet of a cow.[214]

Between the most and least adult animals in the Medinet Habu cattle list lie ḥrs tꜣy (fem. ḥrst) (Wb III, 135, 7: Art Rind; III, 135, 8: fem. zum vorsteh. Wort and III, 150 - var. writing only) and ḏ(r)(t) (Wb V, 585, 8-9: als Bez. für kleine Kälber and Wb V, 585, 10: männliches Kalb). Both types are depicted in the tomb of Rekhmirē'.[215] The same scene also shows nḫꜣw and wnḏw and is, therefore, useful for comparing the types of cattle and confirming the order of the Medinet Habu list. On the upper register the ḥr-sꜣ are depicted beside the nḫꜣw (twice) and wnḏw (once) - five of them are hornless, three have short horns (shorter than those of the wnḏw). On the lower register are four animals, proportionately larger than those on the upper register but similar in build and shape (all have short horns of similar length to those of the wnḏw behind them). The ḏ(r)t depicted on the same register by the nḫꜣw is smaller than the nḫꜣw and wnḏw behind it; the restoration of the top of its head shows short horns (like the ḥr-sꜣ of the top register).

Ḥr-sꜣ is found in cattle lists in various papyri[216] and an ostracon.[217] In some but not all of these the order is similar to the Medinet Habu list. In another papyrus ḏrt follows another cattle term (mr; see below).[218]

In the Pyramid Texts[219] the occurrence of ḥr-sꜣ in a punning phrase ('you are behind him (lit. 'at his back') as a ḥr-sꜣ'(lit. 'an at (his) back [cow]')) has been used to support the translation 'later, elder (animal)' that is, one no longer a calf.[220] Newberry gave 'two-year-old ox' for ḥr-sꜣ and 'yearling' for ḏt;[221] these were regarded as 'plausible' translations by Edgerton & Wilson. Two more examples of ḥr-sꜣ are recorded in the Coffin Texts and on a tablet in Turin (6237: Amenemope 24, 1-25, 9).[222] Another example of ḏrt is found at Abydos.[223]

In all cases where both ḥr-sꜣ and ḏ(r)t occur, ḥr-sꜣ precedes ḏ(r)t, and may have been given priority because of its greater age; the translations 'bullock/heifer' or 'two-year-old' (ḥr-sꜣ) and 'yearling' (ḏ(r)t) cannot, without further evidence, be confirmed.

Two further terms for cattle are apparently derived from the animal's age: mnḥ (not in Wb) - compare the term designating a young man (of an age between that of ḫrd and s)[224] - and rnp (Wb II, 434, 20: junger Stier als Bez. des Month). Both occur with cattle determinative only in Ptolemaic texts, but a phrase mnḥ n kꜣ does occur on an ostracon.[225] The determinative here is also of a man, so it may be surmised that both the terms were borrowed human age terms.

Wnḏw as an animal name appears in the Old Kingdom with goat determinative but from the Middle Kingdom this writing disappears and wnḏw with cattle determinative (Wb I, 326, 2: Art Rinder mit abgeschnittenen Hörner seems to take its place. Wnḏw (goat det.) is attested in animal lists following ỉwꜣ (see Ch.7: Goats) and it is noteworthy that wnḏw (cattle determinative) also almost invariably appears in lists immediately after ỉwꜣ.[226]

A very noticeable feature of representations of the wnḏw is that their horns are short and often have blunted ends as if they had been trimmed (cf Wb entry)[227] though others are hornless.[228] Ghoneim commented (Rind, p.80): 'wnd wird in der Tat meist verwendet als Bezeichnung der künstlich enthörnten Rinder, wird aber auch für die Rinder mit kurz abgesägten Hörnern gebraucht, die aber erst dem Mittleren Reich belegt sind'. Exceptions may be indicated at Abydos, where the determinative of wnḏw is hornless, and at Beni Hasan, where a label to a scene names ỉwꜣ, wnḏw and kꜣ but all the cattle depicted are long-horned;[229] and a rn n wnḏw in an offering scene at Luxor has medium-length horns[230] (cf the long-horned wnḏyt[231]). A young calf is once designated wnḏw[232] and on two occasions wnḏw is combined with bḥs 'calf'.[233]

The word wnḏw does not give a clue towards the meaning of the cattle term; words written wnḏw are recorded in Wb from a few very disparate contexts.[234] Maspero[235] and Andersson[236] both analysed the word as wn + ḏw, Maspero from wnw 'le taureau chargeant' and ḏww 'la montagne', deducing the meaning 'le boeuf de la montagne' or 'le boeuf sauvage'. Andersson compared the term for a mirror, wn-ḥr (Wb I, 313, 7: Bez. des Spiegels), lit. 'that which opens the face', (ie 'that which shows or reflects the face'), and interpreted wnḏw as 'ce qui montre (un) la forme d'une montagne (tu)', which he believed referred to the shape of the top of the animal's skull once the horns had been removed.

Ḥr-dbʿ (Wb III, 136, 6: hornloses Rind) - the reading ḥr -ʿnt has also been suggested[237] - is often taken to be a designation of hornless cattle[238] since all the animals over which this name appears are hornless.[239] It has also been asserted that ḥr-dbʿ was applied to dehorned cattle (cf wndw above).[240] As has been seen in the preceding pages, however, while it is clear that the ancient Egyptians' cattle included long-horned, short-horned, dehorned and hornless beasts, the Egyptians did not distinguish their cattle on this criterion (alone). Among the named representations of cattle it is noticeable that ỉwꜣ, nq and kꜣ all comprised animals with various horn lengths or no horns at all. While ḥr-dbʿ is unusual in that all the cattle so named are hornless this cannot be accepted uncritically as a term for hornless cattle.

In two instances ḥr-dbʿ is found in close association with other cattle terms, once in the phrase ỉwꜣ n mdꜣt ḥr-dbʿ (only one animal appears under this heading so it can be assumed that the whole phrase refers to it)[241] and in the tomb of Meresankh at Giza (in the sentence tt bḥs šdỉ ḥr dbʿ).[242] Rn ḥr-dbʿ also appears;[243] for rn see above.

Goedicke[244] translated the Meresankh text 'pulling the calf which was suckled upon the finger'[245] comparing Junker's and Montet's translations 'daß das Tier mit den Fingern gefuttert, genudelt wird'[246] (cf Wb IV, 564,17 - 565,15: säugen, aufziehen) and 'celui qui est sur le doigt', 'celui qu'on conduit au doigt'[247] (cf Wb IV, 560,8 - 562,19: nehmen, fortnehmen, herausnehmen uä) respectively. The latter is unlikely to be the meaning here, since the animal is being led on a cord like the ỉwꜣ and ỉwꜣt which precede it. It is possible, therefore, that ḥr-dbʿ does refer to the method by which the calf was fed. In any case ḥr-dbʿ is clearly a descriptive phrase and not of the same order as the age terms recorded in the Medinet Habu cattle list. Andersson explained the disappearance of ḥr-dbʿ after the Old Kingdom by supposing that it was subsumed under the term ỉwꜣ;[248] available evidence neither confirms nor denies this.

Another term with descriptive force which has a cattle determinative but is used in combination with a different animal name (ỉbꜣw - see Ch.2 : Antelopes and Similar Animals) is wnm (Wb I, 321, 20: Masttier(?).) The term appears only once, in the Coffin Texts, in parallel with ỉwꜣ, which may be of use in the further interpretation of that term (see above ỉwꜣ for text and discussion). The word is presumably derived from wnm 'eat' (Wb I, 320, 1-321, 12: essen).

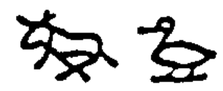
Four other Egyptian terms for cattle were derived from their colouring : ḥḏ.t 'the white' (Wb III, 212, 4: als Name eines (heiligen?) Rindes) and dšr 'the red' (Wb V, 492, 12: Rind, das zu Opfern bestimmt ist) are recorded by Wb only from Ptolemaic texts (compare ḥḏ and dšr describing ỉḥ and kꜣ, above), but kmt 'the black' (Wb V, 125, 5-9: Bez. für heilige schwarze Rinder)[249] and sꜣbt 'the piebald' (Wb IV, 18, 3: bunte Kuh)[250] are both preserved from earlier periods. These four colours are also the colours of the four calves of the ḥwt bḥsw ritual mentioned above (see bḥs) and bulls of red, black and white (and assorted combinations of these colours) are noted in the Ramesseum onomasticon.[251]

Other types of cattle names seem to have been derived from the use to which the cattle were put - for example, traction. Ḥtrỉ (Wb III, 199, 8-10: Gespann der Rinder), sometimes showing as determinative two cattle attached to a plough,[252] was used of a team pulling a plough or cart.[253] The term also appears in the medical texts.[254] In the New Kingdom the words n ỉḥw 'of cattle' were added to the term to distinguish it from the same word which was then commonly applied to horses.[255] Skꜣ (Wb IV, 316, 11: der Pflugstier),[256] from the root skꜣ 'plough' (Wb IV, 315, last entry - 316, 9: pflügen), emphasizes the rôle of cattle in ploughing,[257] though donkeys[258] and goats[259] were also used for this. Nḥbw (not in Wb) possibly related to nḥb 'harness', 'yoke' (Wb II, 293, 3-7; II, 293,1-2: Joch, cf nḥbt: Wb II, 292,9-16: der Nacken, der Hals) has been translated 'draught-cattle';[259] similarly one of the terms from the Ramesseum Onomasticon, ỉtḥ (not in Wb but cf Wb I, 148, 12-23: ziehen), is explained (as restored and translated by Gardiner) 'That is a draught-ox(?)...'[260]

In the Pyramid Texts[261] there is a passage in which several terms with cattle determinatives appear in punning phrases and it is notable that many of the puns concern verbs of violent action - strike, kill, hit etc. One of the terms, ỉḏ (Wb I, 152,2: Bez. für ein Rind), occurs only here, as does its corresponding verb (Wb I, 152,1: Verbum). Another, pḏt (Wb I, 569,6: Bez. eines Rindes), which Wb compared with pḏ 'niederstrecken' (Wb I, 567,8 - 568,13), is attested both from the Coffin Texts,[262] where the deceased promises not to eat the butchered animal, and in a record of offerings.[263] Both these contexts suggest that pḏt designated a sacrificial (or sacrificed) animal.[264]

Wb recorded šsr (Wb IV, 547, 8-9: Schlachtrind) only from Ptolemaic texts, exceptions being the above Pyramid Text and a late attestation which is unfortunately fragmentary.[265] At Abydos the term appears in parallel with nq3w[266] (see above for nq3w); these both occur again on an offering list now in Leiden.[267] Such references were discussed at length by Otto[268] who, following Sethe,[269] believed that šsr, related to šsr 'arrow' (Wb IV, 546, 7-17: der Pfeil), was derived from the method of killing the animal: 'the more general meaning, "a bull killed by an arrow" seems to be more natural as the original conception... Thus šsr seems by no means to denote a species of cattle but is an appellative derived from a special way of killing'.

The remaining term from the Pyramid text set, sm3 (Wb IV, 123, 14-17: Schlachtopfer; Schlachtstier, Schlachtrind & Wb IV, 124, 1-7: der Wildstier), fem. sm3t (Wb IV, 128, 8-10: das Weibchen des Wildstiers), may be related to sm3 'kill' (Wb IV, 122,7 - 123,11: töten). Only three of Wb's references to the sm3 as a sacrificial animal are from pre-Ptolemaic texts, all from the New Kingdom.[270] The translation of sm3 as 'wild ox' is owed to representations of these cattle among other desert animals;[271] as such they could be hunted.[272] The king was described as a sm3[273] and in the Pyramid Texts was identified especially with the sm3[274] or sm3 wr.[275] Sm3 was also the name of a warship;[276] the tails of sm3 were used on boats.[277] The species was identified as Bos africanus Brehm or Bos primigenius Bojanus by Hilzheimer;[278] Dürst,[279] however, believed the 'wild' cattle to be feral examples of the domestic type.

Another cattle term derived from a verb meaning 'fell', 'kill' is ḫryt (Wb II, 322, 6 - 323, 7: Schlachtvieh)[280] var. ḫrt (Wb III, 322). In the determinative the animal is often shown tied up in preparation for butchering.[281] Indications that ḫryt was not specifically a cattle designation but rather a term for a (ritually sacrificed) offering, which might consist of cattle, are provided by the double determinative  in an Old Kingdom Mastaba and in the Book of the Dead[282] and by the phrase k3/ỉḥ n ḫryt (specifying that the ḫryt here does refer to cattle rather than any other type of animal) also in the Book of the Dead.[283]

Other terms appear to be derived from the bull's habit of fighting; Wb recorded mr (Wb II, 106, 8: Kampfstier) and ḥww (Wb III, 45, 2: Bez. für (kämpfende) Stiere) from scenes of fighting bulls,[284] and gave

three more terms with similar translations : pry 'which sets, starts off' (Wb I, 526, 2: als Bez. des Kampfstiers)[285], twnw (Wb V, 359, 13: Kampfstier),[286] the determinative showing a bull pawing the ground before its attack, and wšb, 'the answerer, opponent' (Wb I, 373, 4: Bez. für den Kampfstier),[287] which appears to have a female counterpart wšbt (not in Wb).[288]

A further small number of terms for cattle of various etymologies are known: ỉrw (Wb I, 114, 4-5: Abgabe vom Vieh, bes. von den Rinderherden),[289] var. ỉryt,[290] w'b-r (Wb I, 284, 16: Art Rind),[291] wdw (Wb I, 398, 13-14: freiumher-schweifende Rinder)[292], nw (Wb II, 218, 1: in (k3)-nw : Art Rind)[293], nr (Wb II, 279, 6: ob identisch mit dem Vorstehenden, ie nr Hirt, Hüter)[294], nḥrw (Wb II, 298, 13: Art Frohnde)[295], ḥ3t (not in Wb)[296], ḫrp (Wb III, 329, 15: Bez. für Rinder: Zinstrinder)[297], sbḥyt (Wb IV, 91, 9: [in] ḫrw sbḥyt: Rindergebrüll),[298] tpy (Wb V, 296, 5-6: Art Rind)[299], and tnwt (Wb V, 379, 16: Bez. für Rinder), var. tntt (Wb V, 376, 3-4: die heiligen Kühe der Hathor).[300] Two further terms, ḫsmt (Wb III, 333, 2: in dem lokalen Titel [ỉmy-r ḥsmt ḫnrw] & III, 296, 10) and mrḥw (Wb II, 112, 5-8: ein Gott in Tiergestalt) are found only in titles.[301]

Chapter 5 : Dogs and Similar Animals

The wild canidae[1] are represented in Egypt today by the Common, Oriental or Golden Jackal (Canis aureus L), in particular the subspecies C.a.tripolitanus,[2] C.a.nubianus[3] and the Egyptian or Wolf-like Jackal (also 'Egyptian Wolf') C.a.lupaster,[4] the Red Fox (Vulpes vulpes L) with V.v.niloticus Geoffrey[5] in Egypt, the Sand or Rüppell's Fox (V.rueppelli Schinz) and the Fennec (Fennecus zerda (Zimmermann)). There are a number of other canids now inhabiting northern Africa which may at one time have been present in Egypt, notably the Side-striped Jackal (C.adustus Sundevall), the Black-backed Jackal (C.mesomelas Schreber), the Abyssinian Wolf or Sim(en)ian Jackal/Fox (C.simensis Rüppell), other subspecies of C.aureus such as C.a.bea Heller, C.a.syriacus Hemprich and Ehrenberg and C.a.soudanicus Thomas, and the Pallid or Pale (Sand) Fox (V.pallida Cretschmar).[6] It has been stated that the wolf (C.lupus L, Common, Grey or Timber Wolf) has never occurred in Africa,[7] but a subspecies C.l.pallipes, supposed by some to be the ancestor of the domestic dog, has been described from the northern part of the Arabian peninsula, Palestine and Sinai. At the edge of this habitat another subspecies, C.l.arabs, the Arabian Wolf, is found.[8]

Although wild canids appear in ancient Egyptian desert hunting scenes, the names of only two are shown accompanying representations: wnš (Wb I,324,16-18: der Wolf (Schackalswolf)) and sꜣb (Wb III, 420,5-13: der Schakal). In one scene where both appear together the wnš is larger and a darker ochre in colour than the sꜣb.[9]

In addition to being depicted as an animal of the desert the wnš is mentioned together with other desert species (the lion, and the bear) in a spell for 'shutting the mouth' of dangerous beasts.[10] Other texts show that it was considered a danger to man, like the crocodile,[11] and it was mentioned in what are apparently curses.[12] The wnš was evidently a scavenger, eating fish stranded by a low Nile,[13] though it is described elsewhere a menace to livestock, entering byres[14] or attacking cattle in the fields.[15] The same was true of the ỉshb (Wb I,132, 22: Ausländischer Name einer Wolfs- (oder Hunds-)art), described as a 'red wnš' (wnš dšr) and found in Syria;[16] this text also records the wnš in Syria.[17]

From certain references the wnš appears to have been nocturnal, living in caves during the day,[18] and this same shrinking behaviour was noted in the king's enemies[19] or quarry.[20] It could evidently be tamed as a pet[21] and an ostracon records the sale of a one-year-old pup.[22] The skin of the wnš was used to make ỉꜥꜣ-garments[23] (see also ḥsdd below).

Wnš is recorded as the name of a constellation (?) in the Coffin Texts,[24] and both wnš and the feminine form wnšt (Wb I,325,3 : die Wölfin) were popular as personal names; a form wnšš is also known.[25] Wnš was also the name of a canid-headed object (Wb I,325,2).

The sꜣb is sometimes depicted pulling the solar bark - the animals in this context are sometimes called the souls (bꜣw) of Nekhen or of the East or West.[26] The sꜣb appears in two texts extolling Rēꜥ-Harakhti together with a šꜣ, var. ỉšꜣ (Wb I,134,20: Art Hunde), which has a determinative in one case very similar to that of the sꜣb, but in the other shows the short curly tail of a dog.[27] These two creatures occur together as animals of the Delta marshes (ỉdḥ) in a text at Karnak.[28] The very similar term ꜣyš (var. šꜣy) appears as the name of a jackal-headed deity, once in parallel with two terms recorded by Wb as the names of dogs, bfn (Wb I,456,4-5 : Hunde) and bḥn (Wb I,468,20: Art Hunde).[29] Writings of the form ꜣyš/ỉšꜣ occur as epithets of Seth (eg Wb I,33,13 and I,134,20) and it may be that the šꜣ/ỉšꜣ/ꜣyš/šꜣy designate the 'Seth animal', or at least a real animal of the dog or jackal type with which Seth was closely associated.[30] At Beni Ḥasan this apparently mythological creature has a jackal-like form and is called šꜣ.[31] In view of the texts mentioned above in which the šꜣ/ỉšꜣ praises the sun god it is interesting to note the rôle of Seth as protector of Rēꜥ in the solar bark, and a representation of the bark pulled by both jackals and Seth animals.[32]

The sꜣb was frequently associated with the king. In the Pyramid Texts parts of his body are described as those of a sꜣb.[33] In New Kingdom inscriptions his fearsome countenance is compared with that of a sꜣb[34] and his swift progress in conquering foreign lands is likened to this fleet-footed animal.[35] The same comparison is made of a horse[36], a presumably raging illness,[37] gaming pieces in the hand of a skilled player[38] and even the wnš.[39] Headless sꜣb appear in a magical text.[40]

In two of the texts comparing the king with the s3b the reference is specifically to a 'southern s3b' (s3b šmʿ); s3b šmʿ also appears as the title of a nomarch.[41] No equivalent 'northern' s3b is attested. The epithet 'southern' is combined with only one other animal name, 3by; the 'southern 3by' is the leopard, the 'northern 3by' is the cheetah. It should be noted that these phrases do not appear until the New Kingdom; before this the leopard and cheetah seem to have been given entirely distinct names (b3 and ntrt respectively). S3b and s3b šmʿ, by contrast, both appear in the Pyramid Texts, particularly in association with the deities Anubis and Wepwawet.

It has been stated that the s3b šmʿ was the Anubis animal, that Wepwawet took the form of a s3b,[42] and that these animals appeared in the Pyramid texts with respectively recumbent and upright posture.[43] Closer examination of the determinatives reveals that the latter is not the case.[44] In addition two New Kingdom texts describe a s3b šmʿ as 'the opener of the ways' (wp w3wt);[45] the s3b šmʿ and Wepwawet also appear together on the Shabaka Stone.[46] Anubis elsewhere appears in parallel with [s3b] wr.[47]

The late Ptolemaic P.Jumilhac, though it mentions Anubis, Wepwawet and the animals associated with them many times, does not help to resolve the problem of distinguishing or identifying the s3b and s3b šmʿ. S3b occurs only once in this papyrus, in a description of the wnš and not as the name of a sacred beast. Instead it is the wnš and tsm (Wb V,409,13-22: der Windhund, Hund) which have this distinction.[48] This is reflected in later texts. In Coptic the ογωνϣ[49] is mentioned as being revered at Asyut,[50] the ancient centre of the cult of Wepwawet. If Asyut is to be identified with Greek Lycopolis[51] it may be deduced that the Greeks saw Wepwawet (and the wnš) as a wolf.[52] Similarly Anubis at Cynopolis was seen as a dog (tsm). This, however, was not the earlier conception, though one New Kingdom text does associate Anubis and a dog (ỉw; see below).

It is clear from the Pyramid Texts that in the Old Kingdom it was the s3b and the s3b šmʿ which the Egyptians associated with the deities Anubis and Wepwawet though the distinction between the two types of s3b was not rigid. The wnš had no importance in early religious texts, and it was not until Ptolemaic times that Wepwawet was linked with this animal. In the New Kingdom, and increasingly so afterwards, Anubis began to be associated with the dog (tsm or ỉw). The relationship between the wnš and the dog seems, at the date of P.Jumilhac, to have

been considered very close. After the Old Kingdom the s3b appears in sacred texts only when pulling the solar bark and the s3b šmʿ not at all. It may be that references to the s3b šmʿ in New Kingdom texts are merely archaisms and that after the Old Kingdom the s3b šmʿ and wnš became confused. This would explain the later association of wnš with Wepwawet.

In the past several authors have identified the s3b as a fox,[53] as well as a jackal. Jackals (C.aureus) will bury food and melanistic examples occur,[54] which may explain the association of the s3b with the corpse-tending Anubis, depicted as a black jackal. S3b may, therefore, denote the Common Jackal. S3b šmʿ and wnš may also designate jackals, possibly two of the subspecies of C.aureus in Egypt today. Indeed wnš has often been translated C.a.lupaster, which accords with the representation of the animal as larger and darker than the s3b at Beni Ḥasan.

P.Jumilhac is noteworthy for providing a late attestation of a term otherwise recorded only from the Old Kingdom: ḫsdḏ. Wb knew only examples from Edfu written ḫstt (Wb III, 333,5: Art Tier).[55] In P.Jumilhac the term (written ḫsdd) appears to comprise both wnš and ṯsm (the ṯsm is also mentioned as one of its ḫprw) and is associated with Anubis and Wepwawet.[56] Ḫsdd appears elsewhere as the name of a jackal-headed deity together with s3b, 3yš (see above) and bfn. The ḫsdd is, therefore, certain to belong to the Canidae, as has been suggested by Montet.[57]

The ḫsdḏ of the Old Kingdom appears in clothing lists from various tombs.[58] It is clear that some of the terms in these lists are the names of animals, and that the clothing was made of these animals' skins. Wnš appears in this context (see above), so it is not surprising to find another of the Canidae in the lists. (Mɜst, also from these lists, may designate another of the Canidae, possibly a fox; for this word see Ch.13: Miscellaneous Mammals).

Three more words have been considered to name wild canids, but the evidence for all of them is slight.

The knmt (Wb V, 132, 8: ein Tier) occurs in the Pyramid Texts as an enemy of the baboon (ỉʿn).[59] Sethe[60] noted the Leopard and Cape Hunting Dog[61] as the greatest predators on baboons. Brehm[62] noted the mutual animosity of baboons and dogs, and Ember[63] therefore compared knmt with

Hebrew and Aramaic and Arabic klb, Assyrian kalbu, 'dog' and Mehri koub 'wolf'. The surviving evidence does not allow a firm translation of knmt as 'dog' or any other animal; see Ch.14: Miscellaneous Mammals for a full discussion of the term.

Wsr (cf wsrtj, Wb I,363,18 : als Erklärung des Schriftzeichens 𓃠) has been considered the origin of Coptic ϩⲁⲩⲟⲣ 'fox'.[64] This proposal was rejected by Černý, Westendorf and Vycichl, all of whom saw the Coptic word as a corruption of Greek βασσάρα, 'fox'.[65] Nevertheless, the fact remains that 𓃠 shows the head of a canid and wsr may have named a species or type of jackal or fox; and Černý did compare the similar Coptic ϩⲟⲓⲩⲓ 'a desert animal' (Crum) with Bishârîn ubʾašeʰ 'Sudanese jackal'.

Wb noted the sign w3st (Sign List S40) as the name of a fox-headed deity (Wb I,259,18: als Bezeichnung einer fuchsköpfigen Schutzgottes)[66] and it is interesting to note that the word appears in parallel with other animal names in a Ptolemaic text from Madâmûd [67] and as one of the animal forms assumed by a goddess.[68] Meeks considered the term should be read wsr (see previous paragraph), stating that 'les signes 𓃠 et 𓃠 étant parfois confondus à B[asse] Ep[oque]'.[69]

Wt (not in Wb) was translated 'cub' rather than 'child' by Iversen, as it is sometimes determined with a jackal; he compared the word with wt (Wb I,377,20: alt sein? gross sein?) and wtw (Wb I,377,21: ältester Sohn).[70] The meaning should doubtless be chosen according to the context.

The most common names for the domestic dog were tsm (Wb V, 409, 13-22: der Windhund, Hund) and ỉw (Wb I, 48, 3: Art Hund), var. ỉwỉw (Wb I, 50, 1: Art Hund).[71] (For bfn and bḥn see above). In one Old Kingdom representation tsm labels hunting dogs of slender build with upright ears and short, tightly curled tails[72] and dogs of this type depicted on a Middle Kingdom stela[73] were also described in a later text as tsm.[74] A similar dog with rather shorter legs can be seen in certain writings of the personal name p3-ỉw-Ḥr.[75] In the New Kingdom tsmw appears labelling a dog with lop-ears and long straight tail.[76] The determinative of tsm in the Late Period Geographical Papyrus is, however, a jackal-like animal with a long tail brushing the ground behind it (see above for remarks on Anubis, originally conceived of as a jackal but later as a dog).[77]

Although dogs were depicted frequently, either in hunting or domestic scenes (sometimes under the chairs of their owners)[78] and were occasionally given pet names,[79] the label 'dog' occurs only in the few scenes mentioned above. It is not easy to decide, therefore, from the pictorial evidence, whether tsm and ỉw named breeds or types of dog or whether they were alternative terms denoting all domestic dogs in general.

The tsm appears in a text accompanying a hunter;[80] it was noted for its speed[81] and is recorded being beaten when disobedient (in a proverb).[82] The ỉw, on the other hand, is mentioned in the house(?)[83] and in the street, where they could evidently be a savage nuisance (compare wnš in this context)[84] - one text recounts that an unfaithful wife was thrown to these animals.[85] Another describes it more kindly as watchful for its master.[86]

Dogs appear to have been regarded as items of livestock - tsmw were looked after by mnỉw 'herdsmen' (the term wʿrt tsmw also occurs).[87] Mnỉw are usually found in connection with cattle, goats, sheep, pigs or horses,[88] and ỉwỉw once occurs in a list with some of these same animals.[89] Both ỉw and tsm appear in the medical texts, tsm several times (particularly in treatments for the hair and limbs),[90] but ỉw only once.[91] (No prescriptions for the bites of dogs are known though bites are recorded in other texts.)[92] The tsm is recorded as having been imported from outside Egypt, though not the ỉw(ỉw).[93] ʾIw, but not tsm, was popular as a personal name.[94] ʾIw also appears in a veterinary text.[95] In one magical text a model of a dog (ỉw) is required in a charm to overcome death,[96] in another the deceased is to be protected by magic from 'dogs and bitches' (ỉwỉw, ỉwỉwt).[97] In a further magical text the ỉwỉw is addressed as 'chewer of bones'.[98]

The tsm appears in P. Jumilhac as the animal associated with a number of deities, Anubis and Wepwawet,[99] Anti and Horus,[100] Osiris,[101] Horsiese,[102] Seth,[103] Thoth-Shu,[104] Rē,[105] Geb,[106] and Baba;[107] sometimes the deity involved is not named.[108] ʾIw is associated with Thoth[109] and with Baba,[110] and Anubis and the ỉw appear together in a Dynasty 19 text in a spell to dispel a headache (gs-mꜣʿ).[111] The spell includes threats of violence against the sacred animals of certain deities if its words are not heeded: 'I will cause Suchos to sit shrouded in a crocodile-skin. I will cause Anubis to sit shrouded in the skin of a dog'. As earlier texts generally ally Anubis and the sꜣb (šmʿ) (see above) this may indicate the beginning of the Greek

tradition that Anubis was a dog.

One text associates the ỉw and tsm very closely[112] and ỉw alternates with tsm in the story of the doomed prince. The dog of the tale is first called ỉw by the seven Hathors. When a dog is first seen by the Prince it is called tsm, as it is in subsequent sentences, but later in the text is consistently referred to as ỉw.[113] Both terms are found in other texts where the dog is used as a metaphor of devotion or servility.[114]

Ember[115] compared Hebrew ỉw 'jackal' with the Egyptian word; a similar term ei meaning 'dog' is found in Somali.[116] The onomatopoeic Arabic name wāwī 'dog', representing the animal's howling, has also been likened to ỉwỉw.[117] In Egyptian ỉw(ỉw) appears as a verb meaning 'wail, lament',[118] and this indicates a similar derivation for the animal name.[119] This, and the resemblance of the tsm to the modern Basenji (which does not bark), prompted Handoussa[120] to distinguish the tsm and ỉw as follows: 'Ainsi tout autre chien qui aboie fut mis dans la catégorie des ỉw ou ỉwỉw : son qu'émet le chien. Le ỉw ou ỉwỉw est donc le chien ordinaire, le tsm le chien racé'. However elsewhere[121] the tsm is described as 'barking' (whwh, Wb I, 351, 10: 'bellen') so his distinction is not valid. Blok[122] supposed that tsm named a particular sub-set of ỉw; the evidence given above suggests that the terms were largely synonymous, though the older term, tsm, was evidently first applied to hunting dogs.

Whrt is known to Wb only as a personal name[123] but in Coptic its descendent ογϩορ is the common term for 'dog'.[124] Vycichl[125] compared it with north-Moroccan ỉwhar and Rif uhar meaning 'fox' : 'Hierzu sei trotz des Bedeutungsunterschiedes ägyptisch w-h-r, "Hund" gestellt, koptisch ογϩορ'.

For convenience all domestic dogs are known by the Latin binomen Canis familiaris L,[126] and both ỉw and tsm can be translated thus.

The determinatives of mm (Wb II, 58, 15: ein Tier) show a creature with long tail and upright ears.[127] The original Wb Zettel suggested 'ein einheimisches Tier' and 'Ob Hyäne', adding the further note - with mmy 'giraffe' in mind - 'also ein Tier, der nach meiner Kopie keine Giraffe ist, wohl aber auch im Habitus an die Giraffe erinnert ...Ob eigentlich irgendein kleineres einheimisches Tier, deren Name dann später auch für das grosse fremde benutzt worden ist?' In view of this

it may be possible to suggest the Spotted Hyaena (Crocuta crocuta (Erxleben)), which today is found in Africa south of the Sahara,[128] as a suitable translation of mm.[129]

The hyaena normally depicted by the ancient Egyptians[130] was the Striped Hyaena (Hyaena hyaena (L)) which is still present in Egypt. The Egyptian subspecies is H.h.dubbah Meyer, the Nubian Striped Hyaena.[131] The name generally used to describe this animal was ḫtt (Wb III, 203, 16-17: die Hyäne) - attested usually in offering lists or scenes[132] - though ḫtw, apparently with hyaena determinative, occurs as a toponym.[133] Vycichl compared the Egyptian term with Semitic words of similar spelling meaning 'a/to limp'.[134]

Chapter 6 : Elephant, Rhino and Hippo

A very restricted number of terms for these animals appears in ancient Egyptian texts. During the dynastic period until the New Kingdom, when the animals were encountered by the Egyptians during military expeditions or through foreign tribute, representations of elephants were rare and of rhinos non-existent. The disappearance from Egypt and subsequent rediscovery of rhinos and elephants by the Egyptians led similarly to the disappearance of the original designations and the adoption of new terms for the animals. Hippos, on the other hand, were well known throughout Egyptian history, feared chiefly for the considerable danger they caused to boats on the Nile[1] and noted for their noise, destructiveness and aggressiveness.[2] They were identified with the god Seth and as such appeared as the subject of certain rituals designed to overcome his power.[3] Such rituals were depicted particularly in Ptolemaic reliefs, and various terms with obvious etymologies were used of Seth in this form.[4] Two terms for the female hippo are known only from Ptolemaic texts.[5]

None of these animals now occurs in Egypt, though the hippo (Hippopotamus amphibius L) was still present in the Nile in the 19th century and was mentioned by travellers to the country.[6] The elephant (African elephant, Loxodonta africana (Blumenbach))[7] and the rhinoceros (there are two African species: the White[8] or Grass Rhino (Ceratotherium simum Burchell) and the Black or Browse Rhino (Diceros bicornis L) are now confined, in ever decreasing numbers, to sub-Saharan Africa.[9]

Both elephants and rhinos were depicted in the pre-dynastic rock drawings from eastern and western desert wadis studied by Winkler and Dunbar, though the elephant appeared more frequently than the rhinoceros.[10] No representations of rhinos are known between this date and the New Kingdom, when the animal was recorded as a curiosity, together with its measurements, on a stela at Armant.[11] Models of rhino horns were, however, identified from a 1st Dynasty tomb.[12] African elephants, or at least animals resembling these elephants, were drawn until the Middle Kingdom[13] (and there is one drawing of an Indian elephant from a New Kingdom ostracon and another in a New Kingdom tomb painting[14]) though many representations are found only as the determinatives of the toponym ꜣbw,[15] Greek Elephantine, modern Aswan. The elephant, or its tusks, almost certainly gave its name to Abu, the

trading post at the first cataract[16] - Váhala supposed that elephants must have survived this far south in Egypt when the town was named[17] - though it is also possible that the animals were named after the town, because of its connections with the ivory trade. The inaccuracy and paucity of the drawings would indicate that the African elephant disappeared from Egypt at an early date[18] and that artists were only imperfectly acquainted with their appearance, in contrast to the hippopotami which were depicted prominently in Old Kingdom scenes of hunting in papyrus marshes[19] as well as in later reliefs. In Meroitic and Ptolemaic times there seems to have been a renewed interest in the animals.[20]

In the New Kingdom elephants are mentioned in Ny, a state in Syria-Palestine,[21] and their tusks were imported from Syria, as well as Libya and Kush.[22] Although the tusks imported from Kush and Libya were doubtless those of the African elephant, those from Syria were probably not, like the elephant hunted by the pharaoh in Ny, near the Mediterranean coast. That drawn on the Deir el-Medina ostracon belongs to the Indian species, Elephas maximus L. (the appropriate subspecies has been given as E.m.asurus) which today does not extend even as far as the western border of India. If the elephant of Ny were of the Asiatic and not the African type it would indicate that E.maximus was widely distributed throughout Asia Minor in c. 1482 BC.[23]

The only representation of an elephant-like animal specifically called ꜣbw (Wb I, 7, 15: Elefant) is at Beni Hasan,[24] but the creature, which appears among the other fabulous desert inhabitants depicted in this tomb, has only a single horn and no trunk. Brugsch[25] deduced therefore that ꜣbw 'bezeichnet ebensowohl das Rhinoceros als den Elefanten', and that ꜣbw meant simply 'Hornträger'. Keimer[26] compared the Arabic appellation 'Abu karn' (sic ; the term is umm al-qarn) 'possesseur d'une corne' but considered that the Beni Hasan representation 'doit être interpretée comme un rhinocéros fantastique'.[27] The problem of identifying the ꜣbw is further complicated by the appearance of a rhino as the determinative of ꜣbw on a Middle Kingdom statue[28] but Störk,[29] who studied the rhinoceros in the Ancient Near East, followed Brugsch in assuming the term to apply to both animals: 'Was liegt näher als der Gedanke, ꜣb(w) könne außer "Elefant" und dem Ortsnamen "Elephantine"... auch "Rhinozeros" bedeuten?... Den Grund für die Seltenheit, mit der ꜣb(w) eindeutig das Rhinozeros bezeichnet, darf man wohl darin sehen, daß der Elefant für die ägyptische Kultur immer ungleich interessanter war... Für die

Griechen schließlich war die Bedeutung ꜣb(w) nicht mehr zweifelhaft und so kam es zur Insel "Elefant" und nicht "Rhinozeros".'

The similar single-horned creature in the 'Weltkammer' at Abû Ghurâb was originally believed to have another name, ỉrbꜣ[30] (Wb I, 115, 4: ein Tier (Nashorn?)) but Edel, in his discussion of the inscriptions in this temple, read rather ỉr ꜣbw 'to Elephantine'.[31] The reading ỉrbꜣ is, therefore, to be rejected.

Another word with elephant determinative, ḥw (not in Wb), was recorded by Fairman from the kiosk of Sesostris I at Karnak; he translated 'elephant'. The word, he suggested, was a nisbe derived from ḥw 'elephant tusk' - 'it is apposite to quote the analogous English use of "tusker" to describe a grown elephant with developed tusks'.[32]

The elephant appears, therefore, to have been known by the name ꜣbw into the New Kingdom and the rhino by the same name into the Middle Kingdom. Both appear with different names at later dates. The elephant appears on the Pithom stela[33] with the name dnhr and in demotic texts as tnhr;[34] the rhino, hunted by Pharaoh in Nubia and recorded at Armant, as šḳb.[35] On this word Mond and Myers noted: 'The etymology of the word šꜣḳb is obscure; possibly it was derived from a Nubian place name, or the local name of the beast'.[36] Störk considered the etymology of the word extensively, putting forward the semito-hamitic root šḳk with various derivatives designating pointed objects (eg nail, thorn) as the prototype of Egyptian šḳb. The -b ending is common to the names of other wild animals; he compared Egyptian db and sꜣb. He also mentioned a Somali word shabuq meaning 'whip of rhinoceros hide' which may be associated with šḳb.[37]

Grdseloff[38] considered that šḳb designated (one of) the African rhino(s) and ỉrbꜣ (sic) the Asiatic (Indian?) species on the grounds of the latter's similarity with a toponym in Syria-Palestine, ỉm-n-ỉrbt, in a stela dating to the reign of Amenophis II. This point was further discussed by Keimer[39] who commented that rhinos had occurred only in pre-historic Syria and that Grdseloff's translation of the toponym 'Lac de Rhinocéros d'Antioche' 'constitue une appellation assez bizarre'. The reading ỉrbt was in any case rejected by Edel[40] as noted above.

Apart from the names applied to Seth and a Fayum deity in hippopotamus form (ḥdt)[41] only two terms were used regularly to designate the hippo. The more common of these is db (Wb V, 433, 14-17:

das Nilpferd). Ḥꜣb (Wb III, 229, 5-6: das Nilpferd) seems to have a more specialized usage, a number of its recorded occurrences being in the Ptolemaic temple texts, though db also occurs in this context.[42]

In order to draw a distinction between the words it is useful to note that db occurs in the medical texts[43] - compare from the Pyramid texts an invocation to an illness in the form of a db[44] - and in other instances where the animal itself is being referred to[45] (eg the term used of the animal's skin(?)),[46] whereas ḥꜣb does not. In two texts, the dream book of the Chester Beatty collection[47] and the Late Period 'Geographical Papyrus'[48] both terms appear. In the former dreaming of carving a dbt is interpreted as a good omen; ḥꜣb appears in the characterisation of Seth-like men. In the latter the determinative of ḥꜣb is drawn pinned down with a knife, which indicates its dangerous nature (cf 𓆑 as a determinative of Apophis). This determinative also appears in a text recounting hunting at Moʿalla.[49] A further reference to ḥꜣb occurs on the Middle Kingdom Stela noted above (see ꜣbw)[50] where the hippo-hunting ritual is mentioned. Hippo-spearing is also shown in the scene on the fourth square of senet-boards,[51] but the name of the animal is not recorded. A passage from the Coffin Texts mentions the slaying of a db[52] as does the tale of the Eloquent Peasant.[53] Ḥꜣb also appears in the rituals of the Book of the Opening of the Mouth.[54] In these texts there seems to be a distinction between the animal as such[55] and the animal as a hypostasis of Seth; note that in the story of Horus and Seth the latter is recorded as changing himself into a db.[56]

Lacau believed that the name ḥꜣbw, meaning 'curved', was derived from the hippos' huge curved teeth.[57] Störk[58] compared ḥꜣb 'sickle' and similar words ḥꜣb/ḥꜣb 'krumm, gebeiegt', ḥꜣbb/ḥꜣbb 'Gekrummtheit, Falschheit', making the name of the animal 'das Heimtückische'. From the writing of ḥꜣb with 'tusk'in the Pyramid Texts and with 'horn' (Sign List F18 and F16) in P.Boulaq VI the term would indeed seem to be associated with (some characteristic of) teeth or horns so the above translations appear appropriate.

Ḥꜣb has also been associated with the phrase bḥs ḥꜣbw which occurs in the Pyramid Texts[59] and was interpreted as 'calf (ie young) hippopotamus' though Wb (III, 229, 15) recorded it separately from ḥꜣb, 'hippo', and did not offer any translation. The same phrase is also found in a medical papyrus,[60] two Middle Kingdom texts from burial chambers,[61] the Coffin texts[62] and a Late Period text.[63] Although bḥs

is known as a term describing the young of animals other than cattle (eg bḥs n mꜣḥd), ḫꜣbw here should probably be understood differently; Sethe[64] translated the Pyramid Text example 'zahnlos Kalbchen' and Breasted[60] the medical example 'hungry calf'. There is perhaps confusion here with sꜣbw 'variegated'; a similar phrase, ỉḥ ḫꜣbw, occurs in P.Boulaq VI. (See Ch.4: Cattle).[65]

Db has been equated with Semitic words for 'pig'. Ember[66] compared Assyrian dabu 'pig' and modern Arabic khanzi-al-mā' 'hippo' lit. 'water-pig', and noted that an Egyptian deity with the head and body of a hippopotamus (Tuēris) was sometimes described as rrt 'pig'. (See Ch.11: Pigs).

Chapter 7 : Goats

The term ꜥwt displays a number of determinatives, most frequently a goat or a sheep. Although ꜥwt appears to denote primarily a class of animals (most closely conveyed by English 'mammal') goats and sheep may have been considered typical of the group '[true] ꜥwt' in the same way as the gazelle, and less frequently the oryx and ibex, seem typical of 'desert ꜥwt' (ꜥwt ḫꜣst). In one text[1] goats and sheep appear as defined sub-groups of ꜥwt - 'small ꜥwt' (ꜥwt ndst with goat determinative) and 'white ꜥwt' (ꜥwt ḥdt with sheep determinative). (For further discussion of the term ꜥwt, see Chapter 1: Classification).

The most commonly occurring word with goat determinative is ꜥnḫ,[2] divided by Wb into ꜥnḫt (Wb I, 205, 11-12 - pre Dynasty 18 spelling) and ꜥnḫw (Wb I, 205, 13-14 - post Dynasty 18). The latter Wb translated 'Ziegenbock?'[3] and the former 'Ziege? oder allgemeines Wort fur Kleinvieh?'. The last suggestion was taken up by Helck[4] and Janssen,[5] both of whom proposed that ꜥnḫ was a general term comprising both goats and sheep.[6] However, from the numerous instances of ꜥnḫ used in parallel with other terms for domestic animals, including sheep,[7] it becomes apparent that ꜥnḫ denoted a single discrete species, though 'various (types)' (šbn) were evidently distinguished.[8] This interpretation is further supported by the consistent use of a single determinative with ꜥnḫ (Sign List F27 or) rather than several (as was the case with ꜥwt).

ꜥnḫ sꜥb ('castrated goat') occurs twice[9] and ꜥnḫ should thus perhaps be translated '[male] goat'. However, the 'male' (tꜣy) is specifically named on one ostracon.[10]

That goats were desirable possessions is shown from the frequent mention of the animals, sometimes with their prices, or of goats' skins,[11] both in private records[12] and in lists of booty from foreign lands.[13] Goats also appear in the medical texts[14] and as sacrificial beasts[15] though they are elsewhere recorded as unclean.[16] Goat-herds are occasionally mentioned,[17] and those holding this title may at some time have held military responsibilities.[18]

ʾIb (Wb I, 61, 7: Böckchen) occurs once over a representation of a group of hornless and apparently young goats,[19] and several other times, more or less damaged, in the tomb of Rekhmirēʿ.[20] This would seem to support Wb's translation. In one text, however, ꜥnḫ and ʾib, though

they occur together, are not in the order which would be expected if ỉb were the younger animal.[21] (Nevertheless, in another text[22] ỉb does follow ꜥnḫ.) ʾIb and their young (ndst) appear in a list of cattle and other animals to be provided for a temple.[23] Their position in the list is where goats would be expected, so the primary meaning of ỉb here is unlikely to have been 'kid' or similar;[24] Lesko recently gave both 'kid' and 'goat' as a translation.[25] Like ꜥnḫ, ỉb appears in the medical texts,[26] and as a beast for sacrifice, perhaps to be identified with Seth[27] (cf ꜥr below).

In a hymn to the Nile ỉb stands in parallel with 'men' as being provided for by Re's creation, and thus appears to designate animals as a class (cf perhaps ꜥwt as the class 'animal' but also 'goat').[28] Posener translated 'le (bétail) assoiffé',[29] but although the translation (cf ỉb 'thirsty') is appropriate here - the noise (ḫrw) of a herd (ỉdr) is compared with ỉb around a well (šdyt) - this sense of ỉb with goat determinative is not apposite in other contexts.

Pastures for white ỉb (ỉb ḥd) are mentioned in P.Wilbour.[30] Gardiner translated 'white goats' but Helck, though at first translating likewise 'Weiße Ziegen',[31] later preferred to understand as 'sheep' on the grounds of comparison with the phrase ꜥwt ḥdt apparently with that meaning (see above).[32] The phrase ỉb ḥd was also noted by Gardiner in a toponym.[33]

A papyrus recording a collection of magical texts mentions ḫnw ỉb(w) which is translated by Koenig as 'peau de chevreau'[34] (for the skins of the ꜥnḫ see above). Pꜣ ỉb also occurs as a personal name.[35]

Three more terms with goat determinative were known to Wb: ꜥr (Wb I, 208, 10: Ziege); wꜥty (Wb I, 279, 7-8: die Ziege) and wndw (Wb I, 326, 3: Art Ziege), of which ꜥr is the most common.

Like ỉb, ꜥr occurs in offering texts parallel to the Nile goose, smn,[36] and in an offering list at Medinet Habu.[37] (A writing ꜥt in a livestock list[38] may be an error for this word). In both the latter cases the words for certain other animals in the list are rare terms - ỉpḥ in the former (see Ch.11 : Pigs) and šw in the latter (see Ch.8 : Horse and Donkey). Despite examples of ꜥr showing a trussed goat as determinative[39] (cf the trussed [cow] in ḫryt, a term applied to sacrificial cattle - see Ch.4 : Cattle) the term was not used

exclusively of beasts of sacrifice as it is attested in the medical texts[40] (ỉph and hryt do not appear in this context).

The phrase k3 (n) ꜥr, which appears in two papyri[41] appears to designate specifically a 'male' ꜥr (for k3 used of male animals see Ch.4 : Cattle). This would indicate that ꜥr applied to both male and female animals,[42] though a possible female form ꜥrtt is also attested as the name of a goddess.[43] ꜥr also occurs as a toponym.[44]

ꜥr is elsewhere recorded as the form taken by a deity,[45] and may, therefore be compared with a late (Ptolemaic) term ꜥrꜥr designating the animal of Banebded, god of Mendes (for this term see also ꜥmꜥm, Ch.13: Miscellaneous Mammals).[46] This animal was named τράγος 'he-goat'[47] by classical authors, and it is evident that even by New Kingdom times representations of Banebded, originally a ram, had acquired various goat-like attributes. Note here various Coptic words derived from b3 (the ram of religious representations) which mean 'goat'. (See further in Ch.12 : Sheep).

As there are no representations of the ꜥr, and the word does not occur in any text together with ꜥnḫ, it is difficult to see in what way or to what extent the ꜥr was differentiated from the ꜥnḫ. That it was in some way similar to the ỉb is obvious from the texts where they appear to be interchangeable; that ỉb designates a type of goat rather than merely 'kids' is also evident.

Wꜥty is attested in the medical texts, where it is the most common of the four terms discussed above.[48] Elsewhere it appears independently[49] or contrasted with types of cattle,[50] which is of little help in determining its precise meaning. Osing supposed it to be related to a word ꜥw (not in Wb) 'einzelnes Stück (Vieh)'.[51]

Wndw likewise appears independently[52] or together with terms for cattle (especially ỉw3).[53] Wndw goats are depicted in various Old Kingdom tomb scenes; some show long widely everted wavy horns,[54] some are hornless animals[55] and others have short horns like those of the ꜥnḫw.[56] Janssen is wrong, therefore, to state that wndw applies to 'artificially dehorned animals'.[57] The term does not survive beyond the Old Kingdom, but it is interesting to note that following its disappearance a term for cattle with the same spelling becomes evident. This term too is closely associated with ỉw3 (see Ch.4: Cattle). Whether wndw was adopted as a cattle term as ꜥnḫ became more commonly

used for 'goat' (ꜥnḫ is rare in Old Kingdom inscriptions), it is not possible to say.

Roquet translated wnḏw 'chèvre mambrine',[58] presumably for the Palestinian variety of the domestic goat or Mamber (Capra hircus mambrica).[59] Zeuner believed the ancient Egyptian goats to have been of a type possibly related to the Wild Goat, C.aegagrus Erxleben, and not the modern Mamber.[60] (On the wild goat, possibly called ỉmɜt, see Ch.2: Antelopes and Similar Animals).

Wšɜw (Wb I, 369, 8: Masttiere), though generally having a [cow] determinative, is also applied to goats (not as Wb 'von Antilopen u. Gazellen' - only goats are to be seen in the register accompanied by the inscription in question).[61]

Shisha-Halevy also recorded a loan-word, ꜥṯm (not in Wb), with the meaning 'goat'.[62]

Chapter 8 : Horse and donkey

Horses (Equus caballus L) appeared in Egypt during the Second Intermediate Period,[1] acquired - to judge from the Semitic loan-words adopted to describe horses and chariots[2] and later imports of horses from Syria Palestine[3] - from Asiatic immigrants who settled in and usurped the throne of Egypt.[4] The Egyptians seem to have seen horses first in pairs since they gave to them the name ḥtr[5] (the verb root meaning 'tie'),[6] which had previously been applied to yokes of oxen.[7] A second name for the horse was derived from the plural form of the Semitic term - ssmt[8] from susim 'horses'.[9] In Egyptian representations horses are almost exclusively seen in pairs harnessed to chariots; single horses with riders are very rarely depicted.[10] Horses were always closely associated with the military[11] and never used for ploughing or transport as were donkeys and oxen which would indicate that they were first encountered in battle. However, the Pharaoh used them for recreation, especially for hunting.[12]

Wb recorded ḥtr (Wb III, 199, 11-200, 12: Pferdegespann, Pferde) and ssmt (Wb IV, 276, 18-277, 7: das Pferd) with different translations but Donner[13] believed that both words were adopted with the meaning 'team of horses' and that both were subsequently used for the single animal[14] (cf Coptic ϩⲧⲟ 'horse').[15] The resulting redundancy of one of the terms would explain why only one survived into Coptic. Ḥtr occurs in the texts more frequently than ssmt and was incorporated into more standard phrases (ḥr ḥtr [16]; ḥtr ꜥꜣ (tpy n ḥm.f)[17]; tꜣ nt ḥtr [18] - compare the less common r/ḥr ḥꜣt ssmt of Ramesside texts[19]) which no doubt favoured its survival over that of the loan-word.[20] (Note that writings without phonetic complements are not considered here).

In certain texts both ḥtr and ssmt are mentioned in connection with chariots (mrkbt, wrrt),[21] or as 'yoked' (nḥb), like oxen.[22] Since no representations are known of a lone horse pulling a chariot, both terms would seem to designate a pair of horses. This also appears to be the case in a Dynasty 18 stela, where numbers of ḥtr and ssmt equal the numbers of chariots mentioned.[23] In a Dynasty 19 text, however, the number of ḥtr mentioned is twice that of the number of chariots.[24] Ḥtr here apparently means a single horse[25] and since in a text of similar date at Medinet Habu ḥtr and ssmt are used of the same horses (compare other Ramesside texts giving ssmt and ḥtr as variants in different versions of the same text)[26] this would probably be true of ssmt also. This meaning is confirmed by the fact that subsequently a new term rks

(Wb II, 459, 7: Gespann (von Pferden)) was used in conjunction with ḥtr to express 'a team of horses',[27] as did the phrase ꜥ n ḥtr (Wb III, 200, 5: Gespann).[28] Ḥtr and ssmt seem from other texts to have been equivalent terms,[29] though ḥtr has also been translated 'riding'.[30] In the Rosetta Stone demotic ḥtr translates hieroglyphic ssmt.[31]

Drawing a precise temporal dividing line between the uses of ssmt and ḥtr as '(team of) horses' and as '(single) horse' is more difficult. In some Dynasty 18 texts the words seem to be used of individual 'horses', not merely 'teams of horses',[32] and in one case ssmt may designate a single horse.[33] In certain later texts, however, the words still appear to have the meaning 'team', rather than 'horse'.[34] Thus it is possible to conclude merely that the words might have either meaning in earlier (Dynasty 18-19) texts and should be translated according to context.

Caminos believed that ḥtr was a broad term, comprising both horses (ssmt) and chariots (wrrt).[35] Several points militate against this. The text he was studying seems to place in clear parallel the words ssmt and ḥtr, and the term for chariots, wryt and ꜥqns.[36] The appearance of ḥtr together with wrrt (where horse(s) and chariot seem to be contrasted) is well attested (see above). A number of texts mention food for ḥtr, which must therefore denote horses alone,[37] and ḥtr is listed in parallel with other animal names as if it were no more than a simple species designation.[38]

Horses appear to have been noted for their valiance,[39] eager speed[40] and impatient tramping,[41] and on the battlefield the king's horses[42] were compared to a falcon scattering small birds.[43] An army compared to a horse (ḥtr) was thus presumably eager to throw itself into battle.[44] Horses were kept in stables[45] or let loose[46] in the fields.[47] They were looked after by overseers (ỉmy-r ssmt)[48] or herdsmen (mnỉw ḥtr).[49]

A few more words for horses are known and P. Anastasi IV lists a number of these - gꜣwꜣ, nfrw, msw, ỉbr and ḥmt in addition to ḥtr.[50] Ḥmt is a designation for any female (human , mammal or bird) and is applied to horses in the Piankhi Stela[51] (for further discussion see Ch.4: Cattle). The preceding term ỉbr (Wb I, 63, 15: Hengst) may be compared with Semitic abyr 'mighty, valiant'.[52] It is also known in a tribute list from Dynasty 18 in the sequence ssmt, msyt nt ssmt, ỉbr,

rnp.[53] Msw and msyt are obviously connected with ms 'be born'; ms is used primarily of cattle, but also of other newborn creatures. Gꜣwꜣ (Wb V, 159, 9: Art Pferde) is attested in two other texts. In one it is mentioned in a stable (m pꜣ ỉhy),[54] in the other it designates the animals from which ssmt are chosen.[55]

Nfrw (Wb II, 261, 15-16: allgemein Pferde, auch bes. die Fohlen) appear elsewhere parallel to ssmt[56] (written smsm) and as a variant of ḥtrỉ[57] and in the title sš ḫrp nfrw.[58] Nfrw is also a term applied to cattle. The same is true of rnp from the Dynasty 18 tribute list (other attestations recorded by Wb are limited to epithets of Montu in the Ptolemaic Period; another reference noted in Wb was restored ḥtrỉ by Sethe).[59]

It is tempting to see in the Anastasi text a parallel with the Medinet Habu cattle list (see Ch.4: Cattle) which appears to order the animals from most to least mature. Ḥtr would thus be the most adult and ms the most juvenile. A comparison may also be made between gꜣwꜣ and the gw which appears as a cattle term, apparently as a variant of nq.[60]

The ancient Egyptian name for the donkey Equus asinus L,[61] ʿꜣ var. ỉʿꜣw[62] (Wb I, 165, 6-11: Esel) with its feminine counterpart ʿꜣt, var. ỉʿꜣt[63] (Wb I, 165, 12: Eselin), Coptic ⲉⲓⲱ,[64] is undoubtedly onomatopoeic.[65] (Note that female donkeys were also called ḥmt.)[66] This type of word was found in other semitic languages to describe horses - Ember[67] compared Assyrian urû 'horse' and Hebrew ʿayir but ʿꜣ is not necessarily related to these.[68] In addition to occurrences of the word with donkey determinative,[69] the meaning of the term is proven by its appearance over pictures of the animal.[70]

Donkey herds were termed sḥꜣt[71] (Wb IV, 209, 9: Herde von Eseln die Lasten tragen u.ä) and donkey foals skt[72] (Wb IV, 315, 12: Eselsfüllen), Coptic CH6.[73] Skt is often found in the phrase 'a she-donkey with her foal',[74] though also independently.[75]

Donkeys are frequently mentioned in the company of other domesticated animals[76] and are often represented in agricultural scenes.[77] They were used for ploughing[78] and threshing,[79] and as the principal beast of burden.[80] The riding of donkeys is not depicted, and only foreigners or a sick man are mentioned as riding them.[81] They pulled chariots (mrkbt,[82] wrryt),[83] and a carrying-chair is shown supported by donkeys.[84] Their hide was utilised for water-skins,[85] and

sieves were made of their hair.[86] Many of their parts appear in the medical texts.[87]

The donkey was patently a most useful beast and this accounts for the vast number of references to donkeys on ostraca. These record transactions of sale[88] and loan[89] and the return of the animals to their owners.[90] Others preserve cases of litigation arising from these transactions[91] or the death of the donkey while out of its owner's possession.[92] In one case the donkey was found to be pregnant.[93] Large numbers were in possession of the state[94] and the temples[95] as well as private individuals.

Despite their usefulness they were not so valuable as cattle; even young cattle fetched the same price as a donkey.[96] In livestock lists donkeys ranked after cattle and sometimes even after the cheaper goat.[97] Nevertheless they were regarded as a symbol of wealth[98] and are mentioned among the tribute of foreign lands.[99]

In literature donkeys came to represent stubbornness, ill-temper and stupidity.[100] 'Donkey' was a term of abuse[101] and occurred in a favoured obscenity.[102] Donkeys had a rôle in magic[103] and in religion. This was most notably through their association with Seth[104] (see also hy, hiw below) though they are also mentioned in the Book of the Dead,[105] and various demons in the underworld had donkey heads.[106] A donkey might consitute a good omen in a dream.[107]

Wild donkeys as well as domesticated forms were known to the Egyptians. They are shown infrequently in hunting scenes[108] and it is likely that the ꜥꜣ ḫmw (Wb IV, 470, 5: wilder Esel) of a Dynasty 18 stela recording the Pharaoh's hunting exploits in Syria-Palestine refer to such animals.[109]

Three other words appear to have the meaning 'donkey, ass'. The first, šw (Wb (IV, 4, 3, 16: Esel), occurs only once in a list of domestic animals in a tomb at El-Kab,[110] and may simply be an erroneous writing of ꜥꜣ. It should be noted that the preceding word, determined with a goat, written ꜥt (possibly for ꜥr) is not the most usual term for this animal (see Ch.7: Goats) so the reading šw 'donkey' cannot be ruled out. Further support for the reading šw was recognised by Junker,[111] who noted the head of a donkey in a writing of a word associated with the handling of cloth, šwšw (Wb IV, 75, 16: zusammenballen oä; Wb IV, 75, 17: Bausch, kleiner Ballen o.ä. von

Leinen (zum Auswischen einer Wunde, als Polster)).

The second word, ỉmr (not in Wb), appears to be a loan from Semitic, being written in the 'syllabic orthography'. It occurs in the phrase 'you drive your subordinates like ỉmrw',[112] which was compared by Ward[113] with the very similar sentence from P. Chester Beatty V: 'He (the soldier) is driven like a donkey'.[114] Ward noted a number of similar Semitic words: Ugaritic ḥmr, Hebrew ḥamōr, Arabic ḥimār and Akkadian ʾimēru meaning 'donkey' and Ugaritic ỉmr and Akkadian ỉmmeru meaning sheep. He concluded that Egyptian ỉmr, meaning 'donkey' was borrowed via Akkadian; this language was known by scribes of the Amarna period and it was then, presumably, that the term was adopted into Egyptian.

Hy (Wb II, 483, 15-17: als Bez. des Seth) occurs together with the bfn at Philae, among things which may not be brought into the temple.[115] Bfn is attested elsewhere as a term for dog (see Ch.5: Dogs and Similar Animals) so hy was presumably denoted a real animal. It has a determinative in the form of a recumbent donkey pinned down by a knife to render it harmless.

Hỉw (Wb II, 484, 2: Substantiv (wohl ein böses Tier)), written with the determinative of a donkey in the Coffin Texts,[116] is often attested as a name for Seth.[117] It was compared by Ward[118] with various other Egyptian words - hwt 'to shout', hhy 'to ring in the ears (noise)', hhty 'tinnitus', hwhy 'to become hoarse from shouting' and demotic hwhw 'to bray (ass)'. In one case Hỉw (=Seth) appears in parallel with the name Šd-ḫrw, rendered by Ward: 'one who repeats a noise aloud',[119] and may thus be supposed, especially in view of the words noted above, to have a similar meaning. In two Coffin Text passages the voice (ḫrw) of the hỉw is mentioned,[120] which would also support this interpretation. Prior to the Coffin Texts hỉw appears in the Pyramid Texts (ỉʿꜣt hỉwt - Ward translated 'a braying jenny');[121] in a variant text the word is determined by a pair of ass's ears.[122]

Hỉw may thus be interpreted 'brayer', a somewhat different appellation from the zoological term ʿꜣ 'ass' (cf zoological ỉʿn and descriptive ḥtt - see Ch.10: Monkeys). This would explain the use of the donkey's head to write hrw 'day',[123] a practice also discussed by Ward. He postulated the existence of a late Egyptian word hw (related to Demotic hwhw) meaning 'ass', from which the writing of hrw (then pronounced hw) was derived.[124]

The final word to be considered here is ptr, a hapax from an ostracon listing the herdsmen of various types of animal - cattle, goats, sheep, pigs, donkeys and ptr.[125] From its writing it seems to be a Semitic loan-word; because of this and its closeness in the list to donkeys Kitchen[126] likened it to Hebrew pered, f. pirdā 'mule' (a mule is a sterile horse-donkey cross).[127] Prd also occurs in Ugaritic accounts of a date similar to that of the Egyptian ostracon.[128] Bohairic ⲧⲉⲙⲑⲁⲙ (derived possibly from Akkadian da(m)dammu) has also been considered to designate the mule, [129] but this term is not (yet) known from an earlier period.

Chapter 9 : Lions and Other Cats

In his listing of the animals of Egypt Flower[1] noted, from the cat family, the Cheetah (Acinonyx jubatus Schreber),[2] the Caracal (also known as the 'Desert Lynx' or 'Caracal Lynx') (Felis caracal Schreber)[3] and the Leopard (Felis (Panthera) pardus L).[4] Whether any of these remain in Egypt is questionable.[5] Flower also mentioned three species of wild cat as inhabitants of Egypt - the Libyan or African Wild Cat (F.libyca Forster, now considered to be a sub-species F.sylvestris libyca[6]), the Jungle Cat (F.chaus Guldenstaedt;[7] the subspecies F.c.nilotica De Winton, the Egyptian Jungle Cat, was given by Hoogstraal[8]) and the Sand or General Marguerite's Cat (F.margarita Loche[9]) - in addition to the domestic variety (F.catus L)[10]

Kingdon supposed that it was the African Wild Cat (F.libyca / F.s.libyca) which was domesticated by the ancient Egyptians and that this too, via export,may have been the ancestor of European domestic cats.[11] Morrison-Scott noted the similarity between cats mummified by the ancient Egyptians and F.libyca Forster, and, like Kingdon, presumed that the Egyptians' domestic cat was derived from this species. The Egyptians' cat he recorded as F.l.bubastis Ehrenberg.[12] The species F.chaus has also been identified from mummified remains, though it may not have been domesticated.[13]

A number of other species should also be taken into consideration. From representations and texts it is apparent that the Lion (F.(P.)leo L) occurred in ancient Egypt; its worldwide distribution has contracted greatly even since the last century.[14] The Serval (Cat) (F.serval Schreber) and the Golden Cat (F.aurata Temminck) of East Africa may also have occurred in Egypt in the past.[15] The Serval is now confined to Africa south of the Sahara, but, like the Zorilla (Ictonyx striatus Perry), the range of which is similarly restricted today but which has been identified from Old Kingdom representations (see gsfnw), it may have originally extended farther north.[16]

The meaning of mꜣỉ (Wb II, 11, 14-19: der Löwe), female mꜣỉt (Wb II, 12, 6: die Löwin), is clear from its lion determinative (Sign List E22)[17] and is confirmed by the occurrence of the name together with pictures of the animal.[18] The term may be complemented by ḥsꜣ (Wb III, 161, 1-10: grimmig, wild) which Wb recorded as 'Bez[eichnung] des Löwen' (Wb II, 12, 2; mꜣỉt ḥsꜣt : Wb II, 12, 7: die Löwen). There appears to have been in Egyptian a similar term mꜣ meaning 'animal'

(see Ch.1: Classification). Loret[19] believed m3 and m3ỉ in all cases meant simply 'animal' and that juxtaposed terms then differentiated between types of animal. M3 ḥs3 he thus translated 'fauve terrifiant' and m3 ḥd (oryx) 'fauve blanche du désert'. Texts in which both m3 and m3ỉ appear would, however, indicate that a clear distinction was made between the terms, though where the word appears alone, especially in the phrase 'm3(ỉ/y) of the desert' it can be difficult to decide which is meant.[20] De Wit assumed that m3ỉ ḥs3 had no greater significance than 'lion'.[21]

Wb recorded the feminine forms m3ỉt and m3ỉt ḥs3t only as designations of goddesses,[22] and not as applying to the lioness as an animal. This may be accidental, since Coptic preserves the obviously related term ⲙⲟⲩⲓⲏ[23] (with variants, ⲙⲓⲏ, ⲙⲓⲉ, ⲙⲩⲏ CD 160b: 'lioness' under the entry ⲙⲟⲩⲓ 'lion') with this meaning.[24] There existed in Egyptian another word translated 'lioness', rby[25]. The term, together with demotic lby (DG, p.262: 'der Bär... Auch für Löwe') and Coptic ⲗⲁⲃⲟⲓ, has been compared with semitic lby 'lion', and is also similar to Arabic labwah 'lioness'.[26] It may also have been related to rw (Wb II, 403, 8: der Löwe), which appears to have been an old term for the lion, or to rw-3bw (Wb II, 403, 9: Über dem Bilde eines Löwen).[27] The figure of a lion was used to represent phonetic r(w) (Sign List E23). It was distinguished from m3ỉ (Sign List E22) by its recumbent posture - though m3ỉ does on occasion appear to be written with a recumbent lion,[28] no full phonetic writings of m3ỉ occur with recumbent lion determinative.

As noted by Wb, rw-3bw was originally used of the figure of a lion, and the phrase has been taken as an epithet of a deity, 'lion tacheté'.[29] (Cf on 3by below.) Rw is seldom attested elsewhere,[30] usually appearing only as rwty, the 'lion-pair' (Wb II, 403, 10-11: das Löwenpaar),[31] also translated: 'celui à l'aspect léonin'.[32]

That rby means 'lioness' seems (from the context in which it occurs) inescapable, but it should be noted that the use of entirely different terms for male and female of a particular species is very uncommon in Egyptian and suggestions to the contrary can usually be disproved (see hbn, ỉm3t, kyky). The pintail (A.acuta) does seem to constitute an exception, since both ḥp and st appear to designate the bird, ḥp the drake and st the duck, though st is by far the more common term and was applied to the males as well as the females (see Ch.15: Waterbirds).

Wb also recorded another possible loan from Semitic designating the lion: ỉꜣr (Wb I, 106, 4: ob אָרִי Löwe?).[33] Unfortunately, the word occurs only once in a rather obscure context; whether it is to be translated 'lion', or, as others have done, 'sheep' or 'lamb',[34] must remain open to question.

A number of other terms in Wb are recorded as designating lions, for example wʿty, phyt, hmhmty, ḳnw, tꜣm. Tꜣm, tꜣrw, smnt and ḥwnt with lion determinatives appear as epithets of deities. These words are attested only from Ptolemaic texts, and are, therefore, not discussed here.[35]

The lion (mꜣỉ) appears a number of times in the medical texts[36] and was mentioned as being hunted[37] and tamed[38] - it might also accompany the king into battle.[39] On certain days of the year lion's meat was forbidden[40] (which would suggest that it was sometimes eaten and that lions were not merely hunted for sport) and a dire destiny was predicted for lions which ventured abroad on other fateful days.[41] The lion was feared[42], both by man and other beasts,[43] ; it appears in a proverb as jealous of its property, not to be crossed,[44] and as an ill tempered beast.[45] It was, with the frog, a symbol of resurrection[46] and watchfulness[47] and in the Book of the Dead the deceased was identified as a lion,[48] perhaps for those reasons. Mꜣỉ was also applied to figures of lions (cf Wb II, 12, 1: Löwengestaltiges Bild des Königs, sog. Sphinx)[49] and was used as a personal name.[50]

By far the greater part of references to mꜣỉ and mꜣỉ ḥsꜣ take the form of similes. Gods,[51] kings[52] and ordinary mortals[53] were described as, or having the attributes of, this noble beast (note that some examples may be read rw). Amenophis III was particularly closely associated with the lion and a lion sometimes appears in the cartouche of his prenomen with the reading nb.[54] Lions are depicted on scarabs together with kings' names and kings' names appear on statues of lions.[55] Lion heads and legs were integral parts of the decoration of the royal throne[56] and the king's residence was described as a lion.[57]

Certain of the names attributable to the other big cats are found in Old Kingdom clothing lists and similar contexts: bꜣ (more often bꜣ šmʿ) (Wb I, 415, 4-6: Panther; cf 7-11: Leopardenfell), ntrt and ỉb (for ỉnb) (not in Wb).[58] These terms have been identified as naming the leopard (Felis (Panthera) pardus),[59] the cheetah (Acinonyx jubatus) and the caracal (F.caracal) respectively. All appear named in Old Kingdom

tomb scenes, the latter in the Giza mastaba of ʾIssi-mr-ntr,[60] b3 and ntrt in the mortuary temple of Niuserrēʿ.[61]

At a later date the leopard and cheetah seem to have been regarded as 'northern' and 'southern' varieties of the same animal,[62] written 3by (Wb I, 7, 11-14: Panther), determined occasionally with an animal with bowed head.[63] This hieroglyph appears once as the name of an item of clothing,[64] and therefore presumably replaced the older sign from the clothing lists and Niuserrēʿ scene (Sign List F9). A big cat with bowed head is called 3by šmʿ in the temple of Hatshepsut at Deir el-Baḥri.[65] By contrast the pair of creatures depicted below it called 3by mḥ are more slender, with longer legs, and hold their heads up (unlike the 3by šmʿ they wear collars). In this they resemble old representations of the ntrt, and are therefore to be identified as cheetahs.

3by alone could apparently also be used for cheetah[66]; the facial markings of cheetahs (dark lines running from the eyes down the cheeks) which appear on the 3by mḥ mentioned above are also found on skins marked simply inm 3by (same scene).[67]

The skins of these animals were mentioned among tribute from foreign lands,[68] and as a traded commodity.[69] They were worn by sm-priests[70] (a reason for this is offered in P.Jumilhac[71]), other priests,[72] Seshat,[73] and the deified Hatshepsut.[74] The skin of an 3by is also attested in the 'Song of the Harper'[75] and in the medical texts, as is its dung;[76] their claws are mentioned in the Book of the Dead.[77]

From the Old Kingdom and Middle Kingdom representations mentioned above it may be assumed that the leopard and cheetah were indigenous to Egypt at those dates. The New Kingdom representations from Thebes show the animals among tribute from Nubia, as also seems to be the case in P.Ch.B. IV.[78] A New Kingdom text also mentions 3by in Syria-Palestine.[79] This might indicate that their numbers were on the decline in Egypt; however, the 3by often appears in the imagery of New Kingdom texts, particularly when describing the king in battle[80] or those about to wreak vengeance on their adversaries,[81] so they were clearly not lost from the Egyptians' minds. They may also have been hunted in Egypt at that date[82] and to dream of them was considered a good omen.[83]

An etymology for 3by was offered by Müller[84] who translated the word literally as 'das bunte Tier' (he compared 3bt 'buntes Zeichen, Mal', 3b 'bunt', not in Wb). Edel rendered the name of the cheetah, ntrt,[85] as 'Göttin' or 'die Göttliche'; this was followed by Westendorf.[86]

Another term for a member of the cat family is partially preserved in the temple of Niuserrē',[87] all that remains of the name is ...3 with recumbent lion determinative, possibly to be read rw. The animal's head is lost, but it has a big-cat-like body. Its shortish tail indicates that it could be the Serval (cat) (Felis serval Schreber). (See above on this animal).

Wšt and wšft, both of which appear in the Coffin Texts,[88] the former with [illegible] determinative, the latter determined by [illegible], were translated 'un félin' by Meeks. Since the words are not attested elsewhere this must remain a suggestion.

Mîw (Wb II, 42, 1-3: der Kater), fem. myt (Wb II, 42, 4-7 : die Katze), Coptic ⲉⲙⲟⲩ,[89] was the unmistakeably onomatopoeic name for the cat.[90] Störk wondered whether mîw did not embrace the Serval and Jungle Cat as well as the domesticated cat,[91] but a possible term for the Serval has been suggested above. That a man could be described as 'smaller than a cat and bigger than a guenon'[92] indicates (unless this is a mistake) that domestic cats could be quite large, as might be expected if they were derived from F.sylvestris.[93]

Cats appear in some texts in conjunction with mice,[94] and also seem to have been considered an enemy of snakes.[95] In this guise the cat was identified with Rē' as he battled with Apophis,[96] and is sometimes mentioned among the familiars of Seth.[97] Ḥarakhti was addressed as 'the cat',[98] and 'she-cat' was applied to Hathor[99] and other divinities.[100] Cats replaced lions as the animal sacred to Bastet and were particularly revered in the Late Period.[101] The cat is also mentioned in a dream-interpretation text,[102] in a mythological text[103] and a magical text; in the latter the prescribed inscription on papyrus is to be hung around its neck.[104] A spell for the enchantment of a cat is recorded in the Metternich Stela, though the lion determinative of the word may explain it as an error for m3î.[105] The wailing (rmw) of a cat is mentioned in a further text.[106]

Although no representations of cats are known from the Old Kingdom[107] the personal names p3 my and myt are attested at that date and continued to appear into the Late Period.[108]

Despite the frequent appearance of the parts of the cat (both male and female) in the medical texts,[109] their possible use as a hunting animal or as a retriever during fowling expeditions[110] and their occurrence as pets[111] they do not seem to have been greatly prized. They are only once mentioned in tribute lists,[112] less frequently than are dogs, and even guenons, which seem to have had merely decorative appeal.

Chapter 10 : Monkeys

The monkeys which today inhabit African regions closest to Egypt[1] are the vervet monkey[2] (Cercopithecus aethiops L), the patas monkey (Erythrocebus patas (Schreber)), the olive or anubis baboon (Papio cynocephalus anubis L , sometimes regarded as a distinct species P. anubis Cuvier),[3] the hamadryas, desert, or sacred baboon (P. hamadryas L)[4] and the gelada baboon (Theropithecus gelada (Rüppell)).

It is abundantly clear that the ancient Egyptians were well acquainted with the hamadryas baboon.[5] It was accurately and frequently represented and was prominent in religious and mythological thought. It generally bore the name ỉʿn (see further below).

Two other monkeys represented by the Egyptians were named gf and kyky. From the general shape and bearing of the animals it is clear that the first was a guenon (the vernacular name of the genus Cercopithecus) and the second a baboon (Papio).[6] In neither case, however, is the colouring depicted in the ancient sources entirely consistent with the monkey species which, on zoological grounds (see above), are the most likely to have occurred in ancient Egypt. The Egyptians' guenon is shown in coloured representations with red hands, feet, face and rump[7] whereas C.aethiops has a sooty black skin and very noticeable bright blue scrotum.[8] The colouring of the fur, a greyish green, is, however, consistent with C.aethiops.[9] The animal with the name kyky is depicted with a dark green coat like that of P.c.anubis, but again has red extremities,[10] although the only baboon with pink skin is the hamadryas.[11] It is shown without pale fur on its underside, however, like P.c.anubis and unlike P.hamadryas.[12] The conclusion that kyky named a sub-group of P.hamadryas is, perhaps, attractive.[13] Nevertheless, such an identification cannot be accepted without reserve. The bones of anubis baboons have been identified from Egyptian mummies;[14] the general coat colour of the kyky accords with that of the anubis baboon and it is evident from representations of the vervet monkey (which was kept as a pet and must, therefore, have been well known) that inaccuracies in pictures did occur.

Given the very similar distribution of C.aethiops and E.patas over the northern savannah belt in Africa[15] it is surprising that E.patas was not equally commonly depicted by the ancient Egyptians.[16] Vandier d'Abbadie[17] noted two species of cercopithecine monkeys, though with

somewhat garbled names. Her 'cercopithèque griseo-viridis Aethiops' is presumably C.aethiops;[18] her 'cercopithèque Ruber'[19] is unidentifiable and in any case (from the description) probably not E.patas.[20] It may be that the otherwise unidentified kꜣry (see Ch.14) designates this monkey. The kꜣry was imported from Kush and could dance and be taught to recognise speech, all of which call to mind the patas, which Hill referred to as the 'dancing red monkey'.[21]

Störk recently put forward the proposition that the gelada baboon (given the vernacular name 'baboon' because of its long face rather than any close relationship to the genus Papio) may have been known to the Egyptians, or at least to the inhabitants of Meroe in the Greco-Roman period.[22] The suggestion rests on the identification of the 'Sphinx' monkey mentioned by Agatharchides[23] and Pliny,[24] and stated to come from 'Ethiopia' (ie from near Meroe where the Ptolemies captured elephants) and near the island of Artigula, somewhat north of Napata, as the gelada. Assuming that this identification and the reports of locality are correct[25] this would indicate a more northerly distribution of T.gelada than at present.[26] Störk does not give any references to earlier Egyptian descriptions or representations of this animal though an ostracon from Amarna may show this monkey[27] and it is possible that one of the very rare terms which appear to designate monkeys may refer to this species (see below).

As indicated above no monkeys are present in modern Egypt and it is difficult to establish from the ancient records when they disappeared from that country.[28] Baboons appear in rock drawings from upper Egypt/lower Nubia,[29] and the mountainous terrain of upper Egypt would seem an ideal habitat for the cliff-roosting hamadryas.[30] Baboons and guenons were depicted in the Old Kingdom as domesticated animals[31] and in the Middle Kingdom apparently in the wild also.[32] By the New Kingdom, records indicate that they were imported[33] though naturally this does not of itself mean that they had ceased to exist in Egypt (cf the import of ṯsm, ꜣwꜣ, ꜣby etc.); the sharp decrease in the number of representations of monkeys after this period, as noted by Vandier d'Abbadie,[34] may indicate that they then became less common.

As mentioned already the most common appellation of the hamadryas baboon was ꜣꜥn (Wb I, 41, 5-8: Pavian), feminine ꜣꜥnt (Wb I, 41, 9: der weibliche Pavian).[35] A number of variant forms are known : ꜥnr (Wb I, 192, 15: Pavian), ꜥnw, ꜥꜥny, ꜥnꜥ, ꜥnꜥn, ꜥꜥnꜥ, ꜥꜥn (Wb I, 170: Pavian), ꜥny, ꜣꜥnꜥ, ꜣꜥnꜥw, ꜣꜥꜥn, ꜣꜥn, ꜣꜥꜥnw, ꜣꜥꜥny, plural ꜣꜥnw, ꜣꜥnꜥꜣw, ꜥnyw.[36]

This variety of forms seems intended to convey a sound, perhaps the animal's cry, and indeed ỉꜥnw is attested with the meaning 'a cry' or 'wail'.[37]

The term for this baboon survived into Coptic as ⲏⲛ(S), ⲉⲛ(B), ⲁⲛⲁ(O) (CD 66b: 'ape')[38] where it is recorded as the form taken by Thoth.[39] This echoes ancient descriptions and representations of Thoth, the patron of scribes and recorder in the scenes of the judgement of the dead, as a baboon.[40] The deities Hedjwer,[41] Baba ,[42] Isden or Isdes[43] and certain forms of Khons[44] were also portrayed as baboons.

The hamadryas was associated in particular with the sun-god.[45] Its habitual morning and evening journeys between sleeping places and feeding grounds with the accompanying noisy activity[46] were interpreted as, or came to represent, a welcoming of or valediction to the rising and setting sun. Baboons are often depicted with their arms raised in a gesture of adoration towards the sun's disc[47] and in the texts are said to foretell (anticipate?), praise, sing to and dance for the god.[48] In this context they may be termed ḫtt[49] (Wb II, 504, 4: Art Pavian) or ỉmy-ḫtt[50] (Wb I, 74, 18: Bez. der Affen, die zur Sonne beten) as well as ỉꜥn. Ḫtt too seems to be an onomatopoeic term describing their cries.[51]

A number of other terms applied to baboons are known largely, if not solely, from religious texts, though some (eg bnty) are quite common in other contexts. A group of eighteen are known from certain tomb scenes[52] in which the baboons depicted are described as 'the gods who open for the great soul' and 'the gods who praise Re when he enters the underworld'.[53] The names seem to have been considered in sets of three :

ỉb-tꜣ[54], ỉb-ỉb-tꜣ[55], ỉknw[56] (once ḥknw);
bnty[57] (Wb I, 464, 9-12: Art Pavian; var. bnw, Wb I, 458, 6: Pavian),
ỉfỉ[58], ḏḥḏḥ[59] (Wb V, 607, 2: Art Affe);
ḥkn-m-bs.f[60], ỉbꜣw[61], and an unnamed baboon;[62]
wn-tꜣ[63], bꜣ-tꜣ[64], mꜣn-rꜥ[65];
ỉmy-kꜣ(r)[66]; ḫnty-tꜣ.f[67], ḥnn[68];
ḫtt (Wb ref above), pꜣtt[69] (Wb I, 500, 6: Bez fur Pavian) and bsy.[70]

The significance of some of these names is obvious (see relevant footnotes). The absence of ỉꜥn itself from this group of words is noteworthy. This term seems, at least prior to Ptolemaic

inscriptions,[71] to be restricted to the actual animal, thus corresponding to the binomen P.hamadryas, whereas the other names appear to be epithets, derived from the animal's appearance and behaviour.[72]

Baboon and sun god are mentioned in even closer association in some texts. The 'baboon with the strong name' is recorded in parallel with the ḥwnt which defeats Seth and his companions, the enemies of Rēʿ.[73] Baboons accompanied the solar bark[74] - cf their adoration of the sun, mentioned above - and Rēʿ himself was called 'baboon of the underworld'.[75]

A baboon seven cubits high is mentioned in the Harris magical Papyrus[76] and eight baboons 'in the open court' (Theban deities) in P. Bologna 1094.[77] A 'great baboon who eats the gods' appears in the Coffin Texts,[78] but deities are also said to live off baboons' entrails.[79] The deceased pharaoh's clothing included items of baboon hide.[80] In the Pyramid Texts baboons are recorded as being killed by, and themselves killing, a knmt animal,[81] and ỉʿn (like knmt) is attested as the name of a constellation.[82]

The vervet monkey was known by the name gỉf (Wb V, 158, 12-16: Art kleiner Affe, Meerkatze), fem. gỉft (Wb V, 158, 17-20: Äffin, weibliche Meerkatze) with variants gwf (Wb V, 160, 9: Nebenform zu gỉf 'Meerkatze'), gf (Wb V, 166), gfwt and gɜfy.[83] Many representations of this monkey are named.[84] The term has been compared with various similar Semitic words: Wb offered Hebrew gōp;[85] Klein[86] compared in addition Syriac gwpʾ, Mandaic gupa, Sanskrit kapi, Middle Persian kapiγ, Armenian kapik, Greek κῆπος/κῆβος and Neo-Babylonian paqû, glossed ú-qu-pi.[87] Since the latter is recorded in various texts as the name of an animal from Egypt[88] Klein suggested that the Semitic words were loaned from the Egyptian.[89] He also compared the Akkadian paqû with Berber abaġus/ᵃbugə noting that 'these in turn may go back to an ancient African term for "monkey"'.[90]

The vervet monkey, too, had a role in religion and mythology though much more restricted than that of the hamadryas. It also was associated with Rēʿ who is described as 'he who is over his gỉft'[91] and with the dwarf of heaven (the aged Rēʿ) who is described as 'having the face of a gỉf with the hairs of a ỉʿn', whose 'appearance is that of a gỉf after reaching old age'.[92] In certain instances there seems to have been some confusion between the two types of monkey.[93] The gỉf also appears

independently;[94] the female is mentioned in the Pyramid Texts[95] and the Coffin Texts.[96]

Being such a popular domestic animal (in one text it appears in parallel with a cat)[97] it is not surprising that gîf appeared frequently as a personal name;[98] ỉʿn, however, does not occur used in this way.[99]

The word kyky (see above; note too Wb V, 116, 2, for the spelling of k3yk3y[100]) is one of a number of terms for monkeys built around the consonant k recorded by Wb. The simple form kyw (Wb V, 110, 4: Art Affen) appears only in the list of produce given by the snake in the story of the Shipwrecked Sailor to the unfortunate traveller,[101] and may therefore, be presumed to be an animal of Punt,[102] like the gwf with which it is mentioned. The feminine form k3yt (Wb V, 110, 5-6: die Äffin) occurs in the Book of the Dead and also as an epithet of Hathor at Dendera .[103] The reduplicated form occurs in the 'Decree' of Ḥaremḥab[104] and the Chester Beatty dream papyrus[105] (k3yk3y and k3ywk3yw respectively) and on two ostraca[106] (kyky, k3k3). Two other words should also be taken into consideration here: k3wty[107] and krỉw,[108] though they may well designate entirely different species. Once again the spelling seems to suggest an attempt to render a noise.

Šsr (not in Wb) is found in the Coffin Texts[109] and in the Chester Beatty dream papyrus.[110] Gardiner[111] noted of the latter: 'The determinative suggests a quadruped, perhaps a monkey'. Brunner[112] compared the term with the srw of P.Ebers[113] which was read by Wb. Drog., however, as 'Widder' (ie sr).[114]

A further term with monkey determinative occurs in the Ramesseum Onomasticon published by Gardiner. The word is imperfectly preserved; the b at the beginning is clear but is followed only by a tick, possibly for -f. Gardiner suggested the translation 'cynocephalus ape' (ie baboon).[115]

It is noteworthy that the only occurrence of a monkey name in the medical texts is recorded in an invocation,[116] unlike many other animals whose parts were often cited for use in prescriptions.

Monkey determinatives are also uncommon, occurring in the word ḳnd (Wb V, 56, 16-57, 12: wütend werden, in Zorn geraten, zürnen) which has been compared with Arabic kird 'monkey',[117] and once in ḫʿr (Wb III,

244, 3-7: wütend werden,.... der Grimm). The determinative is of a baboon, whose outbursts of rage have been noted by zoologists.[118]

Chapter 11 : Pigs

Greco-Roman sources relate that the ancient Egyptians avoided eating the flesh of pigs and even touching the animals themselves[1] and that swineherds were accorded only low social status,[2] views adopted by Hopfner[3] and other scholars.[4] Pigs (Sus scrofa L)[5] are, however, mentioned in ancient Egyptian livestock lists[6] and in the ostraca[7] and are represented in various tomb scenes,[8] so they were clearly considered on a par with other domesticates such as the goat. The use of the parts of the pig in the medical texts[9] would likewise indicate that they were not generally taboo, although it is clear that their mud-grubbing habits were not highly regarded,[10] and to dream of a pig was a bad omen.[11] Some later evidence of a pig taboo may be deduced from P.Jumilhac.[12] An incantation against pig bites[13] shows a more pragmatic fear of pigs.

In all these contexts the word for pig is šꜣỉ (Wb IV, 405, 7-10: das Schwein), which survived into Coptic as ϵϣω (CD 63a: 'sow').[14] The more common Coptic term was ⲣⲓⲣ (CD 299a: 'swine, pig')[15] of which the Egyptian antecedent was rrỉ[16] (Wb II, 438, 7: das Schwein). Both terms appear in one passage from the Book of the Dead[17] where the sight of Seth, in the form of a black pig (rrỉ km), blinded Horus; to cure him the Ennead pronounced pigs (šꜣỉ) an abomination (bwt) to him. Rrỉ is not a purely mythological term (cf db and ḫꜣb for the hippo in different contexts) as it occurs in the medical P.Ebers[18] where the part used (ꜣs) is the same as that from a šꜣỉ in another medical text. The feminine form rrt (Wb II, 438, 8-11: die Sau) also occurs in a non-mythological context,[19] and is attested as a personal name.[20] Elsewhere the term recorded for the female pig is simply (šꜣỉ) ḥmt.[21] (For ḥmt see especially Ch.4 : Cattle). Rrt otherwise designated the part-hippopotamus deity Tuēris ,[22] and may in a late text designate the hippopotamus itself.[23] The word is also used of a constellation, thought of as having the form of the Tuēris animal.[24] Tꜣ šꜣỉ was used to designate another 'Mischwesen', the monster, part-crocodile-part-hippo-part-lion, believed to devour the hearts of the unjust in the afterlife.[25] Piglets were called smsw 'young'[26] though rrỉ appears in this context also.[27]

Pigs were associated with Isis (Min-Horus is called 'son of the white sow (šꜣỉt)')[28], Nut[29] and Rē',[30] but most commonly with Seth.[31] The Seth animal appears at Beni Ḥasan with the name šꜣ[32] (Wb IV, 401,

6-7: Name für das Tier des Seth), and is later called ỉš (Wb I, 134, 20: Art Hund). The identification of the Seth animal has generated a vast literature[33] and its likeness to the pig has been both asserted[34] and denied.[35] Šꜣ with pig determinative is recorded as an animal of the desert,[36] as was obviously the case with the šꜣ animal at Beni Hasan, but this is not proof that the šꜣ animal was, or had been, derived from the pig. Though classical sources indicate that the pig was considered 'typhonian'[37] it has been argued that the association of Seth and the pig was late in date[38] and it should also be noted that Seth could assume various animal forms. The Seth animal was often drawn (misinterpreted) as a donkey so the pig connection cannot have been particularly strong. There is, indeed, some evidence from ancient Egyptian sources that the šꜣ/ỉš was considered as - or closely related to - some type of dog or jackal. (See Ch.5 : Dogs and Similar Animals).

In addition to šꜣỉ and rrỉ a number of rare words with pig determinative are attested. ʾIpḥ (Wb I, 69, 14: Schwein), of which ꜣpḥ (Wb I, 9, 4: etwas geopfertes) may be a variant writing, occurs only twice[39] prior to the Ptolemaic period; one of these attestations provides the only example of a pig in an offering list.[40] ʾIbkꜣ, perhaps from bkꜣ 'be(come) pregnant' (Wb I, 481, 1-11: schwanger werden, schwanger sein... schwängern) occurs in the Book of the Dead[41] and in the Coffin Texts.[42] Ḥwt and ḥdr (neither in Wb), both occur in toponyms[43]. Dawson [44] seemed to see these words as separate from the pig determinative, and understood 'pig-striking'. Ḥdr, however, is not attested, at least in Wb, as a verb, and the determinative, in any case, generally shows an animal other than a pig. (See Ch.14 : Miscellaneous Mammals.)

Chapter 12 : Sheep

Two types of sheep can be identified from Egyptian reliefs, one with horizontal spiral horns, the other with horns curling down at the side of the head.[1] The first type appears in the Middle Kingdom and earlier;[2] the second in the Middle Kingdom and later.[3] Hieroglyphs tend to show the former sheep (Sign List G10 and G11) though late examples may show the second.[4] Khnum represented as a ram took the form of the first type[5] while the ram of Amun-Rēʿ was depicted with side-curled horns.[6] In mythological texts these types were referred to as bȝ (Wb I, 414, 9-14: heiliger Bock) and rhn (Wb II, 441, 1-3: der heilige Widder des Amon) respectively. Though rhn had a very restricted usage, applying only to the ram of Amun-Rēʿ[7] and to Seth,[8] it was also popular as a personal name.[9] Bȝ was applied to many deities,[10] especially the god of Mendes whose name comprised the element bȝ (Banebded: Wb I, 414, 9),[11] and Amun and Rēʿ could also be addressed as bȝ[12] or bȝ bȝw.[13]

Wb recorded another term for sheep, šft (Wb IV, 456, 4-8: anscheinend Name der älteren ägyptischen Widderart). This term is determined by a ram's head with horizontal horns (Sign List F7). It does not appear in contexts which would mark it as a simple species designation - in livestock lists for example - nor was it associated with particular deities, like bȝ and rhn. It occurs rather as,[14] or in comparisons involving,[15] some kind of ornament: ḥr šfyt appears to be the name given to the ram's head which could decorate the prow and stern of ceremonial boats.[16] (For other animals in similar settings see smȝ and twt-mrwy).

A fourth term with ram determinative, ʿpwy, noted by Wb (I, 180, 3: Name eines heiligen Widders) occurs only once, in parallel with bȝ, as an epithet of Osiris.[17]

Despite the distinctions made in mythological contexts, the Egyptians do not appear to have given separate names to sheep with horizontal or side-curled horns as livestock.[18] In lists of domesticated animals, only sr[19] (Wb III, 462, 7-13: Schafbock, Widder) appears as a term for sheep.[20] Although early representations of both sheep and goats exist the term sr is much less common than ʿnḫ 'goat' in the livestock lists,[21] and Janssen[22] wondered, owing to the paucity of references to sr in the Ramesside ostraca, whether ʿnḫ might cover both sheep and goats. However, although some reliefs seem to indicate that they were considered to be closely associated[23] (cf also sheep and

goats as determinatives of ʿwt, and distinguished as ʿwt ḥdt and ʿwt ndst respectively[24]), there are sufficient instances of sr and ʿnḫ in parallel to establish that they designated separate groups of animals.[25] One such instance was indeed known to Janssen from the ostraca.[26] In view of the almost complete absence of sr from the Deir el-Medîna texts it is interesting to note that sheep are not depicted on ostraca;[27] the animal resembling a sheep on one is labelled bꜣ ʿnḫ and shows the hybrid sheep-goat of the god of Mendes[28] which should not be regarded as a zoological species. The evidence of these ostracon sketches should not be used to prove that sheep were absent from Deir el-Medîna ; a donkey is drawn only once on an ostracon though over 100 references to ʿꜣ(t) 'donkey' are recorded on the ostracon texts (see Ch.8: Horse and Donkey).

Sr is also the only term for sheep to occur in the medical texts.[29] The absence of bꜣ and rhn from this corpus would indicate that they were not true (zoological) names, terms for species or types, but very restricted sub-sets of sr applicable only to gods or to sacred animals [30] (note that the rhn is called 'son of the sr'[31] and that bꜣ and sr may appear in parallel[32] so connections between the groups were evidently recognised).

Sr survived into Coptic as ϵϣⲟⲟⲩ (CD 61a: 'sheep'),[33] though rhn did not, and bꜣ only in ϐⲁⲗⲙⲡϵ (CD 39a: 'goat'),[34] presumably derived from the phrase bꜣ-n-pt[35] (cf too ϐⲁⲣⲏⲓⲧ CD 43b: 'he goat' also connected with bꜣ).[36] ⲥⲣⲟ (CD 354a: 'ram') is also derived from this word.[37]

Ewes appear as srt (Wb III, 462, 14: das Schaf)[38] and wꜣpt (Wb I, 251: das Schaf),[39] the latter, from the context, apparently designating a sheep suckling young.

Coptic also preserved an earlier term in ⲟⲗϵⲓϵ (CD 254b: 'ram').[40] The word, probably of semitic origin, appears possibly three times in Egyptian texts, twice in records of provisions (Wb I, 106, 5: Widder?; Wb I, 38, 16: Hirsch(?), Widder(?))[41] and once in a list of animals as offerings.[42] It is, however, also possible that these writings (or some of them) represent Coptic ϵⲓⲟⲩⲗ (CD 77a: 'hart, hind') which replaced the earlier Egyptian term for 'deer' (hnn - see Ch.2 : Antelopes and Similar Animals).

A group of sheep (as seen in certain agricultural scenes) could be designated ḥst (Wb III, 154: die Schafherde (welche die Saat eintritt)) or sḥt (Wb III, 464, 2: die Schafherde, welche die Saat eintritt; cf sḥ3t: Wb IV, 209, 9: Herde von Eseln),[43] both, presumably, writings of the same word. In one instance [sḥt] is replaced by an ideogram of three sheep.[44]

For the Wild or Barbary Sheep (Ammotragus lervia Pallas) see Ch.2: Antelopes and Similar Animals; when this animal appears in tomb scenes it is depicted with other members of the ʿwt ḫ3st and there is no evidence to suggest that the Egyptians regarded it as substantially different from gazelles, oryxes etc.

The words s3bt and gnw, both from the Book of the Dead,[45] which in the version published by Naville have sheep determinatives, are probably miswritings of the similar cattle terms (see Ch.4: Cattle); Allen[46] translated 'my spotted cows and longhorns' and Barguet [47] 'mes vaches bigarrées, et mes boeufs negaou'.

Chapter 13 : Miscellaneous Mammals (A)

A number of terms can be identified with varying certainty as the names of animals; these are discussed in alphabetical order over the next two chapters.[1]

ỉbṯrsw (Wb I, 65, 4: Name eines Tieres). The word occurs only once (in a prescription in P.Ebers) and may be a miswriting of (or the correct spelling of) prṯrsw (not in Wb) in another medical text, in a prescription which contains many of the same ingredients.[2] In the latter text mrḥt prṯrsw appears between the fat (also mrḥt) of a lizard (ꜥšꜣ) and the fat of a snake (ḥfꜣw) which might indicate that it was a similar type of creature; in P.Ebers ỉbṯrsw follows ḥfꜣw but itself is followed by 'mouse' (pnw) and 'cat' (mỉw), so the identification of ỉbṯrsw/prṯrsw as a reptile must remain a tentative suggestion.

ỉnḥ (Not in Wb). The term is a hapax. The animal is mentioned in the Kamose Stela where women peering from windows are compared to 'the young of the ỉnḥ within their holes.'[3] Such holes (bꜣbꜣw)[4] are mentioned as the dwelling places of snakes (ḥfꜣw)[5] and mice (pnw)[6] as well as being used of bodily orifices and parts of the river (perhaps deep depressions in the river-bed). If the fort walls mentioned in the text were indeed as reconstructed in the drawing of Smith and Smith[7] the ỉnḥ would seem to be an animal inhabiting deep burrows in, for example, the high banks of canals. Translations have included 'mice(?)' (Habachi)[8] ;'snake', 'worm' or 'lizard' (Smith & Smith: 'We rather prefer the gekko lizard');[9] and 'weasel' (Harris,[10] preferring a sinuous creature as suggested by the homonym ỉnḥ 'eyebrow' (Wb I, 99, 1-2: Augenbraue)).

ꜥmꜥmw (Wb I, 186, 10-11 : ein vierfüßiges Tier... Name eines Torwachters im Jenseits). As the name of an animal, ꜥmꜥmw appears in a medical text in a prescription for an ear complaint[11] and in a veterinary text where its smell is referred to.[12] In the latter the word has a specific determinative, unfortunately partly missing where the papyrus is damaged; Griffith described it thus: 'The determinative is an animal with short legs, tail slanting outwards and downwards, the head unfortunately lost. It may be the ichneumon, or a rat'. The same identification was proposed by de Wit[13] who compared ꜥm 'swallow' with the mongoose's swallowing of its prey, snakes. The word has also been compared with Coptic (Oxyrhynchitic) ⲉⲙⲓⲙ[14] translated 'shrew mouse'

by Crum[15] and thus taken to be not the mongoose but the shrew, a voracious eater capable of consuming two and a half times its own body weight daily.[16] This was also the view of Vycichl[17] following Brunner-Traut's study of both the shrew and the mongoose and the words ꜥmꜥmw and ḫꜣtrw.[18] Both these designations appear as the names of deities on the base of a statue in Berlin[19] and Brunner-Traut believed that both were associated with M(ḫ)nty-(n)-ỉrty[20], originally a falcon-god at Letopolis, but as early as the Pyramid texts[21] associated with Horus of Letopolis, whose eyes, one sighted and one blind, symbolised sun and moon, day and night.[22] The ꜥmꜥmw is represented in the Underworld as a deity with the head of an animal with a long pointed muzzle and prominent whiskers.[23] In demotic the ꜥmꜥmw is described as telling the future and being hot tempered;[24] in another demotic text it is said to cause blindness in a man and erotic feelings in a woman. The latter text also provides the only explicit association of the ꜥmꜥmw and Letopolis[25] though in a Ptolemaic text Osiris, Lord of Abydos, is addressed as ꜥmꜥmw by the goddess of the Letopolite nome.[26] These texts were taken by Brunner-Traut to indicate that the ꜥmꜥmw was a shrew, though the evidence suggests that ḫꜣtrw should be translated in this way. The close association of the ꜥmꜥmw with the ḫꜣtrw (see Ch.14) may indicate that it was a similar animal. (See also ꜥrꜥr, immediately below).

ꜥrꜥr (Wb I, 210, 7 : ein essbares Tier). The term was recorded from only one Ptolemaic text by Wb[27] though it may also have occurred in Demotic.[28] A further attestation is found in a magical papyrus,[29] though in an obscure context. The word is included here because of comparisons with ꜥr (see Ch.7 : Goats)[30] and ꜥmꜥm (see immediately above).[31] Meeks'[32] reading of ꜥr from the Ptolemaic text (which refers to Mendes) is possible, but the magical papyrus reference seems to confirm the existence of a discrete animal ꜥrꜥr. That it is described in the latter as emerging from mud is reminiscent of the belief that mice were generated spontaneously from Nile alluvium[33] and it may, therefore, have been a mouse or similar small beast.

ꜥḏ (Not in Wb). This animal is identified with Re in the magical texts on the statue of Djed-Hor; when the god was battling with the serpent demon Apophis he did so in the form of an ꜥḏ of 46 cubits.[34] It is tempting to see in this snake-slaying animal the mongoose (Egyptian mongoose, Herpestes ichneumon (L), often known simply as 'ichneumon') though other animals will kill snakes.[35] A figure called ꜥḏy is shown similarly vanquishing a snake in the Book of Caves.[36] The mongoose(?)

appears to determine the phrase ꜥḫm n rꜥ 'representation of Rēꜥ' elsewhere in the Djed-Hor text.[37] The ꜥḏ also occurs in association with the sun-god in the Coffin Texts,[38] where it is described as 'who cannot see the brow of Rēꜥ-Atum'. Faulkner suspected that a noctural or semi-nocturnal animal which seldom saw the sun was meant and suggested 'jackal' as a translation. This is unlikely given that ꜥḏ, associated specifically with Atum, appears in the inscriptions over two mongooses on a naos from Cairo[39] - ꜥḏ (originally read šd[40]) is written over one, over the other ỉtm kꜣ ỉwnw tꜣ rwḏt kꜣ ḏbꜥ 10 - 'Atum, der Schutzgeist Heliopolis, fester Stein, hoch 10 Finger' (Sethe's translation).[41] Ỉtm kꜣ ỉwnw is also the name engraved on a Saite statue of a mongoose published by Sethe.[42] Sethe suggested that the name of the animal was originally ꜥnḏ. The name of the Heliopolitan nome 'Gau des ꜥnḏ-Herrschers' could thus be explained as the nome of Atum. The name has also been interpreted as 'the perceiver'.[43] (For ḥꜣtrw, often quoted as the name of the mongoose, see Ch.14).

wr (Not in Wb; noted by Meeks, AL 78.1029). From the Coffin Texts, in the phrase: 'look on the face of the Great One'. Wr is determined by an animal sign (var. BIBO) of which de Buck noted: 'the tail differs from that of sr' ('sheep', 'ram').[44]

wḥswt (Not in Wb; noted by Meeks, AL 78.1066). Meeks gave only one instance of the word from the Coffin Texts and translated: 'un animal; les prédateurs(?)'.[45] The word is replaced in the Book of the Dead variant with bḥwy (recorded by Wb under bḥn 'dog'); see Ch.5 : Dogs and Similar Animals.

bq (Wb I, 482, 9: Name eines beissenden Tieres). The word appears in the Harris magical papyrus together with the animals ḏprm (see below) and ḥwy (see Ch.8 : Horse and Donkey).[46] It is tempting to compare a very similar phrase in the same papyrus referring to three dangerous animals, a lion (mꜣỉ), an unknown creature which has been identified as a bear (ḥtmt - see below) and a jackal (wnš).[47] It was perhaps this which caused Chabas,[48] who transcribed the word bqꜣsw (sic), to comment: 'ce doit être le léopard, nommé [illegible] [sic] dans un autre texte.'[49] Ḥwy has been considered to name Seth in the form of a donkey;[50] the danger from these three animals was, therefore, perhaps more mythological than real.

pnw (Wb I, 508, 6-10: die Maus). A considerable number of mice and mouselike species - spiny mice, gerbils, jirds, jerboas and sand-rats,

for example - are known to inhabit modern Egypt[51] but only one ancient Egyptian name may be said with certainty to apply to these creatures. This is pnw, sometimes translated 'mouse'[52], sometimes 'rat'[53] or even 'jerboa'.[54] The word survived into Coptic as ⲡⲓⲛ.[55]

Since named representations appear so seldom it is not easy to decide whether pnw applies to all mouselike rodents[56] or merely the most common type (ie house mouse,[57] Mus musculus L, as might be inferred from its depiction with a cat (mỉt)?).[58] Cat (mỉw) and mouse (pnw) also appear together in a mathematical text recording a multiplication by sevens (seven houses, 49 cats, 343 mice etc.),[59] in a medical text[60] and in a text from the Book of the Dead where the mouse is called 'the abomination of Rē'.[61]

Other texts mention pnw in burrows (bꜣbꜣwt)[62] which is of little help in establishing the precise identity of the animal as all the species mentioned above dig burrows. These burrows were vulnerable to the waters of the inundation; one text compared the soldier's hard life with that of the mouse during the flood season.[63] The pnw is also recorded as a bad omen[64] and in the fields as a pest.[65] This characteristic is fairly uncommon among Egyptian rodents but is displayed by the Nile Grass Rat and the Egyptian Bandicoot Rat; other species, such as the House Mouse and some types of Spiny Mice can also be found in cultivated land near buildings.[66] Another text mentions pnw in the desert.[67] Unfortunately the pnw depicted at the causeway to the pyramid of Unas are shown on bare registers without any indication of habitat.[68]

The pnw were ranked by the ancient Egyptians among the most insignificant[69] and the most helpless[70] of creatures and it may be that this insignificance led to small rodents' not being very clearly distinguished in the modern zoological sense - compare the relatively restricted number of terms surviving for insects from ancient Egypt (although insects are the most numerous animal type worldwide). It also appears, however, that the Egyptians distinguished between some species and even perhaps subspecies, and it may be that the texts which have survived give a distorted picture.

Despite their evidently lowly position in the animal kingdom, the pnw were important as materia medica and are recorded several times in the medical texts.[71] In one case the mouse is to be eaten[72]; references to the eating of mice are known from other contexts too.[73] They were,

in addition, popular subjects for sketches and satirical drawings.[74] Pnw is also recorded several times as a personal name[75] and in the names of plants.[76] .

prt (Not in Wb). The sole representation of this animal is preserved at the Unas causeway.[77] The figure of the animal itself is lost - all that remains is the curve of its head and back. It is shown in the scene next to another animal (ḥmt - see below) giving birth to young, and appears to have been a similar small creature.

prtrsw (Not in Wb). See the discussion of ỉbtrsw above.

pḳrḫ (Not in Wb). The term is recorded from the temple of Niuserrēʿ.[78] Only the back leg of the animal to which the name seems to apply remains (it cannot apply to the next animal on the register as this is named gsfnw). For further discussion see Ch.2: Antelopes.

m3s (Wb II, 33, 2: ein Tier von roter Farbe). Wb referred to a passage in the Book of the Dead which runs: 'I am that red m3s (animal) which is in the writings'.[79] Red m3sw also occur in the Coffin Texts.[80] M3sw 'in a team' (m ḥtrỉ) are mentioned in a fragment of text published by Caminos,[81] who further noted a title 'overseer of m3sw in the temple of Onuris'.[82]

The term may be compared with two very similar words, mỉst, var. mrst, from the Coffin Texts,[83] and m3st, which appears in Old Kingdom tombs as the name of a piece of clothing, specifically a type of ỉ3ʿ (Wb I, 27, 15: Allgemeine Bezeichnung für Schürze).[84] A plural writing of m3st also occurs in a New Kingdom text, among animals hunted by Pharaoh in Syria (at Rbỉw near Kadesh).[85]

In the latter text Badawi read m3st as an error for msyt, known from the phrase msyt nt ssmt, 'young of the horse', and translated the term 'Füllen'.[86] This was rejected by Vikentiev on the grounds that 'foals' would not be found alone and no other horses are mentioned in the text. Keimer also disagreed.[87] He asserted that msyt would never have been written 'd'une manière aussi bizarre' (without the ms sign) and that m3st 'est certainement le pluriel du nom d'un animal syrien sauvage'. Bearing in mind the tendency in Egyptian lists to run from largest (most important) to smallest (least significant),[88] Vikentiev assumed m3st to be larger than the hares (sḫʿt) but smaller than the gazelles (gḥs) mentioned in the same text. He noted the 'red m3s' of

the Book of the Dead and deduced of mꜣst : 'Ce sont des petits animaux au poil fauve. On se demande s'il ne serait pas du genre Vulpes, un renard ou quelque autre canidé'.[89] This suggestion certainly seems to be consistent with the other types of animals mentioned in the Old Kingdom clothing lists noted above.

A number of the terms occurring in the clothing lists are also attested as the names of animals. Bꜣ[90] and bꜣšmʿ[91] are given in Wb (Wb I, 415, 4-6) as 'Panther... Leopard, Gepard'.[92] Nṯrt as an animal name occurs only in the temple of Niuserrēʿ in a scene showing various animals giving birth to young,[93] and seems to name the cheetah. Ḫsdd as an animal, probably a member of the Canidae, is found in P.Jumilhac in connection with wnš (jackal) and ṯsm (dog) and elsewhere appears as the name of a dog-headed, falcon-bodied being together with other terms for jackals and dogs.[94] ʾIbt was compared by Edel[95] with ỉnbt, translated by Keimer as 'caracal'.[96] ʾIb with animal determinative was also noted as a personal name by Roquet.[97] Wnš is well attested as the name of a type of jackal. Tỉwḏ and ḫn occur only in these clothing lists. Since the other terms in these lists are also used of animals it is likely that tỉwḏ and ḫn are animal names also.[98] Furthermore, in view of the fact that five of these eight names are applied to members of the cat and dog families, it is also probable that the other terms, mꜣst, tỉwḏ and ḫn, also belong to these categories. (For further discussion of these lists see Ch.5: Dogs and Similar Animals and Ch.9: Lions and Other Cats).

Even if the translation mꜣst 'fox' (or similar) is accepted the mꜣs(w) and mỉst remain problems. Keimer noted the Book of the Dead reference to mꜣs but when attempting a translation took into consideration the Coffin Text determinatives of mỉst showing an animal with horns. He concluded: 'L'animal rouge du Livre des Morts pourrait désigner une espèce de Gazelle, mais aussi le Bubale ou le Daim et le Cerf, bovidés de couleur rougeâtre, tandis que les antilopes Oryx...sont plutot blanchâtres'.[99] Allen translated similarly: 'red deer'.[100] Caminos wondered whether the mꜣsw 'in a team' were mules, but this was rejected by Kitchen because of the writings of mỉst with horned animals as determinatives and because of the existence of a word ptr which may be convincingly translated 'mule'.[101] Nevertheless the only animals generally depicted 'in a team' are cattle, horses or donkeys, and horses are only shown thus in, or in close association with, battle scenes. The sꜣbw and ỉš (jackal and Seth-animal(?)) however are depicted in religious texts in pairs or groups of three

drawing the bark of Rē', which is of interest as Caminos' text appears to mention a 'divine boat'. The presence of an 'overseer of m3sw' in a temple would indicate that they were some sort of livestock, (see Ch.5 for dogs (ỉw) in a list of livestock), kept there for sacrifice or for the purpose of religious ceremonies.

Meeks took m3s in the Coffin Texts[102] to mean 'taureau (au poil roux)', comparing Caminos' text. He differentiated m3s(w) from the mỉst of the Coffin Texts noting that the latter term: 'paraît se rattacher à mj(3)zw "pointe, piquant" et ses dérivés'; he translated accordingly 'animaux à cornes(?)'. Another example from the Coffin Texts[103] he rendered: 'peau du taureau m3s(tj)'. This usage he compared with the Old Kingdom clothing lists. The example reads, however: 'I am the m3s of the Bull in Letopolis'; parallel phrases indicate that mỉst or m3st 'liver' (Wb II, 44, 11-14: ein inneres Organ... vermutlich die Leber), should be read.

mm (Wb II,58,15: ein Tier). The determinative of this toponym shows a canid-like animal with pointed, upright ears and a long tail. The word mmy 'giraffe' may be compared; mm may thus name a spotted member of the family. (For further discussion see Ch.5 : Dogs and Similar Animals and Ch.2: Antelopes and Similar Animals).

mḫ3w (Wb II, 131, 11: ein Tier). A msktỉw m msḳ n mḫ3w appears in the 'Annals' of Tuthmosis III, in a list of tribute from Retjenu.[104] As msḳ3 occurs elsewhere as a term for animal skins[105] (Wb II, 150, 3-5; Wb II, 149, 10-14) it seems reasonable to assume that mḫ3w was the name of an animal from Retjenu (Syria-Palestine). That the word occurs only here would indicate that the creature was not native to Egypt. The type of animal cannot, however, be deduced from the context, though since its skin was large enough to produce an arm-band (msktỉw - Wb II,150, 8-9: Armring) it was presumably not very small.

rḥty (Not in Wb). The word appears only in the Coffin Texts.[106] De Buck noted of its determinative: 'Transcription doubtful; some insect (cf. eg. 281c)? [=ktt - see Ch.20: Insects] or a pig (cf.293a)?'[107] (the next spell begins r n ḫsf rrỉ). Faulkner[108] translated: 'Spell for driving off the fearsome companions', with 'monster det.'.

htw (Wb II, 503, 11 : ein Tier (im Zauber)). This word, together with its feminine equivalent htt, occurs only once in one of a series of prescriptions in P.Ebers under the title 'remedies for stopping

secretions.'[109] A list of ingredients is given and then an invocation to the htw and htt (determinative) and the ʿḏn and ʿḏnt (determinatives and respectively) to be spoken while the ingredients are made up (sꜣp) with water prior to being exposed to the dew at night. Presumably, from the determinative, both are animals (or perhaps spirits in animal form) as supposed by Wb. Drog. which translated '[Tier]'.[110] The passage was also discussed by Schäfer,[111] who saw in htw/htt variant writings of the ḫtt, a term applied to sun-worshipping baboons. (For further discussion of this term, see Ch.10: Monkeys). He was not able to identify the ʿḏn(t) and indeed Wb knew it only from this one text. Though Wb recorded the words ʿḏnt 'Art Armband', ʿḏn.t 'Art Beschaffenheit des Kupfers' and ʿḏn.t 'Name eines Öls' they throw no light on the medics' terms.

ḥwnt (Not in Wb). Apparently only in the Coffin Texts, in parallel with iʿn, baboon (see Ch.10: Monkeys) and with the 'fiery serpent' (nsrt).[112]

ḥmt (Wb III, 80, 14 : ein Tier). The word occurs as a personal name[113] and in a toponym.[114] The determinative shown by Ranke is of a mouse-like creature; in Junker's publication the animal resembles Ranke's determinative for the word ḥdrt[115] showing a longer-legged creature with extended tail and hairy back. The ḥmt is shown in a desert scene giving birth to young. It has long, prominently depicted whiskers and a long slender, rather weasel-like, body. (Contrast the shape of the pnw in the nearby scenes). This, unfortunately, is not enough to identify it with certainty. Ḥmt may not necessarily be a species name, as Ranke implied by his translation 'das (weibliche) ḥmt-Tier', but simply the 'female' of the animal shown. (For ḥmt as the designation of the females of various animals see Ch.4: Cattle, and elsewhere).

ḥnty (Wb III, 121, 15: ein Tier mit Stacheln). The srt of this animal are used in a medical text, burnt and soaked in fat, to be applied to the head as a remedy for a disease causing baldness (nsḳ).[116] Ebbell took ḥnty to be a name for the hedgehog and he translated the very similar ḥntꜣ, also of P.Ebers, in the same way (see below). Zu Hülshoff did not translate any more precisely than 'Stacheltier.'[117] Given the primary meaning of srt (Wb IV, 190, 24-191, 2: Dorn, Stachel) it seems difficult not to equate the ḥnty with the porcupine[118] (Hystrix christata L) or one of the seven types of hedgehog[119] found in Egypt and represented by the ancient Egyptians.[120]

Keimer[121] believed that ḥnty may have designated both hedgehogs and porcupines, citing the frequent confusion of the two in modern Egypt.

ḥnt3 (Wb III, 122, 7: ein Tier). In P.Ebers the 'hairs' of this animal, burnt in fat, are applied to the head for four days to restore the hair during the illness nsṣḳ.[122] The similarity of this prescription to that referring to ḥnty is such that ḥnt3 must be understood as a variant writing of this word. Ebbell seems justified in his translation: 'quills of hedgehog'. The ḥnt3 occurs in another medical text[123] in a gloss accompanying the description of a procedure for treating a chest wound. The ḥnt3 (determinative ⌒) of the patient's chest (ḳ3bt - Wb V, 11, 2-8 die Brust ...das Knie der Scheitel) is explained as the 'upper head' (tp ḥry) of his chest, 'it being like the form of a ḥnt3'. Whether this is a genuine comparison (Breasted compared the man's ribs with the quills of a porcupine)[124] or influenced by word-play is difficult to deduce.

ḥty (Not in Wb). The word occurs only in the phrase rnpt n ḥty[125] and was taken by Vandier[126] as rnpt n ḥtt 'l'année des hyènes'. Spiegelberg supposed that the phrase referred to some local event[127] - in a year when food was scarce hyaenas may have scavenged closer than was usual to human settlements and thus been more than usually in evidence.[128] Vandier also wondered whether the phrase might not be a metaphor referring to a plague of foreign invaders. The use of wnš 'jackal' in 'jackal-Nile' (ḥʿpy-wnš) in reference to a low inundation may be compared. (For ḥtt, hyaena, see Ch.5: Dogs and Similar Animals).

ḥtb (Recorded in Wb III, 203, 16-17: die Hyäne). Where hyaenas are depicted and named in ancient Egypt the name is written ḥtt, though an Old Kingdom toponym shows a (variant) writing ḥtw with hyaena determinative. (See Ch.5 : Dogs and Similar Animals). The two writings in the Harris magical papyrus quoted by Wb under ḥtt are quite distinct from these forms without the additional problem of the appearance of a fairly clear final -b in one of the passages.[129] In both cases the word accompanies other animal names. In the second it is preceded by m3ỉw 'lion' and followed by wnš 'jackal' (for these terms see Ch.9: Lions and other cats and Ch.5: Dogs etc). In the first case (presumably the same word though the writing differs slightly)[130] it is preceded by m3ỉw 'lion'. In both passages these animals are mentioned together with 'all long-tailed animals which eat flesh and drink blood'. All are, therefore, presumably carnivorous, which would accord with the interpretation 'hyaena'. Lange[131] supported this translation, but

preferred to read the word as a corruption of a separate word ḥtmt, recorded by Wb. De Wit[132] also read ḥtm, but translated 'des hyènes'.

ḥtmt (Wb III, 198, 14: ein wildes Tier in Syrien). This term is recorded by Wb from two places in P.Anastasi I. In the first instance it occurs with two other animal names, mꜣỉ 'lion' and ꜣby 'leopard' (possibly for rby 'lioness'), in the tree-filled land of Magar.[133] The second refers to an apparently historical incident, in which the chief of Isar, Kadjardy, was seized by a ḥtmt in a tree.[134] This would rule out the translation 'hyaena'[135] as hyaenas do not climb trees, though big cats and bears do.[136]

The latter reference recalls vividly the scene on the second pylon in Luxor temple depicting Ramesses II's battle at Satuna which shows an Asiatic in a tree caught at the ankle by a bear,[137] and it was with this scene that Posener[138] began his proposition that ḥtmt meant 'bear'. Although the place name Isar has not been identified with certainty[139] (though it has been compared with biblical Asher[140]) most authors place it with Magar and Satuna in Syria-Palestine.[141] Leopards and cheetahs are still present in the Arabian peninsula and cheetahs at least used to be found in Palestine.[142] In the Bible lions and bears are mentioned together several times[143] and lions and ḥtmt are mentioned in P.Sallier I as a danger to soldiers in Palestine and Syria.[144] (This does not altogether preclude the translation of ḥtmt as 'hyaena' as striped hyaenas are also found in this area.)[145]

Bears are depicted several times in Egyptian reliefs and tomb paintings (almost exclusively as imports) but, unusually, are not named there.[146] The animal in question is likely to have been Ursus arctos syriacus, a sub-species of the European brown bear, sometimes known as the 'Syrian Bear' and described as a 'small, ashy-brown mountain race'.[147]

The name ḥtmt itself Posener supposed to be derived from ḥtm 'détruire', meaning therefore 'la déstructrice'[148] (rather than ḥtmt 'la détruite' used of the hippo in its rôle as incarnation of Seth[149]) and commented: 'Il est assez naturel que les Egyptiens n'aient pas eu un nom spécial pour désigner un fauve qui ne vivait pas sur les bords du Nil'.[150]

Other writings of ḥtmt show various determinatives - [151], lion, or leopard[152] and dog[153] - which may be explained (according to

Posener) by the scribes' ignorance of the form of an animal foreign to Egypt and never adopted into the range of hieroglyphs.

Ḥtmt also occurs in a somewhat obscure context on a Dynasty 18 statue base[154] and in the Ramesseum Onomasticon[155] between the lists of birds and mammals; this would at least not contradict the translation 'bear'.

ḥṯs (Wb III, 204, 13 : ein rattenartiges Tier). The word appears only as a personal name. This is unhelpful in the identification of animals as the hieroglyphs in the determinatives of names tend to be small, no sense of scale is given by the presence of other animals, and published copies of the name tend to reproduce different forms of the same determinative.

Ranke[156] translated the name 'die (männliche) Springmaus'[157] which, if the determinatives can be trusted, is surely wrong since the ḥṯs has short legs and its stance is differently depicted from that of the jerboa.[158] The Cairo Catalogue described the determinative as an 'Ichneumon'.[159] Before his discovery of named representations of the Striped Polecat or Zorilla (gsfnw), Keimer[160] suggested that the name of this animal should be found among the otherwise untranslated mm, ḥmt, ḥdrt and ḥṯs. Having examined the Cairo example he concluded that the ḥṯs reproduced the Striped Polecat reasonably well, though with some notable differences.[161] Despite the later revision of his opinion this was still the identification given by Roquet[162] for the writing ḥs at Saqqara.[163] Roquet also suggested a comparison of ḥṯs with Coptic ϩⲏⲧⲥ,[164] which Westendorf translated 'Ichneumon(?)'.[165]

ḥdkk (Not in Wb). The word appears only once, in an inscription from Kawa:[166] these animals, together with snakes, were swept away from the cultivated land by a good inundation. The animal of the determinative has large round ears and a long tail and may have been a 'rat' as has been suggested;[167] the ravages of mice in the fields and the vulnerabilty of mice during the inundation (see pnw above) may be noted here. The term has been compared with ḥdḳ 'cut off' (Wb III, 206, 1: (die Nase) abschneiden) and its form, with the last radical reduplicated, with various other animal names (ꜥff, ḥfnn, ḥdrr, ḫprr).[168]

ḥdr (Wb III, 214, 11 : ein Säugetier). Occurs in a number of forms, including ḥdrỉ, ḥdrỉt, ḥdrr, ḥdrt (Wb III, 214, 12: ein Säugetier),

ḥdr, ḥdrw and ḥdrwt.[169] Numerous attempts have been made to identify the animal which appears as the determinative of the term, but no final conclusion has been reached. A Wb Zettel in Berlin noted of one attestation: 'allerdings wie eine Hyäne' and of another 'Springmaus oä' (apparently Sethe's identification). On one example where ḥdrt appear in a 'herd' (?ḥpt) Eisler[170] noted : 'das Wort ḥdr.t... [the determinative he printed is a calf], sonst als "Hyäne" oder "Springmaus" übersetzt, muß hier wohl einen anderen Sinn haben; nach dem Determinativ denkt man an Kleinvieh, was auch einen guten Sinn gäbe. Das Wort kann wohl nur die ägyptische Umschrift eines Femininums von kanaanäisch... ḥazîr, "Wildschwein", "Eber", aramäisch ḥazira, assyrisch ḥumziru, bzw ḥabaziru sein.' Ḥdrr as a toponym has been translated similarly by Darby and Ghalioungui, as 'white-sow'.[171] Ranke commented on the determinative : 'Das Wortzeichen hinter ḥdr und ḥdrt sieht in den Publikationen einer Hyäne ähnlich, ist aber gewiß ein anderes Tier. Das ägyptische Wort für "Hyäne" ist ḥt.t (Koptische ϩⲟⲉⲓⲧⲉ), das nicht als P.N. belegt ist; zum ḥdrt-Tier vgl. LD III, 166 ...Herr HEUSER möchte den Namen ḥdrt mit dem (allerdings männlichen) Koptischen P.N. ϩⲁⲓⲗ zusammenstellen.'[172] Gardiner suggested 'jerboa' for ḥdrî and (in the same publication) that ḥdrt, which he translated 'mouse', 'may mean weasel'.[173] 'Jerboa' was rejected by Dawson on the grounds that the Egyptians would not have depicted the familiar jerboa so variously;[174] the determinatives are not particularly 'various', but the legs drawn on the animal are too short for a jerboa.

The position was summed up by Barns: 'Neither ḥdr... nor ḥdrt... are securely identified'; 'neither can be a pig... and the equivalent "hyaena" for either seems doubtful in view of the known equivalent ḥtyt[sic] for the latter'.[175]

h3trw (Wb III, 236, 10: als Name eines Gottes (mit rattenähnlichem Gesicht)). This rare word is generally translated 'ichneumon', the meaning given by Crum to Coptic ϣⲁⲑⲟⲩⲗ, which is likely to have been descended from the Egyptian word via demotic hʿtwl.[1] Crum suggested that the Coptic term was originally a loan from Arabic khīṭl and Chaldean hatul 'cat'.[2] In Wb the word is recorded only from the base of a royal statue in Berlin.[3] On two sides of the base the king is described as 'beloved of' a deity; one deity is named ʿmʿmw (see Ch.13), and the other h3trw.[4] These words were studied by Brunner-Traut; she believed that h3trw (like ʿḏ - see above) designated the mongoose.[5] In one Coptic text the ϣⲁⲑⲟⲩⲗ is said to be at enmity with 'all reptiles' and this would accord with the identification of h3trw as a mongoose.

However, a deity called h3try is depicted in the Underworld with the head of an animal with a long pointed muzzle and prominent whiskers reminiscent of a shrew.[6] Various texts indicate that a deity h3trw was associated with Horus of Letopolis[7] and inscriptions on bronze statuettes of shrews also connect them with this god.[8] Mongoose statues, on the other hand, bear inscriptions associating them with Edjo, who is not associated with Letopolis.[9] It appears, therefore, that h3trw did not denote the mongoose, but the shrew, a few species of which are found in Egypt today;[10] Coptic references which indicate ϣⲁⲑⲟⲩⲗ to be the mongoose should be considered separately.

hwrr (Wb III, 248, 2: als Beiwort eines Kalbes (als göttliches Wesen)). In the Book of the Dead[11] the word appears in the phrase bḥs hwrr (for bḥs 'calf' see Ch.4: Cattle). In the Coffin Texts[12] this same phrase is written with the bird determinative used in both bird and insect names. Lacau, who mentioned the Book of the Dead example in a discussion of bḥs h3bw (see Ch.6: Elephant, Rhino and Hippo), compared the form of the word (with reduplicated third radical) with other animal names such as hprr (see Ch.20: Insects) or ḥfnn (see Ch.19: Reptiles). The Pyramid Text phrase hwrr psdt he compared to the ḥm-psdt with pelican determinative also known from the Pyramid Texts.[13] It seems possible, therefore, that hwrr named an animal (perhaps a bird?).

hn (Not in Wb). Occurs in an Old Kingdom clothing list from the tomb of Snfrw-snb. It may be an animal of the dog or cat family (see m3s, Ch.13).

ḫstt (Wb III, 335, 5: Art Tier). Occurs, like ḫn, in Old Kingdom clothing lists. Other occurrences of the term in P.Jumilhac and at Edfu, and as the name of a jackal-headed deity on a Late Period sarcophagus, indicate that this animal belonged to the dog family (see Ch.5 : Dogs and Similar Animals, for a full discussion).

spks (Not in Wb). The determinative may indicate an animal name; the word appears on an ostracon from Deir el-Medîna used for writing practice.[14]

smr (Wb IV, 139, 10: ein Tier). The references in P. Ebers record that these animals could be killed by the burning of a ḥnt3sw (det. Sign List I1) and vice versa.[15] Wb suggested that smr was to be understood 'als Feind der Eidechse' and there is a late tradition that scorpions and lizards were sworn enemies.[16] Words for scorpions are, however, well documented (see Ch.20: Insects). Stern gave the translation 'genus lacertae?', though without justifying it. Ghalioungui compared an Arabic term, sammour, for which he proposed the translation 'sable' or 'beaver', from a 14th Century Book of Animals. This animal was claimed to be like one of the cat family or like a mongoose, but with adaptable colouration: clearly a confused beast, and of little help in identifying the smr.[17] Since P.Ebers prescribed one ḥnt3sw to kill several smr and several smr to kill one ḥnt3sw it is possible that they were smaller creatures; compare, perhaps, the ỉntš (see Ch.20) which is apparently like, but clearly distinguished from, the scorpion. The 'cow's-skin' determinative does not help much in the identification of the creature since it was applied to reptiles and insects as well as mammals.

snbtt (Wb IV, 161, 2: ein kleines Tier). The word occurs in a text on the statue of Djed-hor together with a number of other animal names, of which the only readily identifiable example is pnw 'mouse'.[18] Another, qq3, is also recorded by Wb (Wb V, 208, 8: ein kleines Tier); the final term in the list was translated 'poulet' by Daressy. He rendered the passage: 'tu auras peur d'un rat, tu craindras un renard(?) tu courras devant les poulets... un senbeti te fera fuir jusqu'au cimetière'. These are presumably all small and insignificant animals which would not normally be feared; snbtt can be identified only thus far. (See also qq3 below).

snmty (Wb IV, 165, 13 : Art Tier.) In the Coffin Texts[19] and elsewhere[20] it is said that the tail (sd)[21] of a snmty, placed at the stern of a boat, would protect it. Although boats may be drawn with animal heads there seem to be no examples with animal tails,[22] though one text records the tail of a wild bull (sm3) at the stern of a boat (see Ch.4: Cattle). (See also tt-mrwy, the animal (bird?) put (for protection) at the prow).

srw (Wb IV, 193, 6 : ein Tier). The word appears in P.Ebers in the phrase srw wr. Wb.Drog. recorded separately from sr(i) 'der Widder' (VI, p.454-455) but suggested that the words might be identical (VII[1], p.772 : Widder(?)); this seems likely. (See also Ch.12: Sheep).

Despite the use of the hare hieroglyph (Sign List E 34) to represent the phonetic group wn, and the appearance in the Coffin Texts of a word wn apparently with the meaning 'hare'[23], the only named representations of this animal record the designation shʿt (Wb IV, 236: der Hase; Wb IV, 268, 11: der Hase);[24] compare here both wr and mnt denoting 'swallow' (Ch.17). The name is rare, appearing twice in the Middle Kingdom (both examples at Beni Ḥasan)[25] and once in an 18th dynasty stela.[26] In the latter the hare is one of a number of animals hunted by the pharaoh in Syria-Palestine, (see also ḏhs, m3st and ʿ3 ḫmw discussed in other chapters) and the Beni Ḥasan representations (together with many others where the animal is not named[27]) indicate that this was a sport also pursued in Egypt. Neither name survived into Coptic when the term applied to the hare was ⲥⲁⲣⲁϭⲱⲟⲩϣ, a borrowing of a Persian word meaning literally 'with asses ears'.[28]

At least four subspecies of Lepus capensis L, the Brown or Cape Hare, were recorded from Egypt by Setzer.[29] A sub-Saharan species Lepus crawshayi de Winton may also have occurred in ancient Egypt.[30] Darby & Ghalioungui[31] stated of shʿt: 'it is probable that these animals were either hares or wild rabbits'. Rabbits (at least those of the genus Oryctolagus) are, however, not indigenous to Africa, and the rabbits which do occur there today are descended from imported stock.[32] Rabbit should not, therefore, be considered as a translation of shʿt.

The hare played only a modest role in Egyptian mythology[33] and it appeared once in the Pyramid Texts as a term of abuse.[34] Plutarch and Horapollo recorded that its speed and alertness were the reasons for its significance to the ancient Egyptians.[35]

šwšt (Not in Wb). The skins of a lion and a šwšt are listed together with giraffe-tails and giraffe skins in the Nauri Stela.[36] From the orthography it appears to have been a loan-word.

š...m (Not in Wb). Possibly an animal name, being preceded by ḥs 'excrement' in a medical papyrus.[37] However, the text is far from clear. The editor did not read a 'cow's-skin' or other animal determinative at the end of the word and the published photographs do not allow the reading to be checked.

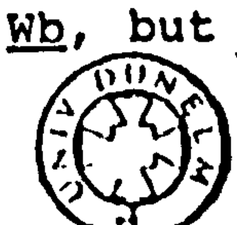
šspt (Wb IV, 537, 9: Substantiv). This may be an animal name as it has the 'cow's-skin' determinative but the context is so broken as to preclude any serious attempt at translation. Earlier in this text the addressee is compared with a lion; the -k which precedes mỉ šsp.t may indicate that this was a similar comparison.[38]

štbt (Wb IV, 557, 10: Art Tier im Zauber). The term occurs once in the Harris magical papyrus. Lange did not translate it, commenting : 'Die beiden fremdartigen Wörter sind als Tiernamen determiniert. Vielleicht sind sie doch nur magische Wörter'.[39] This was also the opinion of Chabas.[40]

šṯ (Wb IV, 559, 1: ein Tier). The word appears only in toponyms, the determinatives of which show a pair of animals. They have been considered to belong to the dog family, but a recent publication of a relief from Giza shows the animals copulating, and they are clearly not dogs but some small desert mammal (compare ḥmt and prt, Ch.13); Brovarski suggested: 'Perhaps the ratel or honey badger is intended or some allied genus'.[41]

šd (Not in Wb). See ʿḏ (Ch.14); šd appears to be a miscopying of this word.

kỉry (Wb V, 116, 8-10: ein Tier (aus Nubien), with the note: Wohl identisch mit kỉw, Affe). This word was originally read 'kamaa(l)' by Chabas[42] and was, therefore, considered to be the antecedent of Coptic ⲕⲁⲙⲟⲟⲩⲗⲉ= ϭⲁⲙⲟⲩⲗ 'camel', demotic gmwl, a loan of Semitic gimel. This reading was rejected by Lefébure[43]; he transcribed the word kari, which he translated 'mule or wild ass'. Loret translated 'chèvres', comparing Coptic ϭⲓⲉ (ⲓⲉ).[44] Wb, on the other hand, compared it with the ancient Egyptian kỉw, which appears with a monkey determinative in a tribute list.[45] Separately listed from kỉw by Wb, but again similar, is the



term k3yk3y which also shows a monkey determinative and appears on an ostracon over a monkey watching a child dancing. This may be compared with the almost identical k3k3 also found on an ostracon.[46] Kiw and k3k3 are, therefore, attested with certainty as the names of monkeys. (For further discussion of these terms see Ch.10: Monkeys).

Kiry is more difficult to identify. It occurs as a personal name[47] but only infrequently in other contexts.[48] From these it appears that the kiry was found in Nubia and understood speech.[49] It could also be taught to dance.[50] In another text it appears parallel to the horse (ssmt) and dog (tsm). It is said to be able to carry a mkr (Wb II, 159, 4: Gefäss?) which its mother could not do[51] presumably to emphasize that this was an acquired skill, similar to its ability to acquire the understanding of speech, like the horse's submission to traces and the dog's understanding of orders. Caminos[52] compared Aelian's record that monkeys could be taught to read and play musical instruments.

Concerning the identification of the kiry as a monkey the following may be noted: 'The so-called patas "dance", referred to in non-sytematic descriptions of captive individuals, is presumably the stereotyped pivoting back and forward on straight limbs that occurs in some caged animals....'; '....it appears.... to be a frustration response in a very active animal'.[53] Walker[54] also noted: 'Captive patas have been observed to express pleasure by dancing on all feet, quite similar to the behaviour of guenons (Cercopithecus)'. The ibꜣ, hb and ihꜣb 'dancing' of the baboon (iꜥn and imy-ḥtt) may also be compared. (See Ch.10).

A reduplicated form kiry-kiry occurs in a text from Madâmûd. Drioton[55] translated the phrase in which it occurs: 'Les dromadaires(?) te fêtent (9) avec du bois sepen', which seems difficult to comprehend. The kiry here appears in parallel with another unidentified animal, kriw, which is associated with the name of another type of wood (ssdm). Perhaps both were tree-dwelling creatures; this would be consistent with the translation of kiry as a type of monkey.

Kiry has also been compared with Coptic κελ[56] and demotic kl.[57] In one demotic text[58] its dung smeared on the phallus is said to secure the love of a woman slept with. In another it is said to eat fruit.[59] Cannuyer[60] believed these references to indicate that kl was a baboon, a frugivorous animal noted for its sexual activity, and this was also the opinion of Smith.[61]

Wb (Wb V, 116, 10) included under kiry a word spelled k3r3 from the Mut ritual recorded in a Berlin papyrus.[62] This k3r3 is mentioned in the context of dancing, but Brunner-Traut,[63] in her study of dance in ancient Egypt, was at a loss to explain the extract. It should be noted that the word k3r3 also appears in a Brooklyn papyrus describing snakes. (See Ch.19: Reptiles). Sauneron[64] identified it, from the description given in that papyrus, as a chamaeleon. Whether the Mut ritual contains this spelling in error for the dancing kiry, or whether k3r3 could designate an animal other than the chamaeleon (cf dqy-bird and d3qy-bat; sdḫ-bird and sdḫ-snake; 3bnn-bird and 3bnn-fish) cannot be deduced with certainty; in any case it seems strange that a chamaeleon could be described as 'dancing'.

There is also a toponym k3r3y/kry[65] which may be related to this animal name.

knmt (Wb V, 132, 8: ein Tier im Kampf mit Pavianen). As an animal name knmt occurs only once, in the Pyramid Texts, as a creature inimical to baboons.[66] Sethe[67] believed the knmt to be a leopard: 'Die in einer großen Herde lebenden Mantelpaviane sind oft von einem einzelnen reißenden Tier knmw.t getötet worden, und manchmal auch wieder dieses durch sie... Dieses nimmt Bezug auf die Feindschaft zwischen dem Pavianen und dem Leoparden, die oft zu erbitterten Kämpfen zwischen beiden Tieren führen, mit wechselnden Ausgang dank der ungeheuren Muskelkräfte und der gewaltigen Zähne der männlichen Paviane.'

The enmity of leopards and certain monkeys is almost legendary and is often cited in zoological works. Kingdon[68] noted, for example, that: 'During daylight, baboons will unite and chase leopards. On several occasions I have called up the large males of a troop to within a few metres by imitating a leopard's sawing. Kortlandt (1967) has filmed chimpanzees belabouring a stuffed leopard put in their pathway,' and again: 'baboons have been photographed attacking in concert a stuffed leopard, and there are three published accounts of leopards being killed'. This association was also mentioned by Walker[69] : 'Hamadryas baboons are heavily preyed upon by leopards'; 'Their main enemy is probably the leopard, although several old males are usually a match for this powerful carnivore. An adult male baboon is a powerful and courageous animal'. Schultz[70] too noted: 'Such terrestrial species as baboons, geladas and some macaques, living in open or nearly treeless regions, congregate at dusk on carefully selected ledges, niches or

even in shallow caves on high rocky cliffs, inaccessible to their most feared enemy, the leopard, which stalks its prey in the dark.'

Rowell[71] has asserted that this position is exaggerated, believing rather that: 'Sometimes, especially on clear moonlit nights, they [the monkeys of a troop] will perhaps spot a leopard moving through the forest, and scream and bark at it... The noise made by an excited or infuriated baboon sounds to us as if it is protesting at being torn limb from limb, and I believe it is such occasions as these which have given rise to the unshakeable myth that leopards prey extensively on baboons. There is no other evidence, at least for central Africa, that any of the cats take any more than the very occasional young straggler' and: 'There were lions, leopards and hyaenas which could have eaten the baboons, but apparently didn't'. Kummer[72] noted the presence of 'Lions, leopards and cheetahs' near hamadryas baboons in his study area, but no interactions between the species.

A number of the baboon's predators are listed by DeVore and Hall[73]: 'Life on the ground exposes baboons to predation far more than is true of arboreal monkeys. In East and Central Africa today, and over most of Africa before the expansion of human activity, the predators included lions, leopards, cheetahs, hyaenas, jackals, wild dogs, and raptorial birds.'

From an Egyptological view-point the main objection to the identification of the knmt as a leopard (or indeed lion or cheetah) is that Egyptian already possessed words applicable to these animals. B3 (later 3by) 'leopard' is itself attested in the Pyramid Texts, as well as elsewhere in the Old Kingdom, as is m3ỉ, 'lion'. (For further information see Ch.9: Lions and Other Cats). The same may be said of hyaenas (ḥtt) and jackals (s3b, wnš) (See Ch.5: Dogs and Similar Animals).

'Dog' has also been suggested as a translation of knmt. Ember[74] compared Hebrew keleb, Arabic kalb, Aramaic klb and Assyrian kalbu 'dog' and Mehri koub 'wolf'. This would accord reasonably well with DeVore and Hall's 'wild dogs' (see above); Brehm[75] too stated that dogs hunted baboons. Sethe[76] took Ember's proposition into consideration though rejected it: 'Neben dem Leoparden soll der Hyänenhund[77] der vorzüglichste Feind der Paviane sein, da er aber nur in Rudeln jagt, unser Text aber deutlich ein Einzelwesen voraussetzt, wird der Leopard gemeint sein und zwar ein Weibchen.'

Without additional evidence from ancient Egyptian sources it is difficult to provide an adequate interpretation of knmt, though the translation 'leopard', commonly quoted,[78] seems unlikely.

kps (Not in Wb). The word, from a Deir el-Medîna ostracon,[79] has a 'cow's-skin' determinative and thus may be an animal name; the text is, however, incomplete so this must remain a suggestion.

kn...(Not in Wb). Occurs in the phrase 'excrement of a kn...' in a medical text.[80] The rest of the word is lost. The phrase was read by Dawson as ỉs kk and translated 'the brain of a kk...'.[81] (See kkt below).

krỉw (Not in Wb). See kỉry above.

kkt (Wb V, 142, 10: ein Tier). According to P.Ebers[82] this animal could be prevented from eating corn in a granary by smearing the walls and floor of the granary ḥr ỉtnw.sn ḥr mw. Wb. Drog. translated the sentence: 'werde bestrichen seine Wände, seine Fußboden an ihren Löchern (ỉtnw) mit Wasser'. Harris,[83] however, understood ỉtnw as 'dung', after Loret.[84] He rejected Loret's translation of kkt as 'bats' as bats do not eat corn, though neither do the 'geckos' which he proposed because of the onomatopoeic sound of kkt.[85] It is, of course, possible that the Egyptians believed that the kkt ate corn whereas in fact it did not. Ebers and Stern translated kkt as 'sorex', mouse;[86] some small rodent pest does seem to be most likely, though it should be noted that elsewhere ḥf3t 'snakes' are noted in amongst grain.

Dawson considered kkt to have been a 'weevil', in view of the means used to eradicate them,[87] and it is tempting to compare here Coptic ⲕⲁⲕⲧⲉ 'louse'.[88] Dawson wondered, too, whether this was the same animal as appears in another medical text; there he read 'the brain of the kk' but decided that kkt must have been a separate word, the brain of a weevil being an impossibly small ingredient.[89] The Coptic word may well be derived from an entirely different word, ktt (not in Wb), which has an insect determinative and seems to have meant 'louse'. (See Ch.20: Insects).

ḳ3dyt (Wb V, 15, 4 : ein Tier). Another term from the medical texts with 'cow's-skin' determinative and thus perhaps an animal. Here its 'insides' (ỉmy) are used to cure an eye-complaint.[90] The same word may occur in a Deir el-Medîna ostracon.[91]

ḳḥḥwt (Wb V, 67, 5: Tiere, die statt Rinder geopfert sind).[92] Probably not 'instead of' (as Wb) but 'from among' - compare the parallel phrase wšn.n.(i) n.k srw m ꜣpdw : 'For you I have wrung the necks of sr-geese from among the birds'. Ḳḥḥwt, unattested elsewhere, would thus name a type of cattle.

qḥ (Wb V, 190, 14: ein Tier). From the context, a prescription including the db (horn) of the animal, it seems likely that this word is a miswriting of qḥs 'gazelle'. (See Ch.2: Antelopes and Similar Animals).

qsfnw (Wb V, 206, 8: kleines Wüstentier). The qsfnw was identified by Keimer[93] as the Cape or Striped Polecat or Zorilla Ictonyx striatus (Perry), and by Aufrere as the Libyan or Saharan Striped Weasel, Poecilictis libyca (Hemprich & Ehrenberg).[94] Both are striking black and white striped mustelids, the former found throughout the northern and southern African savannahs down to the Cape.[95] The word occurs over representations of the animal in the sun-temple of Niuserrēʿ at Abu Ghûrâb; in all three named depictions it is giving birth to young.[96] In one case the name is qualified by ỉꜣb, equated by Edel and Keimer with ỉꜣb 'stink' (Wb I, 29, 19: Adjektiv und Verbum übler Bedeutung (vom Geruch der Leiche uä)) and taken by them to refer to the foul-smelling secretions of the anal stink glands common to various mustelids and most notorious in the skunk.[97] Keimer supposed that the name was non-Semitic in origin.[98]

qqꜣ (Wb V, 208, 8 : ein kleines Tier). From the statue of Djed-Hor; Daressy translated 'un renard?' without justifying the interpretation, and was probably wrong. A much smaller animal seems to be required by the context - cf perhaps pqqt. (See Ch.19: Reptiles and Amphibians). (See also snbtt above).

tỉwḏ (Wb V, 260, 15 : Art Schurz). Like ḫn and ḫstt (see above) this word occurs in Old Kingdom clothing lists and may designate a member of the dog or cat family. (See mꜣs, Ch.13).

tnbḫ (Wb V, 311, 7-12 : Alt mit einem unbestimmbaren Tier determ... verwirrt sein, bestürzt sein uä). Gardiner[99] and Vogelsang[100] supposed the determinative to show a hedgehog, though this was rejected by zu Hülshoff.[101] The animal drawn has a long tail (in one case) and long legs but does not closely resemble any particular creature.[102]

tḳꜣ (Not in Wb) The term is listed among other animals in the Ramesseum Onomasticon. The ḳ is only partly preserved and the traces would also suit a reading of tꜣ. One is therefore led to compare it with tꜣ (Wb V, 231, 4: ein Opfertier) attested otherwise as an animal only in Ptolemaic texts. (See Ch.2: Antelopes and Similar Animals, for further discussion).

tꜣyt (Not in Wb). It follows ꜥpšꜣyt[103] in a medical papyrus and may be another animal name, though it might simply mean 'male' (Wb V, 345, 14-19: ...männlich).

ḏprm (Wb V, 568, 8: Art böses Tier). This term appears only in the Harris magical papyrus in parallel with another unknown animal, bq (see Ch.13). To render them harmless the text expresses a wish that their mouths be shut; this would put them in a similar class of animals as the lion, jackal and bear against which the same wish is directed in this papyrus. However, the appearance of hwy (see Ch.13) with the animals ḏprm and bq may indicate that this group was of a different sort. Chabas[104] noted that: 'ce mot a une physionomie araméenne, mais rien ne peut préciser l'animal auquel il se rapporte'. Shisha-Halevy[105] compared the -m ending with the Hebrew plural -im (cf ssmt 'horse' from Hebrew susim 'horses'), the singular form being preserved in a personal name. He noted a similar Hebrew word spir 'young he-goat' and also spr 'bird', though neither of these seems suitable as a translation of ḏprm.

PART 2 : BIRDS

Chapter 15 : Waterbirds

The birds of ancient Egypt constitute the subject of an extensive recent study by Houlihan and Goodman.[1] A complete list of the species found in modern Egypt is given in their work, among them some 100 water birds,[2] and many of these species were identified by them from ancient paintings.

Waterfowl were of particular importance to the ancient Egyptians as a source of food, and many terms for these birds can be found in lists of offerings on tomb and temple walls. (The offering lists are so numerous that only exceptional examples will be recorded here). One group of five birds, comprising two species of goose,[3] two ducks[4] and a pigeon, was particularly common.[5] From the small number of good representations of this group which have survived[6] it may be ascertained that the species in question were the Greylag Goose, Anser anser (L) (r), the White-fronted Goose, Anser albifrons Scopoli (trp), the Pintail, Anas acuta (L) (st), a brown duck with dark eye stripe and white speculum as yet unidentified (s),[7] and the Turtle Dove, Streptopelia turtur (L) (mnwt).

The frequent attestation of this group of birds throughout Egyptian history means that the development of variant writings can easily be traced. Some of these writings appear to be mere abbreviations[8], for example, t, tp or tr for trp, while others may indicate real changes in pronunciations, or, perhaps, the rise to popularity of new species with similar names.

Most confusing among these writings are sr and srw. Wb equated sr (Wb IV, 191, 17-192, 4: Art Gans) with both s (see the Belegstellen to Wb IV, 191, 7), which only appears in the fourth position among the five terms, and with srw (Wb IV, 191, 16: Art Gans and Belegstellen to IV, 192, 4), which in Wb's own examples occurs only as the first term of the five.[9] The examples of sr recorded by Wb include words occurring in either first[10] or fourth position in the lists, and, occasionally, in neither.[11]

The writing srw was always rare and did not survive the Old Kingdom, and sr as a variant of r also became less common during this period.[12] However, sr written with the 'bolt' sign (Sign List 034), appeared from the Old Kingdom onwards as a variant of the fourth term, s.[13] Later this fourth term was also written srt or sry,[14] (compare

also srwt)[15] and is therefore likely to have been the prototype of the srît equated by Černý[16] with srw, and likewise by Caminos with 'old sr(w) "goose"'.[17] This writing srît is recorded separately by Wb under srt (Wb IV, 192, 5-7: in der Opferliste für älteres sr). This writing occurs in the name of a goddess who may or may not be associated with the birds in question,[18] but a further attestation shows srt in a list of offerings preceding r.[19]

It appears, therefore, assuming the species of the lists to be unaltered, that the terms srw and sr (written) are variants of r,[20] which takes precedence after the Old Kingdom, and that sr and sry (written) are variants of s,[21] replacing it entirely from the Middle Kingdom onwards.

The r (Wb II, 393, 1-6: Gans) and the s (Wb IV, 1, 5-6: Art Gans) both occur in contexts other than the offering lists.[22] Both birds were kept as domestic animals[23] - the r sometimes appeared separately as a r-ddꜣ (Wb V, 631, 8: fett Vövel) or r-ḫpn 'fat(-tend) r',[24] r-šd 'reared r'[25] (šd could also be used of other birds)[26] and ḥr-ḫt-n-r 'on-its-belly r' showing a fattened goose[27] (cf the use of ḥr-ḫt.sn to describe snakes). The phrase 'live r' also appears in offering lists.[28] The existence of a r-ḥd 'white r'[29] is further evidence of their domestication, as domesticated animals show albino forms more commonly than wild populations[30] (though the r-ḥd may have been a naturally occurring albino). Wild r from the marshes were also mentioned.[31] The r appears as an item of payment,[32] in a mathematical calculation,[33] as the shape of a loaf,[34] once in the medical texts[35] and cooked (psd).[36] It is compared with the soul.[37] The word survived into Coptic as ⲣⲟ, 'goose'.[38] The s is far less commonly attested outside the offering lists but once occurs in a curse formula.[39]

The third term of the group of five, usually written st[40] (Wb III, 407, 16-17: Art Gans oder Ente...Ursprünglich wohl sꜣ.t und das Wort, von dem das Zeichen seinen Lautwert sꜣ erhalten hat...), but once written s (for sꜣ?) and once sty,[41] is very well attested.[42] Sꜣ is also attested in the Middle Kingdom in the same text as st,[43] though this may be an entirely separate word. (See Ch.16: Birds of Prey). In the offering lists it shows a variant mst[44] (Wb II, 136, 4) which may be compared with the similar msyt[45] (Wb II, 143, 3: Art Wasservogel), once written msrt.[46] The position of mst/msyt in the offering lists is confirmed in P.Brooklyn 47.218.50 where it appears after the smn (a goose) and before the ꜥnt and the mnwt (a pigeon).[47] A further writing

msw may also denote the same bird.[48] Msyt and st both appear on jar labels from the same source in the New Kingdom which would indicate that they denoted different species despite the offering list examples where one name replaces the other.[49]

From good representations the st can easily be identified as a pintail.[50] In one particular instance both male and female pintails are drawn;[51] the females are called st but the males ḥp (Wb III, 69, 19: Art Ente).[52] Ḥp is recorded elsewhere with male pintail as determinative[53] but usually male pintails are drawn under the name st.[54] The terms also appear in connection with the otherwise unattested m3ʿ (Wb II, 24, 8: Art Ente) and šst (Wb IV, 529, 12: Art Geflügel : Ente oä).[55] The phrase k3w nw st of the Coffin Texts has been taken to mean 'pintail drake' (lit. 'bull of pintails').[56] This may indicate the date at which ḥp ceased to be used for the drake. In another, early, text the drake appears to have been termed nb.[57]

The remaining water-bird of the group of five is the ṯrp (Wb V, 387, 6-9: Art Gans oder Ente), the most consistently used and written of the set though, as mentioned above, the abbreviations/variants ṯ, ṯp and ṯr[58] are known. The word has been compared with Coptic 'stumble'.[59] The ṯrp is shown being fattened[60] and is mentioned among foodstuffs.[61] It appears twice in the medical texts.[62]

Ḥd (Wb III, 210, 9: Art Gans) has already been mentioned as an epithet of r, but some texts show the ḥd independently, following the ṯrp in offering scenes[63]; in the tomb of Ti the ṯrp and ḥd are being fed in the same enclosure.[64] In other scenes the ḥd is drawn after the ḏnw which follows the ṯrp and it is to be concluded from this that it was a smaller or less important bird than these,[65] though evidently bigger than the smn.[66]

The ḏnw (Wb V, 575, 4: Art Gans oä) can be seen from the representations to be another goose, similar in size to the ḥd and ṯrp.[67] The later word ḏnḏn (Wb V, 580, 2: Art Geflügel) should probably be equated with this term because of its similar position in offering lists.[68] (Compare the forms wn/wnwn, gb/gbgb discussed below). The ḏnḏn was identified by Helck[69] as a swan, an identification later confirmed by Störk. Störk compared the word with Coptic ϫⲛϫⲛ 'sing',[70] and noted the voice of the Whooper Swan (C.cygnus (L)) or the musical notes made by the wings of the Mute Swan (C.olor (Gmelin)) in flight as supporting evidence for this identification. The Coptic term for the

swan (as recorded by Crum) was merely 'white bird'.[71] Helck[72] also suggested that the dndn may have been a new species of bird introduced into Egypt in the Middle Kingdom, but given its similarity to the word dnw, it seems to have been identical with the goose of the Old Kingdom. (Compare also the dnd, a duck, discussed below).

Other terms which have been taken as the name for the swan are ꜥḳ (see below), ꜥšt (see ꜥḥy, Ch.16: Birds of Prey; translated 'swan(?)' by Griffith[73] without justification) and nḫnt (Wb II, 312, 7: ein Vogel). This latter occurs in a proverbial phrase at el-Amarna: 'Set him there until the nḫnt becomes black and the snfrw becomes white' (see further under snfrw, and nḫnḫ, Ch.17: Miscellaneous Birds). Swans were represented a limited number of times in ancient Egypt - these representations were collected and commented upon by Vandier d'Abbadie[74] - and the bird in question has generally been identified as the Whooper Swan (C.cygnus (L)); Houlihan and Goodman suggested that the Bewick Swan (C.bewickii Yarrell) may also have been known in ancient times.[75]

Another goose, the smn (Wb IV, 136, 2-4: Art Gans), fem. smnt,[76] surviving in Coptic as ⲥⲙⲟⲩⲛⲉ[77], occasionally appears in addition to the group of five birds as offerings, and often occurs in more extensive offering lists.[78] This bird can be identified from representations as the Nile Goose (Alopochen aegyptiaca (L)),[79] which was the subject of a detailed study by Kuentz.[80] In one relief it is described as 'giving birth'.[81] In other texts it is recorded as a bird of the marshes[82] which could be a pest[83] in the fields and in the medical texts[84] - a domesticated example may appear in the Westcar papyrus[85] - but is most frequently attested in mythological texts. The deceased could reach heaven in its form.[86] It is closely associated with Amun[87] and appears in certain magical ceremonies.[88] The noise it makes (nqq)[89] is often referred to; this word is also used as a substantive (Wb II, 350, 13-14: Art Vogel), especially in the phrase nqq wr,[90] once nqꜣy wr (Wb II, 349, 9)[91] and it is to be supposed that the nqq and smn refer to the same bird, as the nqq is also associated with Amun.[92] (For a similar phenomenon see ꜣn and ḥtt, Ch.10: Monkeys.) Smn also appears as a personal name.[93]

A further bird name attested from Old Kingdom offering scenes is gb (Wb V, 164, 5: Art Gans - gbb);[94] the word appears in a New Kingdom text as gbw.[95] A form gbb is recorded in a late Old Kingdom papyrus,[96] and may be the same bird. Gardiner identified the gb (Sign List G38)

as A.albifrons, the White-fronted Goose, taking it to be the determinative of the names of other species of goose and also of 3pd 'bird' which eventually replaced all other determinatives specific to individual birds.[97] As mentioned above the trp has been identified as A.albifrons but it is difficult to offer a realistic alternative translation of gb while no coloured representations are extant.[98]

Another term to be mentioned here is g33bt (Wb V, 149, 13: Art Vogel) from Beni Ḥasan.[99] (The name was read g3mbt by Montet).[100] The bird is almost invisible now though the red bill noted by Wilkinson, Rossellini and Champollion is still visible, and the wing appears noticeably lighter than the bird's body and head; the green wing covert, breast and tail noted previously are still in evidence.[101] The bird is not inconceivably a goose (its general shape is goose-like though its colouring is not like that of any goose now found in Egypt[102]); Davies described it simply as an 'Aquatic bird of some sort'.[103] (For the bird gbg3 see Ch.17).

A number of other words may be identified from the reliefs or texts as denoting waterbirds.

The ḫtꜥ3 (Wb III, 342, 1: Art Gans oder Ente), known only once from an Old Kingdom context, but frequently attested after this period, was depicted in the tomb of Ti being fed with grain together with various other waterfowl.[104] It was named with other such birds in New Kingdom offering lists,[105] while in the Middle Kingdom it appeared in parallel with the smn as the object of a magician's spell.[106] It was apparently a type of goose, but without coloured representations it is not possible to determine the type.[107]

Wb defined few other words as designating geese: stp (Wb IV, 337, 4: Gänse oä), which should probably be read as 'choice examples of' the goose depicted,[108] ḥtm (Wb III, 196, 7-8: Art Gans) and ḫ3r (Wb III, 232, 3-4: Gans oä) both found only in the names of stretches of water in the Pyramid Texts, and Coffin Texts and Book of the Dead.[109] A Late Period word ḥt (not in Wb)[110] may be compared with ḥtm, though its determinative shows a heron-like bird.

A bird named nnt and depicted at Beni Ḥasan was also identified as a goose by Davies; the bird is not well preserved though was apparently white and has the form of a goose.[111] Houlihan and Goodman recorded eight species of goose from modern Egypt. Three of these can be

identified from ancient representations as the birds r, trp and smn. Dnw, gb(b), nnt and ḫt-ʿꜣ may well also be species designations, though ḥd, and possibly also ḫꜣr and ḥtm, are probably not.

Wrd (Wb I, 336, 17-18: Art Ente oder Gans) appears in a list of birds from the New Kingdom, where it is included among ꜣpdw-n-mw 'waterbirds'.[112] A variant 'yellow-billed' type (wrdw-fnd-n-nwb: Wb II, 239: Art Geflügel; I, 578, 1: 'mit goldener Schnabel' dh. gelbschnäbelig, von einem bestimmten Geflügel) is also recorded,[113] though it would also be possible to read fnd-n-nwb separately as the name of a different type of bird.[114] Wrdw (Wb I, 336, 18: auch allgemein für Sümpfgeflügel) were elsewhere associated with Ptaḥ.[115] The plural form appears in a list of birds associated with particular stretches of water,[116] and here again would appear to denote a particular species. Another text, where these birds are described as 'winged' (dnḥ, 'tied at the wings'), neither confirms nor denies this.[117] In one case wrdw occurs in parallel with rmw 'fish'[118] and could thus be taken as a general word for birds, as Wb proposed.

The pḫt (Wb I, 542, 6: Art Ente oder kleine Gans) var. pḫ and ptḫt (not in Wb)[119] or ḫpt (Wb III, 258, 1: Art kleinen Vögel), held a varying position in lists of ducks and geese, often alternating with the pintail (st/ḥp). The bird was represented several times in the Old Kingdom[120] as a short-necked duck with a somewhat hunched appearance.[121] It appears from scenes at Abûṣîr to have been migratory to the Delta;[122] this is a characteristic of a number of small ducks, so does not allow a more specific identification.[123]

Wb recorded under p (Wb I, 490, 4 : Name eines Vogels) a bird from the offering list in the Festival Hall of Osorkon,[124] suggesting that the name could be read pḫ.[125] Pḫt (var. ḫpt) may be the original form of the later word.

The variant writing ḫpt is to be distinguished from ḫpw[126] (Wb III, 259) as the latter is recorded in a text as the prey of peregrines (see bꜣk), which do not take prey as large as ducks.

Another duck, the bsbs (Wb I, 477, 1: Art Gans oder Ente), is shown in one relief with a striking fanned tail[127] and in another without this characteristic but with a ringed neck.[128] The word is also attested at Abûṣîr.[129] Hilzheimer[130] identified the bird from the reliefs as the White-headed Duck, Oxyura leucocephala, one of the

'stiff-tailed ducks' which has, as the bsbs sometimes does, a characteristically upright posture when on land. Boessneck,[131] on the other hand, identified the bsbs as a Mallard, Anas platyrhynchos. The term may also be read from a fragment of papyrus listing birds' names; the surviving letters bs should probably be completed as bsbs.[132] The word survived as a designation for a duck into Coptic.[133] Bsbs is also preserved as a verb,[134] as the action of another duck, the wꜣḏ-ḥꜣt lit. 'green-front', which itself has been identified as a Mallard. The wꜣḏ-ḥꜣt (Wb I, 270, 1: 'mit grüner Brust' als Name einer Entenart) is depicted with various birds and plants at Beni Ḥasan[135] and appears with the same birds in the Coffin Texts,[136] in a list of provisions for the temple of Amun,[137] and among birds brought from the marshlands.[138] Grapow's suggestion[139] that this phrase designated the Mallard which does indeed seem plausible.[140] The posture of the bsbs shows that it was not a Mallard; the absense of a real ring on the neck of O.leucocephala also calls into question Hilzheimer's identification.

Also to be considered here is the 'green' bird wꜣḏ (Wb I, 268, 7: Art Geflügel). The name is attested only once prior to the Ptolemaic period,[141] though an ꜣpd wꜣḏ (lit: 'green bird') is known from the Pyramid Texts. The wꜣḏ appears in an offering list together with mnyt 'pigeon'; it is presumably to be distinguished from the wꜣḏ-ḥꜣt, but it is difficult to decide what species could be meant by the name 'green'.

A duck with a pronounced upright posture is the wnwn (Wb I, 317, 15: ein kleiner Vogel);[142] the writing wn (Wb I, 307, 10: Art kleiner Vogel) is probably to be deleted.[143] (For reduplication in another bird name see gb and gbb above.) In one relief (where it is called wnn) its wings are shown in an undeveloped state like those of a chick.[144] Meeks, therefore, translated it: 'un oiseau, ou peut-être une désignation de "l'oisillon", du "poussin"'.[145] It was identified by Schäffer as a coot or moorhen or type of tree duck.[146] Boessneck also identified it as a coot[147] but it lacks the long legs and particular stance of this bird and the similar moorhen (for wḥꜥt identified as a coot see below); tree ducks do not occur in Egypt or northern Africa and this suggestion should also be rejected.[148]

Bdꜣ (Wb I, 488, 10 : Art Gans oder Ente) is another small bird shown in Old Kingdom tomb scenes.[149] It may be compared with the similarly named bdw (Wb I, 488, 15: Art Kleiner Vogel) represented at Beni Hasan,[150] which Davies could not identify but which Wilkinson named the 'Gutta', the Arabic name for the sandgrouse.[151] The bdw has

a reddish collar and may, therefore, be the Pintailed Sandgrouse (Peterocles alchata (L)), now vagrant in Egypt, though no pin-tail is drawn; the Chestnut-bellied Sandgrouse (P.exustus (Temminck)) or the Spotted Sandgrouse (P.senegallus (L)) are also possibilities.[152] A bird named bdw also appears on the reliefs at Abûṣîr as a migratory bird in the Delta.[153] Edel believed it to be a type of pigeon.[154] Sandgrouses are migratory but inhabit arid and semi-desert land[155] so the bdw at Abûṣîr may be a different bird, also to be distinguished from the bdꜣ which is certainly a duck.

The sbḥ (Wb IV, 91, 8: als Name eines Geflügels) is also represented at Abûṣîr.[156] Edel[157] identified it as Allen's Gallinule (Porphyrio alleni Thomson), a name already suggested for the sḥḥ at Beni Ḥasan. The sbḥ, the name of which doubtless means 'shrieker' (Wb IV, 90, 11-17: schreien), is also depicted in other Old Kingdom reliefs[158]. Allen's Gallinule is not particularly noted for its voice; a more suitable 'shrieking' bird of a similar type would be the coot (see also wḥʿt below) or moorhen.[159]

The sw (Wb IV, 59, 15: Art Ente) appears in Old Kingdom Tomb scenes[160] and at Abûṣîr.[161] Edel[162] translated the name 'der Schädling' (comparing Wb IV, 59, 16-17:...schädlich...). It is not possible to identify the species from the reliefs, though it is presumably to be distinguished from the s (above).

Three more water birds depicted at Abûṣîr[163] were the ḥrt (not in Wb), the wḥʿt (Wb I, 350, 15 : Art Ente)[164] and the m, not an owl but possibly to be compared with a Late Period word denoting a water bird, ỉm (Wb I, 78, 5: Name eines Vogels).[165]

A word ḥrt occurs in a list of bird names from the Middle Kingdom, following sꜣ 'pintail' and preceding ḳḳ. (see Ch.17) and wšꜣt[166] (see below); the term ḥrỉw (Wb III, 146, 14: Art eßbares Geflügel), which is mentioned elsewhere with the mst (possibly a later writing of st 'pintail') and the pʿrt 'quail', may be another variant writing.[167] Keimer[168] noted that it 'semble être un canard', which, from these contexts, does seem to be the case. The wḥʿt is also depicted at Beni Ḥasan;[169] Davies identified it as an 'Aquatic bird of some sort'.[170] It is probably a coot, though the bill lacks this bird's characteristic white shield; the shield may appear on other depictions of the wḥʿt.[171] However, a bird determinative of ỉmy-r wḥʿ, 'overseer of fishermen' shows a duck of hunched appearance with a pin-tail.[172] Edel translated

(ỉ)m 'der Klagende' or 'Jammervogel', comparing the verb ỉm 'weep' (Wb I, 77, 12: wehklagen, jammern); he suggested that the name was originally applied to the owl, but was later used to describe another bird which 'lamented'.[173] Unfortunately this does not allow the type of waterbird named by (ỉ)m to be identified.

From a coloured determinative of wšꜣ 'force feed'[174] (Wb I, 369, 2-5: mästen) the bird called wšꜣt (Wb I, 369, 1: Art Geflügel) in the tomb scenes[175] can be identified as a widgeon (Anas penelope). It also appears in a Middle Kingdom list of birds,[176] and as a form taken by Seth.[177] The term can be restored from the ..št surviving in the tomb of Ḥetepka[178] (wšꜣ as a verb is also attested without the ꜣ),[179] though Martin restored mšt. Edel[180] considered this a possible ancestor of Ptolemaic mršt, Coptic ⲙⲣⲟⲱ; this name he translated 'die lichtrote', which he considered a suitable description of the widgeon (presumably because of the bird's rufous head).[181]

A few more bird names can be mentioned here as applying to waterbirds. Wỉꜣt (Wb I, 272, 6: ein Vogel) is known from one medical prescription[182] and from the Greenfield Papyrus[183], with possible plural form wỉꜣyt[184], denoting a bird which was hunted. Ḏnḏ (Wb V, 472, 16: Name eines Vogels) is depicted at Beni Hasan as a bird with a reddish head and white breast.[185] Ḏꜣn (?) (not in Wb) was noted by Mariette.[186] None of these can be identified with certainty.

A few other bird names may refer to waterbirds, but likewise cannot be identified from the available evidence. The ꜣmꜥ (Wb I, 10, 15: Name eines Vogels) of Beni Ḥasan[187] may, from its position in the bird and bat scene there, be a waterbird[188] though the reference in P.Edwin Smith[189] to its 'claw',[190] ꜥnt (Wb I, 188, 1-7: Nagel, Kralle), might indicate otherwise.

Breasted[191] assumed from the second determinative of ꜣmꜥ (two claws) that it was a two-toed bird, but the ostrich is the only two-toed bird and is clearly out of the question here (see nỉw for this bird). To Dawson[192] this determinative 'seems intended merely to denote the grasp of any perching bird' and he supposed that the ꜣmꜥ was chosen because of the pun on the ꜣmꜥt(-bone ?) in the text; he believed the bones mentioned in the text to look nothing like a bird's claws.

Davies was unable to identify it from the Beni Ḥasan picture.[193] Gaillard devoted an entire article to its identification[194], noting

previous attempts to determine the species - Savi's[195] Larus sp (Gull)[196] and Boussac's[197] Dromas ardeola Paykull (Crab Plover).[198] Gaillard himself identified the bird as Ardetta minuta (superceded),[199] while Jéquier suggested Charadrius melanocephalus (superceded; C.sp are plovers).[200]

Ḫꜣbs (Wb III, 230, 9: Art Vogel im Sumpf), var. ḫbs (Wb III, 257, 1: Art Vogel) has been translated 'diving bird'[201] from late contexts where it is said to ḫrp 'sink down or dive' (Wb II, 500, 27-501, 4: untersinken im Wasser, untertauchen; einsinken; unterdrücken) and mḥꜣ 'fish' (Wb II, 131, 8-10: durchstossen). Others have suggested more specifically 'cormorant'[202]. Prior to these Ptolemaic examples the word is attested in a medical text,[203] where the mouth of a child at the breast is likened to that of ḫꜣbsw-birds on the Nile - at a source of plentiful nourishment - and in the Coffin Texts.[204] The ḫꜣbs is clearly a fish-eating water-bird, but the translation 'cormorant' is by no means certain.

Another bird name translated 'cormorant' (Phalacrocorax carbo (L))[205] is ꜥḳ (not in Wb). It appears in a punning phrase from the Coffin Texts[206] but otherwise only as the phonetic sign for ꜥḳ (Sign List G35). Störk[207] identified the bird of the hieroglyph as a Finfoot (Podica senegalensis Vieillot) after Boussac,[208] though its hooked bill - and its current distribution - would better suit the original suggestion.[209]

The ỉrtḏr (Wb I, 116, 16: Art Vogel) is known only from a single text concerning fowling in the marshland, in an unfortunately rather broken context.[210] It is not possible to suggest a more precise translation than 'type of water bird'; Wb commented 'wohl Fremdwort',[211] presumably because of the 'syllabic orthography'.

Ḥꜣyt (Wb III, 16, 1 : Art eßbares Geflügel) appears in a text which mentions a number of other birds: wrdw, mst, pꜥrw and ḥrỉw.[212] The whole text is concerned with a description of Memphis, and, in the passage, with the sort of foodstuffs which may be found there. Wrdw and mst can be identified as ducks/geese (see above); the pꜥrw has been identified as the quail, though no absolute proof for this exists (see Ch.17: Miscellaneous Birds). Ḥrỉw is found only here, so cannot be translated, but was evidently an edible water bird. Ḥꜣỉt, probably a variant of Wb's ḥꜣyt, appears on a papyrus fragment together with other bird-names.[213] The phrase ḥr ḥꜣyt 'the face of a ḥꜣyt-bird' is found in

the Chester Beatty dream papyrus,[214] but this may be a variant writing of a different word. In the following line of this papyrus, the dryt is mentioned;[215] the dr(y)t, a bird of prey, was often associated with Isis or Nephthys (see Ch.16: Birds of Prey) and was sometimes accompanied by another bird of prey, the ḥꜣt. Ḥꜣt also appears to have been the name of a water-bird, possibly a tern.

It seems therefore that ḥꜣt and ḥꜣyt named both a bird of prey, often associated with Isis, and a type of water-bird which was found in the Delta and was eaten (birds of prey were not eaten). Ḥꜣyt was apparently the later writing (cf msyt for earlier mst above). The writings ḥꜣy and ḥꜣyw apparently apply to the bird of prey, but are to be differentiated from ḥꜣw, which may therefore denote the water-bird. Both names may have arisen from the birds' cry (cf Wb I, 6-7, 4: klagen).

Despite the similarity of their names, the determinatives of bn (Wb I, 457, 2-4: Art Vogel (Bachstelze?)) and bnw (Wb I, 458, 3-5: der Phönix) have been identified as depicting different birds - a wagtail[216] and a heron[217] respectively.

The bn seems to occur only as a phonetic sign, and is not used as the name of a species[218]; bnw, on the contrary, is frequently attested. It has been suggested that this bird was a purely mythological beast, because of difficulties in identifying representations with any living species, but certain textual references, notably the use of the bird's plumes as an amulet,[219] indicate otherwise. The bnw is mentioned together with other bird names as one of the forms which might be adopted by the souls of the deceased;[220] as these other bird names are attested elsewhere as the names of species it may be inferred that the same was true of the bnw. The term should, therefore, be translated '(type of) heron' (probably the Grey Heron, Ardea cinerea L) rather than 'phoenix', which has overtones of a different sort. Nevertheless, the phoenix legend may well have had its origins in the ancient Egyptians' associations of the bnw with the sun and planets and ideas of eternity.[221]

The bnw was most closely connected with Rē'[222] and his place of worship, Heliopolis (especially the area of Heliopolis called ḥwt-bnw).[223] It also had close associations with other places and deities, notably Herakleopolis[224] (but also elsewhere)[225] and Atum[226], Osiris[227], Amun[228], Hathor[229], Horus[230] and Anubis[231]; a deity in the

Underworld was also called bynn.[232] The bnw was mentioned in association with a particular tree[233] and with the Nile[234]. It was described as 'the sacred bnw whose name is hidden'[235] and 'great god'[236], and was worshipped independently in its own form;[237] a spell against its legs appears in a papyrus cursing various gods.[238] A bnw of wax was included together with the four sons of Horus in a mummy's wrappings[239] and its form was used to decorate scarabs and amulets.[240] The bnw also gave its name to a constellation,[241] and appeared in the personal name bnwiw.[242]

Four more birds written with a heron-like determinative were the šnty[243] (Wb IV, 519,1: Art Reiher),[244] the nw (Wb II, 217,15: Name eines Vogels), var. nwr (Wb II, 223,5: Art Vogel),[245] the ꜥḥꜥw (Wb I, 222, 11: Name eines reiherartigen Vogels)[246] and the it-ḥꜣꜥ (Wb I, 142, 9: 'Vater des kleinen Kindes' als Name eines Vogels).[247] Compare too the nm (Wb II, 263,5: Name eines Vogels), the rd (Wb II, 463, 12: Art Vogel) and possibly also šm (Wb IV, 462,4: Name eines Vogels), from the 'festival hall' of Osorkon,[248] all of which show heron-like birds as determinatives. Two further words, ḥy (Wb III, 136, 13: in den Namen von Stern-göttern) and diwty (Wb V, 421, 6-7: Vogel mit Federn am Kopf in einer Götterprozession) were also written with herons as determinatives.[249]

In one of the Coffin Texts the nwr is described as šnty[250] (not in Wb; translated 'lotus-haunting' by Faulkner)[251] which itself appears as a bird name elsewhere in these texts.[252]

Houlihan and Goodman[253] recorded from modern Egypt twelve members of the family Ardeidae (herons and allies).[254] Bnw, as seen above, may be identified as Ardea sp, and various birds identifiable with the smaller herons are given below. Šnty, nw(r), ꜥḥꜥw and it-ḥꜣꜥ are perhaps, therefore, to be identified as egrets (Egretta sp) (note especially the 'cricked' necks of some species), though ꜥḥꜥw 'the stander' and it-ḥꜣꜥ 'father of children' may be descriptive rather than specific names. The nwr, depicted in a naturalistic setting in the Unas causeway, somewhat resembles one of these birds.

Another of the herons, the Night Heron, may be definitely identified from Egyptian paintings;[255] at Beni Ḥasan it is named rš[ꜣ]w[256] (Wb II, 399,3: ein storchartiger Vogel), more recently read (probably mistakenly) as šꜣw alone.[257] The kꜣpw (Wb V, 105, 2: Name eines Vogels), which is also depicted at Beni Ḥasan,[258] was identified

by Davies as a Bittern (Botaurus stellaris (L)),[259] though it could also be a Squacco Heron (Ardeola ralloides (Scopoli))[260]; the name has been compared with Coptic ⲕⲁⲧⲧⲁⲓ.[261] The sdꜣ (Wb IV, 365,12: die Rohrdommel)[262] has likewise been translated 'bittern' (Wb), though also 'egret'; the shape of the hieroglyph resembles that of the Great White Egret (Egretta alba (L)).[263] Another bird to be considered here is the ḥnt[264] (Wb III, 105,8: Name eines Vogels), again represented at Beni Hasan; it has been identified as a kingfisher,[265] but its legs are too long and it would be better compared with the Little Bittern (Ixobrychus minutus (L)).[266]

Three ibises have been recorded from modern Egypt: the Sacred Ibis, Threskiornis aethiopicus (Latham), last reliably noted there in 1877, the Glossy Ibis, Plegadis ,alcinellus (L) and the Hermit Ibis, Geronticus eremita (L).[267] Four terms for ibis species are recorded by Wb: ḥb (Wb II, 487, 1-4: der Ibis), gmt[268] (Wb V, 166,5: der Vogel, den das Schriftzeichen darstellt: der Ibis), ṯḥn (Wb V, 326,25-27: der Ibis) and ꜣḫt (Wb I, 18,12-13: Name des Vogels (Ibis comata)[269]).

The ꜣḫt and gmt are easily identifiable as the Hermit Ibis (from the 'ruff' shown on the hieroglyph)[270] and the Glossy Ibis (from the characteristic posture of the bird well represented in the sign)[271] respectively. Both names have been compared with verbs - gm (Wb V, 166,6-169,8: finden) and ꜣḫ (Wb I, 13,7-14,25: herrlich sein, trefflich, nützlich). These etymologies reflect the Glossy Ibis' habit of probing mud to find food[272] and the metallic sheen on the plumage of the Hermit Ibis.[273] Neither name is common; the ꜣḫt is not named in a naturalistic setting (though two Hermit Ibises on stands are labelled ꜣḫt)[274] but the gmt is depicted at Abûṣîr[275] among birds flying to the Delta. The Glossy Ibis does indeed winter in Egypt and the surrounding areas.[276] The name also appears on a papyrus fragment.[277] The 'uniform, almost black plumage'[278] of the gmt was taken by the ancient Egyptians as a metaphor for dirtiness.[279]

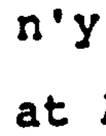
Like the gmt the ṯḥn is depicted at Abûṣîr.[280] It was identified by Edel as the Wood Ibis or Yellow-billed Stork, Mycteria ibis (L),[281] widespread in Africa south of the Sahara, though ṯḥn has elsewhere been taken as a designation for the Sacred Ibis, like ḥb.[282] In Ptolemaic texts ṯḥn is applied to Thoth[283] and this has been the chief reason for translating ṯḥn as 'Sacred Ibis'.[284] Prior to the these texts ṯḥn occurs only once in this context,[285] though the word is attested a number of times in the Pyramid Texts.[286] The name has been compared

with thn 'pierce, break through', perhaps referring to the bird's feeding habits (cf gmt above).[287]

Hb (Coptic ϧⲓⲃⲱⲓ)[288] does not appear before the New Kingdom, though certain references (for example, in the Instructions of Amenemope[289] and in the medical texts)[290] may indicate its existence at an earlier date. It appears most frequently in association with the god Thoth,[291] who could take the form either of an ibis[292] or of a baboon (see Ch.10: Monkeys) and also occurs in lists of animals associated with deities.[293] References to a man's fingers[294] or actions[295] being like those of an ibis doubtless refer to the wisdom of Thoth. The name may be derived from a root hb 'to step' and refer to the Sacred Ibis' stately gait.[296]

Representations of Thoth as an Ibis leave no doubt that hb designates the Sacred Ibis. It may be that thn also designated this bird,[297] with hb taking precedence after the Old Kingdom and surviving into Coptic.

Only two species of crane[298] are found in Egypt today, the Common Crane, Grus grus (L), and the Demoiselle Crane, Anthropoides virgo (L).[299] Both may be distinguished among the birds depicted in ancient tombs as food offerings, the first from its red crown[300] and the latter from its white head tufts.[301] They bear the names dꜣt (Wb V, 516, 9-13: Art Kranich)[302] and wdꜥ (Wb I, 407, 14: der graue Kranich) respectively.[303]

Two other species of crane, the Wattled Crane, Bugeranus carunculatus Gmelin, and the Sudan Crowned Crane, Balearica pavonina L, are found in East Africa; neither is found north of 20°N [304] and neither can be identified from Egyptian reliefs and paintings.[305] Nevertheless, two further designations were applied to cranes in ancient Egypt: ꜥw (Wb I, 170, 3: Art Kranich)[306] and gꜣ (Wb V, 149, 8: Art Reiher).[307] Owing to the existence of one example where ꜥw (written ꜥꜣw) immediately follows dꜣt[308] Montet[309] believed ꜥw to be 'qu'une epithète qui qualifie une variété de l'espèce  . Entre les oiseaux qui portent ces deux noms il n'y a d'autre différence que la couleur'. In the tomb of Ptaḥshepses at Abûṣîr the dꜣt has blue legs and plumage with red feet, while the dꜣt ꜥꜣw has pale blue plumage and dark blue feet.[310]

The colouring of cranes was mentioned by Junker[311] when discussing examples from the Mastaba of Iy. He dismissed the presence of red colour on the feathering of the d3t and wdʿ as an error on the part of the painter: 'Wir hätten also unter d3t nicht nur den schwarzen, sondern auch den roten Kranich zu verstehen' (though what he means by 'black' & 'red' cranes is unclear) - 'das will freilich nicht zu den feinen Unterscheidungen passen, die der Ägypter bei den Tierarten macht.' On these points note the brownish/reddish feathers which do appear on the back of the common crane;[312] these colours were presumably transferred in error onto the demoiselle crane depicted in this mastaba. The colour differences noted by Montet seem insignificant; red feet are not, in any case, present on any species of crane. Junker[313] suggested for ʿiw in this instance 'vielleicht die Bezeichnung des Männchens'.

With no further information available it is difficult to see how to translate ʿw and g3; though they are obviously different from the wdʿ their similarity in form to the d3t (and dissimilarity to other East African cranes) would tend to lead to the conclusion that these terms too applied to what modern zoologists see as a single species, Grus grus.[314] The names applied by the ancient Egyptians to cranes thus provide valuable evidence for 'overdifferentiation' in their classification of animal species (see also Ch.18: Fish).[315]

The only one of the terms for cranes to survive the Old Kingdom was d3t, which continued to be common in offering lists and elsewhere,[316] for example, in ritual[317] and as a good omen in a dream.[318] This crane was also associated with the soul of the deceased on his ascent to heaven.[319] By the Coptic period a separate term for crane had been lost; instead ⲉⲧⲏⲱⲓ and ⲧⲓⲥⲓ , from Egyptian dšrt 'flamingo', were used to denote this bird.[320]

Two water-birds were adopted as hieroglyphs, the b3[321] (Wb I, 410, 10: der Vogel, den die Hieroglyphe darstellt) and the dšr[322] (Wb V, 487, 9: der Flamingo, den das Schriftzeichen darstellt). The dšr is easily identified as the (Greater) Flamingo, Phoenicopterus ruber L,[323] still found in Egypt today,[324] from detailed examples of the hieroglyph[325] and from the name itself meaning 'red' (Wb V, 488, 1 - 490, 13: rot, rot sein).[326] As a bird name dšr is attested in a list of words,[327] in the Book of the Dead[328] and in the Coffin Texts[329] where it varies with the otherwise unknown term, šbd, var. šbdd (not in Wb).[330] B3, on the other hand, does not occur used as a bird name,

though it undoubtedly did originally designate the bird represented by the hieroglyph. It was identified by Keimer[331] as the Saddle-billed Stork, Ephippiorhynchus senegalensis (Shaw), sometimes knownas the Jabiru (Stork),[332] though 'jabiru' should properly be applied only to the South American stork Jabiru mycteria. The Saddle-billed Stork does not occur in Egypt today, but is found in the Sudan and in all but the most southerly parts of sub-Saharan Africa.[333] Early hieroglyphs represent the position of this bird's wattle accurately,[334] though by the New Kingdom this has migrated to the base of the neck.[335] The colouring of later hieroglyphs is, however, reasonably accurate.[336] Comparison with Coptic ϩⲁⲓ,[337] 'night raven', 'screech owl', led to a delay in the correct identification of the bꜣ; dšr is also preserved with a different meaning in Coptic, as ⲉⲧⲏⲱⲓ 'crane'.[338]

A number of other water-birds appear in named representations, for example:

ꜥnḥbt (Wb I, 193, 1: Name eines Vogels),[339]
bnq (Wb I, 464, 4: Name eines Vogels)[340]
mrwryt (Wb II, 109,10: ein Vogl),[341]
ḥnt (Wb III, 104,2-3: der Pelikan)[342]
- compare perhaps ḥn (Wb III, 104, 1: ein Vogel)[343]
ḥrt var. ḥrt (not in Wb),[344]
ḫry (Wb III, 396, 7: als Name eines Vogels),[345]
sḥḥ (Wb IV, 220, 19: Name eines Vogels)[346]
- compare sḥt (Wb IV, 209, 8: Art Vogel)[347]
and, similarly, the bird name in the phrase ḏw-sḥsḥ,[348] which appears from the length of its bill in the hieroglyph, to be another species
sḏḥ (Wb IV, 394, 5: als Name eines Vogels)[349]
- compare sth (Wb IV, 345, 1: Name eines Vogels)[350]
krꜣ (not in Wb),[351]
tnt (Wb V, 313, 7: ein Vogel),[352]
tfnyt, which glosses another bird-name sft (Wb IV, 118, 9: Art Vogel),[353]
dqyt (Wb V, 499, 5-6: als Name eines kleinen Vogels (ob: der Regenpfeifer?)),[354] var. drqyt (Wb V, 478, 4),[355]
dms (Wb V, 574, 13: Art Vogel).[356]

Of these ḥnt 'Pelican' is the most common, being attested a number of times in mythological contexts,[357] as well as in the medical texts.[358] The mrwryt, identified from the Beni Ḥasan depictions as a Black Stork (Ciconia nigra L), may also appear in a mythological text

as the mrwy whose wings are attached to the prow of a boat [359] (see also ʿwʿ, Ch.17, which may be a similar bird).

The ʿnḫbt and ḏms are identifiable from the representations as the Pied Kingfisher[360] and Avocet[361] respectively. The ḥry may be a type of plover[362] and the shḥ a gallinule.[363] Tnt evidently named the Spur Winged Plover[364] and sdḥ the Little Ringed Plover,[365] while d(r)gyt appears to have denoted the Painted Snipe.[366] The other birds are as yet unidentifiable.

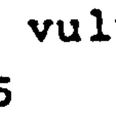
Chapter 16 : Birds of Prey

Houlihan and Goodman recorded 47 species of birds of prey from present day Egypt,[1] and a few of these can be recognised from ancient Egyptian records.

Five birds of prey appear as hieroglyphs : 3 (Sign List G1, cf G2-3), m (Sign List G17, cf G18-20), nr (Sign List G14, cf G15-16), tiw (Sign List G4) and Ḥr (Sign-list G5 cf G6-G13). These have been identified as the Egyptian Vulture, Neophron percnopterus (L);[2] The Barn Owl, Tyto alba (Scopoli) (among others);[3] the Griffon Vulture Gyps fulvus (Hablizl),[4] the Long-legged Buzzard Buteo rufinus (Cretschmar),[5] and the Peregrine Falcon, Falco peregrinus Tunstall,[6] respectively.

Both 3 (Wb I, 1, 1: der weißköpfige Geier[7]) and nrt (Wb II, 277, 1-3: der Geier) appear in the texts as the names of birds,[8] but whether m was also the name of the owl(s) depicted is a matter of some debate.[9] There is no evidence to suggest whether or not tiw was the name of the buzzard of the sign, though 3 and m were undoubtedly onomatopoeic names[10] and the same may be true of tiw. Ḥr was not the name of the 'Horus' falcon; numerous references indicate that the bird in question was named bik.[11]

Of these words only nrt is very common. The term is found several times in the medical texts.[12] Their bones and feathers are mentioned elsewhere[13] and the deceased could fly to heaven in their form.[14] Vulture heads on a collar[15] and vulture figures as amulets were also named nrt;[16] a 'vulture of gold' also appears in this context.[17] This bird was closely associated with the goddesses Mut and Nekhbet[18] and possibly also Rēʿ.[19]

After the Middle Kingdom writings with final (apparently feminine) t become less common; t is replaced by iw. (In some of the latter cases the word may be confused with masculine niw, 'ostrich'.[20]) This form recalls Coptic writings,[21] which may be either masculine or feminine. Westendorf concluded of the Coptic: 'Das weibliche Wort bezeichnet also den Geier beiderlei Geschlechts. Dazu erinnert Sethe daran, daß nach ägyptischen Glauben (Horapollo I, 11) nur weibliche Geier existeren'.[22] On this idea Keimer also commented: 'Presumably to be connected with this idea [that vultures are all feminine] are the facts that from primitive times the vulture  was conceived to be

the animal of Nhbt of El-Kâb, the patron goddess of Upper Egypt, and furthermore that the same vulture hieroglyph was used to determine the word for 'mother' (mwt) and the name of the great Mother-goddess (Mwt) of Thebes, the consort of Amun'.[23]

The only named birds of prey depicted in a naturalistic setting are the bꜣk (Wb I, 444,13-445, 8: der Falke)[24] and the tnḥr (Wb V, 384,12: Art Falke).[25] They are both shown nesting (the nest of a bꜣk is also mentioned elsewhere).[26] Tnḥr occurs only in one other text, the tale of the Eloquent Peasant,[27] so an identification of the species is difficult. Edel presumed it was one of four species of falcon now breeding in Egypt. The Eloquent Peasant text notes that the tnḥr preyed on other birds; this would allow it to be identified as a Lanner or a Sooty Falcon.

As has been mentioned the bꜣk is the bird associated with Horus, and designates the Peregrine Falcon. This falcon feeds chiefly on smaller birds, a characteristic mentioned a number of times at Medinet Habu, where the king (or his horse) among his enemies is compared with a peregrine among the šf(n) (Wb IV, 445,3: Art kleiner Vögel; Wb IV, 460,3: Art kleiner Vögel) or ḫpt (Wb III, 258,1: Art kleiner Vögel; Wb III, 259).[28] Many other metaphorical expressions describe the king as a bꜣk,[29] divine bꜣk[30] or bꜣk of gold.[31] Various deities also appear with these appellations.[32] In addition Hathor was described as a bꜣkt.[33]

In the underworld the deceased could assume the form of a bꜣk in order to travel heavenwards or go about during the day.[34] Bꜣk and smn (the bird associated with Amun) appear together in this and similar contexts.[35] Bꜣk also appears in the Coffin Texts in descriptions of a fishing net,[36] and is associated with the shoulders (mnwy) in a medical text.[37] The bꜣk had a place in ritual[38] and magic,[39] and falcon-shaped amulets,[40] like collars in the form of falcons,[41] were designated bꜣk.

In a number of texts bꜣk appears in parallel with gmḥsw (Wb V, 172,1-6: Art Vogel (Raubvogel)).[42] The vast majority of references to gmḥsw are from Ptolemaic texts[43] and Junker[44] believed gmḥsw at this date to be the name given to sacred falcons or cult images of the god Horus. In earlier texts the gmḥsw is associated with Sokar. The 'falcon (gmḥsw) who sees the rudder' in the Cairo Calendar[45] may be compared with the 'gmḥsw upon the evening bark' of Theban Tomb 30[46] describing Ptaḥ-Sokar-Osiris (cf Sign List G10 'falcon on a special sacred bark' as determinative of the name of Sokar). Gmḥsw also appears on an

ostracon preserving part of a sun hymn.[47]

In two of the texts in which bꜣk and gmḥsw occur together šnbty (Wb IV, 514, 1-4: ein Raubvogel: Falke) also appears.[48] This term is elsewhere applied to Horus,[49] and to a falcon-shaped amulet.[50] Like gmḥsw it is more common in Ptolemaic texts.[51] Its usual determinative was described by Gardiner as an 'archaic image of a falcon'.[52] One of the texts containing these three words gives different determinatives for each; though each describes the sun-god the juxtaposition of the words seems to indicate a clear distinction between them.

It is evident that by Ptolemaic times gmḥsw was synonymous with bꜣk,[53] and both gmḥsw and šnbty at that date were applied to Horus in the same way as bꜣk. Altenmüller[54] suggested that the different terms corresponded to different depictions of falcon deities : 'Als heiliges Tier...: seit der FrZt in unterschiedlicher Haltung dargestellt, als aufgerichteter F[alke] (bꜣk) , als lauernder F. (šnbtj) oder als mummifizierter F. (ʿḫm, Achom) , seit MR auch mit ausgebreiteten Flügeln (Dunanui)'. Nevertheless, bꜣk may also show a 'cowering falcon' determinative,[55] so the distinction may be more complex than Altenmüller allowed.

Like Horus and Mut, Isis and Nephthys also took the form of birds of prey. In their functions as mourners at the bier of the deceased (as Osiris)[56] these birds are both depicted and named. When depicted the birds are drawn alike;[57] in the texts, however, although both may be described as ḏrt[58] (Wb V, 596, 2-8: ein Raubvogel: der Falke, die Weihe oä), especially as ḏrt wrt and ḏrt nḏst,[59] Isis' bird may be designated ḥꜣt (Wb III, 7, 8: ein Vogel).[60] Houlihan, from various representations of Isis as a bird, identified two species, both the Black Kite, Milvus migrans (Boddaert), and the Kestrel, Falco tinnunculus L or Lesser Kestrel, F.naumanni Fleischer. Neither of these identifications is entirely satisfactory.[61]

Ḥꜣt also appears as the name of a bird in a relief at Abûṣîr, in the sun-temple of Niuserrēʿ.[62] The bird depicted here has a long bill, as it does in another relief from the Unas causeway,[63] and forked tail, and was identified by Edel as a tern[64] ('Seeschwalbe'). Ḥꜣt also occurs on a Middle Kingdom sarcophagus between three dressed ducks and a pintail, though it is probably not a bird name here, but a writing of ḥꜣt 'food' (Wb III, 12, 22: Speisen oä).[65] Similar forms ḥꜣy and ḥꜣyw (Wb III, 16, 2: Bez. der Raubvögel) are also attested; in the former case[66]

Isis is referred to, in the latter[67] the conquering pharaoh is likened to ḥ3yw among a multitude of birds. The determinatives in the latter text are unusual - both ḥ3yw and 3pd 'bird' have the 3 as determining sign. This sign is also found as a determinative of ḏrt, and Isis and Nephthys depicted as birds of prey sometimes appear very like the 3-hieroglyph in shape. Ḥ3yw also has a knife (Sign List T30) as determinative, which would seem appropriate for a bird of prey. Ḥ3y is attested in addition in the Coffin Texts, and is apparently to be distinguished from another bird name ḥ3w.[68] Ḥ3t is also attested here,[69] and a form ḥ3yt, recorded among the names of various edible birds, appears in a New Kingdom document.[70] (See also Ch.15: Waterbirds for these words).

The ḏrt appears to have been regarded as a vicious scavenging bird,[71] eating carrion[72] as well as mice,[73] though it could be 'mastered',[74] like the bꜣk. This Keimer took to be a reference - the only one in Egyptian texts - to falconry.[75] The ḏrt is twice referred to as being 'in the sky'[76] - this seems to have been its typical habitat (as the desert was for jackals); the bird's flight heavenwards is alluded to in the Pyramid Texts.[77] It appears in parallel with other types of bird, among them the bꜣk and smn.[78] A writing ḏrꜣ also occurs in love-songs,[79] and in the medical texts the bird appears in the rôle of a scapegoat.[80]

A form ḏrty (Wb V, 597, 5-12: Art Falke; Wb V, 597, 13-14: das Falkenweibchen) is also occasionally found, though it is applied to Horus, to the pharaoh or to a Nile god.[81] These texts are late in date; like qmḥsw and šnbty, ḏrty seems to have been synonymous with bꜣk.

Ḏrw (Wb V, 601: Vogel, Raubvogel, cf Wb V, 596, 1: Art Vogel in einem Vergleich) in the phrase ḏrw n šꜣ from the Book of the Dead[82] should perhaps also be included here, though this is not otherwise attested as a writing of ḏrt. (Compare however the Coptic form ⲧⲣⲉ).[83]

It can be seen from the above texts that the ḏrt (var. ḏrw, ḏrꜣ) was noted for its wailing cry, its scavenging, eating mice and frequenting watery habitats. It could, perhaps, be trained. In all these characteristics it resembles the Black Kite (Milvus migrans).[84] Ḥ3t (var. ḥ3y, ḥ3yw) also clearly denotes a bird of prey. It may be distinct from the ḥ3t as depicted at Abûṣîr and the Unas causeway though this bird's forked tail and fish-eating habits are also found in the Black Kite.[85] As noted above it is difficult to identify the birds

of Isis and Nephthys from representations in tombs and on papyri but, when depicted, the birds are always of the same species. From this and the texts it may be deduced that both ḥꜣt and ḏrt applied to the Black Kite; ḥꜣt may have been a descriptive name, 'screecher', also appropriate to other species (such as a tern).

The ꜥḫy-bird (Wb I, 224, 11: Name eines Vogels) appears in one text as an insect-eating bird.[86] In another, Isis speaks of herself as both an ꜥḫy and a ḏrt.[87] The ꜥḫy and the bꜣk appear together in a medical text,[88] and ꜥḫt (again like bꜣk) is used of the king.[89] These attestations indicate that ꜥḫy was a similar species. That it is described as 'striking' suggests that it was a bird of prey.[90] It is also mentioned in connection with watery places[91] - compare the ḏrw n šꜣ - and as being restless.[92] A keeper (šꜣw) of ꜥḫy (written ꜥḫw) is also known.[93]

In another text the term appears to have a more general meaning, seeming to designate 'birds' as a class.[94] Sauneron compared the term with ꜥḫꜣ 'voler';[95] another word with a similar etymology and a broad meaning is pꜣyw (see Ch.1: Classification). Both the specific and the general meanings of ꜥḫy are found in New Kingdom texts; the presence of ꜥḫy in the medical texts apparently denoting a species might indicate that this was the older use.

Other terms which have been translated with the names of birds of prey are ꜣs (not in Wb)[96] and ḏtꜣt (Wb V, 618,8 : Geier).[97] Both may be vultures, though in one case ꜣs has a determinative unlike a vulture.[98] Also possible as the name of a bird of prey is s(ꜣ)ꜣ (not in Wb);[99] this bird, like bꜣk[100] and tt-mrwy,[101] appears on the prow of a boat.[102]

No term is preserved which may be translated 'eagle'[103] though it has been asserted[104] that Coptic[105] used the ancient term ꜥḥm, (Wb I, 225, 15-226, 5: Götterbild... der Falke)[106] to designate this bird. The expression 'feather of an ꜥḥm '[107] indicates that it was a living species. According to Ember, the word may be descended from a Semitic root.[108]

Chapter 17 : Miscellaneous Birds

As has already been mentioned in Ch.15, mnwt (Wb II, 72; Wb II, 79, 3-4: die Taube) is very frequently attested in offering scenes and lists from tombs and temples, appearing most often in a group of five birds with two geese (r, trp) and two ducks (st, s). From named representations of the bird mnwt[1] it may be identified as the Turtle Dove, Streptopelia turtur (L).[2] Although mnwt[3] is the most common writing of the name of the bird, mnt [4] and mnw[5] are also attested. Mnwt (once as mnt)[6] also occurs many times in longer lists of birds destined as offerings.[7]

Similar lists are known which separate ducks and geese (summarized as (3pdw)n mw: 'water-birds') from other birds; here the writings mnt,[8] mnꜣt[9] and mnw[10] are attested. Mnyt (Wb II, 77) also appears in another list of offerings.[11] The form mnw is recorded separately by Wb (II, 79, 5: Art Vogel) among a list of goods transported by the 'Eloquent Peasant'.[12] Mnꜣt is recorded by Spiegelberg in a list of birds on an ostracon from the Ramesseum;[13] Gardiner[14] supposed mnꜣt and mnyt to be either variants of mnwt or writings of a separate term altogether. The latter appears to be disproved by the examples noted above.

In P.Ebers the writings mnt and mnyt once occur in the same prescription (note that mnt was corrected from mnyt).[15] This is the only occurrence of mnyt in the medical texts though mnt is attested several times;[16] mnwt is not attested in these texts. Wb.Drog translated the terms 'die Taube' (mnyt) and 'die Schwalbe' (mnt) respectively.[17]

Mnt with swallow determinative[18] (Wb II, 68, 2-4: die Schwalbe) is frequently attested in mythological contexts. It was associated with Rē[19] (Greco-Roman sources rather indicate a connection between Isis and the swallow),[20] it appeared in the underworld texts[21] and was one of the birds into which the soul of the deceased might change in order to travel heavenwards.[22] It occurs in a love song as the herald of the dawn.[23] Swallows were revered at Deir el-Medîna[24] and mummified examples have been found near Thebes.[25] Mnt is also attested as a toponym[26] and as a personal name.[27] Another writing of the word can be found above a representation of two swallows in the papyrus of Panebenkemetnakht where stands the word mnꜣt.[28]

It is abundantly clear from the above that there was considerable similarity between the various forms of mnwt and mnt. Mnw and mnwt, as is indicated by their presence in lists of food offerings, almost exclusively designate a dove.[29] Mnt and mnỉt, on the other hand, may be used to designate either the swallow or the dove, and there seems little point in postulating, as Gardiner did, the existence of a third bird designated mnỉt. The mnyt of P. Ebers causes a problem in that the word with which it appears, mnt, can apply to either the dove or the swallow. Since mnyt is attested elsewhere with the meaning 'dove' it may be best to understand mnyt 'dove' and mnt 'swallow' in the Ebers text, as suggested by Wb.Drog., though the reverse cannot be altogether ruled out. This evidence well illustrates the dangers of translating mnt and mnỉt out of context.[30]

Mnt 'swallow' survived into Coptic (as ϭⲏⲛⲏ);[31] mnwt 'pigeon' did not. Instead ϭⲣⲟⲟⲙⲡⲉ was used, derived from earlier gr-m-pt (see below).

Various other words have been considered to designate pigeons/doves[32] and swallows[33]: bḏw (Wb I, 488, 15: Art kleiner Vogel);[34] ʿb3 var. ʿb (not in Wb, but cf ʿbw, Wb I, 175, 1: Name eines Vogels?, and, perhaps, ʿby(t), not in Wb);[35] šsmty (not in Wb); šm (not in Wb); ḥsf (not in Wb); s3bw (not in Wb; see shḏbw, Wb IV, 228, 7: Art Vogel. Ob richtig?); gr-(m)-pt (Wb V, 181, 2: die Taube; Wb V, 181); sš3 (Wb IV, 280, 14: Name eines Vogels); ʿš3 (Wb I, 229, 11: Art Vogel: ob Taube?); wr (Wb I, 326, 11: die Schwalbe) and (ʿ)ʿnt (not in Wb).

Bḏw was translated 'Taube' by Edel, who rejected other identifications of this bird as a sandgrouse[36] as he believed the bḏw to be a migratory bird (sandgrouses are migrants however).[37] Edel also believed ʿbʿ to be a dove, possibly a subspecies of S.turtur,[38] and this would accord also with pictures of the ʿb[39]. A peasant's voice is compared to that of the ʿbw;[40] since few birds are voiceless it is difficult to identify the bird from this text alone,[41] and to confirm or deny whether it was merely a variant of ʿb3 or ʿb. The word has been translated 'crow'[42] or 'raven'[43] though the repetitive tones of the pigeon or dove[44] would suit the context equally well; in other texts the human voice is compared with the drw (kite?), smn (Nile goose) and bnw (heron). Another bird name which may be related to a verb concerning the human voice is sš3 (cf Wb IV, 281, 1: umstimmen; IV, 281, 2-3: flehen...), identified by Davies from the representation at Beni Ḥasan as 'Pigeon(?)'.[45]

Šsmty was the name given to another of the birds depicted at Abûsîr which Edel identified as pigeons. He translated the name literally as 'die Malachitfarbene', comparing šsmt (Wb IV, 539, 1-3: Ein Mineral), and understanding this as a reference to some species' neck of glossy metallic green.[46] Šm he took as a designation for the Rock Dove, and ḫsf for the Laughing Dove;[47] he accepted the possibility that the terms šm and ḫsf might not be bird names but part of a phrase labelling the scenes, though, from the placement of the signs, this does not seem inevitable.

S3bw named a bird depicted at Beni Ḥasan,[48] identified by Houlihan and Goodman as a Masked Shrike.[49] The name is appropriate to this bird; the term s3b is applied to black and white cattle (see Ch.4 : Cattle) and the Masked Shrike is a black and white bird with rufous flanks.[50] (If this identification is correct the approximate size (c.6") of the ỉrt, ʿḥỉw and ʿnnbw in the same scene can be established.)[51] The s3bw also appears at Abûṣîr where it was identified by Edel[52] and Keimer[53] as a type of pigeon; the Beni Ḥasan example indicates that this is probably wrong, though a rather pigeon-like bird being carried by a boy is labelled nfr s3b in the tomb of Mereruka.[54]

The name gr-m-pt was translated 'dove' by comparison with Coptic ϭρωομπε, 'dove'.[55] (Compare here the form gry (Wb V, 181, 1: Vögel; Geflügel)[56]). This bird is not depicted but is mentioned a number of times in lists of food offerings,[57] often close by the mnwt. This would certainly indicate a bird of similar size or type. Another bird from the offering lists, often appearing in parallel with the ḫtʿ3 or r geese is the ʿš3[58] (a variant ʿšt may also belong here).[59] In other lists it is separated from such 'waterbirds' and follows mnwt or gr-pt.[60] The word occurs with several variant writings, some showing a bird determinative, others showing a bird hieroglyph preceding, or both preceding and following, ʿš3. This has led to the readings st-ʿš3 (this is explicitly written in one case)[61] or sʿš3 (Wb IV, 55, 20: Art Geflügel) (which appears written out in a Ptolemaic text)[62], but also 3pd ʿš3 'ordinary birds', which has sometimes been separated from the bird-name ʿš3.[63] It is generally the ʿš3+bird determinative which occurs with the ḫt-ʿ3 and r and this is perhaps, therefore, to be understood as a type of waterbird, a goose or duck. Writings of ʿš3 with the bird sign preceding should then be read s(t)ʿš3 and considered to be a similar type of bird to the mnwt and gr-pt.[64]

Wr as the name of a swallow was deduced from the Pyramid and Coffin Texts and the Book of the Dead,[65] though in later times it appears exclusively as a phonogram,[66] while mnt is used to designate the species. ꜥꜥnt is attested in a passage recounting a ritual involving various birds.[67] The word has been compared with one of the bird names at Beni Ḥasan (usually read ỉrt),[68] applied to bird identified as a type of swallow, despite the fact that the bird so named does not have a swallow's forked tail. The toponym ꜥnt from the Coffin Texts has been read as a variant writing of mnt,[69] though the ritual text would seem to confirm ꜥnt as a separate word. Note that ꜥnt is also attested in an unfortunately garbled list of offerings from Luxor;[70] from its position in the list it is likely that a much larger bird than the swallow is intended and, therefore, that this identification should be abandoned.

A number of bird-names may be inferred from the phonetic use of signs with the forms of birds. Examples of these are w (Wb I, 243: der junge Vogel, den die H[ieroglyphe] darstellt (ob Wachtel)[71]); wr (see above); nḥ (not in Wb); rḫyt (Wb II, 447, 8: Name des Vogels mit dem das folg. Wort [=rḫjt Untertanen, Volk] geschrieben wird), cf rḫt, perhaps not the same word; and ḏb (not in Wb). Other signs belonging to this group, m and ꜥḳ, are discussed in other chapters.

The nḥ is attested as a bird name, though only infrequently, and has been identified as the Sennar guinea-fowl, Numida meleagris (L).[72] The rḫyt-bird appears from detailed hieroglyphs to be a lapwing, Vanellus vanellus (L),[73] and the ḏb a hoopoe, Upupa epops.[74] (Hoopoe has also been given as a translation of the bird name ḳḳ, (Wb V, 71, 11: Name eines Vogels der als langlebig gilt. Ob 'Kuckuck?') attested in the Ramesseum Onomasticon and at Thebes).[75]

The nỉw (Wb II, 202, 8-11: der Strauß) is readily identifiable from its determinative (Sign List G34),[76] as the ostrich (Struthio camelus L). Recent records of ostriches in Egypt suggest that the bird may have existed unobserved there since antiquity (it is sometimes stated that the bird died out in Egypt in the 19th century[77]) or that it may have re-colonized the country by advancing north from the Sudan.[78] Although the ancient Egyptians pictured and mentioned ostriches as imports from the south,[79] east[80] and west,[81] hunting scenes indicate that a considerable number existed wild in Egypt.[82] Their eggs and feathers were also imported;[83] these, together with other parts of the bird, are mentioned in the medical texts[84] and elsewhere.[85] To dream of an ostrich was a bad omen.[86]

A New Kingdom text records the nỉw 'dancing in the valleys' at sunset,[87] a scene depicted at Medinet Habu and at Amarna, where ostriches and other animals are shown running beneath the sun's rays[88]. This 'dancing' by ostriches has been noted by various zoologists.[89]

The term may be the ancestor of Berber a.nhil;[90] it did not survive into demotic or Coptic.

One of the birds from the Beni Ḥasan 'bird and bat' scene which also occurs on a number of Old Kingdom tomb reliefs is the gnw (Wb V, 174, 2-4: Art Vogel),[91] also read ḳsnw[92] (Wb V, 69, 6: Wohl Name des Vogels, den die Hieroglyphe darstellt[93]). Wb considered the latter to be 'kleine, den Früchten schädliche Vögel wie Sperlinge'. The former has been identified by several authorities[94] as the Golden Oriole, Oriolus oriolus (L), which still occurs in Egypt.[95] Apart from its appearance as a label for the birds in tomb scenes[96] the word gnw also occurs in the medical texts.[97] From the similar colouring of the gnw and ḳsnw,[98] and the fact that the sign with which ḳsnw is written (Sign List T19-20) may also be read gn, the two designations should perhaps be read together as gnw; there is, however, a demotic word ḳsnw,[99] which would indicate that the earlier term should not be deleted altogether.

A bird discussed by Gaillard together with the oriole was that called swrw (Wb III, 429,7: Name eines Vogels), attested both at Beni Ḥasan[100] and at Abûṣîr.[101] Gaillard identified it with reason as the Roller, Coracias garrulus L.[102] Like the oriole this bird is found in modern Egypt, together with the species C.abyssinicus Hermann, the Abyssinian Roller.[103]

The pʿrt (Wb I, 504, 14: Art Geflügel), nḫnt (Wb II, 312, 7: ein Vogel, von sprichwörtlich weißer Farbe), snfrw (Wb IV, 163, 15: ein Vogel von schwarzer Farbe), skm (Wb IV, 318, 7: Art Geflügel) and tt (Wb V, 413, 14-15: Sperling) have all been identified, though generally on somewhat uncertain grounds.

pʿrt occurs in lists of birds destined as offerings[104] and once, again with the names of other birds, in a mathematical problem.[105] It also appears in a medical text,[106] and a ritual text.[107] Similar terms pʿꜣt, which occurs in a letter to a man's dead mother, and pʿꜣ, in a text berating an idle pupil,[108] have been compared with this word.[109] Wreszinski suggested for this bird 'Wachtel' (quail), noting that the

translation was, however, 'nicht sicher', but deducing from the mathematical text mentioned above that it was a bird of a similar size to a dove (mnwt). Pʿrt was also translated 'la Caille' by Loret,[110] comparing the term with the Coptic ⲡⲏⲣⲉ[111]. Doubt was cast on this equation by Gardiner and Sethe,[112] but it continues to be proposed in etymological dictionaries.[113] The common quail, Coturnix coturnix (L), is still found in Egypt today;[114] numerous agricultural scenes from the ancient tombs attest to their presence there at an early date.[115]

Nḫnt and snfrw both occur in the same text at Amarna : 'until the nḫnt becomes black and until the snfrw becomes white'.[116] Snfrw may also occur at Maidûm,[117] and a term nḫnḫ occurs in a rather garbled list of bird names at Luxor.[118] From the Amarna examples Davies[119] believed the birds nḫnt and snfrw to be the swan and crow respectively (as being typical white and black birds). The translation of nḫnt as swan was questioned by v.d. Walle,[120] following Störk's suggestion that ḏnḏn designated the swan,[121] but, as has been seen above (Ch.15: Waterbirds) the ḏnḏn is rather to be compared with the Old Kingdom goose name ḏnw, and a term for the swan to be sought elsewhere. The occurrence of nḫnḫ in an offering list would not preclude an identification of this bird as a swan since a swan is depicted in precisely this context in the tomb of Ptaḥḥotep.[122] No other term has been consistently accorded the translation 'crow' though demotic ꜣbk/ʿbḳ[123], Coptic ⲁⲃⲱⲕ,[124] have been regarded as designating its close relative the raven. Both crows and ravens are found in Egypt today.[125]

The skm appears only once, in a text concerning the upset of peaceful life at the water's edge.[126] Görg[127] compared it with Hebrew skwi, also a hapax, which he translated 'Hahn' (cock), with the comment: 'Die Bezeichnung könnte zwar asiatischen, aber wohl nichtsemitischen Ursprungs sein, zumal der Hahn Importtier aus dem indischen Raum zu sein scheint.'

The earliest known representation of a cock from ancient Egypt is to be found on an ostracon from Deir el-Medîna ;[128] a Dynasty 18 text referring to birds (ꜣpdw) which 'lay (ms) every day' may also describe this bird.[129] From the time of the Persian occupation of Egypt ḳmt was used of domestic fowl[130] - cf demotic ḳjmj[131] and Coptic ϭⲁⲓⲙⲉ [132] - though this word originally described the Glossy Ibis (see Ch.15 : Waterbirds). Between the first mention of these birds in the texts (as 'birds' only) and the transference of ḳmt, it is possible that a specific name was coined for them, and the loan of a foreign term (cf

ssmt, adopted with the import of the horse) not unlikely. Various representations of the bird[133] permit it to be identified as Gallus gallus (L), the Red Junglefowl or domestic fowl.[134]

The tt is attested only a few times, one of these being as the name of a type of bread or loaf[135] (for similar designations see ỉḥ, kꜣ, ỉwꜣ, gꜣfy and r). In the other texts it is recorded as doing damage to the crops,[136] a characteristic of sparrows but also other birds.[137] Wb translated 'Sperling' without comment; Černý[138] also translated the Coptic ϫⲁϫ , derived from tt, as 'sparrow' comparing ϫⲟⲩϫⲟⲩ 'twitter'.[139]

A considerable number of bird-names occur only once or so infrequently or in such contexts that they are impossible to identify. These are listed in alphabetical order below:[140]

ꜣbnn (Wb I, 8, 6: Art Vogel), var. ỉbnn (not in Wb)[141] - note here also the fish-name ꜣbnn, ỉꜣꜣw (not in Wb)[142]

ỉꜣbt (not in Wb), which appears in a ritual text[143] and elsewhere,[144]

ỉmtr(?) (Wb I, 88, 17: Name eines Vogels), possibly to be read ỉmsꜣ,[145]

ỉnb (not in Wb), from a text recording rituals involving birds,[146]

ỉdw (Wb I, 152, 3: Art Vogel), from the medical texts,[147]

ꜥwꜥ var. ỉwꜥwꜥ, (not in Wb) from the Coffin Texts,[148]

ꜥnnbw (Wb I, 192, 14: Name eines kleinen weißen Vogels), depicted at Beni Ḥasan[149] but still unidentified,

ꜥḫ(?) (Wb I, 225, 13: Name eines Vogels)[150]

ꜥḫỉw (not in Wb),[151] possibly to be taken as a variant of ꜥḫy (see Ch.16: Birds of Prey),

wꜣdꜣd (Wb I, 270, 3: ein Vogel), in parallel with bỉk but, from the determinative, apparently not a bird of prey itself,[152]

wdf (Wb I,409, 8: Name eines Vogels),[153]

bḥwt (not in Wb), a bird associated with the gods and showing a 'hawk-on-perch' determinative,[154]

pr (Wb I, 531, 8: ein Vogel), possibly a bee-eater,[155]

mš' (Wb II, 156, 17: ein Vogel), in a medical text,[156]

swtt (not in Wb), translated 'danger-bird(?)' by Faulkner; it appears together with the crane (ḏꜣt),[157]

srḏf (not in Wb), from an offering list,[158]

shywt, in the title ỉmy-r shywt (Wb IV, 236, 11), to be compared with sht (Wb IV, 262, 3 - 263, 2: Vögel mit dem Netz fangen) and shty (Wb IV, 263, 3-4: der Vogelsteller) hence, presumably, meaning merely 'trapped birds',[159]

ḳꜣd (not in Wb), in parallel with an ibis (ḥb),[160]

ḳbḳ (not in Wb, but cf gbgꜣ etc. below),[161]

ḳrḳr (not in Wb) - as it appears with qr-pt it may be a similar (possibly a larger) bird,[162]

knmt (Wb V, 132, 7: ein böser Vogel), possibly a seagull - compare here the animal name knmt,[163]

gꜣbgw (Wb V, 155, 1: Art Vogel), var.(?) gbgꜣ (Wb V, 165, 2: ein dem Toten feindlicher Vogel), translated 'vulture' by Faulkner, although this does not suit the determinatives, and 'raven' by Ebbell, though without comment,[164]

ddwn (Wb V, 502, 6: ein Vogel?), from the Pyramid Texts,[165]

ḏwỉt (Wb V, 551, 8: Art Vogel oä), from the Coffin Texts.[166]

Female birds, where specifically mentioned, were called ḥm(t) 'female',[167] usually in conjunction with the name of the male. St 'pintail' and smnt '(female) Nile Goose' (see Ch.15: Waterbirds) are exceptions.

Two words for 'fledgling' were recorded by Wb. Of these tꜣ (Wb V, 338, 14: junger Vogel ...) is the more common[168] and could be applied to the young of other animals[169]. The hieroglyph tꜣ was represented by a young bird (Sign List G47) depictions of which in naturalistic settings were studied by Davies;[170] she, like Gardiner, believed the tꜣ to show a duckling.

The second term, sms[171] (Wb IV, 142,7 : die junge Brut des Geflügels), is obviously connected with ms 'give birth' or (in the case of birds) 'lay'. Msw also appears to be attested as a term for chicks in the phrase msw ꜣrw-pt.[172] (For msw and the similar term msyt applied to other animals see especially Ch.4: Cattle and Ch.8: Horse and Donkey).

Wꜣr, unknown to Wb, but attested on an ostracon,[173] was compared by Černý to Coptic ογαλ;[174] he translated the term: 'young bird (which can neither walk nor fly), fledgling'.

PART 3 : OTHER ANIMALS

Chapter 18 : Fish

To the ancient Egyptians fish were inextricably connected with the Nile. Whenever the river was depicted fish were shown within it and one text states that fish lived on its water.[1] It is only in two sources from the New Kingdom that fish from other regions are recognised; the 'Punt reliefs' from the temple of Hatshepsut at Deir el-Baḥri show fish of the East African and Indian coasts[2] and a New Kingdom text lists the names of sea fish.[3]

'Fishing and fowling' scenes of all dates illustrate the importance of fish as a source of food.[4] This is also shown by the fact that the majority of recorded fish names are attested on ostraca noting the payment of fish, among other foodstuffs, to the workers of Deir el-Medîna.

The place of fish in mythology was limited.[5] Certain species enjoyed cult worship and were mummified.[6] Two species were depicted in the heavenly Nile guiding the solar bark in its hazardous journeys across the sky (the ỉnt and the ꜣbḏw). Two (the ỉnt and ꜥḥꜣ) were of particular significance in the fishing and fowling scenes already mentioned, being guarantors of rebirth after death. One species (ỉtnw) was especially associated with the fish deity of Mendes, Ḥat-meḥit.

Gamer-Wallert's exhaustive treatise on fish in ancient Egypt[7] included a lexicographical study of some 70 individual fish names and the discussion below will use this work as a starting point. Certain elements in the book are open to criticism, not least the wholesale adoption of Gaillard's list of species identified from ancient tomb reliefs[8] without any attempt to update the zoological nomenclature.[9] Nile species, which may well have been named by the Egyptians even if never depicted, are not considered.

Only a few of the fish names preserved from ancient Egypt are readily translatable, though even in these cases it is usually not possible to identify down to the species level. These include the Nile Perch, Lates niloticus (L) (ꜥḥꜣ- Wb I, 217, 4-5: der Nilbarsch);[10] Clarias sp (nꜥr- Wb II, 209, 1-6: Art Fisch; der Wels);[11] Synodontis sp (wḥꜥ - Wb I, 350, 12-14: Art Fisch)[12] var. ḥwꜥ[13]; and Tetraodon lineatus (L) (špt- Wb IV, 435, 9: der Igelfisch).[14] The names of these fish are attested in lists of fish names and in the medical texts and occasionally elsewhere. The Grey Mullet has been recorded as the

determinative of three words - ḥbꜣ,[15] ḥskmt var. ḥꜣskt,[16] and bq[17] as well as being used as a phonetic sign (ꜥḏ).[18] ꜥḏ itself is attested as a fish name.[19] Two other fish were common as phonetic symbols and can be identified from the hieroglyphs as members of the genus Sarotherodon or Tilapia and Mormyrus; these are the ỉnt (Wb I, 92, 12-15: Ein Nilfisch, 'bulti')[20] and ḥꜣt (Wb III, 539, 8: der Oxyrhynchusfisch[21]) respectively.

Three further fish names were identified by Gamer-Wallert as designating members of the genus 'Tilapia' (Sarotherodon/Tilapia); these are the wḏ[22] (Wb I, 399, 7-8: Art essbarer Fisch von roter Farbe), also written wꜣḏ[23] (Wb I, 268: Art Fische), the dšrw[24] (Wb V, 492, 10-11 : Art Fische) and the ỉmskꜣ[25] (Wb I, 88, 10 : Art Süsswasserfisch).

Both wꜣḏ and dšr are mentioned together with another fish, ꜣbḏw (Wb I, 8, 23: Art Fische) in place of its usual companion the ỉnt,[26] and it has been suggested from this that the three terms were synonymous. Wḏ appears also in a hymn to Ramesses VI and in association with the baboon (ỉꜥn).[27] Dšr occurs in association with Horus.[28]

A fish named wꜣḏ nfr is depicted on an ostracon from Deir el-Medîna ;[29] only the hind part remains, and shows a tail fin shaped like those of the Sarotherodon/Tilapia genera. It was this, together with the pattern on the tail, which prompted Gamer-Wallert to regard wꜣḏ as synonymous with ỉnt.[30] The w(3)ḏ is elsewhere described as being red,[31] though its name suggests that it was green (wꜣḏ). That a 'green' fish should be described as red would, according to Gamer-Wallert, suit the shimmering colours of Tilapia. Keimer[32] also believed this to be the case, noting the variety of the colour of stones in which figures of Tilapia were made. However, both ỉnt and wꜣḏ appear together in another text ,[33] which suggests that the words denoted separate species (or at least different types); this text is not commented upon by Gamer-Wallert. As the text lists fish as food it is clearly not the case that wꜣḏ was an epithet describing the ỉnt, in the way that ḥtt 'chatterer' describes the baboon ỉꜥn. In any case an early text gives wꜣḏ a different determinative from ỉnt.[34] ʾImskꜣ appears in parallel with wꜣḏ and ỉnt and cannot, therefore, be entirely synonymous with these.[35]

Despite being depicted mummified in the tomb of Khabekhnet[36] (Theban Tomb No.26) the ꜣbḏw has resisted identification.[37] It is partly obscured in the tomb scene by the figure of Anubis who is

attending to its mummification; only the tips of the dorsal and anal fins and its tail are visible. It is described in the accompanying text as the '3bdw of lapis lazuli'; elsewhere '3bdw of gold'[38] is a more common appellation.

The original translation of 3bdw, from a comparison with Coptic ϵψωτ, Arabic at-tirsa, was 'turtle'.[39] Many texts, however, mention the 3bdw, (alone[40] or with the ỉnt, dšr or w3d[41]) as accompanying the bark of Rē', and representations of this scene show two types of fish guiding the boat.[42] In scenes showing the deceased tomb owner spearing fish the ỉnt-fish is accompanied by the Nile Perch, Lates niloticus,[43] but the name of this fish is ʿḥ3, and it clearly differs from the 3bdw of Khabekhnet and the second fish of the solar bark drawings in having a rounded rather than a slightly indented tail.

The problem of the identification of 3bdw was addressed at some length by Gamer-Wallert[44] who rejected various species as being different in some degree from that fish as depicted: Labeo niloticus, Barbus bynni, Schilbe mystus, Polypterus bichir (a suggestion of Ebers),[45] Lates niloticus, Petrocephalus sp. (because of the characteristic lip of this fish), Mugil sp. (though this remains a possibility).[46] This difficulty in identifying the 3bdw with any known species has led to the suggestion that the 3bdw was a purely mythical beast.[47] It was closely associated with Rē'[48] and Amun[49] (because of this it has been identified as an eel),[50] Horus[51] and other deities[52] and is attested in magical texts.[53] Nevertheless it also appears in a number of rational texts - on ostraca[54] and on weights.[55] A further text states that this fish should not be eaten on certain festival days,[56] and it was used in medicine,[57] as well as in magico-medical remedies.[58] 3bdw, therefore, evidently denotes a real fish.

As mentioned above, the mullet has been named as the fish which determines the words bq, ḥb3 and ḥskmt and writes the phonetic group ʿd. Another fish, bry (Wb I, 465, 10: ein Nilfisch),[59] has also been identified as the mullet, by comparing Coptic ϩωρϵ and Arabic bûri, 'mullet'.[60] As one text records bry as a sea-fish this may be possible.[61] (Likewise the New Kingdom term sšr (cf Arabic šal, Synodontis schall) was held to denote the fish originally called wḥʿ).[62]

This profusion of terms apparently denoting the same fish has received considerable discussion. Edel[63] presumed that, in the Old

Kingdom, ꜥḏw was a generic term for mullet, with bq, ḥbꜣ and ḥskmt denoting the three species M.cephalus, M.capito (now Liza ramada) and M.auratus. In the Middle and New Kingdoms, he believed, ꜥḏ was the only definite term for the genus Mugil (the terms ḥbꜣ and ḥskmt are attested only in the Old Kingdom), though he presumed that bry was a 'spezielle Bezeichnung' for a type of mullet. This opinion was also accepted by Gamer-Wallert.[64]

In two New Kingdom Texts[65] both bry and bq appear together in addition to the ꜥḏ and would, therefore, seem to denote different types of fish (cf ỉnt, wꜣḏ and ỉmskꜣ above). Whether they denoted different genera, species or sub-species is difficult to say. The deduction of the meaning of bry via Coptic and Arabic is by no means a certainty, and bq written in an Old Kingdom relief showing a market scene may not refer to the fish (a mullet) being handled. It is not impossible that ꜥḏ designated both the genus and the most abundant (typical) species as is the case in other languages.[66] If the three words did all refer to the same species this would constitute a rare case of 'overdifferentiation' in the ancient Egyptian zoological nomenclature, paralleled by the earlier example of ꜥḏ, ḥbꜣ and ḥskmt and the names of cranes (see ḏꜣt, ꜥw, wḏꜥ). ('Overdifferentiation' is a phenomenon described by anthropologists from modern primitive languages in which animal categories are subdivided further than the species in Linnaean classification).[67] This practice was recognized by Keimer[68] in modern Arabic, in which he noted different words for fish which had spawned and those which had not, for larger and smaller fish and for males and females.

Without the aid of named drawings or textual references which do more than merely record names little can be done to identify the other fish which are mentioned in the ancient Egyptian texts; records of fish names on weights or ostraca show at least that the species mentioned were all edible:

ꜣbnn (Wb I, 8, 5: Art Fisch)[69]
ỉy (Wb I, 38, 8: Art Fisch)[70]
ỉwꜣ (Wb I, 49, 18: Art Fisch)[71]
ꜥwbbw (Wb I, 172, 10: Art Fisch)[72]
ꜥšꜥ var. ꜥšw, ꜥšꜥš (not in Wb)[73]
bꜣwꜣ (not in Wb)[74]
bꜣḥrt (not in Wb)[75]
btỉn (Wb I, 484, 16: Art Fische (ob richtig?))[76]
pꜣw (not in Wb)[77]

p3ḳr (Wb I, 500, 5: Art Fisch)[78]

pnḫ..ỉ (not in Wb)[79] not to be confused with the personal name p3pnḫnt[80]

rš3t (not in Wb)[81]

r-d3 (Wb II, 399, 6: Art Fisch; Wb II, 469: Art Fisch)[82]

hwn (Wb II, 484, 16: Art Fische)[83]

hwtn (Wb II, 485, 9: Art Fisch)[84]

ḥwy (not in Wb)[85]

ḥwtỉ (not in Wb)[86]

ḥmt (Wb III, 80, 13: Art Fisch)[87]

ḫ3y (not in Wb)[88]

ḫpnpn (Wb III, 260, 6: Art Fische)[89]

s (Wb III, 406, 12: Art Fisch)[90]

šnʿ (Wb IV, 507, 10-11: Art Fisch)[91]

špnt (not in Wb)[92]

gst (Wb V, 201, 11: Art Fisch)[93]

ḏs (Wb V, 619, 2: Art Fisch), var ḏss (Wb V, 617, 14: Art Fisch), ḏsḏs (Wb V, 618, 3: Art Fisch), and ṯssw (not in Wb)[94]

ḏdb (Wb V, 633, 2: ein Fisch)[95]

A number of fish names which have recently come to light should be added to Gamer-Wallert's work; most of them occur so seldom that they cannot be identified:[96]

ỉtn (Wb I, 145, 13: Art Fisch)

ỉmt (not in Wb)[97]

ỉrṯ (not in Wb)[98]

b3y (not in Wb)[99]

mrt (Wb II, 105, 17 ein Tier (zwischen Fische genannt... wohl irrig determiniert!)[100]

rdỉt (Wb II, 469, 1: Art Fisch(?))[101]

sw (Wb II, 426, 11: Art Fisch)[102]

swr (Wb III, 429, 5: Art Fische)[103]

šʿt (not in Wb)[104]

stpw (not in Wb)[105]

šdy (not in Wb)[106]

ḳwỉ3 (not in Wb)[107]

ḏʿwt (Wb V, 535, 5: ob: gedorrte Fische?)[108]

s3 (not in Wb)[109]

ḥ3 (not in Wb)[110]

ʾItn is the most frequently attested and was associated with the deity of Mendes, Ḥat-meḥit, 'Foremost of Fish'.[111] The word was considered a miswriting of ʾint by Montet in a study of various texts of the Ptolemaic Period,[112] though earlier attestations are provided by the Cairo Calendar[113] and P. Sallier IV.[114] The term also appears in a passage relating the evil deeds of Seth[115] and is recorded in another text among the fish of the wꜣḏ-wr.[116]

The Edfu texts, the Cairo Calendar text and P.Sallier IV all associate the ʾitn-fish with Busiris (Mendes), and P.Sallier IV and the Calendar text mention also the deity Ḥat-meḥit. The nome sign for the Medesian nome shows a fish which has been identified as a dolphin,[117] and the text numbering the ʾitn among the fish of the sea has been taken to support this proposal.[118] Engelbach,[119] on the other hand, compared the fish of this sign with the fish which determines the word bwt and the hꜣ -fish (Mormyrus sp) and concluded that the fish of Mendes was the same as that determining the word bwt, the fish often called 'Schilbe' in Egyptological literature (probably Schilbe mystus, though Eutropius niloticus is also possible).

A further few fish names have been deduced from words which show fish determinatives, notably bwt (Wb I, 453, 8ff: der Abscheu... cf Wb I, 453, 5-6: verabscheuen) - bwt was also noted as a fish name by Wb (Wb I, 453, 4: Art Fisch) though from the texts quoted it is difficult to tell whether it was the fish (and not some other taboo food) which was meant;[120] srḳ (not in Wb with fish determinative);[121] sbnw (Wb IV, 89, 11: Art Fisch)[122] var. bsnt (not in Wb)[123], and bs (not in Wb as a fish name).[124]

Two words originally believed to be fish names are pḥ[125] and tmt[126] (Wb V, 306, 5-6: Art Fisch). However, these should be understood as 'hind-part' and 'whole' respectively, and the following fish hieroglyph in the texts read rmw 'fish'. This is also the case with pꜣḫnt, recorded by Gamer-Wallert as the name of a fish. It appears to be a personal name with (in some cases) the 'seated man' (Sign List A1) determinative not written; the fish sign following must in all cases be read rmw, as other examples from the ostraca show.[127]

Three additional words belong best in the category of 'fish' - wḏʿyt 'mollusc' (Wb I, 407, 6-9: etwas offizinell Verwendetes),[128] ḫꜣt (Wb III, 218, 17: Muschel?)[129] and nwr (not in Wb), which sometimes shows a fish as its determinative, translated by Meeks 'un animal marin(?)'.[130]

Chapter 19 : Reptiles and Amphibians

The Egyptian term most closely expressing English 'reptiles' is ḏdft (Wb V, 633,6 - 634, 2 : Wurm, Gewürm, auch : Schlange) which is discussed in the chapter on classification. The term seems to have had as its focus snakes and other wriggling or creeping creatures, as is shown for example, by the most common determinative of ḏdft, , and by the replacement of ḏdft by ḥf3w 'snake' (Wb III, 72, 14-20: Schlange) in some of the classification lists. Certain reptiles and amphibians, notably crocodiles, turtles and tadpoles, appear to have been considered by the Egyptians to have had closer affinities with fish than a snake-oriented class of animals (see further below), but will be discussed in this chapter for convenience.

It appears that the Egyptians seem to have included in the snake group (by giving them the determinative) animals which are not, in the modern zoological sense, snakes at all. An example of this is ỉnr (Wb I, 98, 10: Art Wurm der Holz frißt)[1] and presumably also the k3k3 (Wb V, 142, 9 : Art Wurm der Holz frißt) which replaces it in a parallel text,[2] both of which (from the contexts in which they appear) must designate insect larvae.[3] Compare also p3yw (Wb I, 498, 5: Bez von Tieren, die im Holz leben (Würmer?, Ameisen ?)).[4] Whether the Egyptians were aware of this, and merely determined ỉnr and k3k3 with because they resembled snakes more than any other type of animal (mammal, bird, fish), as is the case with English 'woodworm' (the larval stage of the Common Furniture Beetle, Anobium punctatum), or whether they really believed the creatures to be a type of 'snake', is probably unknowable, though it is possible that they did realize connections between dissimilar forms of the same animal (eg tadpole and frog).[5]

In view of the predominance of snakes in the Egyptians' concept of reptiles it is reasonable to begin with a review of the terms designating these creatures. Ḥf3w and ḥf3t, the most common and most inclusive terms are fully discussed in Chapter 1, as are the words ꜥ , sḏrw, ḥrỉw-ḫt.sn and ḥrrt, which may also be quite broad in application. A full discussion of snake names is somewhat hampered at present by the lack of any complete publication of the Brooklyn papyrus 47. 218. 48 + 85, sometimes know as the 'Snake-charmer's Manual'. This text was being worked on by Sauneron before his death and he published a preliminary description of it in 1968;[6] in it the snakes of Egypt are described and associated with various deities. Although a certain

amount of information may be gleaned from studies which mention this papyrus, notably works of Vandier,[7] Goyon[8] and Sauneron himself,[9] it should be borne in mind that much of the discussion below may have to be revised when the papyrus, currently in preparation by IFAO, is finally published. Altogether some 30 species of snake are known from Egypt today and this number may have been greater in antiquity;[10] it would be interesting to see the extent to which the Egyptians recognised these species in this apparently thorough and systematic text.

Outside mythological texts (in which snake-names often seem to be only epithets derived from the animals' appearance and behaviour) terms for snakes are not particularly numerous or common. Many occur predominantly or solely in the medical texts as causes of disease, and, therefore, like the ʾinr and kꜣkꜣ mentioned above, are not 'snakes' as we understand them.

The ꜥpnnt (Wb I, 180, 6-7: Art Wurm oder Schlange) occurs nine times in the medical corpus;[11] its appearance in one prescription together with flies and beetles might indicate that it was a very small creature and this seems to be corroborated by the use in all but one prescription of the whole animal, rather than just parts of it.[12] In a text from P. Ebers parallelled in P. Hearst ꜥnꜥrt (Wb I, 191, 15-17: Art Wurm oder kleine Schlange, auch im Wasser lebend (ob Aal oä (?)))[13] replaces Hearst's ꜥpnnt, which might suggest that the ꜥpnnt too could be found in water. The word is determined by 𓆑 as well as 𓈖 which originally led Chassinat to distinguish two animals, translating ꜥpnnt with cow's-skin determinative as 'otter'.[14] However, both writings are found in P. Ramesseum III, which Wb. Drog. took as an indication that the two forms designated the same animal.[15]

It should be noted that certain other animal names have varying determinatives, notably scorpions, frogs, tadpoles, turtles and certain insects.[16] In all these cases the animals in question are anomalies within the classificatory system recognized by the Egyptians, namely a division of the animal kingdom into walking (mammals), flying (birds), swimming (fish) and creeping (reptiles) creatures. Frogs and turtles, in that they are both water-dwellers, share a characteristic with fish, but are clearly distinct from fish and may thus take a general animal (cow's skin) determinative. Certain insects fly like birds and thus have bird determinative, but those which do not might also take 𓆑 . Scorpions, which, like turtles, have their own specific determinative,

might also show , though they were closely associated with the class ddft which itself, representing a variety of creatures, might take instead of as determinative.

ʿpnnt may, therefore, be an animal of this sort - compare Barns' translation 'Perhaps "newt"'[17] - but any such interpretation must be modified by the absence of an alternative determinative for ʿnʿrt. Other translations have included snake[18] or lizard,[19] mole[20] and worm or slug.[21]

Wʿwjt (Wb I, 279, 12-13 : Art Wurm) is attested only once in the medical texts, described as an animal found in excrement,[22] and therefore translated 'grub' by Ebbell.[23] It also occurs three times in the Harris magical papyrus as the bait which has attracted various birds[24] and is perhaps to be translated 'maggot' (the larva of some type of fly).

Pnd (Wb I, 511, 4 : Art Eingeweidewurm) occurs six times in the medical texts, but only in Papyrus Ebers.[25] The prescriptions recorded are designed to rid the body of the worms themselves[26] and of the symptoms caused by them.[27] One is intended to combat the illness caused by ḥfꜣt as well as pnd so the two are evidently similar.[28] The ḥfꜣt is found in the stomach (m ḫt);[29] one preparation against the pnd is to be applied to this part of the anatomy[30] and another is to purge (wḫꜣ) the stomach.[31] Ebbell identified the pnd as a tape-worm,[32] a suggestion which was followed by Leca.[33]

Ḥrrwt (Wb III, 150, 1: Art Eingeweidewürmer (im Bauch) als Krankheitserreger) - compare here ḥrrt (see Ch.1 : Classification)[34] and ḥrrw (Ch.20: Insects) - occurs but once in the medical texts, again in the body (m ḫt).[35] The identification of this creature as the 'schistosoma' worm[36] was rejected by Ghalioungui; he believed ḥrrw to indicate the urinary blood clots (caused by this worm) themselves,[37] and that ḥrrw (like ʿnʿrt, above) named a type of worm to which these threads of blood were similar. Wb. Drog. read the term as ḥrrt and thus believed it to mean 'worms' in general. Without further attestations it is difficult to add more to these arguments.

Another internal parasite was the btw (Wb I, 985, 11-14: Bez. der Giftschlange, Bez. einer unheilbaren Krankheit, Bösewicht (?)), var. btꜣw (Wb I, 484). In three cases the btw does appear to designate a complaint.[38] In one instance in P.Ebers there is a warning: 'do not

approach it, it is a case to be avoided', and Wb. Drog. therefore explained its name: 'Die Grundbedeutung des Substantivs bt.w ist wahrscheinlich "einer, vor dem man davonläuft" oder "einer, dem man aus dem Wege gehen soll"'.[39] In P.Edwin Smith btw appears in a gloss which again counsels that the condition should not be treated.[40] Ebbell identified btw as the hookworm[41]; this was questioned by Ghalioungui[42] without suggesting an alternative translation. In another text the btw appears to have been a poisonous snake;[43] elsewhere magic (tp-r) is to be invoked against it.[44]

Fnt (Wb I, 577, 5-6: Wurm, Schlange) were found in the fingers and toes[45] (and presumably other limbs)[46] and were also supposed to cause tooth-decay.[47] Prescriptions to draw them out (šd)[48] or kill them outright[49] are preserved. Magic was also used against them.[50] Fnt were also known to infest decaying flesh[51] and other substances.[52] The fnw of a snake (ḥf3w) may be related in some way to this word.[53]

Wb. Drog. questioned whether fnt did designate an actual worm or worm-like creature, since all the medical preparations are for external use (even probably the example from P. Ramesseum III as it comes between two medicaments to be used externally), and commented: 'viehlmehr ist an ein wurmähnliches Gebilde zu denken, das offenbar aus geronnener Flüssigkeit (Eiter oä) besteht'.[54] They compared here the ꜥnꜥrt-worm which appears in a description of a 'thread' of blood (also called ꜥnꜥrt).[55] Nevertheless, the prescriptions which try to 'draw out' the fnt suggest that they were indeed real 'worms' (cf sp(d) below), though the assertion that fnt could be found in teeth must be explained as a superstitious belief.

Fnt were numbered among the first created beings.[56] They occur a number of times in the Book of the Dead[57] and ꜥm-fnt ('worm swallower') was the name of the guardian of a gate in the underworld.[58] In the Pyramid and Coffin Texts the fnt are presented as inimical creatures.[59] A fnt of silver appears in P. Jumilhac.[60]

The word survived into Coptic as ϥⲛⲧ (CD 623b: 'worm')[61] where it is again particularly associated with rotting flesh. Vycichl compared the word with an Arabic word meaning 'manger toujours avec avidité, sans choisir ses mets ni se dégouter de rien'.[62]

Several other terms seem, like fnt, to designate the maggots which infest rotting matter. These are ḥsbtt (Wb III, 168, 8: Würmer im

Leibe?),[63] ḥdr (Wb III, 214, 13: Art Würmer welche die Leiche fressen),[64] mtw (not in Wb),[65] dm (Wb V, 451, 6-7: Wurm),[66] var. tm (not in Wb),[67] dnm (Wb V, 467, 12: Würmer (welche die Leiche fressen)).[68] The dm is also recorded as attacking old manuscripts.[69] The name may be derived from dm 'pierce, sting' (Wb V, 449, 1-7: stechen) and thus translated 'biter'. The word probably designates the larva of a type of insect.

The connection between 'snakes' and putrefaction is further indicated by Coptic ⲗⲟⲩⲗⲩ, from Egyptian nfnf (Wb II, 252, 10: Schleichendes, Gewürm[70]) or rfrf (not in Wb).[71] The Coptic word means 'rot, putrefy',[72] though the Egyptian clearly denotes an animal. Nfnf is attested as nfnf nb, in parallel with ḥfꜣw nb, ḥfꜣt nbt, which would suggest that it had a similar broad meaning.[73]

Spyw (Wb III, 440, 17-18: als Krankheitserreger) and srftt (Wb IV, 197, 17: Art Wurm) occur in one medical text together with fnt.[74] There is only one attestation of srftt, but spyw also occurs as an infestation of fingers and toes, with the variant writing spd (Wb IV, 108, 1:.. als Krankheitserreger).[75] It is possible that spd is an entirely different creature. This same text also preserves the mention of a sꜣ-worm, unattested elsewhere.[76]

Two true snakes were used to write phonetic signs: f, (Gardiner, Sign List I9: 'Cerastes cornutus)'[77] and ḏ, (Gardiner, Sign List I10: 'Naja haje').[78] Prisse d'Avennes identified the former as a slug because of a Dynasty 18 representation of the animal climbing a papyrus stem,[79] but Murray believed neither this opinion nor the identification of the f as a Horned Viper.[80] Keimer[81] thought that the f showed this snake moving by 'side-winding' and that cryptic signs for 'enter' and 'leave', showing an f entering or leaving a hole (the m-hieroglyph, Sign List Aa13), were derived from the snake's habit of burrowing into sand.[82] He believed that f could be used as a determinative in place of ∿∿.[83] He also noted a hornless variant which he identified as the species C.vipera.[84]

Murray proposed the cobra Naja nigricollis[85] as a translation of ḏ; she believed it to be the same species as that of the royal uraeus, the rôle of which was to protect the King by vanquishing his enemies.[86] This was not the opinion of Störk[87] who accepted the identification of ḏ as Naja haje; he did agree that the poison-spitting N.nigricollis must have been the Egyptian uraeus, ỉꜥrt (Wb I, 42, 1-4: Schlange,

zumeist heilige Schlange, Schlange an der Stirn des Königs vgl. οὐραῖος).[88]

There has been considerable discussion as to the reasons for which these snakes represented f and d. It has been believed that the sounds may have been derived (on the acrophonic principle) from the names wfi[89] and ꜣdyt[90] (not in Wb) respectively. Both f and dt (Wb V, 503, 1-8: das Wort von dem die Hieroglyphe 𓆑 ihren Lautwert d erhalten hat, die Viper, Schlange) appear in texts as nouns in their own right[91] which suggests that they existed quite independently, though in the Sign Papyrus the f hieroglyph is explained by a longer word, partly lost (fnty or ftft perhaps[92] - though cf the comment of Wb I, 571, 12 (ft): das Tier, von dem das Schriftzeichen 𓆑 sein Lautwert hat).

A few more terms are attested as snake names: ỉknw (not in Wb),[93] ꜥnḫyt (not in Wb),[94] ḫt (? not in Wb)[95] and kmy (not in Wb).[96] All occur only once and therefore do not reveal much of their meaning. Of the remaining terms applied to snakes sꜣ-tꜣ (Wb III, 410, 16-17: 'Sohn der Erde' als Bezeichnung der Schlangen),[97] which has been compared with Coptic ⲥⲓⲧ (CD 359a: 'Basilisk'),[98] is the most common. From certain determinatives in the Pyramid Texts and the Book of the Dead and a vignette in P. Jumilhac, the sꜣ-tꜣ appears to have been a cobra.[99] It was possibly not a species designation, but merely a descriptive term. The sꜣbt snake (Wb IV, 18, 2: bunte Schlange) twice occurs in the Old Kingdom in a title; it is possible that this term also designated an actual species.[100]

Kꜣ with snake determinative occurs in the Coffin Texts[101] and the phrase kꜣ nꜥy is said to appear in the Snake-charmer's Manual.[102] It may be that kꜣ means merely 'male' (see Ch.4: Cattle). Nꜥy occurs alone in one text as a variant of ḥfꜣw 'snake';[103] together with the ḥfꜣw and dꜣrt on an ostracon preserving a piece of writing practice[104] and as proverbially long-lived elsewhere.[105] A possible variant of this word, nꜥw (Wb II, 207, 8-14: Art Schlange), is also attested;[106] the forms nꜥy and nꜥỉw and the forms nꜥwy and nꜥwt occur in a papyrus from the British Museum.[107] Störk[108] suggested that this term applied to the python, not found in Egypt today but apparently the subject of an ancient cult.[109] Borghouts translated 'smooth snakes'[110] without further comment.

Although 40 species of lizards are known from modern Egypt[111] the ancient language preserved the names of only two (a third, sknks, is

known from demotic[112]). The lizard hieroglyph (Sign List I1) is also found with the reading dmi (Wb V, 453: das Wort von dem das Zeichen seinen Lautwert dmi erhalten hat; compare dm with 'snake' determinative noted above) and (in Ptolemaic texts) msdmt[113] and as the determinative of the ḫw-illness.[114]

Both the terms designating lizards, ʿšꜣ (not in Wb)[115] (also found in the Coffin Texts)[116] and ḥntꜣsw (Wb III, 122, 9: die Eidechse) are attested in the medical texts.[117] In P. Ebers a ḥntꜣsw km 'black ḥntꜣsw' is mentioned,[118] indicating that at least two types of ḥntꜣsw were distinguished.[119] The other type (or another type) may have been the ḥntꜣsw šmꜣ 'wild ḥntꜣsw' recorded on an ostracon.[120] (Compare the 'wild ass' in Ch.8). A spell for changing into a ḥntꜣsw is recorded in Cairo Calendar.[121] Ḥntꜣsw survived into Coptic as ⲁⲛⲑⲟⲩⲥ (cf demotic ḥntš);[122] ʿšꜣ did not survive into Coptic in the same form, but is possibly preserved in the first syllable of ⲁϣⲓⲣⲁ (see below on chamaeleons).

Coptic ϩⲁⲩⲗⲉ(ⲉ)ⲗⲉ (CD 741a: 'lizard') has been compared with Egyptian ḥfnnt or ḥfrr[123] which seem, however, to be variant forms of ḥfn(r) 'tadpole'.[124] There are other similar Egyptian forms apparently denoting snakes, ḥfnw and ḥfnnt (Wb III, 74, 17: Bez für die Schlange; Wb III, 74, 18),[125] which may have a bearing on the Coptic term.

Griffith seemed to believe that ḥntꜣsw and ʿšꜣ designated the same species, which he gave as the 'Green lizard'.[126] The hieroglyph as represented at Beni Ḥasan is indeed green; though it has the wrong number of fingers and toes - lizards have 5 toes and 4 fingers, while the Beni Hasan hieroglyph has 4 and 5 respectively.

Both dnf (Wb V, 576, 9 : als Personenname)[127] and kꜣrꜣ (not in Wb)[128] have been considered to designate the chamaeleon.[129] As two species of chamaeleon are known from Egypt it is possible that both do apply to this lizard. Coptic ⲁϣⲓⲣⲁ (CD 23a: 'chameleon') may be derived from a phrase ʿš-ỉrw 'manifold of forms'[130] referring to the chamaeleon's ability to adapt its colour to match that of its surroundings;[131] alternatively the ⲁϣ may be related to Egyptian ʿšꜣ '(type of) lizard'. Bohairic Ⲧⲉⲗⲩⲓ (CD 411b: 'kind of lizard') has been compared with dnf[132] but no Coptic equivalent of kꜣrꜣ is attested. (For further discussion of kꜣrꜣ see Ch.14: Miscellaneous Mammals-kỉry).

Few species of amphibians are recorded from Egypt by Flower : he mentioned two frog species and three species of toad.[133] Frogs and toads are both held to appear in Egyptian representations.[134] Wb recorded two terms for the former: ꜥbḫn, var. ꜥbnḫ[135] (Wb I, 178, 15-17: der Frosch), occurring once in the medical texts[136] though more often in Ptolemaic texts,[137] and krr (Wb V, 61, 5-6: der Frosch), also recorded in a medical text,[138] and undoubtedly onomatopoeic.[139] Although seldom attested[140] krr survived into Coptic as ⲕⲣⲟⲩⲣ (CD 177a: 'frog').[141] No term for the toad appears in Wb, but pqqt (Wb I, 563, 8: ein Tier) has been considered to name this animal. The word is found in the medical texts;[142] Dawson[143] noted in his study of ꜥpnnt that: 'it may be another kind of slug or snail'. Iversen[144] later thought, because of the determinative of pqqt as a personal name at Maidûm,[145] that it must be a frog or a toad. Despite this Osing recently translated the word 'Wassermolch'.[146]

Ḥfn and its variants[147] have been mentioned above. The tadpole as a hieroglyph (Sign List I8) was used, for phonetic reasons, for the number 100,000.[148] The name may be derived from the verb ḥfnw 'être recroquevillé'.[149]

After Dynasty 18/19 the frog hieroglyph was sometimes used to write the phrase wḥm-ꜥnḫ 'repeating life'.[150] The association of frogs with resurrection and rebirth may have come about because of the yearly overland migrations of frogs during the mating season. Like snakes, mice and flies they were recorded by classical authors as being spontaneously generated out of the earth.[151]

A number of terms for crocodiles are recorded in Wb: ꜣd (Wb I, 24, 11: Krokodil); ḫr-mryt (Wb II, 110, 4: als Bez. der Krokodile: 'die am Ufer'); mḥw (Wb II, 122, 20: als Bez. für die Krokodile); msḥ (Wb II, 136, 10-137, 5: das Krokodil) fem. msḥt (Wb II, 137, 1)[152], var. ḥms (Wb III, 96, 11: Schreibung für msḥ Krokodil) fem. ḥmst (Wb III, 96, 12)[153]; ḥnt (Wb III, 104, 4: in rꜣ-ḥnt, cf Wb III,121, 14: Feind in Gestalt des Krokodils); ḫnty (Wb III, 308, 4: Bez. für das Krokodil); rꜣ-ḥsꜣ (Wb II, 398, 5:); swy (Wb IV, 65, 13-14: als Bez. für das Krokodil); kꜣpw (Wb V, 105, 5-6: als Bez. für das Krokodil); dpy (Wb V, 447, 13-16: Krokodil). Other designations have been noted subsequently, notably ḫnd (Andreu Cauville, Vocabulaire II, p.17) and šnty, var. šny (AL 77.4231-4). Young crocodiles were called tꜣ.wy 'fledgling'.[154]

Mḥw, like mḥyt 'fish', seems to be a general term, designating all crocodiles as a class of 'water-dwellers'[155] and is seldom attested.[156] Note that the figure of a crocodile may determine another term for water animals in general[157] (ʾimyw-mw - see Ch.1: Classification). Dpy may similarly indicate a connection with the crocodile's watery habitat (cf dpt 'boat') and may have meant originally 'floater'. (See also below). By far the most common name for crocodile was msḥ. All names presumably denote Crocodylus niloticus Laurenti, the only crocodile species of Egypt, also widespread in other parts of Africa.[158]

Numerous texts attest that the crocodile ranked among the most deadly animals known to the ancient Egyptians, together with the lion, the snake and the scorpion.[159] The bite of a crocodile is recorded in the medical texts;[160] the Doomed Prince is fated to be killed by a crocodile, dog or snake[161] and others also appeared to have this destiny.[162] Death by crocodile is also recorded in other papyri.[163] The work of the fisherman was scorned because of the perils of a workplace 'among the crocodiles'.[164] In the Tale of the Two Brothers a river full of crocodiles is created as an insuperable barrier between them.[165] Crocodiles were also a danger to cattle crossing the river,[166] and numerous scenes from Old Kingdom tombs showing the warring of crocodiles and hippos graphically illustrate their viciousness.[167] In some instances this was regarded as a laudable quality, and the king who attacked the enemies of Egypt was described as a crocodile.[168] At the same time they were considered cowardly creatures; Asiatics who would attack only the defenceless were compared with crocodiles.[169]

Crocodiles played an important part in magic and medicine; their rôle as an agent of fate and destruction was recently discussed by Eyre.[170] The Westcar papyrus recorded that a wax model of a crocodile thrown into the river where a rival bathed became real and devoured him,[171] and a spell spoken over a clay model of a crocodile was supposed to relieve a headache.[172] Another text records a spell to be written on the ground over a figure of Amun with a crocodile under his feet.[173] Their apotropaic rôle is indicated by their appearance on amulets and scarabs[174] and a crocodile-headed god presumably for this reason attended the birth of the royal child.[175] Crocodile fat (mrḥt) and excrement (ḥs) appear in the medical texts in prescriptions for various complaints;[176] a fierce illness could be compared with a crocodile[177] (cf sꜣb for a similar comparison).

The msḥ was the bꜣw of Sobek,[178] the crocodile god,[179] and like other dangerous creatures, was associated also with Seth.[180] The vengeful goddess Sakhmet was likewise described as 'foremost of the crocodiles'.[181] The crocodile appears in a list of sacred animals, and in lists of tabooed creatures,[182] though eating crocodile flesh in a dream was considered a good omen.[183] In the underworld the deceased was threatened by crocodiles[184] - the ʿmmyt-creature which devoured the hearts of the unjust dead was part crocodile[185] - but himself could overcome perils in the form of the crocodile.[186]

On rare occasions msḥ appears in the same text as other terms showing crocodile determinatives, for example ḫr-mryt, lit. 'those on the river-banks',[187] ḫnty, lit. 'swimmer upstream' or 'lying on its face',[188] ꜣd, lit. 'the rager'.[189] Both ḫnty and ꜣd are common elsewhere, ꜣd (almost) exclusively in mythological contexts.[190] Ḫnty, though also used as the name of a deity[191] and occurring in Ptolemaic temple texts,[192] is found in texts referring to the crocodile as an animal.[193] In one such text ḫnty is found with another term with crocodile determinative, dpy.[194] This animal is found elsewhere identified with the pharaoh,[195] and with Amun.[196] Müller interpreted the name as 'Schwimmer' which is probably correct (see above);[197] but Brugsch translated 'der Verschlinger, der Fresser'.[198] In a Ptolemaic text at Kom Ombo dpy is used of Sobek;[199] as with ḫnty this would suggest a meaning close to that of msḥ.[200]

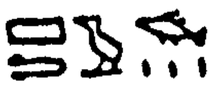
Other words with crocodile determinatives are only seldom attested. Ḥnt appears at Asyûṭ in rꜣ-ḥnt 'lac alimenté par des cours d'eau'[201] and ḥnty in the Book of the Dead,[202] and both are found in texts of Ptolemaic date. Swy is also found in the Book of the Dead in a spell which begins with the assertion that it will 'drive away a crocodile (msḥ)'.[203] The term appears again, with crocodile determinative, in the toponyms pr-swy (Coptic ⲡⲥⲟⲓ , ⲡⲥⲱⲓ)[204] and ỉw-swt.[205] Kꜣpw occurs only once before the Greco-Roman period,[206] and is presumably related to kꜣp 'hide' (Wb V, 104, 14-17: sich verstecken, sich verbergen). Rꜣ-ḥsꜣ again appears only once before the Ptolemaic era.[207] Ḫnd was commented on by Meeks, who translated it 'celui (aux pattes) repliées (?)'.[208] Šnỉ was also recorded by Meeks with the translation 'crocodile', comparing šnty 'l'Ennemi'.[209]

It seems likely from these texts, and from the zoological evidence, that all these terms describe a single species. Msḥ should be considered as the primary designation, with the other terms as epithets

or descriptive of the animal's attributes which then gained currency as substantives. (Compare, for a similar practice, the terms for baboons discussed in Ch.10: Monkeys).

Although a number of turtles and tortoises are known to occur in Egypt[210] the only common species which extends any distance inland is the Nile Soft-shelled Turtle, Trionyx triunguis (Forskål), a species found throughout all African inland waterways except in the north-west and south.[211] This was the identification proposed by Loret for the ꜣbḏw,[212] though, as was later pointed out by Dawson,[213] this is a fish. There is in any case a well attested word with the determinative of a turtle (Sign List I2) šṯw[214] (Wb IV, 557, 1-5: die Schildkröte), variants šṯiw (Wb IV, 556) and šṯw (Wb IV, 559). The word survives into Coptic as ϣⲓⲧⲥ;[215] Coptic ⲉⲫⲱⲧ rendered by Arabic 'turtle' in the Scala texts has been compared with Egyptian ꜥpš[216] (not in Wb but in Brugsch, Wörterbuch I, p.183).

Štw occasionally appears in contexts which indicate that it designated the actual animal, particularly the medical texts and a text which records the eating of fish and turtles,[217] but also on an amuletic ivory wand where it appears between a hippo and a crocodile.[218] This use as an apotropaic figure shows that the turtle was feared - note the comment of Pritchard on sea-dwelling examples of T.triunguis near Turkey: 'fishermen find them so vicious they do not like to bring them aboard'. This was perhaps the reason behind the turtle's inimical association with Rēꜥ and why Seth, as protector of Rēꜥ in the solar bark, is recorded as killing the turtle along with the oryx and Apophis.[219] Elsewhere the turtle appears as an associate of Apophis[220] and the wish is often made that 'Rēꜥ live and the turtle die'.[221] The štw was also believed to be able to swallow the water of the Nile, thus depriving Egypt of the river's life-giving properties and promoting famine.[222] Its evil influence was destroyed symbolically in reliefs of Ptolemaic temples which show the king spearing the animal; the only known earlier (Ramesside) tomb-painting which shows the harpooning of a turtle[223] presents it in parallel to a hippo-hunting scene, an arrangement reminiscent of the parallel fishing and fowling scenes of other tombs.[224] The isolation of this example and the fact that turtles have been found as offerings from the Old Kingdom[225] would indicate that the hunting of turtles as symbols of the 'Gottesfeind' was not an early theme.

Štwy 'the two turtles' appears as the name of a constellation.[226] A further example of the word, written  , was recorded by Wb as a type of fish (Wb IV, 559, 2: Art Fische), though it also compared štw 'turtle'. Given the context[227] (especially the association with Rē') this comparison appears to have been correct. (On the use of the fish determinative see above and Ch.1: Classification.)

The very similar šttwt from P. Hearst was translated by Borghouts as 'tortoise (-shell)[?..]'.[228] Meeks translated similarly as 'écaille, carapace de tortue (?)' and suggested a comparison with the šttwt of the Coffin Texts.[229] (On the use of an animal's name to denote its skin see ʿnḫ, wnš, ꜣby, etc).

Chapter 20 : Insects

There appears to have been no ancient Egyptian equivalent to the term insect ;[1] these small creatures were classified according to their appearance and mode of movement. Flying insects were categorized with birds and creeping insects with reptiles (see Ch 1: Classification).

Compared with other types of animals only a restricted number of individual insects were named and attestations of each name are few;[2] the record may be distorted because of the types of texts which have survived. One of the most commonly mentioned insects, and doubtless the most significant, was the beetle, ḫprr (Wb III, 267,5-9: der Käfer den das Schriftzeichen darstellt), identified as Scarabeus sacer L[3], but possibly naming other dung beetle genera - eg Copris - as well as Scarabeus.[4] The word has been compared with other Semitic terms for the beetle.[5] In one text the determinative of ḫpr is drawn with eight legs,[6] but ḫprr is unlikely to be the name for the spider, which appears from an ostracon to be shtt (not in Wb).[7] Scarab amulets were also named ḫprr.[8]

The characteristic habit of dung beetles of rolling balls of dung, to be buried as nourishment for their larvae hatching from eggs laid in it,[9] led to their identification with the force behind the morning sun as it emerged above the horizon, and thence with other ideas of coming into existence and self-creation (ḫpr - Wb III, 260,7-265, 13: werden, entstehen etc).[10] The soul of the dead pharaoh rising from his tomb was likened to this beetle[11] and Horus, among other forms of the sun-god, especially as creator, likewise was described as a scarab.[12]

The scarab and its wing appear as ingredients in medical prescriptions,[13] and in a New Kingdom magical text.[14] Ḫprr also appears in the Book of the Dead[15] and in the 'hieroglyphic dictionary'.[16]

Ḥkwn (Wb III,178, 1: off verwendet) also occurs with the scarab determinative (Sign List L1). This word is attested only once,[17] in a medical text. The reading has been disputed and ḥkw n (ḫprr) (ḥkw not in Wb) suggested,[18] though a very similar form, ḥknw (Wb III, 180,10 : als Name eines Gottes) is also recorded. Hornung, however, considered this to read ḥknw (ḫprr), 'Der Chepri preist',[19] which seems to be a likely interpretation.

Ptolemaic texts also give ꜥpy/ꜥbb and variants with the scarab determinative[20] and one text gives ḫprr as the equivalent of ꜥpy.[21] These terms may be compared with the bird name ꜥbw (Wb I,175,1) and may be derived from the same root, ꜥp 'fly'.[22] (see Ch.17: Miscellaneous Birds). The terms have been compared with Coptic ϩⲁⲃⲟⲩⲉⲓ 'wasp'.[23]

ꜥnḫ too is recorded by Wb as the name of a type of beetle (Wb I, 204, 7-8: ein Käferart). In Ptolemaic texts the word appears in or as the name of an amulet (Wb I, 203,10: Name eines Amuletts in Käfergestalt), once taking the form of an ꜥpy-beetle,[24] and once in a late text a scarab is evidently to be read ꜥnḫ.[25] The ꜥnḫ indeed seems to have had an amuletic value from early times.[26] No texts refer to the animal itself; in the Pyramid Texts the name appears in puns[27] and two further attestations noted by Keimer show ꜥnḫ as a personal name.[28] Keimer tentatively identified it as 'le bupestride [jewel beetles] Steraspis...ou...l'élatéride [click beetles] Aegrypnus notodonta LATR[EILLE]'.[29]

Another term written with scarab determinative is ꜥpšꜣy (Wb I, 181, 18: Art Käfer?).[30] The animal, depicted in a vignette from the Book of the Dead, appears quite different from the scarab,[31] and a feminine form of the word (Wb I, 131, 19: Art Heuschrecke?)[32] shows the grasshopper (Sign List L4) or cow's skin as determinative. Dawson identified the similar ꜥpšwt (also with cow's skin determinative - compare the presence of this determinative in the name of the flea, pwy, below) of certain medical texts with the ꜥpšꜣyt, and suggested that the scarab sign (Sign List L1) be read ꜥpšwt throughout these texts.[33] He also noted the later confusion of ꜥpšꜣy and šꜣi 'pig' in the Book of the Dead (including the vignettes),[34] which indicates that the word was or became rare and was not well understood. Coptic ⲉⲡϣⲉ (not in CD; appears as a gloss in a demotic text) has been considered the descendent of ꜥpšꜣyt,[35] though Černý proposed instead Aramaic hippūšīt 'blackbeetle' as the origin of the Coptic word. ꜥpš with turtle determinative may be related to this term.[36] Taken together, the evidence suggests that ꜥpšꜣy(t) was an insect of some kind, similar to a large beetle or grasshopper, and possibly, therefore, a cockroach.[37] Keimer, however, suggested it must have been a small beetle such as those found in mummies because of the spell in the Book of the Dead to prevent them from attacking the corpse.[38]

Two further possible terms for beetles are ꜣkw-n-tꜣ (Wb I, 139, 7: offizinell verwendet (neben Würmern und Fliegen)) and mht (not in Wb).

Both are attested only once. In P.Ebers ỉkw-n-tꜣ has no determinative,[39] but in the Pyramid Texts the verb ỉkw has a variant determinative showing a beetle; this determinative also appears in the Coffin Texts.[40] The verb is also associated with tꜣ 'earth' and appears to indicate a deferential gesture.[41] Sethe suggested 'Erdangreifer' for ỉkw-n-tꜣ, comparing other words of this stem associated with quarrying, and took the phrase to be an epithet of the scarab.[42] Meeks also took it as a phrase for a burrowing animal (AL 78.0524 : le fouisseur (?)); Dawson translated 'earthworm'[43] and Ebbel 'millipeds(?)'.[44] The Pyramid Text determinative of a beetle suggests that these last are wrong, but no further identification than 'type of burrowing beetle(?)' can be proposed.

Mht appears only in the Coffin Texts in an obscure phrase which Faulkner did not translate; he offered m ht as an alternative reading.[45]

The term for 'fly', ꜥff (Wb I, 182, 14-16: die Fliege), is attested from the Middle Kingdom onwards and survived into Coptic as ⲁϥ.[46] The meaning of ꜥff is made clear by its specific determinative (Sign List L3; the bird or cow's-skin[47] determinative appears in later writings) and its application to the gold flies awarded to soldiers for their exploits in battle - presumably for showing the same tenacity as displayed by flies at their targets.[48] ꜥff are described as 'flying'[49] and as 'lying down (ie dying?) and being born every day',[50] both of which would accord with the translation 'fly'.[51] They were apparently supposed to eat lice (ktt).[52]

Flies appear frequently in the medical texts, usually as an ingredient[53] (a considerable quantity of their excrement is mentioned in medical preparations[54] and may have been collected from the walls of houses).[55] One prescription is directed against their bites[56] and spells for protecting the pharaoh from the attack of flies are attested.[57] A further spell for 'cleaning a fly' which has been swallowed is known,[58] and in another a magician changes into a fly to enter the belly of his enemy and cause him pain and confusion.[59] However, in the Coffin Texts a fly is described as 'beneficial'.[60]

Some late variants of ꜥff are written ꜥfy or ꜥf,[61] and this spelling with a different (bee) determinative[62] is recorded separately by Wb (Wb I, 182, 10: die Biene). Pleyte, who first isolated the word ꜥf(y) with 'bee' determinative, identified the creature so named as a

wasp,[63] but the meaning 'bee' for ꜥfy is proven by one text which speaks of the creation of bees (ꜥfy var. ꜥft) and honey from the tears of Rē';[64] this is confirmed in a Ptolemaic text from Edfu.[65]

The word bꜣt[66] (Wb I, 434, 1-5: die Biene; compare Wb I, 434, 6-12: Honig < Coptic ϵϩⲓⲱ)[67] is seldom attested as the name of an insect and occurs only in Middle Kingdom texts [68] (unless bꜣy and bꜣw below are variant writings of this). In the New Kingdom appears the phrase ꜥfy...n bꜣt (Wb I, 182, 11: die Honigbiene; Wb I, 434, 10: Honigbiene);[69] it is tempting to suppose that at this date bꜣt was used only of honey and a new designation had, therefore, to be found for the bee. The New Kingdom writing of ꜥff 'fly' was borrowed[70] and the term ꜥfy...(n bꜣt) - Coptic ϧⲩⲛϵϩⲓⲱ 'bee'[71] - was formed. Unfortunately, this explanation would not account for the writings bꜣy and bꜣw (see below), possible variants of bꜣt; bꜣy is attested from an ostracon of the New Kingdom.

ꜥff may have been derived from a root meaning 'to fly' (cf ꜥpy, ꜥbb above),[72] although a root ꜥf 'hum', 'buzz' has also been suggested.[73]

A number of other terms have been considered to name bee- or wasp-like insects.

Bꜣy (not in Wb) is attested in an ostracon from Deir el-Medîna which recounts a hymn to the Nile.[74] This may be compared with the very similar bꜣw (not in Wb) from the Coffin Texts, which Faulkner translated 'hornet(?)'.[75] It is possible that both are variants of bꜣt 'bee'. especially as the former text mentions the insect gathering (smꜣ, lit. 'uniting') honey.

Ḥrrt with 'bee' determinative is also attested once only from the Coffin Texts.[76] There is, however, a word ḥrr(t) (Wb III, 150, 1-3) with 'snake' determinative, apparently denoting the class 'reptiles', which is frequently attested in the texts (see Ch.1: Classification). Faulkner translated the Coffin Texts example 'blow-fly', commenting 'it may perhaps stand for the kind of insect that infests rotting flesh'.[77] Vycichl, Černý and Crum all compared ḥrrt with Coptic ϩⲁⲗⲓⲗ, 'beetle(?)',[78] but the 'bee' determinative argues against this as a translation of the Egyptian word. Ḥrr(t) may have named a beetle with bee-like characteristics (cf ḥs(pl)r) or be a general descriptive term for which a number of determinatives may be appropriate (cf ꜣmyw-mw, ḥryw applied to fish, but also to other animals and people

respectively), the choice of determining sign bringing a more precise meaning to the word. Alternatively both words may have developed separately from a common root.

The bee determinative also appears as a variant in the word hspr (not in Wb), written with a specific determinative in the Coffin Texts. The term appears in another text with the 'bird' determinative (Sign List G38/39); a variant of this, written hsr, has the 'bee' as determining sign (Sign List L2).[79] Faulkner translated this word 'hornet'.[80] The evidence would indicate that hsiplr was a flying insect, of the shape depicted in the Coffin Texts and with (some of) the attributes of a bee (a sting?). The specific determinative is similar to that of ktt and kꜣꜣ, neither of which can be translated with certainty, though the former may mean 'louse'.

A determinative somewhat similar to that of the 'bee'[81] appears in the word tkkt[82] (Wb V, 336, 12: ob Schlupfwespe (Ichneumonida oä)). The term is attested only once, in the Pyramid Texts,[83] where it appears in a rather obscure phrase together with the grasshopper (snḥm). The phrase was translated by Keimer: 'N est né le deuxième jour du mois et il est devenu enceint le 15 du mois, il est sorti de la vertèbre de la sauterelle parmi ces enfants de guêpe.'[84] The word is probably to be compared with the verk tkk (Wb III, 336, 2-10: angreifen) which suggests that tkkt was an aggressive stinging insect. Faulkner offered 'hornet(?)'.[85]

Another insect name to which the 'bee' determinative has been ascribed is ỉbꜣyt (not in Wb). Determinatives in the Book of the Dead have an unusual form which was identified by Budge as that of a praying mantis (Mantis religiosa).[86] In copies of this passage, though in a confused form, in the tomb of Sethos I and on an ostracon from Cairo, Keimer noted much more accurate representations of this insect;[87] because the sign was not accompanied by phonetic complements he did not commit himself to identifying these pictures with ỉbꜣyt.[88] Further variant determinatives show different insects,[89] others show a bird, or the head of a bird, which Keimer compared with the hieroglyph 𓅱 (Egyptian vulture);[90] Faulkner distinguished this word ('ỉbꜣt-bird'; note here ỉbꜣy denoting a bird)[91] from the insect name which he translated ('bbꜣyt wasp(?)').[92] 'Ibꜣyt may be derived from ỉbꜣ 'dance' (Wb I, 62, 8-13: tanzen - compare the ỉbꜣw animal, Capra ibex nubiana) which could refer to the stately gait of the mantis; Keimer also compared the Ptolemaic term ỉbb applied to the scarab.[93]

Remains of a mantis larva were found among bandages at Deir el-Medîna ; these were identified as belonging to the species Sphodromantis bioculata.[94] Störk also suggested Eremiaphila turcica as an identification of the ancient Egyptian mantis.[95]

Grasshoppers,[96] snḥm (Wb III, 461, 6-8 : die Heuschrecke), most frequently appear in Egyptian texts as indicative of large numbers[97] (particularly of the king's enemies).[98] Their destructiveness in the fields was also noted,[99] and writings of the term as sꜣ-n-nḥm 'son of seizing' pun on this characteristic.[100] Despite the obviously poor reputation of grasshoppers snḥm occurs as a personal name.[101]

Grasshoppers are frequently depicted in tomb reliefs in the 'fishing and fowling' scenes,[102] both flying (these forms were first identified as dragonflies)[103] and at rest. Keimer[104] compared these representations, and others, with the sḫt-snḥm 'field of grasshoppers' mentioned in the Book of the Dead.[105] Grasshoppers appear to have been caught in nets, but for what reason is unknown[106] - snḥm are not mentioned as ingredients in the medical texts.

As well as appearing with the tkkt (see above) the grasshopper occurs in the Pyramid Texts as one of the forms in which the deceased pharaoh might reach heaven. This wish ends with the phrase ny rꜥ, which has been translated 'obliterating Rē',[107] and might refer to the obscuring of the sun by the swarming insects.[108] Keimer attributed to grasshoppers 'un rôle important dans les concepts religieux ou supersticieux', this opinion being supported by the occurrence of amuletic-type objects and rings bearing representations of the insects.[109]

Keimer noted two further terms applied to grasshoppers in pharaonic Egypt, as well as several from Coptic. The first, bꜣ, occurs in a phrase concerning sailing to Abydos,[110] which may be compared with the ferrying of grasshoppers mentioned in P.Hearst.[111] Lefébure,[112] on the other hand, compared the term with the word ỉbꜣyt 'praying mantis' (see above). The second, wꜣḏt, is inscribed on the back of certain grasshopper-shaped amulets; Keimer supposed it to mean 'green', literally 'die Papyrus-farbene'.[113]

The most common Coptic terms were ⲥⲁⲛⲛⲉϩ, translated 'grasshopper', derived from snḥm,[114] and ϣⲁϫⲉ , translated 'locust', from demotic sḏꜣ.[115] The terms 'grasshopper' and 'locust' describe groups of

the family Acrididae displaying either solitary (grasshoppers) or gregarious (locusts) habits.[116] This distinction does not appear to have been made by the ancient Egyptians. Altogether, over 80 species of grasshopper and locust occur in Africa, including Egypt, today.[117] Many species are very similar and isolating any of them from the reliefs is problematic. Despite this Keimer[118] identified the grasshopper depicted in tomb scenes as the Desert Locust, Schistocerca gregaria Forskål, though considering another species, Anacridium aegyptium L,[119] a further possibility, but not the prototype of the drawings. The former is distributed across Africa, Portugal and southern Spain, through the Middle East to north-western India; the latter is found throughout temperate regions.[120] It may be assumed from the very wide present-day distribution of the Migratory Locust, Locusta migratoria L, that this species was also found in ancient Egypt.[121]

Other insect pests mentioned by the ancient Egyptians are those which affected their persons - fleas, lice and other biting creatures. The flea,[122] py (Wb I, 502, 2: der Floh), Pulex irritans, Coptic ⲡⲏⲓ,[123] was regarded, with the ḫnws (Wb III, 290, 2-3: ein stechendes Insekt : Mücke oä), as a proverbially insignificant creature.[124] Two methods for ridding a house of fleas are described in P. Ebers.[125] The flea was one of many animals whose form could be adopted by the deceased on his way to the next world.[126] The word is derived from pwy (see Prinzengesch 6, 1) 'jump' which may itself be linked to an ancient root meaning 'fly'.[127] This etymology, and the determinative in the Coffin Texts, leaves little doubt as to the correctness of the translation.

Pwy appears also in a list of bird names on an ostracon from the Ramesseum.[128] This is perhaps to be read 'flea' rather than pꜣyw 'bird' and the term which follows it and begins ḫn may be restored ḫn[ws] or ḫn[ms] (Wb III, 295, 12: die Mücke). Ḫnms is recorded elsewhere as an insect plaguing a soldier who is on duty away from Egypt, together with the ḏwt (Wb V, 552, 7: ein lästiges Insekt (neben Mücke); also read swt[129]) and the ḫmy (Wb III, 281, 12: Sandfliege, die in die Füße sticht).[130] Ḫnms and ḫmy appear together again in a text describing the torments of a boatman while at work.[131]

Ḫnms and ḫnws were considered by Laucau (as by Wb) to be variants of the same word, derived from a root ḫnn 'sting'.[132] This might accord well with the description of a heart complaint as ḫnws (Wb III, 290, 4: als Krankhafter Zustand des Herzens) - presumably a sharp, stinging

pain is intended.[133] Ḫnms has also been compared with ḫnm (Wb III, 292, 4-9: riechen, einatmen) 'smell'; the insect when biting or sucking blood would be seen as 'smelling' its victim.[134] The ḫnms is described as 'biting' in the medical texts[135] and may have pestered jackals (wnš) as well as man.[136] A hieroglyph in the 'opening of the mouth' texts should apparently - from the gloss - be read ḫn(w)s,[137] and certainly seems to have the appearance of a stinging insect.

Ḫmy is also attested in a late text describing the condition of people during floods;[138] as the flood waters rage around them they behave like ḫmy - presumably disposessed and therefore frantic, like a scurrying insect. Caminos[139] associated the term with ḫm 'demolish, break through' and translated the phrase ḫmy n rdwy as a compound name 'leg-piercer'. This he believed to denote the 'sand-fly', as did Wb. The same root was taken by Meeks[140] to mean 'devour', and indeed ḫmy was originally compared with the Coptic name for the proverbially greedy pelican, ϩⲙⲏ.[141] However, this name probably has a different etymology.[142] The term ḏwt has received little attention; Caminos gave a 'conjectural rendering of "midge".'[143]

The ktt (not in Wb) is mentioned in the Coffin Texts as coming from a man's head[144] and, by comparison with Coptic ⲕⲁⲕⲧⲉ 'louse'[145] has been translated in the same way. The word also appears in a spell for preserving the deceased from decay and labour in the afterlife - the ktt is described as 'chewing' (wšʿ),[146] which might refer to their biting, or indicate that they were believed to infest corpses (compare ḥrrt above). The word's determinatives, which resemble that of the flea in the Coffin Texts to a greater or less degree, would seem appropriate to this meaning, and it seems reasonable to translate '(head)louse' - Pediculus humanus corporis de Geer, P.h.capitis de Geer. The word probably means nothing more than 'small' (Wb V, 147, 2-12: klein sein, klein)[147] and it is impossible to say whether ktt was applied to lice alone or other 'small' insects as well. The Egyptians apparently believed that they were eaten by flies (ʿff) - see above.

The centipede, spꜣ, (Wb III, 441, 4-5: der Tausendfuß)[148] appears, despite the smallness of these creatures, as a deity,[149] and all attestations of spꜣ as a noun should perhaps be understood in this way.[150] (A reference in the medical texts to 'centipede fat' should be deleted).[151] The name may be derived from a word meaning 'to be flexible', 'to be jointed';[152] the insect (identified by Brunner[153] as Scolopendra adhaerens Forskål) itself may have given its name to a

carrying chair with many porters (and thus many-legged).[154] Although the term has been compared with spꜣ (Wb III, 440, 17-18: als Krankheitserreger)[155] it is unlikely that the two are identical, or even related.

A number of terms identified by Wb or others as the names of insects occur so infrequently in the texts that they cannot be translated. In some cases it is difficult to establish whether an insect or bird is intended as the general bird determinative was used of certain flying insects. It should not be forgotten, however, that the same name might be used of more than one animal - compare ꜣbnn with both fish and bird determinative - and the comments below should be read in this light.

One text, for example, records the ỉtỉt (not in Wb) as being eaten by the ꜥḥy-bird.[156] Although ꜥḥy is attested several times as the name of a bird (even once apparently denoting all birds) its translation is not certain (see Ch.16: Birds of Prey). It is recorded elsewhere as eating 'sparrows' (?) - tt (Wb V, 413, 14-15: Sperling) - and ỉtỉt may be a variant writing of this, rather than 'an insect' as suggested by Shorter.[157] Some birds, such as the Hobby and Lesser Kestrel (both found in modern Egypt), eat both insects and small birds, which is unhelpful in the interpretation of ỉtỉt.

Ḳy (Wb V, 17, 2: die Vögel) might denote an insect rather than a bird. In a hymn to Amun, the creator is described as giving life to the fish in the river and the birds in the sky and 'creating that on which the ḥnws live, the ddft and pwy likewise, creating provender for the pnw in their holes, giving life to the ḳlỉy[158] in every tree'.[159] Since this part of the text is concerned with very small animals, and birds have already been mentioned in the usual place with fish, it seems unlikely that ḳy designates a bird.

The medical texts contain several such ambiguous terms. The ỉrḥnnt (Wb I, 116, 3: ein Vogel oder ein Insekt) is mentioned together with its 'feather' (šwt);[160] although this might suggest a bird it should be noted that the šwt of a scarab beetle is also attested in the medical corpus (see above). Wb also suggested a reading ỉt-ḥnnt (the word has also been transcribed ỉtḥwt)[161] comparing the bird-name ỉt-ḥꜣꜥ (Wb I, 142, 9: ...als Name eines Vogels). Bỉbỉ (Wb I, 442, 11: Art Insekt(?)) is recorded together with its 'house',[162] translated 'Nest',[163] in P. Ebers also. Wb. Drog. suggested 'Ob bỉbỉw: eine Wespenart?'[164]

The blood (snf) of a ḥwr (Wb III, 56, 5: Art Vögel oder Insekt) is used together with the blood (snf) of a fly (ꜥff) in a prescription to reduce swellings,[165] which might suggest that another insect is intended. Apart from the ḥwr, ꜥff is the only insect the blood of which is used in the medical texts,[166] while the blood of several different birds (mnt, mnyt, nrt, smn, gꜣbgw) is attested. The phrase ḥwrw n ꜣpdw 'den Schwachen unter den Vögeln' and the use of ḥwrt (Wb III, 56, 6) as an epithet of the vulture goddess of El-Kâb would also indicate that ḥwr is more likely to denote a bird than an insect.[167]

Sḥyḥt (Wb IV, 210, 13: ein Insekt) may also be a variant of the variant sḥt (Wb IV, 209, 8) or sḥḥt (Wb IV, 209, 8), probably an Allen's Gallinule, Porphyrula alleni, depicted at Beni Ḥasan (see Ch.15: Waterbirds). The use of a long-legged bird in the treatment of part of a leg (mꜣst knee)[168] would seem appropriate though the use of whole birds is not attested elsewhere in the medical texts. 'One large scarab beetle' is prescribed (see above), and this might indicate that a large insect is intended by sḥyḥt. It may be that the sḥyḥt and sḥ(ḥ)t shared some common feature, such as colouring, and thus shared the same name.[169]

A further three insect names are indicated by the presence of insects as the determinatives of verbs. Sb (Wb III, 432, 12: von unfreundlicher Gesinnung... vgl. die Schreibung von sbn; the latter, Wb III, 433, 7-16, sometimes has a fish as determinative) shows a creature with antennae and four legs[170] (note that the 'bee' hieroglyph also shows four legs).[171] Kꜣꜣ (not in Wb) shows a determinative like that of pwy or ktt in the Coffin Texts, varying with the 'leopard head' (Sign List F9).[172] An insect with antennae and outstretched wings, identified as a butterfly, determines sꜣš (Wb III, 422, 7: öffnen (von den Ohren)).[173] Keimer compared the verb sš 'open (of doors)' Wb III, 481, 14-482, 14: öffnen, esp.482, 1-4 (of doors)) noting the similarity in motion of the leaves of an Egyptian door and the wings of a butterfly at rest; he also noted that Egyptian representations show undivided wings, like the determinative.[174] Identification of the butterfly species depicted is difficult. Keimer suggested the African Monarch Butterfly, Danaus chrysippus; Vanessa sp has also been put forward (this genus includes the Red Admiral and Painted Lady).[175]

Wb records a number of words with a scorpion[176] as determinative, of which wḥꜥt (Wb I, 351, 1-2: Skorpion), var. wḥꜥw,[177] and ḏꜣrt (Wb V, 526, 15-527, 5: Skorpion),[178] later ḏnry (Wb V, 577), are the most

common. Both these words may show the 'cow's-skin' as variant determinative.[179] Although scorpions appear to have been ranked with the ḏdft (see Ch.1: Classification) their place was clearly ambivalent, as the use of the usual 'mammal' determinative shows (compare writings of šṯw 'turtle', ḳrr 'frog'), and they are discussed here with insects for convenience.

Ḏꜣrt was the more ancient of the two words, being attested from the Old Kingdom onwards. Like wḥʿt, it survived into Coptic (ϭⲗⲏ 'scorpion',[180] Bohairic only). Unlike wḥʿt it is attested as a personal name.[181]

The 'bites' (psḥ) of scorpions (ḏꜣrt) were warded off by medical prescriptions[182] and by magical spells,[183] the latter being much more common - presumably no effective rational remedy could be found for scorpion stings.[184] In one text the stinging (ḏdb) of its tail' is mentioned.[185] It was also described as piercing (ḏdm - Wb V, 634, 19-20: stechen)[186] and causing stings (dm - cf Wb V, 449, 1-7: stechen).[187] Its tail was elsewhere called its 'horn',[188] a designation also found in ancient Mesopotamia.[189] In another text the scorpion (wḥʿt) was described as having a 'long back and many joints'.[190]

Ḏꜣrt was often associated in the magical texts with other harmful beasts, notably snakes (ḥfꜣw, nʿy), but also the crocodile, lion (mꜣỉ) or other wild animals (mꜣ).[191] Wḥʿt likewise appears in many texts calling for protection from various creatures, especially the snake (ḥfꜣw) and crocodile (msḥ).[192] Some texts include the scorpion ideogram without writing out a specific name.[193]

The wḥʿt is recorded as biting (psḥ),[194] raging (špt),[195] and its poison (mtwt,[196] the same word as for the venom of a snake, or, more poetically, mw mr 'waters of illness'[197]) is also mentioned. Some funerary texts only show scorpions in a mutilated form in order to render them harmless.[198] The term occurs usually in the New Kingdom and Ptolemaic texts, though a Middle Kingdom example is known.[199]

The term wḥʿt, Coptic ⲟⲩⲟⲟϩⲉ,[200] may be derived from a root wḥʿ, 'prick, pierce' which is attested in the Metternich Stela as the action of a scorpion.[201] The word may be compared with the name of a fish (Synodontis sp) which has long 'piercing' dorsal spines. This term is attested from the Old Kingdom onwards (see Ch.18: Fish); wḥʿt meaning 'scorpion' was evidently a later development.

Scorpions were associated with a number of deities,[202] notably Isis (the wḥʿt)[203] and Atum (the ḏꜣrt);[204] an underworld daemon with scorpion head is also known.[205] Selkis,[206] Egyptian Srkt, probably derived from a Semitic root meaning 'cut',[207] was the appropriately named goddess whose 'Erscheinungsform' was a scorpion.

That ḏꜣrt and wḥʿt were not entirely synonymous is indicated in the Late Period Metternich Stela where both appear in parallel with another animal, ỉntš (Wb I, 102, 12: ein böses Tier (neben Schlange und Skorpion)).[208] The wḥʿt is described as 'pricking' (wḥʿ), the ḏꜣrt as 'piercing' (ḏdb - Wb V, 632, 7-10: stechen - note also ḏdbt with scorpion determinative (Wb V, 632, 11: Skorpion), obviously, like wḥʿt, a descriptive name for this animal)[209] and the ỉntš as 'lurking' (sỉn - Wb IV, 38, 4-8: warten, esp.6: Auch vom Skorpion der auf den Vorbeigehenden lauert). ʾIntš and ḏꜣrt also occur together in one of the Chester Beatty texts.[210]

Later in the Metternich stela the ỉntš is mentioned after snakes;[211] elsewhere scorpions were recorded in this position.[212] If the ỉntš were not a scorpion it must have been some very similar creature, but probably not a spider, as Gardiner[213] and Borghouts[214] translated (see above for šhtt, 'spider'), nor Drioton's 'insecte vénimeux'.[215]

An interesting collection of words with scorpion determinatives is found in certain magical texts. The seven scorpions following Selkis,[216] or conjured by Isis,[217] have names with a magical significance: tfn(t)[218] (Wb V, 299, 7 : Names eines Skorpions), bfn(t) (Wb I, 456, 1-2 : Name eines Skorpions), ptt (Wb I, 566, 4 : Name eines Skorpions), mtt (Wb II, 33, 16: Name eines Skorpions), ttt (Wb V, 413, 5: Name eines Skorpions), mstt (Wb II, 152, 5: Name eines Skorpions) and msttf (Wb II, 152, 6). The use of labials, especially b and m, has been noted in the formation of magical words and names;[219] a similar string of words is found in a demotic magical papyrus.[220] As these words are not attested elsewhere as denoting scorpions they should be understood merely as magical charms.[221]

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Sections 1 and 2 are not exhaustive. In many cases an article or monograph is concerned with only one or a few animals or animal names and full details of these may be found by reference to the index and the footnotes of the relevant chapters.

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