

CHAPTER 33

HIERATIC AND DEMOTIC LITERATURE

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SCRIPTS AND WRITING

In the third millennium BCE, hieratic script (Fig. 33.1) developed from hieroglyphic script. The signs became simplified so that they could be written more quickly. The two scripts are somewhat like our printing and handwriting. Hieratic was used for both documentary texts and literary works. Around the middle of the first millennium BCE, the use of hieratic writing became restricted. From that time onwards it was used only for literary texts in the broadest sense. For documentary texts, however, there was a new script: Demotic.

Around 650 BCE, probably in Lower Egypt, Demotic script came into existence (Vleeming 1981). It is written from right to left like hieratic (Fig. 33.2). Often several signs that were originally separate are connected to form a single ligature. Demotic script spread through the whole of Egypt in the sixth century BCE (Donker van Heel 1994). In the fifth century BCE, when the Greek historian Herodotus wrote about the land by the Nile, Demotic was the normal form of writing used in administration and in everyday life, while hieratic was used for literature and sacred works. The terms 'hieratic' and 'Demotic' that are used today go back to Herodotus' designation of the two Egyptian forms of writing as 'holy' and 'secular' (*Histories* 2.36.4).

The functional split between hieratic and Demotic, correctly observed by Herodotus, gradually disappeared, however. In the Hellenistic period at the latest, only the Egyptian priests could write hieratic and Demotic. Thus, hieratic script was occasionally also used for documentary texts while, more often, Demotic was used for religious texts.

The texts first recognized by researchers as being written in Demotic script show a form of speech that lies between Late Egyptian and Coptic, and so the phase of the Egyptian language written in Demotic script is also called Demotic. But the Demotic form of the language can also be written in other scripts while, conversely, not every text written in Demotic script is also in the Demotic form of the language.

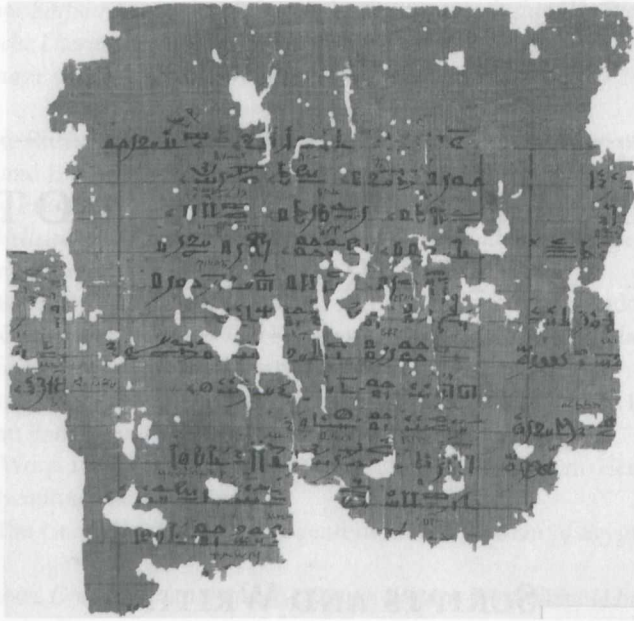


FIG. 33.1 List of quarries and mountains, written in hieratic with Demotic and Old Coptic supralinear glosses. Height 15 cm

Papyrus Carlsberg 180, fr. J 21. Courtesy of the Papyrus Carlsberg Collection, Egyptological Institute, University of Copenhagen.

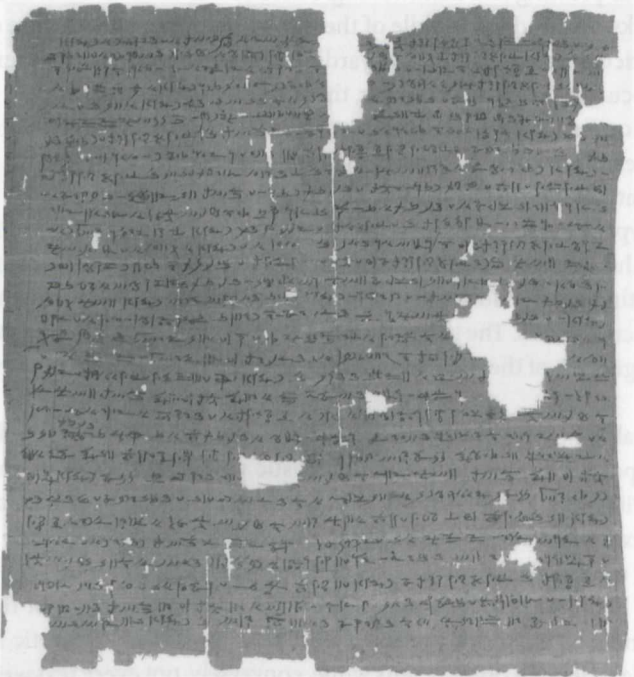


FIG. 33.2 A Demotic papyrus with one of the Inaros and Petubastis tales ('The Contest for the Armour of Inaros'). Height 29.5 cm

Papyrus Vienna D 6251, col. 9. Used with kind permission of the Österreichische Nationalbibliothek, Vienna.

Hieratic and Demotic in Roman Times

As in pre-Roman times, hieratic script was mainly used for works of almost exclusively priestly scholarship and for religious and magical texts. Demotic, however, was also used for these, as well as every other type of Egyptian text, including documentary texts. Occasionally both scripts were used side by side in the same text. There may be two reasons for this: an old text, written in hieratic, may have been partially transcribed into the more modern medium of Demotic. Or, to demonstrate his erudition, a scribe may have interspersed hieratic signs in a text that was otherwise written in Demotic.

The hieroglyphic script did not die out when hieratic and, later, Demotic emerged, but continued in use well into the Roman period as a monumental script (see Chapter 34). The last hieroglyphic inscription that can be precisely dated comes from 394 CE. Some hieroglyphs can occur in texts written otherwise in hieratic or Demotic.

For correspondence with government agencies in the Roman period, Greek was used. The use of a mixture of the Greek alphabet and some additional Demotic characters for writing Egyptian words is called Old Coptic (see Chapter 35).

Writing Materials

The rush, traditionally used by the Egyptians, fell out of use in the Roman period. In its place came the reed pen (*calamus*) that had been adopted from the Greeks. It is much harder than the rush, which was more like a brush, and resulted in a consistently thin line-width for writing signs.

The ink used was lamp-black ink, which had been standard for many centuries. In addition, iron gall ink was occasionally used too. For headings and emphasis, red ink, made from ochre or other dyes, was often used.

The writing materials, as in earlier times, were principally papyrus and pieces of stone or pottery vessels (ostraca). Papyrus was so expensive that Egyptian texts are often found written on the back of Greek documents that were no longer wanted. In addition, depending on their purpose or the situation, other materials could also be used, such as wooden tablets (especially for mummy labels, but also for the astronomical Stobart tablets and drafts of recitations of hymns; for which, see Widmer 2004), stones, walls, bones, palm ribs, textiles (especially for inscribed mummy wrappings), vessels (particularly for docketts), and other materials. Finally, hieratic and, particularly, Demotic script were also carved into stone (Farid 1995).

SCRIBES

In Roman times, only people who had completed scribal training at an Egyptian temple could write in Egyptian. They were all charged with various tasks in the temple, for example in temple administration, which one should envisage as a commercial enterprise rather like a medieval monastery; as a notary; as a scholar in the scriptorium of the temple (the 'house of life'); or as a reciter of texts in the cult. This does not mean that each scribe was equally competent in each script. Conversely, in Roman times it was only the Egyptian priests who maintained the use of all the Egyptian scripts (hieroglyphs, hieratic, and Demotic).

From surviving written documents it can be seen that the education of Egyptian scribes was organized very locally in the Graeco-Roman period. Apparently, each temple was left to its own preferences, which meant that the Demotic scribal tradition took a different course in different locations.

Scribes often identified themselves in the colophon at the end of a document. The author or editor of a text remains anonymous, apart from the wisdom literature and occasionally medical texts. However, some of these are probably pseudepigraphic attributions.

EGYPTIAN LITERATURE IN THE ROMAN PERIOD

What literature actually is, indeed whether there ever was such a thing as literature for the Egyptians, is not absolutely clear from the sources. Although Egyptian assertions about the quality of texts appear repeatedly, they are not sufficient to enable us to reconstruct a fully fledged Egyptian theory about literature or a comprehensive set of genres to be established. Furthermore, it is not useful to approach Egyptian material using modern criteria. The result would be only to establish whether or not, according to this or that literary theory, an Egyptian text would be considered a work of literature today. It might make more sense to approach the question of literary merit and genres in Egypt on the basis of the widest possible material and taking account of its cultural situation. Since this essentially remains work yet to be done, I shall confine myself in the following overview to a selection structured on the basis of a more practical point of view, arranged arbitrarily. And, for the present, I am counting all non-documentary texts as literature.

The Outward Appearance of the Texts

For papyri, the custom of surrounding the columns with borders starts in Roman times (see Figs 33.1 and 33.2). A characteristic innovation of manuscripts of the late Roman period is the use of lines ruled for each row of text (Fig. 33.1; see Tait 1986). That does not mean, however, that every Roman papyrus text has borders or rulings.

Texts could also be illustrated, for example to demonstrate a geometric problem or to provide a religious text with representations of gods. Interestingly, the illustrations do not seem to have been regarded as essential, and at times editions of the same work exist both with and without pictures, for example the Book of the Fayum (Beinlich 1991).

Meta-information is optional. In this I include page numbers or information about where an image is placed (as in *P Boulaq*, *P Hearst*, *P Amherst*, and the Book of the Fayum; Beinlich 1991: 45–53). In the Second Tale of Setne, the use of catchwords (where the last words of the previous page are repeated at the beginning of the next one) is unusual but not without earlier parallels. Interlinear glosses may be placed above the appropriate word (as in Fig. 33.1).

Transmission of Texts

The most commonly preserved texts are in the form of original manuscripts. Of course, the delicate papyri or other writing materials have often suffered damage so that many texts are only preserved in fragmentary form. The preservation of funerary texts, which were put into the grave and then left undisturbed, is often very good, however. Other than this, the bulk of Roman period manuscripts containing Egyptian literary texts come from the refuse of settlements or Geniza-like hiding places within a temple complex. The quality of the surviving textual evidence is uneven. Some have been very carefully written by highly competent scribes, while others rather give the impression of hastily made copies for their own use. In yet other cases the only remaining versions of texts come from error-ridden copies made by students.

Where two or more copies of a text have survived, they can complement each other. However, in the case of literary tales the surviving versions differ from one another. These texts have no fixed wording, but were formulated afresh over and over again. A separate matter are textual deviations that have crept in over time in textual transmission. In scientific and religious texts, in which the exact wording was important, the scribes have sometimes merged two divergent originals so that a variant, labelled as such, or as 'another book', becomes inserted into the new copy.

Manuscript and Text

It is necessary to distinguish between a specific manuscript and the work written on it. This is important in two respects. First, there may be multiple copies of a text. Secondly, the surviving manuscripts represent textual evidence that has been randomly preserved. A common mistake is to equate the age of the earliest manuscript with the age of the text. The text itself, however, may actually have been composed centuries earlier and only been preserved in a more recent copy. For that reason each individual text has to be thoroughly studied to determine its age reliably. It is also important to note that many Egyptian texts were typically revised over and over again and formulated anew. There may be some justification, therefore, for understanding a manuscript as merely evidence about the version written on it, which would then be in fact exactly the same age as the text surviving on it.

Innovations in the Roman Period

Egyptian literature of the Roman period was the preserve of the priesthood of the Egyptian temples and formed part of the scholarly cultural tradition nurtured there. As a result, the new political situation did not spawn any new themes or genres. Innovations can mainly be observed in the more mechanical aspects of writing. In addition to the use of Greek letters for the purpose of glossing or the transcription of complete Egyptian texts into Greek script, the use of the *calamus* and the use of frames and interlinear rulings may be mentioned here. Because, in Roman times, both hieratic and Demotic literature were under the care of the same people, that is Egyptian priestly scholars, there was also a tendency to mix hieratic and Demotic script.

THE CURRENT STATE OF RESEARCH

As is true of the entire period, Egyptian literary texts of the Roman period have been, and often continue to be, erroneously interpreted as a phenomenon demonstrating a late decline of Egyptian culture and not worthy of closer study—first, because they are so late and hence show only epigonic traits, and secondly, because this period was after all not really Egyptian, and moreover it was so heavily influenced by external forces that the contents of the texts are hardly relevant for the study of Egyptian culture. It seemed to be possible to make an exception for the temple texts since, as hieroglyphic texts, they clearly came from an older tradition.

It must be said that in the first instance every period of Egyptian history must be researched and evaluated against its own standards. The extent to which, for example, Demotic literature came to include Greek influences may well be disputed—and maybe it was exactly the opposite way round!—but the fact that we are dealing with late and, in some respects, different types of text from, for example, those of the Middle Kingdom does not simply mean that there were no more Egyptian texts to deal with in the Roman period. It also says more about the researchers than about the texts whether a work in which foreign influences are observed is simply regarded as un-Egyptian or as the product of a modified, and possibly enriched, Egyptian tradition. And the special role accorded to temple texts is unwarranted, the monumental versions being based precisely on the books in priestly libraries written in hieratic and Demotic script (Ryholt 2005).

The range of hieratic and Demotic literature is constantly being expanded through newly published or newly discovered texts. The number of entirely unpublished texts is extremely large, which means that the view presented here is very preliminary. Moreover, the available material is one-sided. In the first place the pertinent texts have mainly been found in Soknopaiou Nesos and Tebtunis (both in the Fayum) and less frequently in Upper Egypt. Secondly, the better-preserved and particularly interesting texts, or those that are most easily understood, are usually the ones to be published first so that a bias based on the history of research is added to the geographical bias of the basic material.

The meta-database Trismegistos (<<http://www.trismegistos.org>>) provides very useful access to texts and secondary literature, so that I can restrict my references in the discussion below.

TEXTS FROM THE BELLES-LETTRES (‘BEAUTIFUL LITERATURE’)

In Roman times, belles-lettres texts were written almost exclusively in Demotic script and language (Hoffmann and Quack 2007; Hoffmann 2009; Quack 2009; no further secondary literature is given here for the texts dealt with in these studies). Most texts are in prose, as far as one can tell. Versified works are rare. A characteristic feature is the occurrence of repeated narrative formulas, through which certain transactions are normally expressed, similar to the intro-

ductory formula 'Once upon a time...' in our own fairytales. That does not mean, however, that there was no striving for variation.

The structure of Demotic tales can be very complex owing to the inclusion of two or more narrative strands, or stories, being embedded in the main narrative. Surprising twists can make the plot very lively. Interestingly, some of the texts form clusters in which the same characters appear. And this also determines the nature of the text: the group known today as the Inaros and Petubastis Cycle, after two of its characters, includes tales of battles and adventures, while the texts about Setne are magical tales. Where stories are preserved in several manuscripts, it can be seen that the texts had no fixed form but were continuously changed. But there are exceptions: in the so-called Myth of the Sun's Eye, variations are recorded in a text-critical fashion, a phenomenon that is typical of religious and scientific texts. It may well be that the way a text was handled corresponds to the Egyptian concept of literary genres.

For many centuries, Egypt had an exchange with neighbouring cultures, and foreign conquests of Egypt—including those by Alexander the Great and later Octavian—made Egypt even more receptive to political as well as cultural influences. The multifaceted contacts of Egyptian literature with Greek culture will be repeatedly addressed in what follows; I do not need to rehearse them here, but it is particularly important to point out the still totally unexplored interactions between Egypt and India and the possible reception of Egyptian literature in Meroe, which for the time being admittedly remains unclear owing to the lack of comprehensible sources. The reception of Akkadian material is also remarkable.

The Inaros and Petubastis Cycle

This is a large group of mostly long, pseudo-historical narratives, which are characterized by a common cast of characters. Most of these figures date back to historical personalities from the second half of the seventh century BCE. There is some debate whether there was any Homeric influence on the Inaros and Petubastis Cycle and whether the literary genre of the novel developed within this group of texts. The earliest story belonging to the Inaros and Petubastis Cycle is an Aramaic version from the early fifth century BCE. From the Roman period the following tales are attested from manuscripts: 'The Inaros Epic', 'Inaros, Bes and the Talking Donkey', 'The Contest for the Armour of Inaros', 'The Contest for the Benefice of Amun', and 'Egyptians and Amazons' (Hoffmann 1996a, b).

The Tales of Setne

'Setne' is actually the late form of the priestly title 'Sem'. In the Demotic tales, however, 'Setne' seems instead to have been used as a name; in addition to stories about Setne Khaemwase, a historical personage who was the fourth son of Ramesses II, there are stories about Setne Ptahhotep and other 'Setne' heroes.

Setne is always a magician and the narratives are related in a highly imaginative and amazingly refined way. Thanks to an Aramaic papyrus, the origin of the Setne tales can be traced back to at least the fifth century BCE. The fragment of *P Carlsb.* 207 (Quack 2009: 40–1) and the so-called Second Setne tale, which is relatively well preserved apart from the beginning, are particularly noteworthy from the Roman period. *P Vienna* D 62 is also interesting,

containing the beginning of what appears to be a magical story, while there is a mythological tale on the recto (Hoffmann 2004).

The Petese Stories

Petese is a priest, skilled in magic, who appears in Demotic narratives from the fourth century BCE onwards. It is prophesied to him that he has only forty days left to live. Consequently, he takes care of arranging his burial, and also entertainment for the rest of his life. This he does by having animals write down a total of seventy short stories about women, some of which at least are preserved in fragments. It is noteworthy that one of them already has a parallel in Herodotus 2.111 and that the whole composition has striking parallels with the Indian Śukasaptati, the 'Seventy Tales of the Parrot' (Vittmann 2006–7). Petese could also perhaps be related to the philosopher Petesis known from Greek sources and to the Petasios known from the alchemical literature.

Stories about Nectanebo

A set of stories developed around Nectanebo (360–342 BCE), the last native Egyptian king, which have survived in fragmentary form in a Greek translation from the second century BCE and in Demotic versions of the Roman period; they also found their way into the Greek Alexander Romance and from there into an almost global narrative tradition.

Other Stories

The manuscripts surviving from the Roman period include a story that is still unpublished about King Djoser, Imhotep, and an Asian magician; an also unpublished story about the campaigns of King Amenemhet and Prince Sesostris (see parallels in Herodotus and the Greek Sesonchosis Romance); and an unpublished tale of Nakhthorshena, which may go back to a local ruler called Nakhthornashena referred to in the annals of the Assyrian king Assurbanipal and on the victory stela of the Kushite king Pije.

Another tale, 'The Swallow and the Sea', has been known for a long time as a school exercise, and it has a close parallel in one of the embedded tales from the Indian Panchatantra. An 'aretalogical' tale of wonder about salvation through Isis, and several other stories, also exist in the form of school exercises.

Mythological Tales

Hieratic texts from this genre belong to the area of cult topographic literature. In addition, there are Demotic works that may clearly be regarded as part of the belles-lettres genre, because they are detached from a theological context. From ancient times onwards, the conflict between Horus and Seth played a major role, and its literary form was fleshed out in the Middle Kingdom. There are Demotic versions of the Horus and Seth tales from the Ptolemaic era and also one from the Roman period (Hoffmann 1996b). In another fragment of Roman date (*P Vienna D 62*) we learn about different gods who go to certain places and

transform their shapes (Hoffmann 2004). Is there a link with the Greek tradition about the gods fleeing from Typhon, when they assume animal form?

The Myth of the Sun's Eye

To date, about eleven papyri from the second century CE are known that contain this extremely complex work, originally more than a hundred columns long; in addition, there is a Greek translation from the third century. Portions of the text are, however, much older and some may perhaps go back to the New Kingdom.

The myth is a religious text, whose mythological storyline is interpreted theologically: Tefnut, daughter of the sun-god, moves to Nubia, from where she is brought back by Shu and Thoth. As they travel, Tefnut and Thoth have profound discussions, and Thoth tells various animal stories to underpin his argument. Because of these fables, some of which have close parallels with the Akkadian Etana myth and the works of Archilochus and Aesop, this Demotic text has been regarded in traditional research as a work from the genre of belles-lettres. It should not be overlooked, however, that the text, with its commentary made up of various explanatory additions and learned exposition, may well have had its place in cultic festivals.

Wisdom Literature

So long as the formal principles of Demotic poetry, in terms of rhythm and versification, remain unknown, one can only occasionally guess that, in the case of texts written in a stichic form, with one sentence per line, there must be works written in verse among them. In the wisdom texts, however, one has the impression that, although many are written in stichs, they are not poetry, and that their graphic form results rather from the desire to emphasize a particular compositional principle, namely the series of individual sayings.

The literary tradition of teachings given by a father to his son dates back to the third millennium BCE in Egypt. Thematically separate from them is the extensive Egyptian text entitled 'The Way to Know Knowledge', which is well attested in the late Ptolemaic *P Insinger*, but of which there are also several manuscripts from Roman times, including an abridged version. The teaching of Ankhsheshonqy exists not only in Ptolemaic editions but also in a version from the second century CE. This later version is more detailed, but so far only pieces of the narrative framework are generally known. A smaller fragment containing rules for living in continuous writing is *P Ashm.* 1984.77. Finally, there are two important Demotic pieces with the remains of the story within a story from the teaching of Ahiqar, an Assyrian wise man of the seventh century BCE, of which the oldest attestation to date is in an Aramaic papyrus of the fifth century BCE found in Egypt.

The Book of Thoth

The text known today by this name is an extensive composition, of which one hieratic and many Demotic manuscripts, especially from the Roman period, have survived. Some are written stichically. The text may well have been composed in pre-Ptolemaic times.

The text sets out notions about the importance of priestly knowledge in the form of a conversation in which, among others, 'the One Who Loves Knowledge', Wepwawet, and Thoth (?) take part. The language is sometimes archaic and the orthography is interspersed with non-etymological spellings. Because of its allegorical nature and many allusions, the text is difficult to understand. How far one may draw links to Greek Hermetic literature still requires detailed research (Jasnow and Zauzich 2005; Quack 2007b, c).

Poetry for Cultic Revelry

A poem about a degenerate harper is preserved in a manuscript from the first century CE. Each verse is divided in two halves by red dots, a phenomenon so far unique in Demotic texts. The beginning and ending are lost, so that an overall interpretation of the text is difficult. The preserved part tells of a useless, gluttonous harper who neither plays his harp well nor knows how to behave. The text was probably recited during a religious festival, as suggested by an invocation addressed to the temple of the goddess Mut.

Of a similar character are the texts relating to the festival of Bastet (Hdt. 2.60), which are preserved in three manuscripts of the second century CE. The festival's goings-on, which are characterized by mockery and obscene jokes, deal with the following themes: individuals are reviled; twisted scholarship is used to explain the digestive processes and to urge further eating and drinking; the festival events are interpreted mythologically; and erotic activities are described.

Prophetic Literature

There is a long history of stylized texts being used as prophecies in Egypt. From the Roman period in particular, there are Demotic texts in which predictions are made about a partly distant future. Especially prominent are warnings of disasters, but these are followed by promises of salvation. In none of these texts will the salvation predicted only occur at the end of time; hence the Egyptian texts are prophetic, but not apocalyptic.

A Demotic manuscript of 4 CE contains the end of the Oracle of the Lamb of Bocchoris; the original Egyptian title is 'The Curse that Re Put on Egypt from Year 6 of King Bocchoris' (= 714 BCE). At that time, according to the text, a lamb predicted a long period of hardship during which, among other things, the 'Medes' would penetrate Egypt, which researchers have seen as the Persians but which could, perhaps, be an allusion to the Assyrians, who conquered Egypt in 671 BCE. This would be supported by the predicted revenge against Nineveh etc. during the period of salvation that was to follow, and a king 'of 55 years', mentioned earlier, would perhaps have been Pammethichus I (664–610 BCE), who was installed by the Assyrians.

It is interesting that it is not only the classical authors (including Manetho writing about Bocchoris) who record that a lamb spoke during the time of Bocchoris: it is also recorded in the Potter's Oracle, so far only known from Greek, but which may go back to an Egyptian original, which quotes from the Oracle of the Lamb of Bocchoris.

A poorly preserved prophetic text with the remains of prophecies of disaster and salvation comes from the second century CE. It is also written in Demotic (Quack 2002).

SCIENTIFIC AND SCHOLARLY TEXTS

By 'scientific and scholarly', I am referring here to any type of reflection about phenomena relating to animate and inanimate nature and to human culture. This is a deliberately broad working definition by which I am seeking to avoid modern ideas that might cause a narrowing of perspective. However, I am adopting modern classifications in the following overview, because there are no Egyptian meta-statements about the boundaries and connections between the branches of science. There is also no Egyptian equivalent for the words 'science' or 'scholarship'. The closest term is probably *rḥ*, 'to know', or 'knowledge'.

Egyptian science was very much a form of practical theology: it sought to discover the divine in nature. Science in this sense meant, for the Egyptians, searching for divine action in nature and uncovering the order of creation that operated behind observable phenomena.

The list is one of the basic organizational forms for Egyptian texts concerned with knowledge; another is the fully expanded text. Both forms can be transformed into each other: thus, the terms set out in a list could be expanded into a text by explanations or, the other way around, a text could be reduced to its basic terms. At a higher level, individual expanded texts can be amalgamated into a collective work ('monograph') just as, conversely, individual passages could be extracted from a monograph and take on an independent form of their own in a new context. In addition to texts containing 'facts', there are instructional or procedural texts.

Unlike in literary works, scholarly texts deal with statements of fact and ideas. This means that the amalgamation of possible secondary examples, in order to achieve precision or completeness, can lead to confusing sentence structures or constructions that would be unusual in everyday language. Certain verb forms are also typical of these texts. In other words, there was a technical language. None of these features are a phenomenon found only in texts of the Roman period; it appears as early as the oldest scientific manuscripts from the early second millennium BCE. The focus on the transmission of information, however, together with the fact that in many texts the material has been passed down over a long period, means that the texts were repeatedly modified linguistically to conform with changes to the Egyptian language. At the same time, some old expressions were accepted as convenient abbreviations and perhaps played to the vanity of the educated; hence, scientific texts of the Roman period often show a wild mixture of antique elements from different orthographic and linguistic traditions.

As explained above, in Roman times the priests were the only keepers of the Egyptian scribal tradition. Consequently, the nurturing of science and scholarship was in the hands of the same people who were also responsible for the planning of Egyptian temples. That knowledge, written down in hieratic and Demotic texts and kept in the temple libraries, naturally formed, together with the religious texts, the basis for ensuring the learned formulation of the temple texts, the correct iconography, and the correct proportions of the representations as well as the layout of the scenes in accordance with the rules.

The traces left behind by the Persian period (525–404 BCE) and the Macedonian and Ptolemaic periods (332–30 BCE) are particularly visible (Hoffmann forthcoming). For example, Semitic and Greek words are found in medical texts, and concepts like the Babylonian sexagesimal numeral system and Mesopotamian planetary theory appear in Egyptian astronomical texts. The knowledge of the Egyptians was readily taken up by classical antiquity (Tait 2003).

This happened mainly through Greeks in Egypt, already during the Ptolemaic period; see, for example, the Greek letter *UPZ I 148*, which shows how the recipient learns Egyptian in order to be able to work with an Egyptian doctor. Through Latin authors, who in turn drew from Greek sources, some things found their way into the European Middle Ages (Morenz 1969). This cannot be pursued here, however.

Astronomy and Astrology

Although nowadays we usually distinguish between astronomy as a science and astrology as superstition, for the Egyptians astrology was simply the practical application of astronomical knowledge. We encounter this in what are often extremely dry texts, such as tables and lists of the positions of the planets (Neugebauer and Parker 1960–9), which were based, at least in part, on Mesopotamian theories. In general, the use of sexagesimal numbering shows clearly that Egyptian astronomy in the Roman period assimilated some quite crucial influences from Mesopotamia, which probably date back to the Persian period and even go back in part to the 26th dynasty (664–525 BCE). One such example is a Roman copy of an earlier text about solar and lunar eclipses and omens (*P Vienna D 6278*; Parker 1959). It is attributed to a King Nekhepsos, now identified as Necho II, who reigned 610–595 BCE (Ryholt 2011). In this text even the Babylonian calendar is used.

Among the astronomical papyri of the Roman period, *P Carlsb. 1* and *1a* are particularly significant. They incorporate a well-known New Kingdom hieroglyphic composition from the cenotaph of Seti I at Abydos about the course of the stars, the so-called Book of Nut (von Lieven 2007). In the papyrus versions, the traditional text is reproduced in hieratic script and supplemented with a Demotic commentary. The Demotic *P Carlsb. 9* sets out the schema for a lunar calendar (Hoffmann 1997–8; Depuydt 1998). *P Carlsb. 638* (in Demotic) provides the earliest evidence of the Standard Lunar Scheme (Hoffmann and Jones 2006–7; for further lunar texts, see Hoffmann and Jones 2010). Also worth mentioning are Demotic horoscopes (Neugebauer 1943), on ostraca; and notes on creating horoscopes written in Demotic (Hoffmann 1995); as well as a Demotic Table of Terms—the only ancient copy that survives at all (Depuydt 1994). In addition, there are Demotic astrological handbooks (Hughes 1986; Chauveau 1992).

Mathematics

Compared with Egyptian mathematics in the Middle and New Kingdoms, some fundamental changes can be seen with the restoration of Egyptian mathematical traditions in the second half of the first millennium BCE. These relate to the types of problem, measurements (e.g. an approximate value for π), and occasionally the representation of numbers (including more extensive use of vulgar fractions in addition to unit fractions). Mesopotamian influence can be felt here (Friberg 2005). This does not mean that there was a complete break with distinctive Egyptian tradition. Rather, the Demotic mathematical texts sometimes articulate methods that were used, but never explained, in the older texts (Vogel 1975). *P British Museum EA 10520* (dealing with progressions, multiplication, fractions, roots, and calculating areas) and *P Carlsb. 30* (dealing with areas and proportions) date to the Roman period. These papyri also have drawings to illustrate the geometrical problems (Parker 1972).

Medicine

There is extensive Egyptian medical literature from the Roman period, but it has been insufficiently published or not at all. *O Berl.* P 5570 (late Ptolemaic or early Roman) is in hieratic; *P Vienna* D 6257, from Soknopaiou Nesos, is written in a mixture of hieratic and Demotic script (Reymond 1976; Hoffmann and Quack 2010); *O Medin. Madi* 155 combines Demotic and Greek script; while all the other texts are written in Demotic. These are all collections of recipes, not texts containing medical lore. Material relating to medicine is also found scattered in magical texts (Hoffmann and Quack 2010), which address illnesses and cures in another way (see Chapter 21).

In addition to a strong Egyptian tradition, a Mesopotamian influence (Semitic names of drugs, a Persian measure of capacity in the Vienna Papyrus) and Greek influence (Greek names of drugs) can be discerned in these texts. Owing to its linguistic and structural inconsistencies, *P Vienna* D 6257 is an almost classic example of an accumulative text that was handed down over many centuries and repeatedly changed, which probably ceased to be modified in the Ptolemaic period.

Biology

Egyptian texts on biology as applied theology (von Lieven 2004) are mainly found in compilations of priestly knowledge. Those that survive consist of, for example, descriptions of birds (in hieratic; Osing 1998) and medicinal plants (in Demotic; Tait 1977). In addition, there are also more philologically arranged collections of animal names (in hieratic; Osing 1998).

Philology

The material relating to Egyptian philology from the Roman period is quite remarkable. We have, for example, substantial portions of the so-called Tanis Sign Papyrus (Griffith and Petrie 1889), which explains what the hieroglyphs represent. The papyrus is also of interest because of the arrangement of the hieroglyphs according to the appearance of the signs (e.g. people, animals, plants, vessels, etc.); this is how Egyptologists still do it today. Inserted in the Sign Papyrus is an alphabetical list of uniliteral signs, which uses a Semitic alphabetical order (Quack 2003).

P Carlsb. 7 is also important, in which all the hieroglyphs are arranged alphabetically (Iversen 1958). In this hieratic text, they are interpreted not only in terms of what they represent externally, but also from a detailed theological or mythological perspective. The first sign listed is the ibis, thus confirming the information transmitted in classical antiquity that it was the first letter of the Egyptian alphabet (Plut. *Quaest. Conv.* 9.3 §11). Incidentally, the Egyptians used the names of birds to denote the letters of the alphabet even before the Roman period (Zauzich 2000: 29–30).

In wordlists, related words are grouped together, e.g. verbs to do with building, synonyms for 'battle', terms for buildings, and so forth (Osing 1998). These lists may also contain the lists of animal names mentioned under 'Biology' above. The texts are in part provided with glosses in Demotic and Old Coptic script. These indicate, most importantly of all, the contemporary pronunciation of traditionally written words. I would also draw attention to a

Demotic ostrakon containing words for 'image' (Wängstedt 1976–7: 17–18) and an unpublished onomastic writing board in hieratic (Schøyen Collection MS 189).

Geography

The hieratic priestly handbooks (Osing 1998) also contain lists of places and countries. Collections of holy sites formed part of this group of texts for the Egyptians. The Demotic ostrakon *Ashm.* DO 956, also in the form of a list, has the beginning of a geographical onomasticon naming a number of towns in each nome (Smith 1988: 78–84).

Dream Books

Just like the corresponding New Kingdom texts, Demotic dream books from the Roman period were used to learn something about a person's future from his or her dreams. Analogous dreams and interpretations can occasionally be found in earlier Egyptian or Greek dream books (Volten 1942).

Omen Texts

Predictions about the future of a person were also made based on animal omens. The relevant texts (papyri in Vienna and Berlin) remain essentially unpublished.

Other Texts

A surviving hieroglyphic papyrus from Tanis contains information about the layout of relief scenes (Griffith and Petrie 1889: 2 right–3 left (no. 118)). A Demotic papyrus from Soknopaiou Nesos deals with the decorative programme of complete temple walls (Vittmann 2002–3).

RELIGIOUS TEXTS

In this Handbook, the chapters in Part IV examine religious practice in some depth, in conjunction with relevant texts. Here I briefly discuss some additional religious textual sources from the point of view of hieratic and Demotic evidence in the Roman period.

Cultic Topography and Mythological Handbooks

The Egyptians not only recorded the names of toponyms, but also compiled information about the religious and cultic aspects of towns or larger areas into individual handbooks. These could be lists of gods, sacred sites, sacred trees, festivals, priests and priestesses, taboos, and so on (e.g. Griffith and Petrie 1889; Osing 1998; Osing and Rosati 1998), as well as lavishly illustrated papyri, in which the area under consideration is illustrated schematically or reli-

gious and mythological ideas are discussed in even greater detail (e.g. Beinlich 1991; Osing and Rosati 1998). These texts are often in hieratic or even hieroglyphic script. There are also texts surviving in Demotic, for example on the subject of the Memphite theology (Erichsen and Schott 1954) and on the primeval ocean (Smith 2002).

The Book of the Temple

This is an extended composition dealing with constructing and equipping an ideal temple, and the work of the temple staff (most recently Quack 2007a). It is preceded by a historical section, set in the time of Khufu. The text, which has not yet been published in continuous form, has survived in numerous hieratic and Demotic manuscripts and a fragmentary Greek translation (Quack 1997).

THE END OF PAGAN EGYPTIAN LITERATURE

The preceding overview of hieratic and Demotic literature clearly shows that the Egyptian priestly scholars of the Roman period were still very active. One can be certain that the copying of older texts that may have originated from a much older tradition was part of their work (Hoffmann 1996a: 124; von Lieven 2007: 272; Ryholt forthcoming). In the Roman period, texts also received some editing. An important example of this is the Magical Papyrus of London and Leiden, which has striking late Demotic linguistic features in places.

Egyptian literature increasingly disappears from the public sphere during the Roman period. At the same time, literary texts survived longer than legal and administrative texts, which no longer appear in post-Augustan times other than in the Fayum. Stories and religious texts that had a significance for the Egyptian priesthood survive even longer. Magical literature on papyrus lasts the longest—in other words, texts that had the least importance in public life and that were only of importance to a few individuals (Zauzich 1983).

In the third century CE there is a clear break. Soknopaiou Nesos and Tebtunis, which were so rich in finds of papyrus, were abandoned around or shortly after 250 CE, and the inhabitants who moved away do not seem to have continued their tradition elsewhere. This rapid decline in the third century is surely connected with the political and economic problems of the Roman empire at this time. When, in the course of the fourth century CE, Christianity became the state religion, it set the final seal on the demise of Egyptian culture linked to the temples.

In light of what has just been said, it seems to me to be no accident that a remarkable number of translations of Egyptian literary works exist from the period around 300 CE. Although such translations did already exist in the Ptolemaic period, the sheer number from around 300 CE is very striking (Quack 1997; Hoffmann 2009: 362). This seems to be another example of the intensified adoption—or perhaps adaptation—of Egyptian literature into the universal language of the day and thereby into Western tradition.

For the kingdom of Meroe to the south of Egypt, which was closely bound to Egyptian culture through centuries of contact with Egypt, the temple of Isis on Philae was an important place of pilgrimage. Many graffiti provide evidence of visits by the Meroites (Burkhardt 1985).

Among them we find still in the third century CE scholars who could write not only Meroitic, but also Egyptian and Greek, and used them in their inscriptions, and their titles indicate a familiarity with Egyptian priestly scholarship.

When Diocletian (284–305 CE) moved the southern border of the Roman empire back to Aswan, Philae was actually situated outside the Roman empire. In this ‘exclave’, the cult of Isis held out against the Christianization of Egypt (Dijkstra 2008). After the fall of the kingdom of Meroe, it was in the hands of the nomadic Blemmyes and finally in a single priestly family, who were perhaps not permanently resident on Philae. These people seem to have left no hieratic or Demotic literature behind, but an instance of the title ‘scribe of the house of writing of Isis’ (*Graffito Philae* 436) suggests that texts relating to the cult still existed in the late fourth century. Egyptian textual transmission ceases with the last dated Demotic text (*Graffito Philae* 365) in December 452 CE.

DIRECTIONS FOR FUTURE RESEARCH

I see it as a particularly urgent research priority to work on the large number of unpublished texts—which, thanks to the many excavation projects under way, are constantly growing in number. This cannot be achieved by an individual or a museum on their own. In view of the good results from the International Committee for the Publication of the Carlsberg Papyri in Copenhagen (Zauzich 1991), it would be beneficial and efficient if a compilation of all the findings already made in a particular museum or collection was kept within that institution’s archive. The coordinated study of entire collections, by several appropriate specialists, is what is generally needed to advance research.

Analysis of the texts must seek to uncover the concepts that were peculiar to the Egyptians during the Roman period (emic approach). Only then can we understand what the authors were thinking or what functions their writings had if these texts were formulated in a particular way. Given the rich source material, I also see a good chance, for example, of distinguishing different levels of style in Egyptian narratives of the Roman period.

Although the Roman period was different in many ways from earlier periods, it continued ancient Egyptian traditions in its own way. This statement, trivial in itself, seems to me to be absolutely necessary to make, because until now Roman Egypt is often dismissed as a priori ‘un-Egyptian’. Cognate disciplines should see Roman Egypt as more than the source of some interesting Greek papyri. The particular and quite different interests of the subjects of Egyptology, ancient history, epigraphy, classical archaeology, Meroitic studies, and papyrology must be overcome and united to create interdisciplinary cooperation.

CONCLUSION

For assessing the significance of late Egyptian literature to other cultures, especially Graeco-Roman antiquity, the study of Roman Egypt and the specific aspects that differentiate it from older traditions in Egypt is essential. It is too often forgotten that statements about Egypt

made by authors from the Roman period, or late antique Greek or Latin authors, if they are not quoting an older Greek writer and thus bound to their own tradition, must be measured against circumstances in *Roman Egypt*. It does not matter that, in reality, in the Middle Kingdom things were different from what, for example, a later Greek author writes. This does not mean he is saying something false. The information he provides has to be measured against what the Egyptians knew or thought about the Middle Kingdom during the Roman period. And that sort of information can only be obtained from Egyptian literary texts of the Roman period, which survive in vast but undervalued numbers in the hieratic and Demotic scripts of the indigenous language.

SUGGESTED READING

On writing in ancient Egypt generally, Schlott (1989) is well worth reading. For the hieratic texts of the Roman period, there is, as yet, no overview available. Late period Egyptian literature, including Demotic material, is collected in Ryholt (2010). Online, the Trismegistos database, <<http://www.trismegistos.org>>, provides a search tool. The Demotic material has been compiled, with annotated bibliography, in Depauw (1997), while Hoffmann (2000) offers a more cultural-historical interpretation. Depauw et al. (2007) brings together texts with exact dates (mostly documentary). Houston, Baines, and Cooper (2003) presents an account of the disappearance of pagan Egyptian scripts.

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