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MAY YOUR REEDS BE GREAT REEDS

- a collection of essays on reedland texts and pictures from ancient cultures

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Picture title page: ancient Egyptian depiction of papyrus reeds. Metropolitan Museum of Arts (New York), facsimile of a drawing from the Tomb of Qenanum, Thebes, (c. 1427-1400 BCE). Accession number 30.4.60 (Link to the photo)

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Content

1 Introduction

All peoples that ever lived and still live on earth have in common that they need water. Most ancient cultures, therefore, developed along rivers and lakes, and along coasts if sufficient freshwater was available. And common for almost all water is the expansion of life in it: microorganisms, amphibians, fishes, shellfish, waterfowl, water mammals, and of course aquatic and telmatic plants. The many animals became an important food resource for humans, whereas the luxurious vegetation did not only provide suitable habitats for these animals but were themselves also food and could be used as raw material for building, packaging, weaving, fodder, writing material, weapons, musical instruments, and much more. The perception that all peoples depend on water is, thus, way too simplistic: it is much more accurate to state that peoples depend on wetlands.

How did people in the ancient past perceive wetlands, how did they experience, how did they value them? To address these questions, we have started a project to inventory and to analyse the frequent testimonies of ancient cultures (De Klerk & Joosten 2019) in order to provide a cultural-historical context for natural and exploited wetlands, and a baseline for actuo- and palaeo-ecological wetland research. The project also aims to construct a physical landscape context for interpreting ancient written sources. In this sense, the project integrates earth-sciences with the sciences of linguistics, archaeology, humanities, and history.

This brochure contains several essays on reedland texts and pictures from Sumerian, ancient Egyptian, Neo-Assyrian and Greek/Roman sources.

Comment:

If one does not master a language oneself, one must rely on “translations”. Translations, however, are not merely a transmission of content, they also interprete the meaning of an original text in a broad context of content, intention, and linguistic formulations. This is evident from the different interpretations that translators have adhered to the same text passages. Readers unfamiliar with the original language have more or less to guess, which version they prefer. For the analysis of Egyptian texts in this brochure, therefore, as many versions as possible were collected and compared in order to extract the most probable original wetland views.

In this publication the term “wetland” is used as “an area that is inundated or saturated by water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions” (Joosten et al. 2017, explanation 1 of the entry “wetland”).

2 Ancient reedlands

Reeds – also known as reedbeds, reed marshes, reed thickets, reed fens, reedlands etc. - are common in lowlands along rivers, lakes, or in coastal settings and belong to the most prominent wetland types worldwide. Their precise appearance and plant constituents, however, differ regionally depending on climate, geomorphology, and ecology. Reeds as vegetation type may contain different plant species, including various Poaceae (e.g., *Phragmites*, *Arundo*, *Glyceria maxima*, *Calamagrostis*), Cyperaceae (e.g., *Carex*, *Scirpus*, *Schoenoplectus*, *Cladium*, *Cyperus papyrus*), Typhaceae (*Typha*, *Sparganium*), and many more.

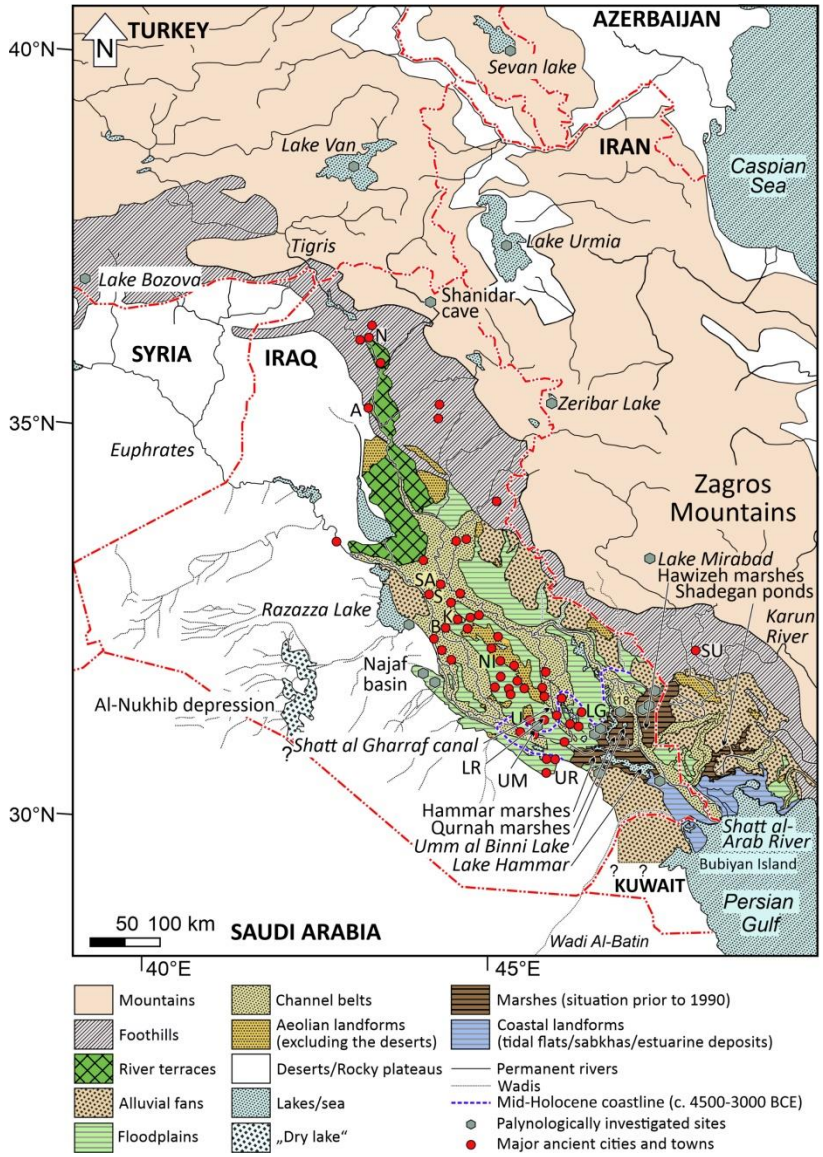

Fig. 1: Geomorphology of Mesopotamia and the location of major settlements. Compiled after: Aqrawi (1997), Al-Sulaimi & Mukhopadhyay (2000), Pournelle (2003, 2017), Morozova (2005), Aqrawi et al. (2006), Heyvaert & Baeteman (2007), Walstra et al. (2010), Yacoub (2011), Heyvaert et al. (2013), Sissakian & Fouad (2015), Azhdari & Bironro (2018), Sissakian et al. (2020a/b/c), counterchecked with satellite images from GoogleEarth (2020-version). Locations of major settlements compiled after Morozova (2005) and Frahm (2013): A: Ashur; K: Kish; LG: Lagash; LR: Larsa; N: Nineveh; NI: Nippur; S: Sippar; SA: Sippar Amnanum; SU: Susa; UM: Tel Umm al-Aqrab. From De Klerk & Joosten (2021). Transliterated spelling of geographical names is standardised after the English edition of GoogleEarth (version of May 2021), historical topographical names are standardised after Bryce & Birkett-Rees (2016).

It is unclear to what extent the reedlands discussed in this publication are actual mires or peatlands in the sense that peat production occurs or occurred (Joosten et al. 2017): this is not possible to know without lithological research at the sites referred to in the ancient texts that are often topographically not specified. In peatland nomenclature the reedlands referred to should, thus be considered as "swobs", being areas with or without peat layer dominated by a normally peat-producing vegetation (Joosten et al. 2017).

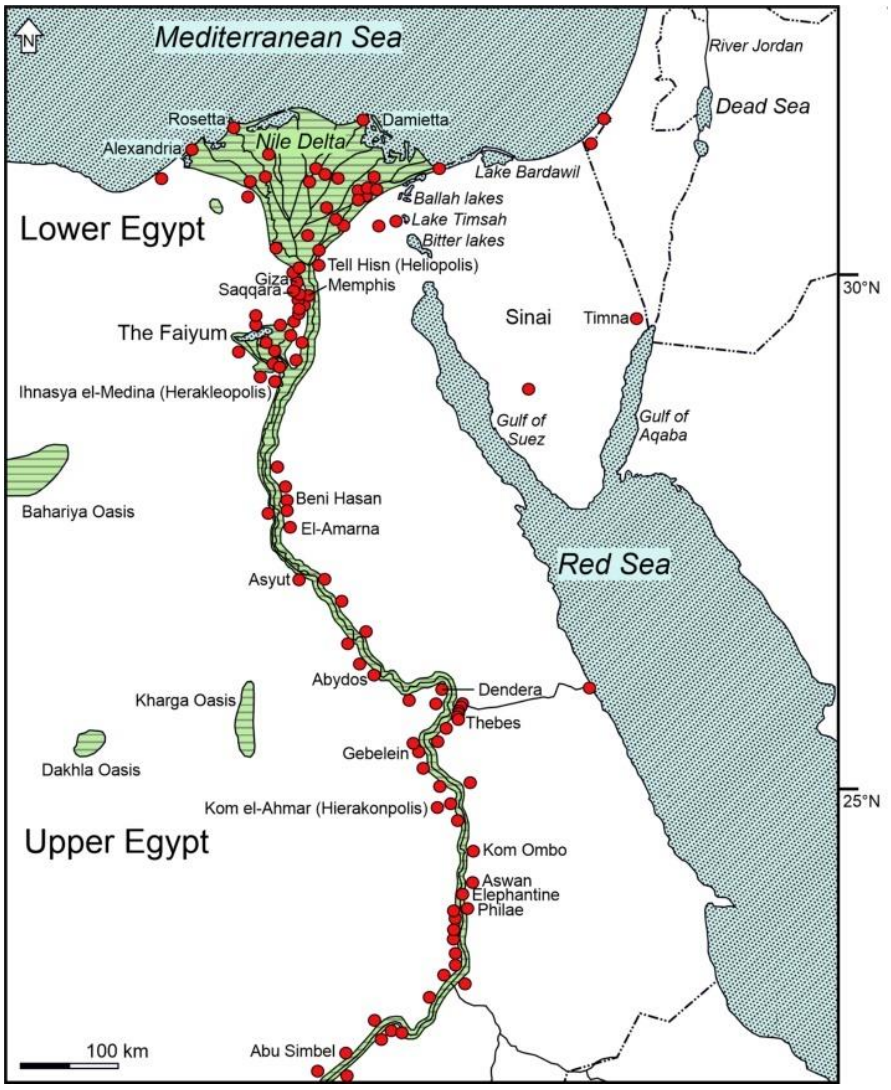

Fig. 2: The Nile valley and the location of major settlements. Settlement names are the best-known names as currently in use as provided by Wilkinson (2017a; p. 10/11) and are a mixture of transcribed ancient Egyptian names, ancient Greek designations, and present-day names).

Ancient Mesopotamia consisted of extensive fluvial lowlands formed by the anastomosing Rivers Tigris and Euphrates (Aqrawi et al. 2006; Sissakian & Fouad 2015; Jotheri 2016; De Klerk & Joosten 2021) (Fig. 1). The river levees carried a tree vegetation with – among others - *Salix* (willow), *Phoenix* (date palm), *Populus* (poplar) and *Tamarix* (tamarisk) (Van Zeist 1984; Wilcox 1992). Settlements were mainly erected on the levees, whereas agriculture and pasturing were predominant in the flood basins and the transition between levees and flood basins (Morozova 2005; Yacoub 2011; Jotheri 2016). The flood basins consisted of extensive reedlands with patches of open water (Van Zeist 1984; Jawad 2021; Romano et al. 2021) and a rich fauna (Veldhuis 2004; Esmaeli 2021; Jawad 2021; Salim et al. 2021). The

wetlands were subject to hydrological regulation to facilitate agriculture. Around 3000 BCE the large Hammar, Qurna and Hawizeh marshes started to develop along the courses of the rivers and reached their largest extent around 600 CE (Aqrawi 1997; Jotheri 2016; Pournelle 2017; Adamo & Al-Ansari 2020). The water of the Euphrates probably flew dispersed through these marshes without forming channel belts (De Klerk & Joosten 2021). The land was fertile and prosperous and therefore interesting for many peoples that immigrated or invaded from outside the region. Mesopotamia was, thus, the scenery of many different cultures that alternatingly dominated the region and impacted on the wetlands (Haywood 2005; Bryce & Birkett-Rees 2016; Bourke 2018; De Klerk & Joosten 2021).

Similar to Mesopotamia the ancient Egyptian societies depended almost exclusively on the riverine landscape in the Nile valley (Fig. 2). In the north, the river branched-out in the wide Nile Delta at the Mediterranean Sea. In contrast to the Tigris and Euphrates, the Nile has only a narrow floodplain surrounded by vast deserts. The annual floods – related to summer rain in the upstream Blue Nile regions (Jiang et al. 2002; Zaroug et al. 2014; De Klerk 2019) – left in the inundated floodplains a fertile silt layer that was crucial for agriculture after water levels had again fallen. Along the river and in the delta, extensive reeds existed of which papyrus (*Cyperus papyrus*) was the main constituent. The plant was not only used to produce paper, but also for the construction of boats, mats, ropes, cables, weapons (including arrows), and more. Reeds and wetlands in general were also used for hunting, fishing (both for economic purposes and for pleasure of the ancient Egyptian elite), pasturing of cattle, etc.

The settings in the regions north of the Mediterranean – including the ancient Greek and Roman realms – were different. Although many mires existed (and partly still exist), their lateral extension is only small (Bragazza et al. 2017; Christanis 2017). Rivers cross the landscapes but did not develop major floodplains in the more mountainous and hilly landscape. Since also non-wetland fertile lands were available, the Greek and Roman societies did not depend exclusively on reedlands. Luxurious reeds predominantly occur(ed) along the downstream lowland reaches of rivers and their mouths, but their extent is by no means comparable with that of the large reedbeds along the Tigris, Euphrates and Nile.

3 The proverbial Sumerian reeds (3rd Millennium BCE)

Numerous Sumerian city-states flourished in Mesopotamia in the 3rd millennium BCE until they were included in the Akkadian empire (2350-2150 BCE). Sumerian cultures briefly revived in the Ur-III period (21st century BCE) (Frahm 2013; Bourke 2018). Wetlands were the most important source of Sumerian sustenance and as such they were valued greatly and played a dominant role in Sumerian texts. In the tale of the 'Heron and the turtle' various reedplants are mentioned, which could not yet be identified. Reeds became literally "proverbial" as they were the subject of many proverbs and metaphors.

One common element in many texts is the wish for luxurious reedbeds:

"… *may your reeds be great reeds*" ('Enki and the world order'); in the Kramer edition it is phrased as "*your reeds will be large reeds*".

"*In the reeds may the old reeds, the young reeds grow high*" ('Song of Inana and Dumuzid (Dumuzid-Inana D1)', see also below).

"… *may its reeds be abundant*" ('Oldest religious text from Babylonia').

"*Where there is no grain, this is a sign of vengeance turned toward a city. Where there are no reeds, it is the worst of all poverty*" ('Proverbs collection 3': 106; 'Proverbs collection 28': 26).

The latter proverb is the counterpart of the wishes for great reeds and means that even when famine had broken out, this was still considered less catastrophic than when there were no reeds. It is, thus, unambiguous that luxurious reeds were an aspect of great wealth in ancient Sumer.

Other Sumerian proverbs state that:

"*The voice of the frog is the glory of the marsh waters*" ('Proverbs from Urim' UET 6/3: 80; 'Proverbs from Susa': 2).

"*The voice of the duck is the glory of the marshes*" ('Proverbs collection of unknown provenance': YBC 7300).

These proverbs probably signify that the sounds of animal life in the reedbeds were considered pleasant. The duck, however, had a question mark added by the translator and it is not certain that really this animal was intended. Although one could expect that the questionable duck was also a frog if the animals would be named after the sound they make which is phonetically similar for ducks and frogs ("onomatopoeia"), the English transcriptions of the animal names translated here are different: the "duck", thus, is certainly a different animal than the frog.

Fig. 3: Amulet of a frog from the Akkadian period; finding place unknown. © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 123555. Link to the photograph.

Various cattle-related proverbs (‘Proverb collection 5’: 3-36) seem to connect both wild and domesticated bovine to reeds. The ‘debate between winter and summer’ mentions that pigs had grown fat in the midst of the reedbeds.

Fig. 4: Top of a copper peg, surmounted by a bull standing in a reed. Lagash II period (c. 2100 BCE), found in the Temple of Nanshe in Tell Zurghul (Iraq). © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 135993. Link to the photograph; photograph has been cropped.

Other proverbs use a “damp reed” as comparison:

“*Because of his arrogance, may his head be bowed to his neck like a damp reed*” (‘Proverbs collection 3’: 63).

“*A man who behaves like a damp reed towards his fellow men does not tell the truth either*” (‘Proverbs collection 12’: b6).

“*All day long, oh penis, you ejaculate as if you have blood inside you, and then you hang like a damp reed*” (‘Proverbs collection 4’: 7).

From these examples it appears that the positive attitude towards reeds was principally associated with healthy, erect reeds. Many Sumerian texts have an explicit sexual content, and intercourse and masturbation are frequently referred to positively (Leick 1994; De Klerk & Joosten 2019). In contrast, a hanging penis that does no longer ejaculate, and arrogant and lying persons, have a negative connotation, visually similar to a wet reed bending down under the weight of the water.

There is a Sumerian proverb that describes wetlands in a negative sense:

“*You should not sleep in the reedbeds, the marsh rats will eat you*” (‘Proverbs collection 2’: d7; see also ‘Proverbs collection 11’: 25).

The meaning of the text-passage is not clear, especially since it deviates from the generally positive reedbed proverbs. The “marsh rats” will refer to not further qualified rodents or rodent-like animals living in the marshes.

Furthermore, Sumerian texts often compare ”old reeds” with “young reeds”, or - dependent on the translation - “mature reed” with “fresh reed” or “full-grown reeds” with “green reeds”, including:

“*…and bestowed on them the old and new growths of reeds*” (‘Enki and the world order’).

“*… may the old reeds and the young reeds grow tall in the reedbeds*” (‘Song of Inana and Dumuzid (Dumuzid-Inana D1)’; see above).

Similar text passages occur in the ‘Balbale to Nanna (Nanna B), ‘Balbale to Ninurta’, ‘Debate between bird and fish’, ‘Hymn to Ninurta as god of vegetation’, ‘Lament for Sumer and Ur’, ‘Nanna-Suen’s

journey to Nibru', 'Ninurta's journey to Eridug', 'Return of Lugalbanda', 'Šir-namšub to Suen', or 'Temple hymn 3'.

In a 'praise poem for Šulgi (Šulgi D)' the people of rebel lands were compared with old reed, but because of missing text passages it is not clear what this comparison implies. 'A prayer to Nanna for Rīm-Sîn (Rīm-Sîn F)' specifies that the old reeds are lying-down, and that other reeds are upright. In the 'Debate between winter and summer' it is told how the personified winter created old reeds and young reed shoots. Slightly further in this text it is specified that the old reeds were harvested by reed-cutters.

The precise distinction between old reed and young reed is not clear: it may be a reference to reeds of the previous year ("perennial reed") and reeds of the current year.

4 The ancient Egyptian 'Tale of the herdsman' (early 2nd millennium BCE)

A peculiar text on ancient Egyptian wetland pasturing is the fragmented 'Tale of the herdsman' that dates to the beginning of the 2nd millennium BCE (for background information see the notes in the various consulted translations). The text is preserved on papyrus 'Berlin 3024' where it occurs on a sheet that was glued to the main part of the papyrus containing the well-known but also fragmented 'Conversation between a man and his ba' (the ba, extremely simplified, was considered by ancient Egyptians to be a part of the human soul). T. Schneider noted in his translation that the papyrus fragment with the 'Tale of the herdsman' was most likely preserved only by its use to strengthen the role with the 'Conversation…'. The beginning and end of the tale are missing. According to R.B. Parkinson, around four lines at the beginning are visible but not readable, whereas at the end clearly four further lines were erased. It is unknown how much text may have been written on parts of the papyrus that were cut-off. M. Escolano-Poveda found in 2015 some papyrus fragments with a few sentences that clearly belong to the continuation of the tale.

The text was probably written by an apprentice scribe, and - if it was written for study purposes - only a part of the complete tale may have been written down. This might be the reason that the person who strengthened the 'Conversation…' papyrus thought the herdsman-fragment was dispensable. According to J.C. Darnell and H. Goedicke, the text contains many spelling mistakes and is grammatically poor, whereas W. Kosack remarked that the text contains many unknown words. This makes a coherent translation complicated, and in fact, the various editions partly contradict each-other.

"…Look, I… long… when I come… So, I went down into the marsh close to the pastures, and there I saw a woman who did not look human at all. My hair rose when I saw her bristled hair, and her hairy skin [or depilated skin, dependent on the interpretation of the Egyptian text. Depilated, however, does not make sense for the description of a monstrous being with bristled hair]. *I will never do what she said, and fear still runs through my limbs. I say to you* [possibly he said it to his companions in a wordplay, or possibly literary to the cattle as a stylistic device to announce the subsequent procedures]: **'***Bulls, go aside and let's ferry-over the calves; the herd can spend the night at the pastures, us herdsmen behind them. Our skiff is for the transport of our bulls and cows* [or guards according to the translation of Schneider]*, and the sages among us should recite a water spell: 'Herdsmen and men, my ka* [another part of the ancient Egyptian human soul] *will rejoice. I will not be driven away from this marsh in years with high floods* [during the annual Nile River inundations] *that command the ridges of the land* [perhaps levees, or the slopes of the higher areas beyond the Nile valley] *and make the lakes* [the inundated floodplains] *indistinguishable from the river. Go back into your dwellings* [probably the river should go back in its normal bed]*, while the cows* [or guards according to T. Schneider] *remain at their place*. *Now come, my fear for you is gone, my dread vanishes, until the rage of the Mighty Goddess and the fear for the Lady of the Two Lands disappear.' At dawn in the morning, the herders did as they had been told. Then the goddess came to him* [the herdsman] - *when he had turned* [his boat?] *to the marsh - stripped-naked and caressing her hair* [most translations just state that her hair was loose or tangled]. *…more than the night, her teeth more than gypsum powder. She hastened to the skiff, transformed into a woman and asked about the cattle. …then …take… The herdsman answered, after the one responsible for the cattle had brought… in order to bow in pity… papyrus-like…*" (compiled from and paraphrased after the consulted translations; the first words are from the erased lines that R.B. Parkinson guessed in his translation; the last lines starting with "*more than the night*" are paraphrased after the translation by M. Escolano-Poveda of the additional fragments).

The I-person talked about his encounter to his fellow herders, and then advised or ordered to flee. He also told them which spell to recite. Obviously, the woman in the marsh had spoken to him, but it is unknown what she had said: only the decision "I won't do that" by the herdsman has been preserved. The final part of the text is in the third person and tells what happened the next day.

Most consulted translations place the tale in the Nile Delta or in the Fayum wetland (see Fig. 2), which both included large papyrus marshes. Various notes in the translations link the 'Tale of the herdsman' to the 'Pleasures of fishing and fowling' that tells of excursions by nobility in the Fayum marshes.

The additional text fragment found by M. Escolano-Poveda, in which the goddess transformed into a woman seems strange since she was already a woman in the second encounter. Since at least four lines were erased from papyrus 'Berlin 3024' and even further lines may have been lost it is conceivable that this transformation happened during a later encounter. E. Brunner-Traut noted in her translation that - according to general storyline principles - the goddess would have been successful in her intentions during a third encounter. Since the fragment mentions that the goddess had asked after cattle and someone responsible for the cattle had brought something, a direct interaction between the different herdsmen and the goddess must have taken place.

Fig. 5: Ancient Egyptian depictions of cattle. Left: calf running through a papyrus marsh (from the palace of pharaoh Amenhotep III at Malqata, c. 1390-1353 BCE). Right: model of a cow and calf (from Meir, Egypt, 11th or 12th dynasty, c. 2030-1850 BCE). Both pictures from the Metropolitan Museum of Arts (New York), accession numbers 11.215.453 (left) and 11.150.5 (right). Links to the photos (left, right)

It is unknown which divine being the herdsmen had encountered. H. Goedicke noted that the woman was part animal and had a furry skin, and her naked occurrence at the end of the text would mean that she had laid-off the fur and was now completely human. Possibly the being was the goddess Hathor (see the explanations by H. Goedicke and J.C. Darnell), who – among numerous other divine tasks – was related to female sexuality. Apart from as a human, she was also regularly depicted as a cow dwelling papyrus reeds (Hart 2005; Wilkinson 2017b). In that case, the animal-like creature of the first encounter may have been the lioness goddess Sekhmet, who was an alter-ego of Hathor: in Egyptian religion - again extremely simplified - many divinities were envisaged to occur in different manifestations.

T. Schneider suggested in his analysis of the 'Herdsman' that also the protagonist of the 'Journey of the Libyan goddess' - that tells of a goddess traveling the Nile marshes – may have been encountered. Ample text parts of the 'Journey…' indicate that this Libyan goddess was Hathor. Indeed, Hathor was also a goddess of foreign lands (Hart 2005; Wilkinson 2017b). The text of the 'Journey…' itself identifies the Libyan goddess as a Mut-Neith-Sekhmet trinity, of which Sekhmet, thus, was an aspect of Hathor. The 'Journey…', however, was written some 1000-1500 years after the 'Tale of the herdsman' and to

pose a relationship between both texts may be too farfetched, unless the 'Journey…' goes back to earlier not-preserved sources.

M. Escolano-Poveda noted similarities between the description of the goddess in the second encounter and the description of a princess on the 'Stela Louvre C100' and posed that the latter may have been based on the being in the 'Tale of the herdsman'.

Some ancient Egyptian texts refer to a lesser-known wetland goddess Sekhet (Guglielmi 1974, 1984, 2013), which may also have been the being encountered. In translations she is generally not named but denoted as "fen goddess" or "marsh goddess", but her actual name was - in transcription - "Sekhet" (or variations thereof), which is the ancient Egyptian word for marsh or field (cf. Dickson 2006). The goddess Sekhet is mentioned incidentally in, e.g., the 'Pyramid texts' (Utterance 341), the 'Coffin texts' (spells 571, 607 and 1015), and the 'Pleasures of fishing and fowling'. She is, however, depicted in numerous drawings on tomb- and temple-walls from between c. 2500 BCE and 50 BCE (Guglielmi 1974, 1984, 2013) and seems to have been more a goddess of bird-catching than of marshes.

Fig. 6: The statue of Ankh-Userkaf (c. 2440 BCE) from Abusir (left) with the red inset enlarged (right). Liebieghaus Skulpturensammlung, Frankfurt am Main, Museum number LH 1629. Left photo: Liebieghaus Skulpturensammlung, © Städel Museum, Frankfurt am Main., right photo: Pim de Klerk.

D. Morenz – who assumed a wordplay – posed that the encountered goddess was another lesser-known deity named Seret who was connected to the Nile River Delta. She has been mentioned only once on the statue of Ankh-Userkaf from the 5th dynasty (c. 2430 BCE), which was discovered in Abusir (Franke 1993, 2003, Fig. 6). D. Morenz speculated that this Seret may have been an aspect of Hathor

too. It has been assumed that she was a feline goddess (Wilkinson 2017b) because the goddess-symbol in the relevant text allegedly represents a lion or another feline (Lange 2016; Hafez 2022). As the inscription is damaged, the identification of a feline figure seems to be an overinterpretation (Fig. 6; see Franke 2003). Another part of her name consists of a duck- or goose-hieroglyph (Fig. 6). Franke (2003), Wilkinson (2017b) and Hafez (2022) noted that hypotheses that Seret was connected to ducks or geese - and, thus, to the fowling goddess Sekhet – are erroneous as the goose/duck symbol is merely a phonogram and not a reference to actual waterfowl.

The intention of the goddess is unclear. Most commentators agree that it was of sexual nature. M. Escolano-Poveda posed that the goddess was after the cattle, which would explain why the herdsman immediately took action to protect the herd. This interpretation would also comply with the newly discovered text fragments.

Apart from the encounter with the goddess, the text also provides information on cattle herding. Ancient Egypt had various kinds of domesticated bovines (Wassell 1991), whereas also wild auerochs will have roamed the Nile marshes (Beierkuhnlein 2015). Among many different kinds of animals worshipped by ancient Egyptians, the bovine cult seems to have been one of the most prominent (Wilkinson 2017b).

The pastures were obviously near marshes, and it seems logical to infer that the cows roamed the reeds more or less freely. The herd was carefully guarded as dangerous and possibly lethal animals such as crocodiles and hippopotamuses dwelled the Nile marshes.

Fig. 7: Ancient Egyptian herdsman transporting a calf on a boat through papyrus reeds. Faience dish found in Enkomi (Cyprus), produced between 1340-1200 BCE and either imported from Egypt or an Egyptianised Cypriotic product. © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 1897,0401.1042. Link to the photograph

Furthermore, small boats were used for the transport of cattle, but not the complete herd. H. Goedicke and E. Brunner-Traut stated that calves were transported by boat, which would encourage the adult cows and other animals to follow swimming. According to A. Erman cows and bulls would swim spontaneously whereas calves were led on a rope. G. Roeder noted that the cowherds on the skiffs pulled the calves by their front legs.

The water spell recited by the sages is identical with spell 836 of the ‘Coffin texts’ which, however, lacks a context and is therefore difficult to comprehend. R. Faulkner noted in his translation that “The whole spell gives the impression of being but a fragment of a longer text”. Several notes in the used editions of the ‘Tale of the herdsman’ pose that the spell was addressed to the Nile flood - i.e., not to the river itself but only to the inundation it caused - to protect the herd from dangerous animals such as crocodiles of hippopotamuses. Other 'Herdsman'-translations suggest that the spell was directed against these dangerous riverine animals directly

The ’Tale of the herdsman’ is one of the few ancient Egyptian texts that play directly in the riverine reeds and provides information on how ancient Egyptians utilised the wetlands for pasturing. One can only speculate about the content of the remainder of the tale and whether it would provide more information on reedland utilisation. It is unlikely that the complete text will be discovered in future, but the discovery of additional lines by M. Escolano-Poveda provides hope that further text passages indeed may be revealed.

5 The hardships in the papyrus reeds in the 'Teaching of Khety' (early 2nd millennium BCE)

The 'Teaching of Khety', also known as the 'instruction of Dua-Khety' or - most common - the 'Satire of the trades', mocks various professions in ancient Egypt. The story is told by a (fictional?) scribe named Khety who explains his son Pepy – while accompanying him to the scribal school - the benefits of being a scribe compared to various hard-labour professions. Background information on the text is provided in the various translations and by Foster (1999) and Jurjens (2019; 2021a/b). The text became popular for training apprentice scribes, and over 300 copies have been preserved – although mostly containing only fragments of the text. Whereas various versions date back to the 18th dynasty (c. 1550-1292 BCE), most are from the Ramesside period (c. 1292–1070 BCE). Presumably the original text stems from the 12th dynasty (early 2nd millennium BCE), but this is not certain. Unfortunately, most preserved copies stem from students and are consequently corrupt and overfilled with errors. The combination of the many copies, however, allowed the reconstruction of most of the text, although the translations vary widely. According to Burkhard & Thissen (2015) the educational purposes were merely calligraphic and not linguistic so that many textual errors were not corrected (on errors see also Jurjens 2019, 2021a/b).

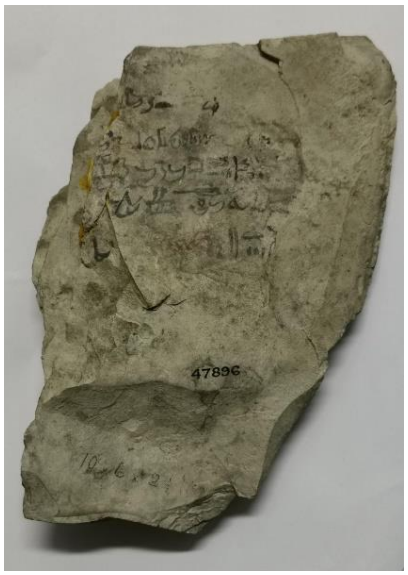

Fig. 8: Ostracon BM EA 47896 with a fragment of the 'Teaching of Khety'; New Kingdom, found in Deir el-Bahri (Thebes). Together with its counter-piece BM EA 41650 it shows the text-sections on the jeweller and the barber (not discussed in this essay) and the first line of the stanza on the reed cutter (see Parkinson 1999). © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number EA47896. Link to the photograph

The text states on wetland-related professions (paraphrased after the consulted translations):

The reed cutter:

"*The reed cutter travels downstream to the marshes* [in the Nile Delta] *to get arrows. When he has done more than his arms can manage, the mosquitoes have killed him, and the gnats have slaughtered him to pieces, and he is completely worn-out*."

In contrast to the other translations, H. Brunner translated the profession with "*shepherd*", but added a question mark that he was not certain about this. W.K. Simpson named it "*arrow maker*".

The arrows are a pars pro toto for all products made of reeds. In several translations the words for mosquitoes and gnats are exchanged, and regularly other insects are interpreted by the translators. Jurjens (2021b) noted some mix-up of the words in the source material that may have confused translators. S. Jäger noted that the animals referred to cannot be identified with certainty, and he used in his translation – hypothetically – mosquitoes and fleas.

J.E. Hoch did not translate "*arms*" but "*hands*" and translated "*slaughtered with its slicer*" – i.e., the sting of the gnat - instead of the often-used phrase "*cut to pieces*". He furthermore proposed "*butchered*" instead of "*worn-out*" because that would continue the "slaughter"-metaphors. Also W. Helck noted that "butchered" (in German "geschlachtet") would be the literal translation. S. Jäger translated this phrase with "*so that he got bumps*" (original in German). W.K. Simpson interpreted that the person is "judged" instead of slaughtered or worn-out, but it is not clear what he meant.

The fieldworker:

"*The fieldworker laments eternally, his voice is louder than that of a crow; his fingers are swollen and stink greatly. He is weary having been sent to the marshes* [in the Delta]*. He is in rags, and he is fine as far as somebody is fine among* [i.e., surrounded by] *lions. Pain is his reward. He goes out* [of the lands] *and when he reaches his house in the evening the walk has finished him off.*"

The opening sentence "eternally" has also been translated with "… *cries like guineafowl*" or variations thereof in the translations of W. Helck, R.B. Parkinson, T. Wilkinson, M. Lichtheim and S. Jäger, of which the latter mentioned in a footnote that the actual bird species cannot be identified. S. Jäger furthermore commented that the cry may not be a complaint but a simple call for the cattle or a field song. The ancient Egyptian words for "eternally" (or "forever") and "guineafowl" are written and pronounced rather similar: although most Egyptian sources use the word "eternally", indeed an ostracon exists on which unambiguously "guineafowl" is written (J. Jurjens, pers. comm. April 2022). If the text was dictated by a teacher, a student may have misheard him and written the wrong word.

The crow also has been named "raven", which indicates that various translators at least interpreted a corvid species. J.E. Hoch, however, retained the transcribed ᶜaba-bird, and also W. Helck and S. Jäger noted that the species involved could not be identified and that according to a personal communication of W. Guglielmi to S. Jäger also a pigeon may have been meant.

W. Helck, J.E. Hoch, W.K. Simpson and S. Quirke depicted the fingers as "*sore*" instead of "*swollen*". T. Wilkinson noted that the literal translation would be "*his fingers are become like his arms*".

S. Jäger rejected the translation of stinking hands and, instead, posed that the phrase deals with "*weather-related rash*" (original in German).

J.E. Hoch stated that the sentence on the Delta marshes should be read as "*he is too exhausted to take a rest in the delta*". S. Quirke translated that line with "*he is too exhausted to report for marsh work*".

S. Jäger translated the lion phrase with "*he has to flee for lions*". Instead of the lion-phrase J.E. Hoch and S. Quirke translated "*His health is the health on new lands; sickness is his reward*" which is also the intention of the translation by W. Helck who, however, named the "*land*" an "*island*" and interpreted it to be freshly formed slick land. S. Quirke followed the sentence *with "His labour-duty there is whatever they have forgotten*."

The translations by S. Jäger, R.B. Parkinson and T. Wilkinson refer to hippopotamuses in the line following the lion-passage. The ancient Egyptian farmers worked in agricultural fields cleared of reeds, where they could have met aggressive hippopotamuses with possibly lethal consequences. M. Lichtheim left-out the hippopotamus passage because she thought the text was too corrupt to allow accurate translation, whereas J.E. Hoch added that the reading of the word for Hippopotamus must have been erroneous since in that case the translation should literally be "*the pain of the hippopotamus is against him*". Also H. Welck stated that "hippopotamus" is certainly erroneous. The confusion results from different variations written on the available ostraca (J. Jurjens, pers. comm. April 2022).

For the "*he goes out*" passage J.E. Hoch noted that a literal translation does not make any sense. The line was left out by M. Lichtheim. S. Jäger translated "*The hamster is the third of them* [i.e., the third perilous animal] *when it comes out of its hole*" but noted that it is not clear what actual animal is meant: it was possibly a rodent that was harmful for cereals. The translation by R.B. Parkinson can be read that the fieldworker went out of his house early in the morning and got home late at night.

H. Brunner – with a question mark – interpreted that the final statement intended to state that the marsh had killed the fieldworker. W. Helck did not refer to the walk that wore-out the farmer, but instead noted that taxes had broken him and remarked that the newly formed slicks interpreted by him could be taxed higher than normal land. S. Jäger provided the notion that not the "*walk*" but the "*work*" had made him tired, and S. Quirke wrote that he reached is home in utter poverty.

The stoker:

"*His fingers are foul and smell like corpses. His eyes are scorched by the smoke; he cannot get rid himself of his dirt. He spends the day cutting reeds, and his clothes repulse him*."

S. Jäger mentioned that the profession is unknown and not really translatable. H. Brunner left it open, J.E. Hoch named it the "*fire tender*" and W.K. Simpson the "*furnace tender*", which seem synonyms for stoker. S. Quirke translated it as "*leather-worker*", and S. Jäger as "*charcoal-maker*".

The editions of S. Jäger, M. Lichtheim and T. Wilkinson mention "*inflamed eyes*" rather than "*scorched*", whereas S. Quirke called the eyes "*wasted*".

J.E. Hoch remarked that it should not be "dirt" but "stench", and S. Jäger commented that the stench will have developed because of the intensive contact with smoke. A note in the edition of R.B. Parkinson states that the smell was mainly because most of his fuel was dung.

S. Quirke translated that the stoker was not "cutting reeds", but that he was cut by reed. Brunner gave the (original German) translation "… *he cuts in reeds*" and added as explanation that it means "… *in rags*", which would logically fit the final remark that "*his clothes repulse him*". W. Helck remarked that "*rags*" was probably a wrong reading of the word for reed and translated (in German) that the stoker "*did not get clean although he spent his day at the reed-pond*". He proposed that the stoker cut his reeds to be used as fuel, whereas S. Jäger noted that it is not clear whether the reeds were used to produce charcoal, or only to incite other plant material. S. Jäger furthermore translated that the stoker was repulsed by reed bundles instead of his clothes and noted that this related to the transport of the reeds from the marshes where they were harvested.

The laundry man:

"*The washerman washes on the riverbank near the crocodiles. 'Father, get out of the streaming water' say his son and his daughter, 'it is not an occupation that gives you as much satisfaction as any other profession'. His food is mixed with dirt and no limb of him is clean. He washes the clothes of menstruating women. He weeps as he spends his day at his washing board and washing stone. People say to him: '*[I have] *dirty clothes for you. Come over here: the riverbanks are overflowing with them*.' "

According to S. Jäger, the "crocodiles" were originally designated as a crocodile-shaped demon.

H. Brunner translated that the child said "*Father*, *I go in the dangerous water*…". W. Helck and W.K. Simpson translated that the son and the daughter did not advise the father to leave his job, but that they would "*leave the water*" and not pursue his job since they could be happier in other professions. According to S. Jäger's translation, the children asked their father to go into the dangerous water for

them in the sense to support his family with his work, whereas the washerman's job was more satisfying than any other profession. According to S. Quirke the passage should be translated as "'*Father is going to the water of the canal'* [where he added a question mark] *he says to his son and his daughter*" and continued that the washerman stated that this was a better job than any other. J.E. Hoch proposed "*waters of slaughter*" - i.e., a metaphor for "perilous water" - instead of "streaming water".

H. Brunner, J.E. Hoch and R.B. Parkinson did not provide the translation "*dirt*" but called it "*excrements*" – which may be a reference to skid marks in the dirty clothes. Brunner, however, put a question mark to his translation.

J.E. Hoch translated the sentence on menstruating women with "*he gets into the cloak of a woman and gets into her menstrual blood*" which in tendency resembles the translations by H. Brunner, S. Quirke and S. Jäger. The latter posed that this text construction may point to cross-dressing by the laundryman.

J.E. Hoch posed that "*he weeps*" should be "*I weep for him*" whereas Quirke provided the request "*weep for him*".

R.B. Parkinson has for the final phrase "*the edge* [the edges of the river, i.e. its banks] *sinks under their weight*." W. Helck translated the last lines (in German) with "'*Dirty laundry! Come to me' they say to him, 'the border is overflowing with it*' ", and J.E. Hoch provided "*… overflowing with you*". S. Jäger translated "'*Dirty laundry is brought to me, but the* [river] *bank is overflowing with it*.'" S. Quirke translated "*He is told 'dirty washbowl, come here, the fringes are still to be done'*." It is, thus, not clear whether "they" address the laundry or the laundryman, but it appears most logical that the people told the washer that they had dirty clothes to clean in such huge amounts that these metaphorically covered large parts of the riverbanks.

Fig. 9: Ancient Egyptian bird-catcher with a net. Metropolitan Museum of Arts (New York), facsimile of a picture from the Tomb of Khnumhotep (early 19th century BCE), Beni Hasan, accession number 33.8.18. Link to the photo

The fowler:

"*The fowler is very weak by watching the sky* [for birds]. *If a swarm of birds flies over him, he says: 'if only I had a net'. But the god does not grant him one, and he is resentful about his plans.*

H. Brunner translated (in German) that the fowler was "*very miserable*" and similar words were used by S. Quirke.

The final sentence should - according to J.E. Hoch – be "*for he* [the god] *is merciful in his plans*", and according to S. Quirke "*he is made miserable by his condition*. W. Helck and W.K. Simpson translated that the god was hostile towards the fowler. Perhaps it is also possible to understand the sentence that the fowler is angry with the plans of this god.

The fisher:

"*I tell you also of the fisher: he suffers more than* [anybody with] *another job. He works in the river surrounded by crocodiles. When the time of reckoning comes* [i.e., the counting of his catch at the end of the day] *he is in misery. There is no one who tells him: '*[beware] *there is a crocodile', since fear* [for the animal] *has blinded him, but coming out of the flowing water he says: 'by the might of the god'*."

S. Quirke titled the stanza the bird-catcher instead of a fisher, which will be an error because the previous stanza is about the fowler.

"*There is no one to tell him*…" means that the fisher was all alone, or people passing by were just not interested. The text is regularly also translated as "*he does not say there is a crocodile*…" or variations thereof, e.g., by H. Brunner, S. Jäger, M. Lichtheim and T. Wilkinson. The translation of W.K. Simpson seems to imply that he was in fear because nobody told him there was a crocodile and was startled when he saw the animal. S. Jäger posed that the "*crocodile was quiet*" and noted that possibly the fisher was so blinded by fear that he could not say whether the crocodile was peaceful or aggressive, and further hypothesised that he feared the reckoning for which reason he became blind for the dangers of crocodiles. R.B. Parkinson seems to have implied that because of fear the fisherman was not able to realise that a crocodile was nearby.

S. Quirke ended the stanza with "*he is as at a miracle*" instead of "*by the might of the god*". W.K. Simpson translated that he fell down through the might of the god, whereas the translation by R.B. Parkinson suggests that at land he is "*as if smitten by god's anger*". S. Jäger noted that the line could mean that thanks to the god he got back to land safely.

It is remarkable that at the end of the stanzas about the fowler and the fisherman only one anonymous god is referred to, although ancient Egypt had a polytheistic religion. This kind of sentence constructions occurs often in ancient Egyptian texts and may indicate that Egyptians envisaged with the singular word "god" deities in general (J. Jurjens, pers. comm. April 2022).

The various translation-variants indicate great differences of opinion on the actual meaning of the 'Teaching of Khety'. This does, fortunately, not relate to the wetland text passages that appear to be rather self-explaining: the reeds and the river were full of annoying and dangerous animals, including stinging insects, hippopotamuses and crocodiles, and the workers in the wetlands were in constant peril and had to work hard and endure much in filthy and stinking surroundings (see Goldsmith (2019) for the ancient Egyptian perception of wetland stenches). The reeds themselves were not described negatively but were depicted as merely part of the landscape scenery. Except for the reed cutter and the stoker, reeds are not even mentioned.

Many statements are highly exaggerated to create a humorous effect (although W. Helck and Burkard & Thissen (2015) deny that the text was intended to be humorous), and illustrate how scribes - and probably the entire ruling and cultural elite - looked down condescendingly on artisans. The text thus testifies the lack of appreciation of higher social classes towards the classes below them, as also other Egyptian texts snobbishly do (Rollston 2001). In contrast, M. Lichtheim noted in the introduction to her translation that some other texts show great respect for hard labour. Within the context of the Khety-

text - in which a father brings his son to the scribal school - the hardships of the artisans may have been exaggerated to stimulate his offspring to be an eager aspirant scribe.

The text also illustrates the dependence of Egyptian society on the papyrus thickets and the River Nile, on which ancient Egyptian sustenance was based.

6 Neo-Assyrian reedland scenes from the palace of Sennacherib in Nineveh (c. 700 BCE)

Whereas many ancient texts provide information on the Mesopotamian fluvial area since the 3rd millennium BCE, there are also various pictures that display the landscape. Several wetland-related bas-reliefs were found in the ruins of Nineveh (NE Iraq) - actually far outside the lowland fluvial area (Fig. 1) - in the palace of the neo-Assyrian king Sennacherib (reigned 705-681 BCE; Frahm 2013). Within the first half of the first millennium BCE, the neo-Assyrians aimed to conquer and dominate entire Mesopotamia (Frahm 2013). Neo-Assyrian texts on the warfare are presented by Luckenbill (1927): there were military campaigns in the Chaldean realm in the marshes of southeastern Mesopotamia, i.e. the present-day highly degraded Hammar, Qurna, and Hawizeh marshes (De Klerk & Joosten 2021). Among the numerous reliefs, some display scenes from battles in the marshes.

Austen Henry Layard (see Parry 2004) was an archaeologist, artist, diplomat, and politician who had adventurously travelled the Near East between 1839 and 1853 (Layard 1853a). He was fascinated by some enigmatic mounds in northeastern Iraq – at that time part of the Ottoman Empire (Könemann et al. 2009) – and with support of the British Museum he started archaeological excavations in Nimrud and Kuyunjik. At the latter site, he discovered the remains of the city of Nineveh and the palace of King Sennacherib. The books that presented the pictures of the bas-reliefs in the palace (Layard 1849, 1853b) contained engravings made from his original field drawings in the so-called northwest palace of Nineveh (see also Barnett et al. 1998a/b).

In the time before photography, it was not possible to document archaeological finds directly, and hand-drawings had to be made to transmit graphical data to the scientific community and the common public. In 1839, Louis Daguerre presented his freshly invented photographic process known as Daguerreotype to the French Academy of Science, and François Arago - the secretary of the Academy - subsequently introduced the process to the wider scientific audience (Lowry & Lowry 1998). Arago already stressed the possible use of the technique in archaeology: "*To copy the millions of hieroglyphics which cover even the exterior of the great monuments of Thebes, Memphis, Karnak, and others would require decades of time and legions of draughtsmen. By daguerreotype one person would suffice to accomplish this immense work successfully*" (Nicolae 2016, p. 227). It was in fact the enormous number of Mesopotamian artefacts that Austen Henry Layard had brought to London – including many clay tablets – that triggered a plan to initiate photography at the British Museum in the 1850s to document these artefacts (Dorrell 1994). It took, however, long time before photography was used in archaeology on a large scale and drawing by hand remained common practice. One of the advantages of drawings is that details can be displayed that on the originals are difficult to discern (see Figs 10/13).

Fig. 10: Sennacherib oversees construction works near the Tigris. Top-left: from Layard (1853b), plate 12; top-right: photograph of the original relief. Bottom: two details. © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 124824. The photographs have been cropped, have enhanced contrast, and one has the background removed. Link to the photographs

The relief in Fig. 10 shows the king and his entourage visiting a worksite where laborers were transporting building material. In the background, a reedland is shown. No differentiation was made on the relief between different reedbed plants: all are depicted with the same symbolised style, which reminds more of cereals than of reeds. At the bases of the stalks, wavy lines demonstrate that the plants grow in shallow water. In the reeds, some deer roam, and the left part shows a wild boar with many piglets, of which one is trying to drink milk. The longhorned animal in the right of the reedbed optically resembles a gazelle: various ribs of the animal show underneath its skin. The animals are, thus, displayed with much more detail than the reed-templates. The text in front of the king translates as "*Sennacherib, king of the world, king of Assyria, huge protector of bull colossi which were made in the district of Balatai for his royal palace in Nineveh, had these transported with pleasure*" (paraphrased after Barnett et al. 1998a, p. 66/67).

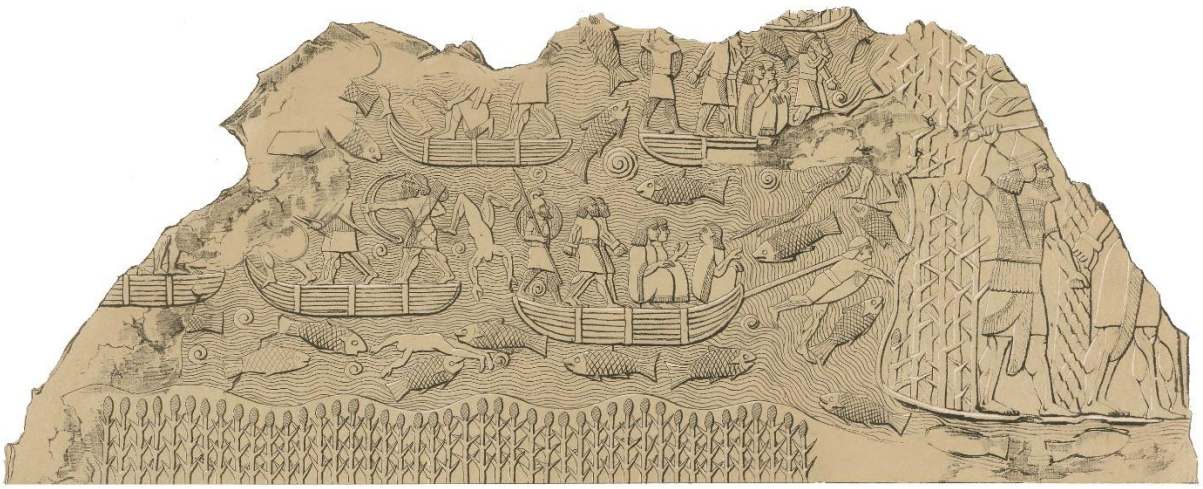

Fig. 11: Battle-scene in the Chaldean marshes. From Layard (1853b), plate 28.

The scene of Fig. 11 depicts a battle on a body of open water surrounded by reeds in the Chaldean realm. The water is depicted with wavy lines, swirls, and fishes. Besides numerous similarly looking fishes, a fish with elongated body will represent some kind of eel. The relief shows two parties fighting with weaponed warriors in small, elongated boats. Decapitated corpses float or are thrown in the water, and one swimmer on an inflated animal skin is towing a boat with a rope. To the right an armed warrior leads-away some cuffed captives.

Fig. 12: Battle-scene in the Chaldean marshes. From Layard (1853b), plate 27.

Fig. 12 shows a central open water bordered by reedlands with ditches or canals (which may have been artificial to allow boat navigation through the marshes). The soldiers fighting on the boats carry bow and arrows, and shields. In three instances, men navigate the vessels with oars standing at the sterns of the boats. The persons without armaments make all kinds of gestures that are difficult to interpret.

One man is falling into the water. Within the surrounding reeds, horsemen are shown armed with bow and arrows, or spears. In the top part of the open water, a group of women and men carrying provisions are escorted to the shore. The second person from the right is cuffed, the woman at the end of the line looks-back to the armed soldier with an annoyed facial expression. Most likely these people were captivated Chaldeans. It seems as if they walk on the water surface, but it was probably intended to depict them wading through shallow water. In the bottom-right of the picture, an armed figure escorts a cuffed man and two women carrying provisions.

Fig. 13: Battle-scene in the Chaldean marshes. Top: From Layard (1853b), plate 25. Bottom-left/middle: part of the original relief. Bottom right: detail of Chaldeans hiding in reedbeds. © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 124774. The three single photographs have been cropped, have enhanced contrast, and one has the background removed. Link to the photographs.

Fig. 13 also shows fighting on boats in an open water environment surrounded by reeds with interconnected channels. Apart from fishes, also crabs are displayed in the water. In this picture, two types of boats are shown: elongated ones with curved boughs and sterns, and completely flat ones. In the second boat from the right, a person is sitting in an apparent rowing-position. Several Chaldean refugees are hiding in flat boats behind reed-stands. Various people are depicted while falling into the water, of which one has a spear or arrow in his back, and another has been beheaded. In the second boat from the right, some warriors seem to show-off cut-off heads of enemies. Prisoners are escorted in the left and right parts of the picture. The boat to the right - carrying warriors with cuffed prisoners – is being drawn to land. The relief continues for a considerable part to the right displaying dry land along a single stream without wetland vegetation (Barnett et al. 1998b). Battles in dry settings or along streams dominate numerous other reliefs, but mostly display single channels filled with fishes and floating corpses, but without wetland vegetation (see Barnett et al. 1998b).

The pictures presented here - although in part highly stylised - provide important information on how the Neo-Assyrians perceived wetlands. The southeastern marshes consisted of extensive reeds with patches of open water, dissected by canals to allow transportation. Layard (1853a) noted that the depicted landscape closely resembled the southeastern marshes of his time. The marshes were accessible for mounted warriors who could support the warriors in the boats from land (which must have been sufficiently firm to support horses). The people in the reliefs are all depicted in detail as individuals with own actions. The pictures display various aquatic animals as well as reedland wildlife, illustrating the importance of natural fauna. Although the animals were certainly used as a food resource, the tender scene of the boar with her piglets shows a deep respect of the artists for the animals. Layard (1853a, p. 109) wrote: “These animals are designed with great spirit and truth”.

That people and animals were displayed with love for details seems to contradict the standard template with which reedbeds were depicted over and over again. In fact, reedbeds were way more diverse than displayed on the reliefs and already in Sumerian times various reeds were distinguished.

7 The march through the marsh and the eye of Hannibal (Second Punic War, 217 BCE)

When ancient city states in Antiquity expanded and enlarged their area of influence, they automatically clashed with other peoples if these claimed the same regions. In 264 BCE, the First Punic war broke-out between the cities of Rome and Carthage over the hegemony of Sicily, a war eventually won by Rome (Scarre 1995; Goldworthy 2003). The Second Punic war started in 218 BCE and was famous for the crossing of the Alps by the Carthaginian general Hannibal with his army including numerous elephants.

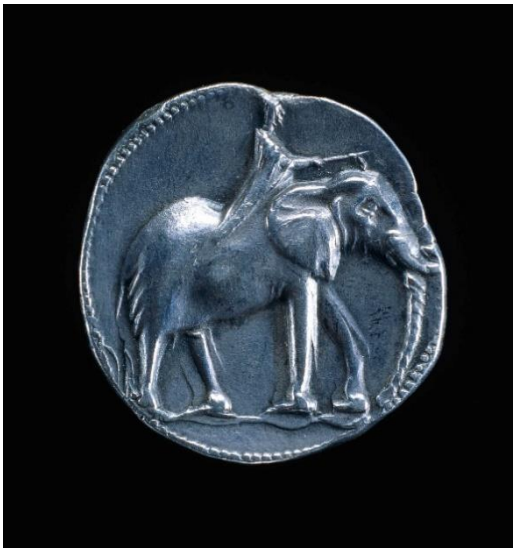

Fig. 14: Carthaginian silver coin depicting an elephant with rider, minted in Spain, c. 237-209 BCE, found in Valencia (Mogente hoard). © The Trustees of the British Museum, shared under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) licence). Museum number 1911,0702.1. Link to the photograph

What happened has been written down by many ancient authors. Probably the best-known accounts are those of Polybius and Livy. Polybius was a Greek historian who lived in Italy in the second century BCE and had invented a so-called “pragmatic history”. This included the study of written documents and memoirs, the careful study of eye-witness reports, and the practice of putting the history in a geographical context (Derow 1996; Howatson 1997). Of his work ‘The histories’ in 40 books only the first five have been transmitted completely. Livy lived in the first century BCE and the early first century CE and wrote a historical work of 142 books from the mythological foundation of the City of Rome in 753 BCE to 9 BCE, but only books 1-10 and 21-45 remain (Briscoe 1996; Howatson 1997), although summaries of all books have been transmitted (the ‘Periochae’). Books 21-30 cover the Second Punic war. Livy had lived in Padua and Rome, was apparently a good friend of emperor Augustus, and had tried to inspire the young emperor-to-be Claudius to study history (Briscoe 1996; Howatson 1997). Livy had not the same aspirations as Polybius and relied almost exclusively on published books (including that of Polybius): he ignored archive documents, made chronological and geographical errors, and allegedly did not fully comprehend the Roman political institutions; but he had great literary qualities and wrote vivid texts (Briscoe 1996; Howatson 1997).

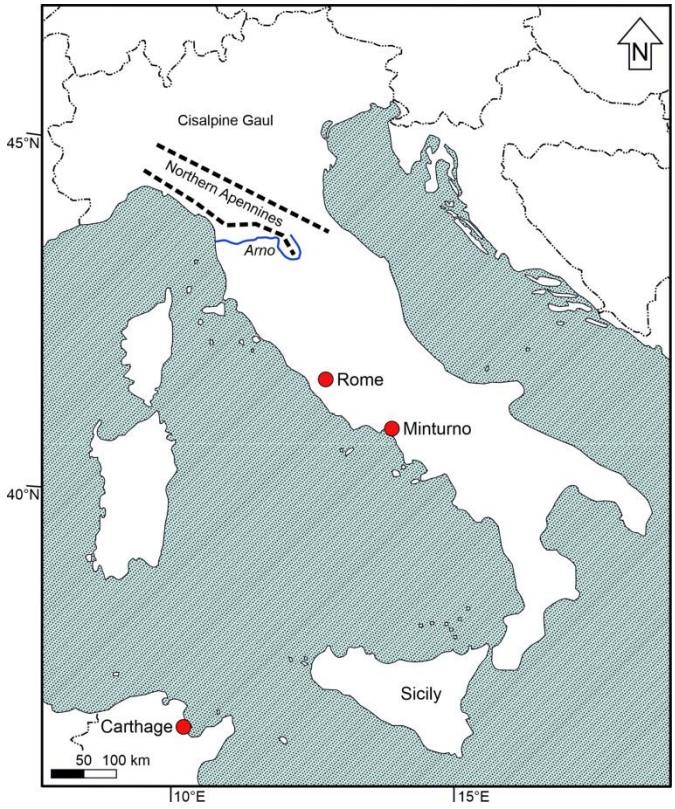

Fig. 15: location of the Arno marshes and Minturno in Italy

Polybius ('The histories' III:78-80) and Livy ('History of Rome' XXII:1/2) wrote that - after crossing the Alps and the first battles with the Roman armies in late 218 BCE - Hannibal had spent the winter in Cisalpine Gaul, the Celtic territory in northern Italy that was conquered by the Romans only about five years earlier (Niese 1910; Howatson 1997). The Celts may for that reason have had considerable anti-roman sentiments, yet their loyalty to Hannibal was far from firm: Hannibal feared to be assassinated by them and continuously disguised himself by wearing different clothes and wigs.

In early spring 217 BCE, Hannibal decided to march southward over the Northern Apennines. He chose to avoid the roads leading directly southward – that were long and well-guarded – by crossing the marshes of the Arno River. This river flows south of the Apennine Mountains through large plains with in 217 BCE allegedly vast marshes, as is illustrated by the reedlands and carrs in present-day nature reserves (Lastrucci et al. 2010). In early spring the water level will have been high, making the march through the marshes extra difficult.

Polybius recorded that Hannibal had placed his North African and Iberian troops in front, after which the division with the provisions followed. Then came the mistrusted Celts followed by the cavalry:

"*Actually, the Iberians and Libyans* [Libya was the ancient Roman designation for entire North Africa except Egypt] - *who had great endurance and were accustomed to fatigue, and advanced through fresh and untrodden marshes - accomplished their march with moderate distress. The Celts, however, proceeded with great difficulty because the marshes were now disturbed and trodden to a muddy path: unacquainted with physical hardship, they became angry and impatient, but could not turn back because of the cavalry in their rear. Everybody suffered greatly, especially because they could not sleep on the continuous march of four days and three nights on a path that was under water: but none suffered so much or lost so many men as the Celts. Most of the packing animals slipped in the mud, fell,*

and perished. Only then they could facilitate the soldiers who could rest on their dead bodies. Those who piled-up the baggage so it rose above the water could get some sleep for a short part of the night. Furthermore, many horses lost their hoofs because of the prolonged journey through the mud. Hannibal himself suffered much, rode on the only elephant still alive, and endured great pains because of a grave attack of ophthalmia: eventually this cost him the sight in one eye, because the short time and the difficulties of the journey did not allow proper treatment and healing". ("*οἱ μὲν οὖν Ἴβηρες καὶ Λίβυες δι᾽ ἀκεραίων τῶν ἑλῶν ποιούμενοι τὴν πορείαν μετρίως κακοπαθοῦντες ἦνυον, ἅτε καὶ φερέκακοι πάντες ὄντες καὶ συνήθεις ταῖς τοιαύταις ταλαιπωρίαις. οἱ δὲ Κελτοὶ δυσχερῶς μὲν εἰς τοὔμπροσθεν προύβαινον, τεταραγμένων καὶ διαπεπατημένων εἰς βάθος τῶν ἑλῶν, ἐπιπόνως δὲ καὶ ταλαιπώρως ὑπέμενον τὴν κακοπάθειαν, ἄπειροι πάσης τῆς τοιαύτης ὄντες κακουχίας. ἐκωλύοντο δὲ πάλιν ἀπονεύειν εἰς τοὐπίσω διὰ τοὺς ἐφεστῶτας αὐτοῖς ἱππεῖς. πάντες μὲν οὖν ἐκακοπάθουν καὶ μάλιστα διὰ τὴν ἀγρυπνίαν, ὡς ἂν ἑξῆς ἡμέρας τέτταρας καὶ τρεῖς νύκτας συνεχῶς δι᾽ ὕδατος ποιούμενοι τὴν πορείαν: διαφερόντως γε μὴν ἐπόνουν καὶ κατεφθείρονθ᾽ ὑπὲρ τοὺς ἄλλους οἱ Κελτοί. τῶν δ᾽ ὑποζυγίων αὐτοῦ τὰ πλεῖστα πίπτοντα διὰ τοὺς πηλοὺς ἀπώλλυντο, μίαν παρεχόμενα χρείαν ἐν τῷ πεσεῖν τοῖς ἀνθρώποις: καθεζόμενοι γὰρ ἐπ᾽ αὐτῶν καὶ τῶν σκευῶν σωρηδὸν ὑπὲρ τὸ ὑγρὸν ὑπερεῖχον καὶ τῷ τοιούτῳ τρόπῳ βραχὺ μέρος τῆς νυκτὸς ἀπεκοιμῶντο. οὐκ ὀλίγοι δὲ καὶ τῶν ἵππων τὰς ὁπλὰς ἀπέβαλον διὰ τὴν συνέχειαν τῆς διὰ τῶν πηλῶν πορείας. Ἀννίβας δὲ μόλις ἐπὶ τοῦ περιλειφθέντος θηρίου διεσώθη μετὰ πολλῆς ταλαιπωρίας, ὑπεραλγὴς ὢν διὰ τὴν βαρύτητα τῆς ἐπενεχθείσης ὀφθαλμίας αὐτῷ, δι᾽ ἣν καὶ τέλος ἐστερήθη τῆς μιᾶς ὄψεως, οὐκ ἐπιδεχομένου τοῦ καιροῦ καταμονὴν οὐδὲ θεραπείαν διὰ τὸ τῆς περιστάσεως ἀδύνατον.*") ('The histories' III:79,5-12).

Livy also transmitted a pitiful scene:

"*Hannibal himself, whose eyes were suffering from the alternating cold and warm weather of the spring, rode his only remaining elephant in order to raise high above the water. But the lack of sleep, the moist night, and the vapours of the marshes pressed on his head, and since there was neither place nor time to heal, he lost the sight in one eye*". ("*Ipse Hannibal aeger oculis ex uerna primum intemperie uariante calores frigoraque, elephanto, qui unus superfuerat, quo altius ab aqua exstaret, uectus, uigiliis tamen et nocturno umore palustrique caelo grauante caput et quia medendi nec locus nec tempus erat altero oculo capitur*") ('The history of Rome' XXII:2,10).

In Greek and Roman literature wetlands are often depicted as unhealthy because of foul vapours, and text-passages about this are found in the works of numerous authors (see the listing in De Klerk & Joosten 2019). Ammianus Marcellinus ('The surviving books of the history of Ammianus Marcellinus' XIX:4,2) even explicitly mentioned eye afflictions caused by marsh vapours. Denholm & Hunt (2021) posed that the common interpretation of Hannibal's eye condition as conjunctivitis is unlikely and suggest that it may have been keratitis caused by waterborne pathogens.

It was certainly cunning of Hannibal to cross the marshes to circumvent Roman armies unnoticed, but he took a risk that was possibly larger than he had anticipated: the partial blindness, the great number of soldiers and pack animals that died and the loss of provisions were a high price.

8 Vanishing Varus in the reeds in the 'Civil wars' by Appian (c. 95-c. 165 CE)

In Antiquity marshes were frequently used as hiding places because the abundant vegetation and small pools provided ample shelter. A well-known story relates how the politician and general Gaius Marius (157-86 BCE) hid in the marshes near Minturnae (present-day Minturno; for location see Fig. 15) at the mouth of the Liris River (currently named Garigliano) when he fled for his Roman enemies under leadership of Lucius Cornelius Sulla (138-78 BCE) during one of the Roman civil wars in the early 1st century BCE. For the Romans this was - apparently - an important tale since it was written-down numerous times. The most elaborate text stems from the 'Parallel lives' by Plutarch (46-120 CE), but the story was also told or mentioned briefly by e.g. Cicero ('The speech against Lucius Calpurnius Piso' 19; 'In defence of Sestius' 22; 'To the citizens' 20; 'About the ends of goods and evils' II:105), Livy ('Periocha' of book LXXVII of the 'History of Rome'), Ovid ('Letters from the Black Sea' IV:3,47), Velleius Paterculus ('Compendium of Roman history' II:19), Valerius Maximus ('Memorable doings and sayings' VIII:2,3), Seneca the Elder ('Declamations' VII:2,6), Lucan ('On the civil war' II:69-74) and Juvenal ('Satire X': 276). The setting of the Garigliano River and the marshes of Minturnae in Roman times was described in detail by Ferrari et al. (2013), who compiled an overview by analysing many works from Antiquity. At present, all reeds have been destroyed to make place for cultivated land (Fig. 16).

Fig. 16: Satellite image showing the mouth of the Garigliano River near Minturno: no (semi)natural reed marshes along the river have been preserved and the landscape around the mouth is intensively cultivated. Photograph from 2019 in GoogleEarth (version 2022).

In 43 BCE also a certain Varus had hidden in the reeds of Minturnae, as was written down by Appian (c. 95-c. 165 CE) in his extensive work on Roman history, including the 'Civil wars' that is often also considered to be a separate work.

Appian wrote:

"*Varus* […] *came to a marsh at Minturnae, where he stopped to take rest. Minturnians searched this marsh for robbers, and the stirring of reeds revealed the hiding-place of Varus. He was captured and he said that he was a robber. He was condemned to death, and he consented in his fate, but when they prepared to torture him so he would reveal his accomplices, he could not endure the indignity. 'I forbid you, citizens of Minturnae,' he said, 'either to torture or to kill me, who has been a consul and – what is even more important for the men who currently rule - who has been proscribed. If I may not escape, I prefer to suffer at the hands of my equals.' The Minturnians did not believe him. They discredited his story until a centurion, who was in the neighbourhood, recognized him and cut off his head, leaving the remainder of his body to the Minturnians.*" ("Οὐᾶρος […] *ἐς τὸ Μιντουρναίων ἕλος ἐνέπεσεν, ἔνθα ἑαυτὸν διαναπαύων ἡσύχαζε. τῶν δὲ Μιντουρναίων ἐπὶ ζητήσει λῃστηρίου τὸ ἕλος περιθεόντων, ἥ τε κόμη τοῦ δόνακος σαλευθεῖσα ἐνέφηνε τὸν Οὐᾶρον, καὶ ληφθεὶς ἔλεγεν εἶναι λῃστὴς καὶ ἐπὶ <τῷδε> θανάτῳ καταδικαζόμενος ἠνείχετο. ὡς δὲ αὐτὸν ἔμελλον καὶ βασανιεῖν ἐς τοὺς συνεγνωκότας, οὐκ ἐνεγκὼν ἤδη τοῦτο ὡς ἀπρεπέστερον, "ἀπαγορεύω", φησίν, "ὑμῖν, ὦ Μιντουρναῖοι, ὑπατόν με γεγενημένον, καί, ὃ τοῖς νῦν ἄρχουσι τιμιώτερόν ἐστι, προγεγραμμένον μήτε βασανίζειν μήτε ἀναιρεῖν ἔτι: εἰ γὰρ οὐκ ἔνι μοι διαφυγεῖν, ἄμεινον ὑπὸ τῶν ὁμοτίμων παθεῖν." ἀπιστούντων δὲ τῶν Μιντουρναίων καὶ τὸν λόγον ὑπονοούντων λοχαγὸς ἐπέγνω διαθέων καὶ τὴν κεφαλὴν ἀπέτεμε, τὸ δὲ λοιπὸν σῶμα τοῖς Μιντουρναίοις κατέλιπε.*") ('Civil Wars' IV:28).

It is not clear which person this Varus was since there were many people with that name who played an important role in public life (cf. Santangelo 2010). There has been some speculation on his identity (e.g., Teubner-edition of the Appian text; Mommsen 1893; Holzapfel 1900; Henderson 1997; Ferrari et al. 2013), but none of the proposed persons had a biography that fits the Varus depicted by Appian, who was a former consul. It is, thus, very well possible that the name or ranks of the protagonist were transmitted erroneously by Appian (see Mommsen 1893; Holzapfel 1900).

Proscribed (outlawed) people were considered enemies of the state: their property was confiscated, and a bounty was offered for their death (see Appian, 'Civil wars' I:11,95-101, IV:1,1-2,6; Bengston 1972; Henderson 1997). Sulla had initiated this practice in 82 BCE to take revenge upon those who had opposed him and their families. In 43 BCE a new proscription was initiated by the second triumvir consisting of Octavian, Mark Antony and Marcus Lepidus who had taken power after the assassination of Julius Caesar in 44 BCE. Their intention was not merely to dispose of enemies, but also to finance their forthcoming wars by confiscation of the properties of those who had opposed Caesar (Appian, 'Civil wars' IV:2,5). Obviously, Varus was on the list of the proscribed.

Appian used the Greek word "ἕλος" (helos, meaning marsh) to indicate probably dense reedlands of the river mouth. He used the word "δόναξ" (donax), which is one of several Greek words for reed or reedbeds (Liddell & Scott 1961). The presence of guards looking for robbers indicates that criminals hid frequently in the marshes. The reeds, thus, must have been of sufficient length to hide adult persons, or the water among the reeds was deep enough for a person to hide by submergence. The people of Minturnae, obviously, were aware of this use and scrutinised the reeds for hidden persons. The fact that Varus stirred the reeds may imply that he was not familiar with the vegetation type, was just extremely incautious, or that he was nervous because he was chased. In the end, while hiding in the marshes, the marshes did not hide him.

9 Concluding remarks

In this brochure, various artforms have been analysed, including proverbs, a fragmented tale, a satire, a series of pictures, and historical accounts. Although they contrast in form, they all illustrate the importance of reedlands for ancient societies. Reed marshes were of important economic value for the Sumerian and ancient Egyptian societies. In warfare in all studied societies, the reeds became important as places for refugees to hide for their enemies, but they were also used to approach or circumvent adversaries unnoticed. In ancient Roman literature reeds are regarded negatively, and the two incidents discussed in this brochure both deal with dangerous aspects of reeds. The preserved Roman texts, however, were transmitted by the literate cultural and ruling elite, and it is certain that - in a heterogenous society like that of the Roman Empire consisting of many different peoples and distinctly different social classes - also more positive attitudes existed.

Despite the fact that mires are hardly mentioned in the biblical New Testament, Christian faith and ideology of the literate Christian scholars – which developed mainly within the Roman empire – adopted the negative view of the Roman written sources and determined west/central European Medieval and post-Medieval views on wetlands up to the present-day.

For future management of marshes for conservation, restoration and paludiculture, a return to a positive attitude towards wetlands is paramount. To paraphrase the Sumerian philosophy: “may all reeds be great reeds!”

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