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A Queen, King, and Menagerie:
Drawings on Papyri as Tools of Ancient Egyptian Artists

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Senior Honors Thesis in Ancient Greek and Roman Studies

University of California, Berkeley

Committee Chair: Professor Todd Hickey

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Chapter 1:

Introduction

1.1 Data set and goals of study

This thesis endeavors to understand a set of three papyri containing drawings over grids that were found at the site of the ancient Egyptian village Tebtunis and date between the third century BCE and second century CE. On their fronts, the three papyri display a drawing of a queen or goddess (P.Tebt.Frag. 14,291+14,292) ([fig. 1](#)), a drawing of a king (P.Tebt.Frag. 14,221–14,226) ([fig. 2](#)), and drawings of animals (P.Fouad inv. 191a+b and P.Tebt.Tait inv.0421) ([fig. 3](#)). Their drawings over grids are the primary connecting feature of the three papyri, and they are the only of the kind yet known from the corpus of Tebtunis papyri, making them a complementary and valuable group for study. Their grids reveal an effort to produce images that conform to the Egyptian canon of proportions, which in addition to the drawings's proficient quality, suggests them to be products of artistic institutions. Also, the content of the drawings clearly demonstrates a connection to religious and dynastic art, placing them more specifically within a temple context. These drawings, however, probably would not have been considered art objects in themselves; rather, their grids and other features (to be discussed) suggest that they were tools or drafts for the conception of veritable art objects, such as relief sculpture and statuary. The exact nature and purpose of these papyri and drawings will be the primary point of inquiry of this thesis. I will explore if and how they can be classified as, for example, cartoons, pattern books, sketchbooks, and/or practice sketches. In the course of doing so, I will also investigate the artistic traditions, iconographies, and styles used by the creators in the drawings and the patterns of reuse exhibited by the papyri. Through this study, I will consider the tools used and operations conducted in artistic workshops of temples in Ptolemaic and Roman Egypt,

including Tebtunis's temple of Soknebtunis, and discuss the broader implications of these discoveries.

1.2 Structure and methods

The remainder of this chapter will explain the excavation and provenance of the papyri as well as provide relevant information regarding Tebtunis and the site's papyri. The following chapter will present artistic context in four sections: (1) "Art production and Egyptian temples" will situate the creation of the drawings. (2) "Grid systems" will explain the history and purpose of the drawings's grids. (3) "Sculptors's models" will discuss a class of artifacts that provides many helpful parallels for the subjects of the drawings. The models will later be discussed as comparanda for each of the drawings to develop and support arguments about the purposes of the papyri. (4) "Pattern books and cartoons" will define these two categories and summarize scholarly opinions about them so that the papyri can be considered with these classifications in mind. The three subsequent chapters will examine each papyrus individually, presenting basic information, analyzing the contents of the front and back, considering other papyri and artifacts that present parallels, and discussing the implications of the analysis. Lastly, the conclusion chapter will synthesize the discussions of each papyrus and suggest their broader connections and consequences.

1.3 Excavation and provenance

To begin, the fragments with catalog numbers beginning with "P.Tebt." are in the care of the Center for the Tebtunis Papyri (CTP) in The Bancroft Library of the University of California, Berkeley. These include the queen/goddess drawing, the king drawing, and the smallest fragment of the animal drawings. They were excavated in the 1899–1900 season at Ûmm el Baragât (ancient Tebtunis) by English papyrologists Bernard Pyne Grenfell and Arthur Surridge Hunt.

Phoebe Apperson Hearst funded the scholars to source and study a collection of papyri for the growing University of California, for which she served as both Regent and benefactress.

Although Grenfell and Hunt did not record precise find spot information for most of their excavation, the preface for *The Tebtunis Papyri*, Part I explains that the papyri came from three distinct sources: from the town ruins (including the temple), from inside and around crocodile mummies, and from mummy cartonnage extracted from bodies in the human necropolis.¹

Cartonnage refers to the use of recycled linen and papyrus to wrap both human and animal mummies. Tebtunis and some surrounding towns in the Fayyūm had crocodile cemeteries, demonstrating the cult practice of sacrificing and mummifying crocodiles. Towns in the Fayyūm worshipped various local manifestations of the crocodile god Sobek (Soknebtunis at Tebtunis), and crocodile sacrifice and mummification were ways to honor and communicate with the god.² Tebtunis's papyrus-wrapped mummies—human and crocodile alike—were disassembled in order to recover papyri within them. While many papyri are known to be from specific mummies, the ones in this study are not.³ Nonetheless, the condition of a papyrus can suggest that it might have come from cartonnage. For example, papyri used in crocodile cartonnage often have dark brown, oily staining, and sometimes they have linen affixed to them.

¹ Bernard P. Grenfell, Arthur S. Hunt, and J. Gilbert Smyly, *The Tebtunis Papyri*, Part I (*P.Tebt.* I) (Oxford University Press, 1902), v; see also Bernard P. Grenfell and Arthur S. Hunt, "A Large Find of Papyri," *The Athenaeum*, no. 1 (1900): 600–601; Bernard P. Grenfell and Arthur S. Hunt, "A Large Find of Ptolemaic Papyri," *Archiv für Papyrusforschung* 1 (1901): 376–378; and Todd M. Hickey and James G. Keenan, "Grenfell's Letter to Goodspeed about His Contribution to *P.Tebt.* II" in *Edgar J. Goodspeed, America's First Papyrologist* (California Classical Studies, 2021), 133–140.

² *P.Tebt.* I, v; Faye Kalloniatis, "Animal Mummies," in *The Egyptian Collection at Norwich Castle Museum: Catalogue and Essays* (Oxbow Books, 2019), 333; for more on the logistics of raising the crocodiles for sacrifice, see Michal Molcho, "Crocodile Breeding in the Crocodile Cults of the Graeco-Roman Fayum," *The Journal of Egyptian Archaeology* 100 (2014): 181–193.

³ For information on the papyri assigned to specific crocodile mummies, see *P.Tebt.* I, xvi; for the human mummies, see Arthur S. Hunt and J. Gilbert Smyly, *The Tebtunis Papyri*, Part III (*P.Tebt.* III) (Oxford University Press, 1933), xv.

This staining is evident on the goddess/queen papyrus, particularly on the back. Moreover, the APIS database⁴ labels the papyrus as crocodile cartonnage from mummies 1–17.⁵

As for papyrus used in human mummy cartonnage, it usually has traces of white gesso or plaster on it. This is apparent on the king papyrus, particularly around the figure's ear. Also, the semi-circular cut out of the top of the papyrus is clearly intentional and was presumably done in conjunction with the manufacture of the cartonnage. Additionally, although this papyrus does not currently have an APIS record, the P.Tebt.Frags. in sequence around 14,221–14,226 are classified as mummy cartonnage. Identifying a papyrus as cartonnage is helpful because it offers a broad date range for the piece: in Tebtunis, papyri from human mummy cartonnage correspond to the third and second centuries BCE, whereas those from crocodiles correspond to the late second and early first centuries BCE.⁶

The use of these papyri in cartonnage also implies that they might have originated from outside of Tebtunis. For example, many papyri extracted from crocodile mummies at Tebtunis actually originated from neighboring towns in the Fayyūm, such as Kerkeosiris. Similarly, a trade in “waste paper” enabled papyri to be used in human mummy cartonnage a significant distance from their origin. Most famously, the majority of extant Alexandrian papyri were found in cartonnage at the cemetery of Abusir el-Melek. While both papyri could therefore be from other places in Egypt, they nonetheless represent practices that presumably would have also

⁴ APIS stands for Advanced Papyrological Information System. For more on this project, see <https://papyri.info/docs/apis>.

⁵ Some information in the database records such as this is based on notes left by Elbert Wall, who imaged the papyri for the American Center of the International Photographic Archive of Papyri. For more on the project, see Elbert W. Wall, “Interim Report of the American Center of the International Photographic Archive of Papyri (1979),” *The Bulletin of the American Society of Papyrologists* 17, no. 1 (1980): 81–85 and Elbert W. Wall, “Interim Report of the American Center of the International Photographic Archive of Papyri (1980),” *The Bulletin of the American Society of Papyrologists* 18, no. 3 (1981): 161–164.

⁶ P.Tebt. I, v.

occurred at Tebtunis, as a site with a major temple and large cemeteries. The significance of cartonnage and methods of reuse will be further explored in later chapters.⁷

The last papyrus, illustrated with birds and a ram, has no visual indication of being from cartonnage, suggesting it was found somewhere in the town. Its fragments are split between two collections, the smallest being in Berkeley and the two larger ones in Cairo. The Berkeley fragment came from Box 24, which was formerly held at Oxford University. Although the box's papyri are clearly from Tebtunis, their provenance had been considered uncertain and even unlikely to be from any of Grenfell and Hunt's excavations.⁸ This is despite the fact that there is no record of other Tebtunis excavations or acquisitions by Oxford University or the Egyptian Exploration Fund⁹ whose papyri are housed by the University. The Tebtunis papyri excavated by the English scholars were taken to Oxford to be studied and were returned to Berkeley in 1938, the 1950s, 2005, and finally 2024. The 2024 shipment consisted of Box 24 (containing over 600 unmounted fragments), more than fifty papyri from that box that had been glass-mounted and published,¹⁰ and additional boxes holding thousands more loose fragments. Todd Hickey, director of the CTP, proved their origins in the Grenfell and Hunt excavation by their many connections to papyri in Berkeley; hence they joined the rest of the material collected for the University of California.¹¹ The papyri from Box 24 appear—based on their content and connections to other fragments—to have come from the temple or the rubbish dump to its east, suggesting these as potential find spots for P.Tebt. Tait inv.0421.¹²

⁷ See sections 3.5 and 4.5.

⁸ See William John Tait, *Papyri from Tebtunis in Egyptian and in Greek (P.Tebt. Tait)* (Egypt Exploration Society, 1977), vii–viii; this exhibits the confused understanding regarding the origin of the box's papyri as well as reasoning for why many of the papyri are attributable to Tebtunis.

⁹ Now known as the Egyptian Exploration Society.

¹⁰ William John Tait published them in his volume *P.Tebt. Tait*.

¹¹ See further Claudio Gallazzi, “I papiri del tempio di Soknebtynis: chi li ha trovati, dove li hanno trovati,” in *Tebtynis VI: Scripta varia* (Institut français d'archéologie orientale, 2018), 114.

¹² See Gallazzi, “Papiri del tempio,” 120.

The Cairo fragments held by the Institut français d'archéologie orientale were bought by Egypt's King Fouad I and donated to the Société royale égyptienne de papyrologie¹³ in 1930.¹⁴ The introduction of *P.Fouad* II explains that these were likely bought from antiquities dealer Maurice Nahman.¹⁵ According to a letter from Coptologist Carl Schmidt, Nahman bought papyri that were illegally extracted from the Tebtunis temple library in 1930 from Mohammed Khalil, who worked as a dealer in Medinet el-Fayum.¹⁶ The illustrations of the papyrus relate it to the temple,¹⁷ and the year of the purchase by King Fouad (1930) aligns with the year in which the papyri were extracted from the temple library. These factors in addition to the link between Khalil and Nahman suggest this transaction as the probable source of acquisition of the Fouad fragments.

Therefore, because the temple library was the main target of the illicit excavation, this would signify a tentative provenance for the Fouad fragments in or near the temple library. Identifying their precise provenance would require a narrower date range for the papyrus. Kim Ryholt dates it between the second century BCE to second century CE, based on connections within the Fouad collection to papyri with known provenance in both the temple library deposit and the rubbish dump.¹⁸ If the date falls into the latter half of that range, it might have come from the temple library deposit as it mostly contained papyri dated between the late first and late

¹³ Later named Société Fouad I de papyrologie.

¹⁴ See Kim Ryholt (ed.), "A Survey of Illustrated Papyri from Tebtunis," in *Hieratic texts from Tebtunis, Including a Survey of Illustrated Papyri* (*P.Carlsb.* XV) (Museum Tusculanum Press, 2020), 188, and Mohamed Gaber Elmaghrabi, *Documentary Papyri from the Fouad Collection at the Institut Français d'Archeologie Orientale* (*P.Fouad* II 90-100) (Institut français d'archéologie orientale, 2024), 1.

¹⁵ *P.Fouad* II, p. 1.

¹⁶ Fredrik Hagen and Kim Ryholt, *The Antiquities Trade in Egypt 1880–1930: The H.O. Lange Papers* (Det Kongelige Danske Videnskabernes Selskab, 2016), 244–245.

¹⁷ This is because the drawing on the front depicts animals that appear to be hieroglyphs, which are primarily used in a temple context, and a sketch on the back depicts ritual scenes (see chapter 5).

¹⁸ Kim Ryholt, "Survey of Illustrated Papyri," 188–189 (no. 55).

second century CE.¹⁹ If it is earlier than that, however, the adjacent rubbish dump would be likely because it contained many Ptolemaic-era papyri relating to the temple.²⁰ While imprecise, these conclusions also align with the plausible find spots of the P.Tebt.Tait fragment. Thus, the three papyri examined in this thesis originate in each of the three unique findspots of the first excavation of Tebtunis, and they all have a religious (temple or mortuary) context. The scattering of these papyri and the possibility of their varied origins could attest to a prevalence of this category of drawings at Tebtunis or across Egypt, which is supported by the fact that similar drawings on papyri have been found at other sites.

1.4 Tebtunis and its papyri

Tebtunis was situated in the Fayyūm basin, in its southern reaches toward the desert, and the Fayyūm depression is located in Middle to Lower Egypt, west of the Nile River. Tebtunis was founded around 300 BCE,²¹ though the site's history spans from as early as the Twelfth Dynasty (circa nineteenth century BCE) to the Fatimid era (909–1171 CE).²² Its Ptolemaic and Roman periods (about third century BCE to third century CE) are the most richly documented, which is in large part due to the town's papyri. The papyri from Tebtunis are mostly written in Greek, followed by Demotic Egyptian, along with Hieratic, Hieroglyphs, Coptic, and Arabic. They are overwhelmingly documentary in nature and are a significant source of information about local administration, the priesthood, and daily life. Only a small number of the papyri are

¹⁹ Kim Ryholt, "Libraries from Late Period and Graeco-Roman Egypt, c.800 BCE–250 CE," in *Libraries before Alexandria: Ancient Near Eastern Traditions*, ed. Kim Ryholt and Gojko Barjamovic (Oxford University Press, 2019), 399.

²⁰ Ryholt, "Libraries from Late Period," 400.

²¹ Ryholt, "Libraries from Late Period," 393.

²² Roger S. Bagnall and Dominic W. Rathbone, *Egypt from Alexander to the Early Christians: An Archaeological and Historical Guide* (The J. Paul Getty Museum, 2004), 147.

illustrated, including ritual scenes in priestly manuals, geographical texts, magical papyri, an herbal, and more, including, of course, the subjects of this study.²³

Tebtunis consisted of a town area with a main temple complex dedicated to Soknebtunis,²⁴ additional smaller centers of worship, domestic dwellings, establishments for dining and shopping, and baths.²⁵ It also had cemeteries in the peripheral desert to the south. The Soknebtunis temple housed a priestly library, and excavations have collected papyri from two small cellar rooms, which served as a secondary deposit for the library's materials—probably stored away upon the closure of the temple.²⁶ Ryholt divides the contents of the deposit into three genres: religious, scientific, and historical; but it also contained some documentary texts and repurposed documents.²⁷ In other parts of the temple complex, the Franco-Italian excavations have revealed various workshops, such as those for coin molding and glass inlay. Moreover, finds including painted panels²⁸ may suggest additional workshops or artistic practices operating within the *temenos*, which could bear significance for the production and use of grid drawings.²⁹

²³ For a summary of illustrated papyri from Tebtunis, see Kim Ryholt, "Survey of Illustrated Papyri," 165–208; for the herbal, see Kim Ryholt "The Illustrated Herbal from Tebtunis: New Fragments and Archaeological Context," *Zeitschrift für Papyrologie und Epigraphik* 187, no. 1 (2013): 233–238.

²⁴ See Bagnall and Rathbone, *Egypt from Alexander*, 147–149.

²⁵ Ryholt, "Libraries from Late Period," 393.

²⁶ Ryholt, "Libraries from Late Period," 395–396.

²⁷ Many of the Egyptian texts are on repurposed Greek rolls (on the backs). Ryholt, "Libraries from Late Period," 398–399.

²⁸ The panels are iconographically distinct from and are dated later than the drawings of this thesis, so while they do not pose a connection to these papyri, they establish the presence of artistic workshops around the temple. For more on the panels, see Vincent Rondot, *Derniers visages des dieux d'Égypte: Iconographies, panthéons et cultes dans le Fayoum hellénisé des I^{er}–III^e siècles de notre ère* (Louvre éditions, 2013), 192–198, 215–233.

²⁹ Vincent Rondot, *Tebtynis II: Le temple de Soknebtynis et son dromos* (Institut français d'archéologie orientale, 2004), 32–57.

Chapter 2:

Artistic Context

2.1 Art production and Egyptian temples

The subjects of the drawings in this thesis parallel the iconography of Egyptian temples. Specifically, the queen/goddess connects to depictions of these figures in relief sculpture on temple walls, the king exhibits similarities to pharaonic-style statues, and the animals appear to be hieroglyphs, which are heavily featured on temple wall reliefs. These connections will be further explored in the following chapters, but now I will contextualize them by discussing the roles Egyptian temples and priests held in the production of art. Fundamentally, ancient Egyptian artists served the state and religion;³⁰ they therefore worked on royal sites, temple complexes, or in workshops attached to them.³¹ The subjects and provenance of this study's drawings identify them with a temple context; however, state and religion were inextricable. This is in part due to the dynastic cult, which is evident in temple wall decoration with likenesses of rulers alongside deities and as deities themselves; as mentioned, these likenesses resemble some of the figures depicted on the papyri in this study.³² Local temples integrated an Egyptianized Ptolemaic cult into their priesthoods and rituals,³³ which was in many ways a continuation of earlier worship of the native Pharaohs through visual representations.³⁴

Inscriptions provide us with information about who conducted and oversaw artistic operations within the cult. For example, a New Kingdom inscription relates a story of priests

³⁰ William H. Peck, *Drawings from Ancient Egypt* (Thames and Hudson, 1978), 23.

³¹ Dorothea Arnold, *The Royal Women of Amarna: Images of Beauty from Ancient Egypt* (Metropolitan Museum of Art, 1996), 43.

³² Sally-Ann Ashton, *Ptolemaic Royal Sculpture from Egypt: The Interaction between Greek and Egyptian Traditions* (Archaeopress, 2001), 18.

³³ Jan Quaegebeur, "Cleopatra VII and the Cults of Ptolemaic Queens," in *Cleopatra's Egypt: Age of the Ptolemies* ed. Robert S. Bianchi (The Brooklyn Museum, 1988), 42

³⁴ Jan Quaegebeur, "The Egyptian Clergy and the Cult of the Ptolemaic Dynasty," *Ancient Society* 20 (1989): 108.

instructing artisans to gather workmen and lay priests to complete a statue.³⁵ This account reveals that priests themselves worked on sculptures and supervised their construction. In general, however, the artists in temple workshops were not necessarily considered priests; nonetheless, priestly personnel supervised their efforts and, as revealed by the inscription, could occasionally contribute to them.³⁶ Temple scribes also created drafts of texts for sculptors to inscribe on walls, which is another example of the interaction between those in priestly roles and artistic staff.³⁷ Moreover, as the office of priest was not always a full-time position, priests could develop other skills, possibly including sculpting and draftsmanship.³⁸ In light of the connections between the papyri's drawings and temple art, the drawings were probably produced in a temple workshop, overseen and potentially aided by priests, in service of the temple or the dynastic cult.

2.2 Grid systems

The grids in the backgrounds of the three drawings are the product of a longstanding artistic tradition in Egypt. The first known figures over squared grids come from the Middle Kingdom, specifically the Twelfth Dynasty. Grids, however, were already in use in the Old Kingdom for non-figural art, such as waves,³⁹ and a system of horizontal guidelines was applied to figures in this period.⁴⁰ The Middle Kingdom's grid system prescribed eighteen squares from sole to hairline, and horizontal and vertical lines were meant to align with specific parts of the body.⁴¹ Moreover, there were specifications for the amount of squares for the height of seated figures and for body widths, the latter depending on gender. The eighteen-square grid system remained constant for most of the New Kingdom as well, but the corresponding body parts to the

³⁵ Whitney Davis, *The Canonical Tradition in Ancient Egyptian Art* (Cambridge University Press, 1989), 99.

³⁶ Serge Sauneron, *The Priests of Ancient Egypt*, trans. David Lorton (Cornell University Press, 2000), 58, 72.

³⁷ Sauneron, *Priests of Ancient Egypt*, 134.

³⁸ Sauneron, *Priests of Ancient Egypt*, 69. Also, sculptors had to be proficient draftsmen because sculptures, in relief and in the round, were first worked up as line drawings. See Peck, *Drawings from Ancient Egypt*, 38.

³⁹ Gay Robins, *Proportions and Style in Ancient Egyptian Art* (University of Texas Press, 1994), 70.

⁴⁰ Robins, *Proportions and Style*, 64.

⁴¹ Robins, *Proportions and Style*, 73.

lines were slightly altered, resulting in a slight change in style and proportions.⁴² One exception to this continuity, though, was the Amarna Period (mid fourteenth century CE), a time which saw changes in style, representation, and its grid system. In this period, the practice of using twenty squares from the baseline to the hairline was briefly adopted, but the eighteen-square grid system eventually became standard again.⁴³ Then, the Late Period experienced a shift in custom when the late grid system was introduced in the Twenty-fifth Dynasty.⁴⁴ This system used twenty-one squares to the upper eyelid or root of the nose,⁴⁵ and it continued into the Graeco-Roman period with only minor adjustments in proportions.⁴⁶ Although its full length is not preserved, the queen/goddess papyrus evidently uses the late grid system as is expected for the time period.⁴⁷ Unlike human figures, representations of animals did not have a standardized number of grid squares, suggesting that canonical proportions may have varied regionally.⁴⁸

The main purpose of grids was to produce figures with canonized proportions, which varied based on the grid system being used and on the time period, not to enable transferring or scaling up designs.⁴⁹ They were used for two-dimensional depictions, relief sculpture, and sculpture in the round. The artists drew or incised the grid onto their working surface before drafting or sculpting. For sculpture in the round, grids could be drawn on each face of the block of stone, and artists could elect to add secondary lines, which were in addition to the standard grid and marked important features not indicated by the main lines. They were commonly drawn

⁴² Robins, *Proportions and Style*, 87.

⁴³ Robins, *Proportions and Style*, 123, 152.

⁴⁴ This change is attributed to an evolution of Egypt's metrological system when a square became equated to the length of a palm. See Campbell Cowan Edgar, *Sculptors' Studies and Unfinished Works* (Imprimerie de L'Institut Français d'Archéologie Orientale, 1906), iii; Robins, *Proportions and Style*, 165; Yoshifumi Yasuoka, "A New Interpretation of the Grid System Reform in the Late Period," *Journal of Egyptian Archaeology* 107, no. 1 (2021): 265–280.

⁴⁵ Robins, *Proportions and Style*, 160.

⁴⁶ Robins, *Proportions and Style*, 163.

⁴⁷ Paola Davoli and Didier Devauchelle, "A Demotic Papyrus with a Project for a Relief in the Bancroft Library (P.Tebt.Frag. 14,291 + 14,292)," *Sapientia Felicitas* 29 (2016): 68–69.

⁴⁸ Edgar, *Sculptors' Studies*, x.

⁴⁹ Edgar, *Sculptors' Studies*, x.

only partially across the grid, not across the full width or height.⁵⁰ The grid on the king drawing aligns with those left on bust sculptures rather than the twenty-one square system for standing figures.⁵¹ This drawing also exhibits the use of a secondary vertical line, only drawn partially across, to indicate the fold of the king's *nemes* (cloth headdress). Therefore, I believe secondary lines could also be applied to preparatory sketches for projects in the round (see further discussion in section 4.2).⁵²

2.3 Sculptors's models

The group of artifacts commonly termed “sculptors's models”⁵³ provides helpful comparative material for the drawings in this study, so this section will outline relevant information about them. Sculptors's models are small-scale reliefs or sculptures in the round, primarily in stone, that date mostly to the Late and Ptolemaic periods. While many depict single figures, some have multiple on one side of a block, and the blocks can be worked with separate designs on the front and back. Heavily represented within the corpus are images of kings, queens, deities, and animals, which clearly connect to the subjects of the drawings in this thesis. The stylistic and compositional similarities between some of the models and the drawings further strengthen this link.

Scholarship on these artifacts has produced two theories about their purpose: that they were training tools and models for sculptors or that they were votive dedications. They have been suggested as votives on the basis of some inscriptions and religious find spots.⁵⁴ The former theory, however, appears to be the primary intent behind these objects while a votive use might

⁵⁰ Edgar, *Sculptors' Studies*, vii.

⁵¹ For a diagram and list of primary grid lines on a bust, see Nadja Tomoum, *The Sculptors' Models of the Late and Ptolemaic Periods*, trans. Brenda Siller (National Center for Documentation of Cultural and Natural Heritage and the Supreme Council of Antiquities, Egypt, 2005), 38–39.

⁵² For a list of possible secondary lines, see Tomoum, *Sculptors' Models*, 41.

⁵³ For more, see Tomoum, *Sculptors' Models* and Edgar, *Sculptors' Studies*.

⁵⁴ For a history of this scholarship, see Tomoum, *Sculptors' Models*, 10–19.

have been secondary; this reuse could be compared to the repurposing of the papyri for cartonnage (see sections 3.5 and 4.5).⁵⁵ An attestation that they were training tools is that many of the sculptures appear unfinished, some left with grid lines like those in the papyrus drawings. Their “incompleteness” might have been an instructional tool to inform students on the steps and methods of carving.⁵⁶ A work appearing “incomplete”—depending on the degree—is not, however, always an indication that something is a sculptors’ model. For example, a bust having an unworked back does not necessarily make it incomplete nor immediately classify it as a model.⁵⁷

The majority of inscriptions on the models are not dedicatory nor votive in nature; rather, they appear to be mostly unrelated documentary Demotic texts added after the “completion” of the models.⁵⁸ The inscriptions provide another parallel to the papyri presented here because two of them are similarly inscribed with secondary Demotic texts on their backs (see sections 3.4 and 4.4).⁵⁹ Furthermore, the nature of some of the models’s inscriptions reaffirms that sculptors’s workshops were in or near temple complexes.⁶⁰ These models are relevant to this study because they represent tools or exercises that support the training of artists and therefore the eventual creation of larger-scale images, and the drawings in this study will be shown to fulfill similar purposes. Also, because of the iconographic parallels, some of the drawings might have even been intended to aid the creation of models themselves. Therefore, I will present sculptors’s

⁵⁵ Tomoum, *Sculptors’ Models*, 202–203.

⁵⁶ Edgar, *Sculptors’ Studies*, v–vi; Tomoum, *Sculptors’ Models*, 55.

⁵⁷ See Robert S. Bianchi, *Cleopatra’s Egypt: Age of the Ptolemies* (The Brooklyn Museum, 1988), 82. Bianchi explains that the unworked back of a bust reflects the ancient Egyptians’s different conceptions regarding completeness.

⁵⁸ One notable exception, however, is a female bust with an inscription that explains that it was dedicated to Isis by the artist who made it. See Tomoum, *Sculptors’ Models*, 115–120.

⁵⁹ I suggest that the Demotic texts on the queen/goddess and king papyri are secondary because there are traces of earlier texts that were erased on both sides of the papyri, which would leave both sides blank. The side of papyrus with horizontal fibers—which the drawings are on—was typically preferred for initial use, indicating that the drawings would have been done first and the Demotic texts second.

⁶⁰ Tomoum, *Sculptors’ Models*, 126

models as comparanda for the drawings in the succeeding chapters in order to aid the analysis of their iconography and intended purposes.

2.4 Pattern books and cartoons

One last topic for consideration in this chapter is that the drawings in this thesis stand out as possible examples of cartoons, pattern books, or similar resources. Conceptions about pattern books and cartoons in ancient Egypt are varied and contentious largely because of the lack of extant evidence. This is, in part, what makes these drawings so important. Therefore, I will present an overview of pattern books and cartoons as a foundation for extrapolating how the drawings correspond to these categories.

Firstly, the existence of pattern books has been suggested due to connections between distant works; for example, Roman-era mosaics from various sites display similar scenes and motifs, which might have been drawn from pattern books of stock images.⁶¹ The use of repeated motifs and imagery within individual sites (at the temples of Philae, for instance) has also served as a reason to believe that they existed.⁶² Pattern books would have been a way to collect and preserve material, creating a decorative repertoire,⁶³ but the form they would have taken is uncertain. Shelley Wachsmann suggests that references (such as drawings) could have been combined to form actual “pattern books,”⁶⁴ or the references could have been on single pieces of papyri or wooden boards.⁶⁵ Helen Whitehouse mentions that some drawings over grids from

⁶¹ Helen Whitehouse “Drawing a Fine Line in Oxyrhynchus,” in *Oxyrhynchus: A City and its Texts*, ed. A.K. Bowman et al. (Egyptian Exploration Society, 2007), 297. Relatedly, P.Artemidorus, a Graeco-Roman papyrus, has drawings of real and fantastical animals (in addition to drawings of body parts and perspectives of male heads) that have been connected iconographically to decoration in mosaics. It has been suggested as a potential pattern book or sketch book in a Hellenistic idiom. Its style and other factors distinguish it from the drawings presented here, which are in a native Egyptian tradition. Nonetheless, it is valuable to consider other contexts in which pattern/sketchbooks may have been used in Egypt and the ancient Mediterranean. See Jaś Elsner, “P.Artemid.: The Images,” in *Images and Texts on the “Artemidorus Papyrus”* ed. Kai Broderson and Jaś Elsner (Franz Steiner Verlag Stuttgart, 2009).

⁶² Eleni Vassilika, *Ptolemaic Philae* (Uitgeverij Peeters, 1989), 5–7.

⁶³ Vassilika, *Ptolemaic Philae*, 7–8.

⁶⁴ By pattern book, I do not necessarily mean a typical codex book (which would post-date Tebtunis’s papyri), rather a single source, such as a roll of papyrus, with multiple patterns.

⁶⁵ Shelley Wachsmann, *Aegeans in the Theban Tombs* (Uitgeverij Peeters, 1987), 24.

Oxyrhynchus are on “a kind of reinforced papyrus,” making them useful and durable resources; in that case, Wachsmann’s latter suggestion seems likely. As for the actual contents of pattern books, rather than consisting of a multitude of variations for decoration, they presumably would have contained basic models.⁶⁶ These models could then be extracted, combined, and embellished by artists drafting cartoons.⁶⁷

A cartoon is a preparatory drawing that serves as a prototype or plan for a work. Eleni Vassilika suggests that, at least in the case of temple decoration, drafting cartoons served as a necessary step in preparation and that papyrus would have been the most suitable material for the task.⁶⁸ While ostraca (repurposed pot sherds) constitute a far more plentiful source of drawings over grids than papyri, that is more likely a reflection of their durability and availability rather than their popularity as a medium for this type of drawing. Ostraca were more appropriate for informal planning rather than true designing or use as a pattern because although they were cheaper and more readily available than papyri, they were harder to work on and less suited as a reusable reference because of their weight and bulk.⁶⁹

In order to reconstruct a potential “life history” for the papyri in this study, it should also be considered where resources such as pattern books and cartoons would have been stored. An absence of patterns on papyri and other materials in workshops could suggest that they were not stored in the workspace. Instead, they might have been held in an archive.⁷⁰ This is plausible considering that at the great temple of Edfu, an inscription with an inventory for the “House of Books” lists “Instructions for decorating a wall” among its contents. This “House of Books” was

⁶⁶ Christine Beinlich-Seeber and Abdel Ghaffar Shedid, *Das Grab des Userhat (TT 56)* (Verlag Philipp von Zabern, 1987), 124.

⁶⁷ Vassilika, *Ptolemaic Philae*, 7.

⁶⁸ Vassilika, *Ptolemaic Philae*, 7.

⁶⁹ Davis, *Canonical Tradition*, 99.

⁷⁰ Tomoum, *Sculptors’ Models*, 165.

made up of small rooms that served as a repository for papyrus scrolls.⁷¹ It is not hard to imagine, then, that beyond instructions, other resources for temple decoration, such as pattern books or cartoons might have been stored in rooms such as these. The Tebtunis library deposit being a potential source for the animal papyrus supports that storing papyri with patterns in a library or archive was certainly a possibility. Pattern books might have been stored for safekeeping and consulted as needed for work or instruction while cartoons might have been placed in a repository after use for storing,⁷² potentially for later repurposing.⁷³

⁷¹ Sauneron, *Priests of Ancient Egypt*, 134–135.

⁷² Davis, *Canonical Tradition*, 98–99, 101; Tomoum, *Sculptors' Models*, 165.

⁷³ This seems possible at Tebtunis because of the reused papyri as well as the Greek documentary papyri (which could have been intended for reuse) found in the temple library deposit; Ryholt, "Libraries from Late Period," 395, 398.

Chapter 3:

Queen/Goddess Papyrus

3.1 Papyrus details

P.Tebt.Frag. 14,291+14,292 contains a grid, a drawing of a queen/goddess, and Demotic annotations on its front ([fig. 1](#)) and an unrelated Demotic account on the back ([fig. 7](#)).⁷⁴ It was published by Paola Davoli and Didier Devauchelle in 2016 and then by Kim Ryholt in 2020.⁷⁵ The papyrus measures 17.6 cm high and 12 cm wide, but these are not the original dimensions; Davoli suggests that the left and right edges might have been intentionally cut for repurposing, such as cartonnage.⁷⁶ Davoli also used the size of the drawing's grid squares and the specifications of its grid system to reconstruct an approximation of the original height. Because this drawing uses the late grid system,⁷⁷ the line that crosses the upper eyelid would have been the top of the twenty-first square, and as there are eight full squares remaining below that line, there must be thirteen missing. Based on this, Davoli estimates that the height of the full original papyrus would have been at least 35.4 cm.⁷⁸ Papyrus sheets can be up to around 50 cm in height, but 35.4 cm is within a normal range.⁷⁹

The ink on both sides is faint and patchy, worn away in some parts. The papyrus contains two vertical creases, one of which leads into a *lacuna* at the lower edge of the sheet; this crease and *lacuna* have skewed the orientation of some fibers. Both sides, but particularly the back, exhibit brown staining, which is, as aforementioned (see section 1.3), a characteristic effect of crocodile cartonnage. As such, we may assume the date of the papyrus to fall within the late

⁷⁴ The front has horizontal fibers, and the back has vertical fibers.

⁷⁵ See Davoli and Devauchelle, "Demotic Papyrus," and Ryholt, "Survey of Illustrated Papyri."

⁷⁶ Davoli and Devauchelle, "Demotic Papyrus," 67.

⁷⁷ The late grid system is defined by the use of twenty-one squares from the baseline to the upper eyelid (see more in section 2.2).

⁷⁸ Davoli and Devauchelle, "Demotic Papyrus," 69.

⁷⁹ The dimensions of papyrus sheets varied based on document type and period. See Frederic G. Kenyon, *Books and Readers in Ancient Greece and Rome*, 2nd ed. (Clarendon Press, 1951), 49–52.

second and early first centuries BCE. Davoli, however, suggests a date between the third and second centuries BCE based on the style of the queen/goddess's profile.⁸⁰ Therefore, the late second century would be most likely because of both the style and also the fact that most papyri from crocodile cartonnage at Tebtunis date between 120 and 90 BCE.⁸¹

3.2 Front

The grid on the front was drawn with red ink and a straightedge, and its squares measure 1.4 x 1.4 cm. Ten full squares vertically and seven full squares horizontally are extant, and the upper and left edges of the grid are preserved. Additionally, as the left edge of the grid is visible, the queen/goddess must either have been the only figure on this papyrus or the last figure in a larger composition.⁸²

The drawing itself was drafted in red ink and then traced (with slight alterations) in black.⁸³ It depicts a female figure facing right in a composite pose, which displays some elements of the body frontally and others laterally. For example, the head, chest, and abdomen are depicted in side profile, whereas the eye and shoulders are in frontal view; this representation style is standard in two-dimensional Egyptian art.⁸⁴ The figure's body is not preserved below the abdomen, and the arms are only partially preserved. However, the left arm extends slightly out from the body, as if holding a papyrus scepter,⁸⁵ and the right arm is positioned down, against the body, as if holding an ankh symbol.⁸⁶ The ankh is commonly featured in depictions of queens and goddesses in the Ptolemaic period, usually held by the loop in the right hand against the

⁸⁰ Davoli and Devauchelle, "Demotic Papyrus," 69.

⁸¹ *P. Tebt.*, vii.

⁸² Davoli and Devauchelle, "Demotic Papyrus," 68.

⁸³ This is shown by a false-color image; see Davoli and Devauchelle, "Demotic Papyrus," 68, 77.

⁸⁴ See Heinrich Schäfer, *Principles of Egyptian Art*, ed. Emma Brunner-Traut and trans. John Baines (Oxford University Press, 1974), 281–300.

⁸⁵ Davoli and Devauchelle, "Demotic Papyrus," 68.

⁸⁶ The notion that the drawing would have featured a papyrus scepter and ankh is supported by the comparanda below, which all contain these items.

thigh.⁸⁷ Other than a breast collar, no other garment details are visible on the torso. This is not necessarily surprising because close-fitting garments became exaggerated in this period, emphasizing the body's contours to the effect that women in sculpture could appear undressed aside from the suggestion of a garment at the lower hem.⁸⁸

The figure's headwear, in contrast, is more elaborated. She wears a tripartite wig, which falls down her chest and back. Above this, she has a vulture cap with a protruding vulture head (its beak is cut off from damage) and tail, and its wing descends to the shoulder. The wing is divided vertically into four sections, suggesting layers of feathers, but the majority of the vulture's body lacks detail. Although the vulture cap was included in statues of queens in the Ptolemaic period, in relief it seems to have been restricted to goddesses or deified queens.⁸⁹ This restriction may then permit a slightly more precise identification of the figure. On top of the vulture cap, there is a stylized *uraeus modius* (serpent crown),⁹⁰ which shows the outline of a typical *uraeus* crown; the lower part has a convex shape while the upper is concave with an outward curving edge.⁹¹ Even though the stylized variety does not have to include subdivisions for the *uraei* (cobras),⁹² the crown in this drawing is divided into nine sections for the *uraei* by thin vertical lines in faint black ink. However, only the two *uraei* on the edges are traced in black, while the middle segment contains an untraced cobra in red ink. The rest of the sections are left blank, suggesting that the drawing may be unfinished, and Davoli proposes that the lack of detail on the collar, vulture cap, and wig as well as the absence of an armlet, dress, and navel

⁸⁷ Sabine Albersmeier, *Untersuchungen zu den Frauenstatuen des ptolemäischen Ägypten*, ed. Günter Grimm, Bärbel Kramer, and Erich Winter (Verlag Philipp von Zabern, 2002), 25–26.

⁸⁸ Albersmeier, *Untersuchungen zu den Frauenstatuen*, 80.

⁸⁹ Albersmeier, *Untersuchungen zu den Frauenstatuen*, 41; Vassilika, *Ptolemaic Philae*, 93–94.

⁹⁰ See Vassilika, *Ptolemaic Philae*, 93, 325: she assigns this combination of headdresses the identifier FW2.

⁹¹ Albersmeier, *Untersuchungen zu den Frauenstatuen*, 52.

⁹² For an example of a statue that shows the stylized *uraeus modius* with the *uraei* carved in the front but not in the back, see cat. 90 in Albersmeier, *Untersuchungen zu den Frauenstatuen*, 52–3.

add to this interpretation.⁹³ However, collars, vulture caps, and wigs were sometimes left undetailed in reliefs, especially at a small scale. Another thing to note is that the *uraeus modius* commonly acted as a base for other crowns; in temple reliefs, it is almost always accompanied by additional crowns. There is no indication, however, that an additional crown was intended in this drawing, and if it were, it would exceed the grid even farther than the *uraeus modius* already does. If, in fact, the drawing is unfinished, that would negate the possibility of it being a pattern book. Rather, it would more likely be a practice sketch or an abandoned/imperfect cartoon.

As for the figure's features, they are not particularly distinct; rather, they constitute an idealized female form. On the face, the lips lack detail aside from a profile outline, but the nose is depicted with a nostril. The eye is slender and points downward in the inner corner. There are two cosmetic lines, one that extends from the eye's outer corner and a shorter one slightly above; they both end when they reach the base of the wig. The ear appears very stylized, made up of many curving lines, and such stylization characterizes other Egyptian drawings, particularly preparatory drawings.⁹⁴ Therefore, rather than being solely for aesthetic purposes, the segmentation of the ear's ridges and depressions might have signaled that the sections were to be carved to different depths. The thin eyebrow is straight until it curves downward at the outer edge. The eyebrow and the cosmetic lines are worked in thicker black lines. As for the form of the body, the shoulders are sloped, and the arms appear slightly broad. While the indistinct facial and body features could indicate that this drawing represents a generic figure, specific individuals were also depicted in this way.

On the drawing Devauchelle identifies eight Demotic annotations that he suggests are unrelated to the grid; rather, he tentatively proposes that they may indicate the dimensions and

⁹³ Davoli and Devauchelle, "Demotic Papyrus," 68.

⁹⁴ See, for example, nos. 6, 39, and 40 in Peck, *Drawings from Ancient Egypt*, 6–7, 110–111.

measurements for the reproduced figure.⁹⁵ This is complicated, however, by the numeral written to the left of the figure, which he states could correspond to the height. He cautiously identifies this number as the Demotic numeral for nine, possibly to indicate 9 cubits, a measurement that would equal over 4 meters.⁹⁶ Davoli notes that such a tall figure could only fit in a main scene on a temple wall.⁹⁷ In theory, it is possible that a unit other than the cubit might have been intended, such as the digit, palm, or hand, all of which would result in a shorter height.⁹⁸ If the hand was the intended unit, this would also explain why the nine has a feminine marker⁹⁹ because hand (*drt*) is feminine while digit (*db^c*), palm (*šsp*), and cubit (*mḥ*) are not. The digit, palm, and cubit, however, would probably have been more likely choices of unit than the hand.¹⁰⁰ There is another potentially complicating factor for the interpretation of a unit other than the cubit: if a height of, say, 9 digits was desired, we might expect that this would be conveyed as 2 palms and 1 digit (in the same way we might write 25 inches as 2 feet and 1 inch).¹⁰¹

Instead of indicating height, the numeral could alternatively be a measure of width. Depending on the intended unit, this could indicate that the figure would need to be part of an even larger scene. For example, if it were 9 cubits wide, it would be a wide register but not impossibly so, perhaps across (part of) a wall. Although there is not a clear understanding of the

⁹⁵ Davoli and Devauchelle, “Demotic Papyrus,” 70.

⁹⁶ Davoli states that 9 cubits equals, “4.725 m (with the royal or reformed cubit of 52.5 cm) or 4.050 m (with the small cubit of 45 cm).” The royal cubit probably would have been more likely to be used for a temple project. Davoli and Devauchelle, “Demotic Papyrus,” 70.

⁹⁷ Davoli and Devauchelle, “Demotic Papyrus,” 70, 71. Also, Rondot estimates that the height of the Tebtunis temple, for example, would have been approximately 6.5 m; Rondot, *Tebtynis II*, 102.

⁹⁸ Nine digits would equal almost 17 cm, which is a similar height to smaller sculptors’ models and figures on stelae (cf. Edgar, *Sculptors’ Studies*, cat. 33439). Nine palms would equal 67.5 cm, and 9 hands would equal nearly 84.5 cm, similar to other figures in relief, on temple walls for example (cf. [Brooklyn Museum inv. 1989.159](#) and Bianchi, *Cleopatra’s Egypt*, cat. 13).

⁹⁹ Davoli and Devauchelle, “Demotic Papyrus,” 71.

¹⁰⁰ This is because a cubit cannot be evenly divided by a hand; a royal cubit equals 28 digits, a small cubit equals twenty-four, a palm equals four, and a hand equals five. Also, the cubit, palm, and digit were the units written to indicate the intended heights of statues in the crypts of the temple of Hathor at Dendera; See Friedhelm Hoffman, “Measuring Egyptian Statues,” in *Under One Sky: Astronomy and Mathematics in the Ancient Near East*, ed. John M. Steele and Annette Imhausen (Ugarit-Verlag, 2002).

¹⁰¹ This assumption is based on the way the intended heights of statues were written in the crypts of the temple of Hathor at Dendera; see Hoffman, “Measuring Egyptian Statues.”

annotations, they are nonetheless of significance because if they are in fact measurements, that would strongly suggest this drawing as a cartoon. If they are proportions, however, which Davoli mentions as a possibility, that would be less definitive.¹⁰²

Either way, annotations of measurements or proportions would seem out of place on an unfinished drawing. They might have been jotted down as a reference for the creation of a revised drawing. Alternatively, they could suggest that the drawing was sufficiently executed to act as a functional cartoon. Perhaps the untraced and unfilled parts of the drawing were rejected for the final project or considered superfluous in that the artisan would be able to render the image in its final medium without a fully executed cartoon. Another possibility is that these details might have been decided to be added at separate stages of the work, for example, by paint instead of carved.¹⁰³ This could indicate a division of labor, in which one person creates a general composition, and another adds the details.

Devauchelle also identifies some traces of black ink as remains of a prior text, indicating that this papyrus is a palimpsest (a document whose prior text was erased for reuse).¹⁰⁴ Such repurposing may indicate that short-term use was envisioned from the start, as, for example, a trial drawing or an ephemeral cartoon (the latter probably more likely because of the annotations). The annotations, “unfinished” nature of the drawing, and palimpsest all imply an economical and practical process of preparing for artistic undertakings that may have included multiple iterations and/or imperfectly articulated preparatory drawings.

3.3 Comparanda

The closest parallels to the figure in this drawing are to be found in relief sculpture. For example, many sculptors’s models follow a similar formula: a standing female figure with the

¹⁰² Davoli and Devauchelle, “Demotic Papyrus,” 70.

¹⁰³ Davoli and Devauchelle, “Demotic Papyrus,” 68.

¹⁰⁴ Davoli and Devauchelle, “Demotic Papyrus,” 70.

right arm extended downward, holding an ankh, and the left extended obliquely, grasping a papyrus scepter. They are all apparelled similarly with a tight-fitting garment, chest collar, tripartite wig, and vulture cap, each with minor differences in its treatment of the body and accessories. One representative example of this is Cairo Museum CG 33411 ([fig. 5](#)).¹⁰⁵ This model, however, and multiple similar ones all lack the *uraeus modius*, but CG 33412 ([fig. 6](#)) from the Cairo Museum is among the less numerous examples that do feature it.¹⁰⁶ The models without the *uraeus modius* are probably more common than those with it because they represent a more pared-back base. Creating the former type would allow an artist to practice or demonstrate a simpler foundation for more complex variations of goddesses or deified queens, like those seen in temple wall reliefs. Nonetheless, the type with the *uraeus modius* is itself also a base model even with this addition because the *modius* commonly acted as a support for other crowns, and this combination is not specific to any individuals or deities.

Female figures in temple wall reliefs typically sport additional intricate crowns that act as identity markers and political and religious symbols. For example, a relief from the Imhotep temple at Philae features a figure that contains the exact elements featured in the drawing with the addition of a horned sundisk crown ([fig. 7](#)). At Philae, this crown is featured on Hathor and sometimes Isis as well, confirming that the iconography of the papyrus's drawing served as a base for the depiction of goddesses in temple reliefs.¹⁰⁷ In comparison to temple reliefs, the sculptors's models and the papyrus drawing portray generic models. The connections between the drawing and the sculptors's models and temple reliefs strongly suggest that this was a cartoon for a relief, plausibly for a model or temple decoration. If it were in fact for a temple relief, the drawing was probably an embryonic iteration of the intended figure due to the lack of additional

¹⁰⁵ Cairo Museum CG 33411 has unknown provenance; Tomoum, *Sculptors' Models*, 223.

¹⁰⁶ Cairo Museum CG 33412 comes from Edfu; Tomoum, *Sculptors' Models*, 223.

¹⁰⁷ Vassilika, *Ptolemaic Philae*, 94.

crowns, which makes it a vague and ambiguous representation. Whereas the drawing in its full form could have stood alone in a sculptors's model.

3.4 Back

The back contains a poorly-preserved Demotic text, written across the fibers, which Devauchelle understands as an administrative register in two columns ([fig. 4](#)). He explains that the beginning regards the delivery of an unspecified product, which may concern laundry workers. Afterward, it lists several names alongside amounts of money.¹⁰⁸ Overall, this text seems quite certainly unrelated to the drawing on the front. In addition, there appear to be possible traces of a text beneath the register visible on the infrared photograph.¹⁰⁹ This suggests that the front and back were both inscribed, erased, and then the drawing was added to the front and the register to the back.¹¹⁰ The reuse of the papyrus for the Demotic text also indicates an ephemeral use of the drawing.

3.5 Cartonnage

This papyrus's final stage of use was as cartonnage for a crocodile mummy, which indicates reuse for a ritual purpose. Animal mummies acted as manifestations of the soul (*ba/b3*) of their corresponding god, which for crocodiles was Sobek.¹¹¹ Crocodile mummies could also be decorated—albeit more simply than human mummies—indicating that care and reverence were taken in their production.¹¹² The inclusion of this drawing, a religiously charged image, in an overtly cultic object might have contributed to the care demonstrated by crocodile mummification.

¹⁰⁸ Davoli and Devauchelle, "Demotic Papyrus," 71.

¹⁰⁹ See fig. 5 in Davoli and Devauchelle, "Demotic Papyrus," 78.

¹¹⁰ The register was presumably added after because it is written against the fibers, which was not preferred.

¹¹¹ Kalloniatis, "Animal Mummies," 333.

¹¹² An example of a decorated crocodile mummy from Tebtunis is [inv. 6-21633](#) at the Phoebe A. Hearst Museum of Anthropology, which is decorated with painted strips of linen, arranged to form a geometric pattern.

3.6 Discussion

Based on the nature of this papyrus's drawing, it seems most likely to have been a cartoon for a relief sculpture. The exact nature of the relief project is less certain, but a few options seem plausible: (1) This drawing was a cartoon for a simple project, like the sculptors's models discussed above, potentially for pedagogical or training purposes. As it is unpolished, the drawing could either have been deemed adequate to be worked from, or it could represent a non-final iteration of the design. (2) It was a cartoon for a larger project, such as a temple wall relief or stele, in which case, it would most likely be a(n unfinished) draft of the design.

The papyrus has served multiple purposes in its various stages. It has contained unknown Demotic documents, a cartoon, and a Demotic register, and it has been a part of crocodile cartonnage. Each of these stages was probably connected to a temple—in Tebtunis or elsewhere—in some way. Although priests often bought waste papyri to reuse, the initial use of Demotic implies a priestly context, even in the late Ptolemaic period. The erased Demotic writing was probably from one or more documentary texts that became obsolete. Then, because the drawing is clearly related to a temple, it would be reasonable to assume that the register does as well; more specifically, the document may concern temple administration. Lastly, the crocodile mummification connects it in specific to the temple of Soknebtunis, suggesting that the papyrus was passed along for cartonnage after its documentary use, either from within this temple or from another. Overall, the drawing and the papyrus's life history provide insight into cycles of reuse, the multi-step process of artistic production, and the interconnection of different spheres within temples (artistic, administrative, cultic, etc.) and/or between temples.

Chapter 4:

King Papyrus

4.1 Papyrus details

P.Tebt.Frag. 14,221–14,226 is an unpublished papyrus that contains two grids and a drawing of a king with Demotic annotations on the front ([fig. 2](#)) and an unrelated Demotic documentary text on the back ([fig. 8](#)). The papyrus consists of six fragments, four of which have not been directly joined; the composite measurement depends on how the fragments should be positioned, but it would have measured at least 34.4 cm in height and 27.4 cm in width.¹¹³ Its original height likely would not have been far greater than the preserved height. On the front, the upper boundary of the grids is partially preserved, suggesting that the papyrus only lacks part of its margin at the top. Although the lower boundary is not preserved, the grid drawn in red provides some clues as to the original length of the papyrus (see [figs. 9](#) and [10](#) for a better view of the grid). The positions of these grid lines suggest that the drawing of the king is probably a side profile of a bust; many busts with extant grids are about five squares tall and end below the lappets of the *nemes* (headcloth).¹¹⁴ Because the king vertically occupies four full squares and part of two more and the end of the lappets are not shown, a total height of five squares or slightly more seems likely. Additionally, considering that the preserved height of the papyrus is within the normal range, a full-length portrait would be exceedingly large. Also, the preserved height of this papyrus (34.4 cm) is similar to the estimated original height of the queen papyrus (35.4 cm).¹¹⁵

¹¹³ Individual fragment measurements (h x w): frag. 1, 34.4 x 22.3 cm; frag. 2, 19 x 5.1 cm; frag. 3, 11.3 x 2.9 cm; frag. 4, 4.8 x 3.7 cm; frag. 5, 1.3 x 0.9 cm. The two fragments connected in conservation are measured together as frag. 1.

¹¹⁴ Robins, *Proportions and Style*, 178.

¹¹⁵ See section 3.1 for papyrus heights in general and the height of the queen papyrus.

In contrast to the height, the papyrus's original width could have been significantly greater. On the right edge, the front of the figure's profile is slightly cut off, cropping off part of the *uraeus*' body and head and the king's nose and lips. This edge is quite straight and perhaps deliberate, like the semi-circle cut above the figure. On the left side, there is another grid with smaller squares drawn in black, and its left boundary is not preserved, indicating that the papyrus continued on that side. Additionally, the presence of two grids suggests that there could have even been another to the right of the red grid. Traces of ink (probably from an erased text) on that edge of the back signify that the papyrus could have been wider in that direction as well (see [figs. 8](#) and [11](#)). Also, the papyrus contains many *lacunae* and a large section in the lower left side (on the front) is missing. The ink is mostly well preserved but somewhat faded in places (especially the red ink and the text on the back) and obscured by staining and gesso (more so on the front). This gesso, as mentioned before (see section 1.3), indicates that the papyrus was used in human mummy cartonnage, which at Tebtunis dates it to the third or second century BCE.

4.2 Front

Although red appears to be the preferred color in most grids drawn on papyrus, the grid on the left is drawn in black ink. Its squares are 1.2 x 1.2 cm, only 0.2 cm smaller than those in the drawing of the queen/goddess. This grid, as far as it is preserved, has nothing drawn over it. The grid to the right is drawn in red ink, and its squares measure 5.7 x 5.7 cm, which is quite large compared to the squares found in most grids in drawings on papyri. This grid contains the drawing of the king. The red grid appears to have been drawn first, and when the black grid was added, its upper line seems to have been drawn continuously over the red grid as well.¹¹⁶ The presence of the two grids may suggest that this papyrus acted as a sketchbook for an artist, designed to house multiple sketches or cartoon drafts.

¹¹⁶ This is visible in the false color photograph ([fig. 9](#)).

The drawing portrays a male figure wearing a *nemes* and a single-loop *uraeus*, a typical Egyptian representation of kings, so here a Ptolemy is shown in the guise of an Egyptian pharaoh. The king faces right and is represented in side profile except for a few elements: the eye and eyebrow are in a frontal view, and the *uraeus* is in a three-quarter view, revealing its underside. The side profile is curious because shoulders are very rarely depicted laterally in two-dimensional Egyptian art (such as drawing, painting, relief) as they are in this drawing. This anomaly supports that this is a cartoon for a three-dimensional representation, a bust in the round. It still retains, however, some frontal or oblique features, the eye and *uraeus*, respectively. These are probably meant as markers, executed in the form most familiar to the Egyptian artist, for the general placement of features rather than a literal guide on how they should be rendered in the round. Therefore, this drawing represents a compromise between two- and three-dimensional art and frontal and lateral views.¹¹⁷

Further evidence that the drawing is a cartoon for a bust is the fact that the back of the figure is not drawn; the lines abruptly end. This can be explained by the fact that many Ptolemaic busts have a flat, unworked back.¹¹⁸ Moreover, the positions of the grid lines confirm it as a bust. For example, the lines in the drawing parallel those incised on a bust from the Cairo Museum, JE 45906, which is made clear by a diagram of the sculpture ([fig. 12](#)).¹¹⁹ Compared with a diagram of the drawing ([fig. 10](#)), it is apparent that the drawing's red grid lines are positioned in approximately the same locations as the ones on the bust. Horizontally, they both have lines near the top of the *nemes*, on the forehead, at the base of the nose, at the shoulder, and across the chest. Vertically, they both have lines near the outer corner of the eye and through the ear, as well as a secondary line at the fold of the *nemes*. Despite a few minor differences (such as the bust's

¹¹⁷ See Schäfer, *Principles of Egyptian Art*, 305, 332.

¹¹⁸ See brief discussion in section 2.3.

¹¹⁹ Tomoum, *Sculptors' Models*, 38.

additional secondary lines), they are drawn with the same grid system, one evidently developed to aid the production of busts. Although this papyrus only preserves one side view, it is certainly possible that the other views (front, top, other side, etc.) were drawn on the same papyrus roll.¹²⁰

The rendering of the king's features, like the queen/goddess's, are not particularly distinct; they conform to the standardized Egyptian male representation (see [fig. 13](#) for a clearer view of the drawing). On the lower half of the face, the king has a rounded chin, defined lips that turn slightly up in the corner with a dimple below, and an outlined nose wing. His eye is slender and long, and it contains an oval-shaped iris toward the front. In the center of the iris, a thick dot forms the pupil. The upper eyelid is shaded with thin, short strokes to create a cosmetic/eyelash line; this line extends until partly under the tab of the headdress. Above the cosmetic rim, a very fine line indicates the eyelid crease. The eyebrow arches upward slightly from the front then straightens and slopes downward toward the end; its tail plateaus with a curvature that parallels the cosmetic line. The eyebrow hairs are detailed in the same manner as the upper eyelid, with thin strokes. The king's ear is drawn in almost the exact same way as the queen/goddess's, with intricate, curving lines; however, the king's is even more detailed with the addition of hatching to shade the most recessed parts of the ear. The shading may further support the idea that this kind of stylized ear indicates that the sections should be carved to different depths because it marks the deepest parts.

The *uraeus* is also detailed, with stripes and lines, and its mouth is outlined, similarly to the king's lips, with wrinkles at its outer corner. It is shown in a rearing pose, and the rest of its

¹²⁰ The semi-composite profile of the drawing (with the frontal eye and oblique uraeus) probably would not have negated the possibility of other views of the bust because these features seem to be cues for placement not a mandate for exact reproduction. A simple two-dimensional representation cannot perfectly map onto a three-dimensional one, so it makes sense for the artist to use familiar methods of representation as cues rather than being concerned with accurately constructing a fully lateral profile, which would not have much consequence for the final bust. Therefore, the other views (frontal, top, and other side) might also have been drawn as a rough guide and made use of mixed profiles as well.

body curves into a single loop and runs over the top of the *nemes*. The *nemes* is rendered simply, with an outline of the fold above the king's ear. The vertical line of the fold is the only part of the drawing in red, and it appears to have been drawn before the rest of the drawing (see [fig. 9](#)), probably when the grid was drawn. Once the *nemes* reaches the shoulder, the lappet is drawn once again in black, draping over the chest. The lappet seems to have been drawn over the lower contour of the neck.

Within the drawing, there are at least twenty-four Demotic annotations, and they appear to be numerals like the ones on the queen/goddess drawing, many of them fractions as well.¹²¹ One key difference, however, is that the annotations in the king drawing are far more numerous. Also, because many are written in close proximity, it seems unlikely that they are all dimensions or proportions of height or width. Instead they could perhaps indicate the depth to which certain parts of the bust should be carved. However, it is, of course, impossible to say without a better understanding of the annotations themselves.

Beyond the annotations, there are also traces of Demotic text below the grids that are visible in the infrared photograph ([fig. 13](#)), which indicate that this papyrus is also a palimpsest. There appear to be two columns of text: one on the right side, which is particularly visible in the bottom half of the papyrus, and one on the left, which seems to begin approximately at the left edge of the drawing. The fact that both this papyrus and the one with the queen/goddess drawing are palimpsests suggests that it might have been common for artists to reuse inscribed rolls of papyrus by erasing them and then using them for their drawings and cartoons.

¹²¹ For example, the two annotations at the top of the *nemes* and below the loop of the uraeus appear to be “ $\frac{1}{4}$ ”, and the two in the tab of the headdress and above the lips look like “ $\frac{1}{5}$ ”. I made these connections in consultation of Janet H. Johnson, *The Demotic Dictionary of the Oriental Institute of the University of Chicago* (Oriental Institute, University of Chicago, 2001), section “Numbers.”

4.3 Comparanda

A comparable papyrus that is undoubtedly a cartoon for a sculpture in the round is P.Berlin 11775,¹²² which depicts a sphinx with a queen/goddess between its paws ([fig. 14](#)).¹²³ It was also extracted from cartonnage and is dated the same as the king papyrus, between the third and second centuries BCE. Although fragmentary, the drawing shows the design from the front, top, and one side. Only one side profile is preserved, and just the front of the paw is extant; nonetheless, a drawing with a side profile for a sculpture in the round is a significant parallel. Moreover, this drawing exhibits the use of three grids: the largest squares for the head in frontal view, the smallest for the queen/goddess, and a size in between for the rest. The preserved and reconstructed horizontal grid lines on the frontal view of the head are in the same position as on the king's profile. The presence of multiple grids is another connection to the king drawing although in the extant fragments of the king papyrus, only one grid contains a drawing. Nevertheless, this comparison further supports the possibility that the king papyrus might have originally had drawings of more than one view of the figure. The sphinx cartoon also similarly has Demotic annotations on it. Lastly, the rendering of the facial features, such as the ears, eyes, eyebrows, and mouth, in the sphinx and king drawings are remarkably similar.

Returning to the previously mentioned Cairo Museum JE 45906 ([fig. 15](#)), this bust, in addition to demonstrating grid lines parallels, contains stylistic similarities to the king drawing.¹²⁴ Although it is dated to the reign of Nectanebo II, at least a half century earlier than the date range of the king papyrus, they have the same iconography (bust of a king wearing a *nemes* and single-loop *uraeus*) and a similar treatment of the features, including the chin, ears,

¹²² The exact provenance of the papyrus is unknown, but it was purchased in Mallawi (near ancient Hermopolis).

¹²³ See L. Borchardt, "Ägyptische Abteilung: Spinxzeichnung eines ägyptischen Bildhauers," *Amtliche Berichte aus den Königlichen Kunstsammlungen* 39, no. 5 (1918): 7–9 and, Frédéric Mougenot, "56. Fragments de papyrus: esquisses préparatoires pour un sphinx," in *L'art du contour: Le dessin dans l'Égypte ancienne*, ed. Guillemette Andreu-Lanoë (Louvre éditions, 2013), 191.

¹²⁴ The bust is from Edfu, but precise findspot information is not provided; Tomoum, *Sculptors' Models*, 209.

mouth, eyes and eyebrows. This represents the stylistic continuity of statuary from the late Pharaonic to the early Ptolemaic period. Moreover, the bust provides an example of approximately how the design of the drawing would have looked once executed.

4.4 Back

The back of the papyrus contains at least one documentary Demotic text as well as traces of earlier texts that have been erased (see [figs. 8, 11, and 16](#)). The main text is written on its left side. A cursory understanding of its nature has been very kindly offered by Leah Packard-Grams. She identifies the second line of the text (first fully visible) as *nbty*, which denotes the second day of the lunar month.¹²⁵ Then, at the beginning of the fifth line, she cautiously reads *thn(y)*, which means faience.¹²⁶ The end of this line reads *5.t*, the numeral five with a feminine marker, and other lines end with numbers as well. Based on these readings, Packard-Grams suggests that this text is an account, perhaps a temple inventory based on the mention of faience. Also, the mention of the second day of the lunar month may signal that each inventory entry was dated by the day. Like the register on the back of the queen/goddess papyrus, this text could indicate that this papyrus was utilized for temple administration.

To the bottom right of the account, there are traces of what appears to be another Demotic text in a slightly larger hand. Very little is preserved; this could be because the rest of the text was erased or was on part of the papyrus that is lost. Additionally, there are other sections of the back which contain traces of text—apparently Demotic—that was clearly erased. As both sides of the papyrus exhibit these traces, this suggests that both sides were originally written upon and then erased, allowing for the drawing on the front and then the text on the back to be added.

¹²⁵ See Johnson, *Demotic Dictionary*, section “N,” 68.

¹²⁶ Johnson, *Demotic Dictionary*, section “T,” 276.

4.5 Cartonnage

This papyrus's use in mummy cartonnage represents a practical application of a recycled material in the funerary sector of the Tebtunis temple. Beyond this, repurposing an illustrated papyrus, such as this one, in this way could have carried symbolism and spiritual value, depending on the subject of its drawing(s). In this papyrus, the semi-circle cut out resembles a neckline, and if it were cut to accommodate this anatomy, that would place the king's likeness centrally over the chest of the mummy. Regardless, this purposeful cut frames the figure with the lowest point on the curve being at its center, and it does not sacrifice any of the drawing. *P.Tebt.* VI 1204 presents another example: it contains illustrations of the gods Tutu and Bes as well as a man sacrificing a bull.¹²⁷ It is cut to the shape and size of a child's foot for cartonnage, and this cropping also seems to take care to preserve as much of the illustration as possible. This indicates a concerted effort to repurpose the drawings of divine figures on a mummy much like the papyrus depicting the king does.

Using illustrated papyri in mummy cartonnage may have been amuletic, intending to provide extra protection for the soul of the deceased. For example, in the two cases presented above, the deceased would literally have a divine ruler or gods alongside them in the afterlife. Mummy cartonnage was sometimes painted, often with gods intended to act as guardians to the deceased, but by using an already illustrated papyrus, the priests may have been able to enhance the mummy and the deceased's afterlife experience without extra effort or expense.¹²⁸ In theory, these could have been thoughtful additions to the mummies of people who might not have had

¹²⁷ For images of *P.Tebt.* VI 1204, see <https://digicoll.lib.berkeley.edu/record/231444>; for more on this papyrus, see Elena Urzi, "1204: Frammento dipinto e iscritto in demotico con raffigurazioni di divinità," in *Papiri da Tebtynis pubblicati dal Seminario di Papirologia dell'Università di Parma (P.Tebt. VI)* ed. Nicola Reggiani (California Classical Studies, 2025), 174–177 and Olaf Kaper, *The Egyptian God Tutu: A Study of the Sphinx-God and Master of Demons with a Corpus of Monuments* (Uitgeverij Peeters, 2003), 227–228, M-23.

¹²⁸ For examples of painted mummy cartonnage from Tebtunis, see Elena Urzi, "Studi preliminari su alcuni esemplari di cartonnage dipinto," in *P.Tebt.* VI, 242.

the money for embellishments such as painting. Alternatively, illustrated papyri could simply be a “bonus” to any recipient. The remains of gesso on the surface of the king drawing suggest that it was on the exterior of the mummy though probably covered with paint. *P.Tebt.* VI 1204 has gesso covering its entire back, indicating that this side was outward-facing and that the drawings on the front were facing toward the body. However, whether or not these images were visible externally likely would not have determined their efficacy because, visible or not, the depicted figure(s) were still alongside the deceased.

4.6 Discussion

The drawing of the side profile of the king is very probably a cartoon for a bust depicting a Ptolemy as a Pharaoh. The date range given by the papyrus’s cartonnage origin is between the third and second centuries BCE, which encompasses the reigns of Ptolemy I–VIII. However, purely pharaonic-style busts and statuary with standardized, idealized male representations are mostly concentrated within the early Ptolemaic period.¹²⁹ Therefore, on the basis of style, I would suggest a third-century date to be most likely. Busts of this type and therefore this drawing are manifestations of the dynastic cult. Priestly decrees indicate that small-scale statues of kings, such as busts, could have been intended as cultic objects kept in shrines and taken out of the temple for the public to witness on major holidays. This was a demonstration of the ruler’s position as an intermediary between humans and gods.¹³⁰

As it contains a cartoon for a cultic object, this papyrus provides insight into the operations and mechanics of dynastic art production. For example, it reveals that artists made use of recycled papyrus for drafting and designing and that rolls of papyrus might have held multiple

¹²⁹ Later statuary becomes less regularly idealized and begins to incorporate more elements of Greek statuary style; Paul Edmund Stanwick, *Portraits of the Ptolemies: Greek Kings as Egyptian Pharaohs* (University of Texas Press, 2002), 56, 61.

¹³⁰ Stanwick, *Portraits of the Ptolemies*, 9, 11.

drawings, like a sketchbook. Furthermore, this papyrus, in addition to the queen/goddess one, suggests that before and/or after papyri fulfilled their artistic purpose, they were also used for other temple operations, such as administrative (suggested by the Demotic text) and funerary (because of its use in cartonnage). These multiple uses once again support the movement of papyrus within and/or between temples.

This papyrus' sequence of use almost exactly parallels that of the queen/goddess papyrus,¹³¹ which in addition to other factors could suggest that they were products of analogous artistic practices or possibly even the same workshop at Tebtunis. For example, both drawings depict idealized figures in a Pharaonic style, and they demonstrate a very similar level of proficiency, with clean and controlled lines and fine precise details.¹³² Moreover, they even appear to have been drawn with similar tools: red and black ink and a fine *kalamos* (reed) pen. Their dates do not precisely line up; the king papyrus seems most likely to date to the third century BCE and the queen/goddess to the late second century BCE,¹³³ but this indicates a continuous tradition of using cartoons to plan sculpture—in relief and in the round.

Beyond displaying similarities to the queen/goddess drawing, the style and form of the king drawing are informative for understanding traditions of Egyptian art more broadly. For example, the drawing's portrayal of the king's torso from a side profile is particularly significant because very few ancient Egyptian works show torsos laterally. Its combination of lateral, frontal, and oblique views exemplifies a compromise between two- and three-dimensional representations. It also demonstrates the artist's priority, namely, marking the placement of features instead of accurately representing them.

¹³¹ To summarize, the papyri were both inscribed on the front and back, erased, then used for the drawings on their fronts and the Demotic texts on their backs, and finally turned into cartonnage.

¹³² Compare, for example, the treatment of the vulture head in the queen/goddess drawing and the *uraeus* in the king drawing. For a better view of these features in the queen/goddess drawing, see fig. 3 (a diagram of the drawing) in Davoli and Devauchelle, "Demotic Papyrus," 76.

¹³³ See section 3.1.

Chapter 5:

Animal Papyrus

5.1 Papyrus details

The papyrus that is made up of P.Fouad inv. 191a+b and P.Tebt.Tait inv.0421 has drawings of animals—three birds and a ram—over a grid on its front ([fig. 3](#)) and a rough sketch of ritual scenes on its back ([fig. 17](#)). Ryholt made a connection between the fragments and then published them in 2020, the front as *P.Carlsb. XV 55* and the back as *P.Carlsb. XV 57*.¹³⁴ There is no record of the dimensions of the Fouad fragments, but the smallest fragment, P.Tebt.Tait inv.0421, measures 3.8 cm in height and 2.4 cm in width. In the *P.Carlsb.* plate, which reproduces the papyrus approximately to scale, the joined Fouad fragments measure 13.9 cm tall and 9.7 cm wide. In total, this would make the preserved dimensions around 13.9 x 12.1 cm (h x w). The papyrus, as it is only partially preserved, would have been larger, but it is difficult to say exactly how large. It probably would not have extended much farther at the top because it already has a generous margin. To the left (on the front), it is likely just missing a margin because the left boundary of the grid is visible (unless there were other grids on the papyrus), and the papyrus would have continued downward and to the right as the last bird and the ram are not fully preserved. It also contains several *lacunae*, some of which have misaligned sections of fibers. Otherwise, the drawings on the front are well preserved except for some abrasion, which is present on the left, but the sketch on the back is much more faded and barely visible in some parts. Additionally, as discussed (see section 1.3), Ryholt dates this papyrus between the second century BCE and second century CE based on its supposed origin in either the rubbish dump near the temple or the temple library deposit.

¹³⁴ Ryholt, “Survey of Illustrated Papyri,” 188–191.

5.2 Front

The front of this papyrus displays a grid over which there are two columns of drawings, one with three birds and the other with a ram. The grid is drawn in red ink except for the boundary lines in black; its top and left edges are partially preserved. The red grid with black outlines is reminiscent of the grid upon which the king is drawn as it is also red with a black boundary. The squares of this grid are smaller than those of the other grids, measuring just 0.8 x 0.8 cm.

The drawings are executed in black ink with accents in red ink (short strokes on the beaks of the upper two birds and near the eye of the middle bird as well as dots on the ram's coat).¹³⁵ The left column contains the three birds; the upper bird is a swallow, and the middle is a quail chick. The lower bird's species is less obvious due to being cut off below the head and its somewhat atypical physiognomy, but it is most likely a vulture. This identification is based on its hooked beak and its unfeathered, crescent-shaped face that is divided from the rest of its head by two curved lines. Although its head has a more prominent crest and its bill is shorter than most Egyptian representations of vultures, the previously mentioned features make that seem the most plausible type of bird. Additionally, a sculptors' model from the Cairo Museum, CG 33452, shows a vulture with a similar crest—albeit slightly shorter and longer ([fig. 18](#)).¹³⁶ The ram in the right column can be identified by its curled horn. Horizontal twisting horns were often shown on rams, an enduring iconographical element from a species that became extinct around the New Kingdom, but the curling horns present in the drawing are drawn from a contemporary species.¹³⁷ These animals are significant because they all can serve as hieroglyphs, suggesting that these

¹³⁵ Ryholt, "Survey of Illustrated Papyri," 188–9.

¹³⁶ This model comes from Tanis; Tomoum, *Sculptors' Models*, 237.

¹³⁷ Emily Teeter, "Cat. 15 Plaque Depicting a Ram," in *Ancient Egyptian Art at the Art Institute of Chicago*, ed. Ashley F. Arico (Art Institute of Chicago, 2025), <https://doi.org/10.53269/9780865593213/30>.

drawings could have been part of a manual of stylized and detailed drawn hieroglyphs. These hieroglyphs could possibly even be arranged in “alphabetical” order.¹³⁸

The animals are all drawn with intricate details. In drawing the swallow, for example, the artist employed a variety of techniques. These include short vertical strokes on the front of its neck, small crescents on the top of its head and its underside, rows of larger crescents on its wings and tail, a section of larger feathers on the wing with diagonal hatches, long strokes on the underside of the tail, and crosshatching on the feet. These techniques and more are present on the other animals; for instance, the rest of the animals also have triangle-shaped detailing to indicate feathers or wool. It is interesting that the same forms and lines are used to represent both feathers and fleece; it lends a cohesive appearance to drawings. The ram’s horn, however, is uniquely textured with wavy lines and speckles on one side.

Within the grid, the birds are stacked directly on top of each other, and there is less than one square of distance between the front of the swallow and the hind of the ram. The heads of the swallow and ram are even with the upper edge of the grid. Both the swallow and the ram are five squares tall, and the quail is eight; the swallow is just over eight squares wide, and the quail is just over six. It is difficult, however, to say exactly how many squares the vulture would have been across its height and width and how wide the ram would have been because there was not a consistent canon of proportions for animals.

Two features of the two previous papyri that are notably absent from the front of this papyrus are annotations and traces of writing from a previous text, differences which suggest that this papyrus and these drawings fulfilled different purposes than the others. The lack of

¹³⁸ The swallow hieroglyph can be read as *wr* “great,” the quail chick as the uniliteral sign *w*, the vulture as either the uniliteral sign *3* or *mwt* “mother,” and the ram as *b3* “soul.” If we take the vulture as *mwt*, these signs could have been purposefully arranged in “alphabetical” order or in the order of the uniliteral signs. For the Egyptian order of the uniliteral signs, see James P. Allen, *Middle Egyptian: An Introduction to the Language and Culture of Hieroglyphs*, 3rd ed. (Cambridge University Press, 2014), 16–17.

annotations to indicate dimensions or proportions implies that these drawings were not conceived as a cartoon for one project, to be produced to specific measurements. Rather, it seems more likely to be a sort of pattern book, from which an artist could pick and choose what to reproduce and to whatever dimensions. Additionally, the use of a fresh piece of papyrus implies the creation of a resource meant for long-term consultation. This would also support the identification of the papyrus as part of a pattern book, which would be habitually referenced, rather than a cartoon, which would probably be applied to only one project.

5.3 Comparanda

These drawings have two rather compelling parallels, P.Berlin 13558 ([fig. 19](#)) and P.Turin cat. 2036 ([fig. 20](#)).¹³⁹ The Berlin papyrus is dated between the second and first centuries BCE, which is within the possible date range of the Tebtunis papyrus. It displays several drawings, with varying subjects (animals, mythological and royal figures, and an architectural facade) over a reddish-gray grid. The various drawings are attributed to three different artists.¹⁴⁰ Among the Berlin drawings, the closest parallels to the ones from Tebtunis are the swallow and the rooster. They exhibit similar detailing, but it is not as finely executed. Even still, the swallow provides a valuable comparison because, aside from the different rendering of the head and the difference in quality, the two swallows have many similarities, including shape and technique (e.g. crescents and diagonal lines on the wing). Additionally, the triangle-shaped rendering of the rooster's feathers are similar to those used to render the ram's shaggy fleece. Despite these similarities, the lack of organization, lower quality, and arbitrary selection of subjects distinguish it from the Tebtunis animal drawings, which exhibit an orderly layout, fine details, and corresponding subjects. Therefore, while the Berlin papyrus might have been a shared sketchbook for an

¹³⁹ The Berlin papyrus was excavated at Elephantine, and the Turin papyrus has uncertain provenance.

¹⁴⁰ A. Erman, "Zeichnungen ägyptischer Künstler griechischer Zeit," *Amtliche Berichte aus den Königlichen Kunstsammlungen* 30, no. 8 (1909): cols. 197–203.

artists's workshop,¹⁴¹ the Tebtunis papyrus was a more deliberate and professional product, such as a pattern book.

In that respect, the Turin papyrus is more similar.¹⁴² It depicts drawings of a lion, cobra, ibex goat, and quail chick over two stacked grids, drawn in red ink and divided by a black ruling.¹⁴³ Although rendered in a more simplistic style, its iconography and arrangement make it similar to the Tebtunis drawings. The parallels suggest that they might have had the same purpose. The drawings seem most likely to constitute pattern books or instructional manuals because of their careful and skilled execution and thoughtful organization. These features would have enabled the drawings to be easily referenced and emulated. The Turin papyrus, however, dates significantly earlier than the Tebtunis one, to the New Kingdom, but this may indicate a historicity and tradition of this type of artistic tool.

The idea that these drawings constituted part of artistic reference manuals is supported by analogous depictions in sculptors's models. The Metropolitan Museum has an exemplary model, which has relief carvings of two swallows on one side and on the other side reliefs of two quail chicks as well as a sketch of the chick ([fig. 21](#)). This model is especially noteworthy because of the drawing of the quail chick in the corner of the slab, which looks almost as if it had been quickly copied from the quail on the Tebtunis papyrus. In fact, they measure the same number of squares, eight tall and six wide. This drawing on the model must have acted as a reference for the sculptor while carving the reliefs. On both sides, the two versions of each bird are worked with different levels of detail, and none of them appear entirely finished. The lower swallow actually still preserves traces of its preparatory drawing on its tail and eye. Nonetheless, the details that

¹⁴¹ Erman, "Zeichnungen ägyptischer," col. 203.

¹⁴² See Elsa Rickal, "45. Fragment de papyrus: animaux dans un quadrillage," in *L'art du contour*, 180.

¹⁴³ These animals might also be hieroglyphs because there are lion, cobra, ibex, and quail chick hieroglyphs, but lion hieroglyphs usually depict the animal in a recumbent rather than seated position.

are incised are even closer than the sketch to the style of the papyrus drawing. Most obviously, their shapes and features are almost identical. Furthermore, one swallow and chick exhibit the cross hatching on their feet, both chicks and one swallow display the crescent-shaped feathers, and one chick shows the fine diagonal hatching on its wing feathers. These intricate details as well as the drawing on the model strongly suggest that it was worked from a reference like the animal papyrus. Moreover, other sculptors's models contain reliefs that correspond to the other animals in the drawing.¹⁴⁴ This provides some context as to how the papyrus may have actually been utilized, as a pattern book to aid the reproduction of images, likely in relief but also potentially in painting or other media.¹⁴⁵

5.4 Back

The back of the papyrus has rough sketches of ritual scenes executed in red ink with a much duller pen than the drawings on the front, and it is not over a grid. The drawing contains two registers, and there are bands with Demotic text, captions or notes. The upper register, which is better preserved, displays a scene of a king before a group of gods, Sobek, Isis, Osiris, and Sobek again (from right to left). Behind the king, another figure's arms are visible, probably belonging to a queen. The lower register also appears to depict a deity.¹⁴⁶ The layout, the scene formula of the upper register, and the depictions of divinities, particularly Sobek, connect this drawing to the temple of Soknebtunis.¹⁴⁷ Therefore, Ryholt suggests that it could be a sketch of

¹⁴⁴ Including the vulture one mentioned above, Cairo Museum CG 33452 ([fig. 18](#)), and ones with rams, such as Cairo Museum CG 33441 (Tomoum, *Sculptors' Models*, no. 116) and Metropolitan Museum [inv. 07.228.10](#).

¹⁴⁵ The drawings seem more likely to be reproduced in relief than painting because some of the shapes, such as the musculature of the ram do not translate entirely accurately in drawing, but they would be helpful indications to render a raised shape in relief.

¹⁴⁶ Ryholt, "Survey of Illustrated Papyri," 190–1.

¹⁴⁷ This is supported by a fragment of an unfinished Ptolemaic *bas-relief from the temple that is in the Phoebe A. Hearst Museum, [inv. 6-20301](#). It displays very similar iconography to the sketch. Compare, for example, the images of Sobek in the drawing and the relief. For more on this relief, see Rondot, *Tebtynis II*, 79–80. *Although the Hearst catalog lists the relief as a stele fragment, Rondot explains that it is a fragment of a bas-relief.

decoration from somewhere in the temple or a rough draft of a decorative scheme to be produced.¹⁴⁸

There are several Demotic annotations throughout the drawing. One note, on the smallest fragment to the left of the upper register, Ryholt reads as *n3 sh* ..., “the texts ...”, which he suggests could indicate hieroglyphic captions or other texts to be added into the design. In the band between the registers, he proposes a reading of *10 n* ..., “ten ...”, which could be a measurement.¹⁴⁹ These readings would seem to support the notion that this is a draft of decoration to be carried out, probably in relief based on the iconography, but the rudimentary quality of the sketch would seem to put this into question. This kind of task—designing a project for relief sculpture—would presumably be the work of a trained artist, one who, even in haste, would likely have produced a higher quality drawing than this. The shakiness and unevenness of the lines in particular give the impression of an unpracticed illustrator.¹⁵⁰ Instead, it seems that it could have been a training/practice exercise for an artist in training to copy existing decoration from the temple, but with such poor preservation of the drawing and annotations, certainty is elusive.

Nonetheless, it is significant that this papyrus contains drawings on both its front and back. It was probably reused after it fell out of use as a pattern book, perhaps within the same workshop or, at the very least, by another artist or artist in training.

¹⁴⁸ Ryholt, “Survey of Illustrated Papyri,” 190.

¹⁴⁹ Ryholt, “Survey of Illustrated Papyri,” 191. An alternate reading suggested by Packard-Grams is *q* ... and potentially *qy* ..., “length/height...”.

¹⁵⁰ Another illustrated papyrus from Tebtunis displays a similarly rough drawing of an antelope, and it also includes horizontal rulings above the drawing, which separate it from a Demotic text (fig. 22). This text, however, is longer than the short notes accompanying the ritual scenes, and the nature of the text is unascertained. Ryholt attributes the papyrus’s provenance to the rubbish dump and dates it to around the second century BCE. See Ryholt, “Survey of Illustrated Papyri,” 180–181.

5.5 Discussion

Because of their high quality and organization, the drawings on the front seem to form a compelling example of a pattern book or reference manual of hieroglyphs. It possibly could have served as a reference for artists creating textual cartoons, planning out hieroglyphic texts to be carved onto temple walls, for example. The majority of hieroglyphs in relief on temples, however, are much simpler than these drawings, but there are nevertheless examples of more detailed hieroglyphs like the drawings. The drawings also exhibit many similarities to sculptors' models, especially the model with the sketch of the chick, in their level of detail, style, and subjects. Considering these parallels, it seems possible that this papyrus could have been consulted for sculpting models, which would have been employed as pedagogical tools by master artists or as done as practice by artists in training.

The back of this papyrus indicates reuse by an artist, although the proficiency of the artist is called into question by the rough quality of the sketch. While it was possibly a very rough draft of a design to be reproduced, the unrefined nature of the sketch may indicate that it was a practice sketch by an artist in training. Also, if the drawings on the front were in fact used for the creation of models and the sketch on the back was a practice exercise, this would place the papyrus in an instructional milieu. This could suggest that there was a sort of instructional institution to train artists in draftsmanship and sculpture. Regardless, this papyrus reinforces the pattern of illustrated papyri being repurposed, which was demonstrated by the other two papyri, but this one is unique in its reuse by another artist within the Tebtunis temple.

Chapter 6:

Conclusion

6.1 Review

The common denominator between the three papyri analyzed in this thesis is that they all contain drawings over grids, and they are the only known examples of this phenomenon excavated from Tebtunis. The content of the queen/goddess and the king drawings relate them to art production of the dynastic cult, which would have been planned and executed within a temple complex. Although these two papyri might have originated from elsewhere, we would expect that similar papyri would have been used for artistic practices at Tebtunis, as a town with a significant temple. Furthermore, the possible findspots of the papyrus with the animal drawings, the fact that they are hieroglyphs, and the ritual sketch on the back similarly relate them to a temple, more specifically to the Soknebtunis temple. Therefore, all together the three papyri are informative sources of evidence for the types of resources artists would have used in temples (and probably other artistic workshops) at Tebtunis and other sites in Egypt.

A functional analysis of the papyri reveals that they may be categorized as follows: the queen/goddess and king drawings as cartoons, the king drawing as a potential sketchbook, and the animal drawings as a pattern book or reference manual. The papyri also demonstrate how these resources (cartoons, sketchbooks, and pattern books) were used by artists working in a variety of techniques and media, including (but surely not limited to) sculpture—both in relief and in the round. This then suggests that cartoons, sketchbooks, and pattern books on papyri constituted part of the artistic toolbox, resources, and processes of ancient Egyptian workshop(s).

Additionally, each papyrus demonstrates at least one indication of a separate use. For example, the queen/goddess and king papyri are palimpsests, exhibiting textual (probably

documentary) use before becoming canvases for the drawings. These two papyri also both have documentary Demotic texts on their backs that were most likely added after the drawings, indicating that they were reused once again for a different purpose, probably still within a temple context. The back of the animal papyrus contains a rough sketch, demonstrating that it was reused within an artistic sphere. Lastly, the queen/goddess and king papyri were recycled in mummy cartonnage—crocodile and human, respectively—which exhibits both a practical and potentially symbolic use. The various stages of use for each papyrus bear implications for understanding the purpose of the drawings, such as distinguishing cartoons and pattern books. For example, the two palimpsests are cartoons, whereas the drawings on a fresh papyrus appear to be from a sort of pattern book. Their reuse also sheds light on the movement of papyri within the temple complex and possibly between temples; for example, papyri could evidently be reused for artistic, administrative, and/or funerary/cultic (mummy cartonnage) purposes. This demonstrates how reuse could occur either in disparate spheres of temples or within the same (or a similar) artistic context.

6.2 Implications

With all of this in mind, we can begin to imagine the possible process an Egyptian artist might have followed in preparation of creating a sculpture—in relief or in the round—or another art object, such as a painting. The artist could draft a cartoon that maps out the design of the project and contains any important dimensions or proportions on a piece of (potentially reused) papyrus, maybe even one that had been turned into a sketchbook of sorts. The cartoon likely would have been drawn over a grid, which the artist had prepared, in order to ensure that the figure conformed to the Egyptian canon of proportions. In crafting the design, the creator might have consulted a pattern book or reference manual, from which they could select and copy

elements to reproduce. Multiple drafts of the cartoon might have been done, but once completed or deemed sufficient, the drawing could be transferred onto the artist's working surface, such as a block of stone, wooden plank, or temple wall. From here, they could begin carving or painting and reference the cartoon as needed. It is also possible that different parties could have been responsible for different stages, such as drafting the cartoon, carving the project, and painting it.

As we have seen, this type of drawing over a grid has been found at sites all over Egypt. This signifies that cartoons, pattern books, and sketchbooks were standard features of Egyptian artistic operations. Additionally, these tools were not limited to the Graeco-Roman period, a fact that is revealed by other drawings such as the Turin papyrus, which dates to the New Kingdom.¹⁵¹ Therefore, drawings over grids represent a long-standing tradition, of which the three papyri discussed here are a continuation. They provide a glimpse into the production of art and the reuse of papyrus in the temple of Soknebtunis and beyond, revealing many practices that we may expect to have occurred at sites of artistic creation across Egypt.

¹⁵¹ See section 5.3.

Appendix



Figure 1. P.Tebt.Frag.14,291+14,292 front (drawing of a queen/goddess over grid), c. 150–50 BCE, red and black ink on papyrus, H: 17.6 cm, W: 12 cm, The Bancroft Library's Center for the Tebtunis Papyri, <https://digicoll.lib.berkeley.edu/record/231556>.

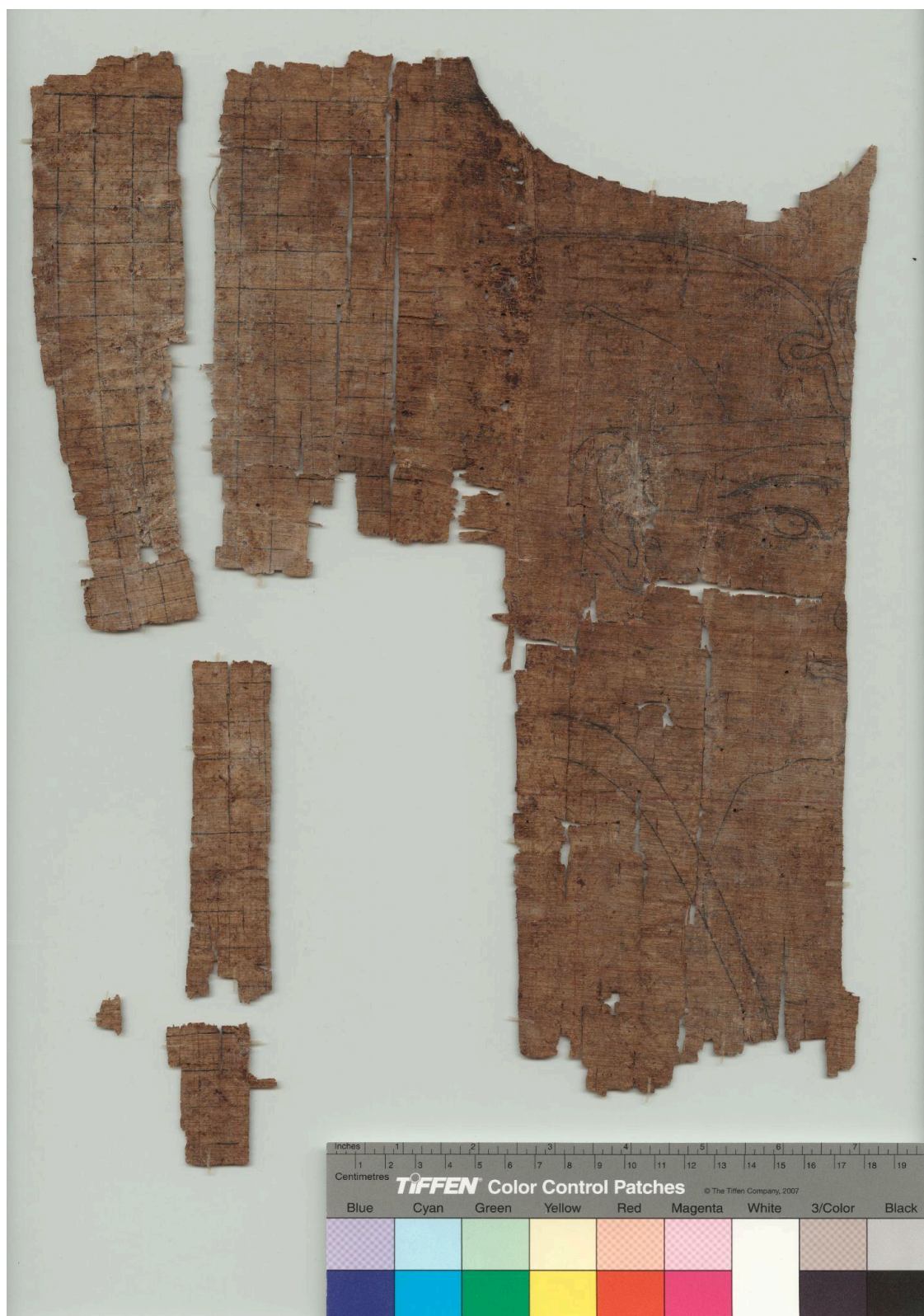


Figure 2. P.Tebt.Frag. 14,221–14,226 front (drawing of a king over grid), c. 299–100 BCE, red and black ink on papyrus, H: 34.4+ cm, W: 27.4+ cm, The Bancroft Library's Center for the Tebtunis Papyri.

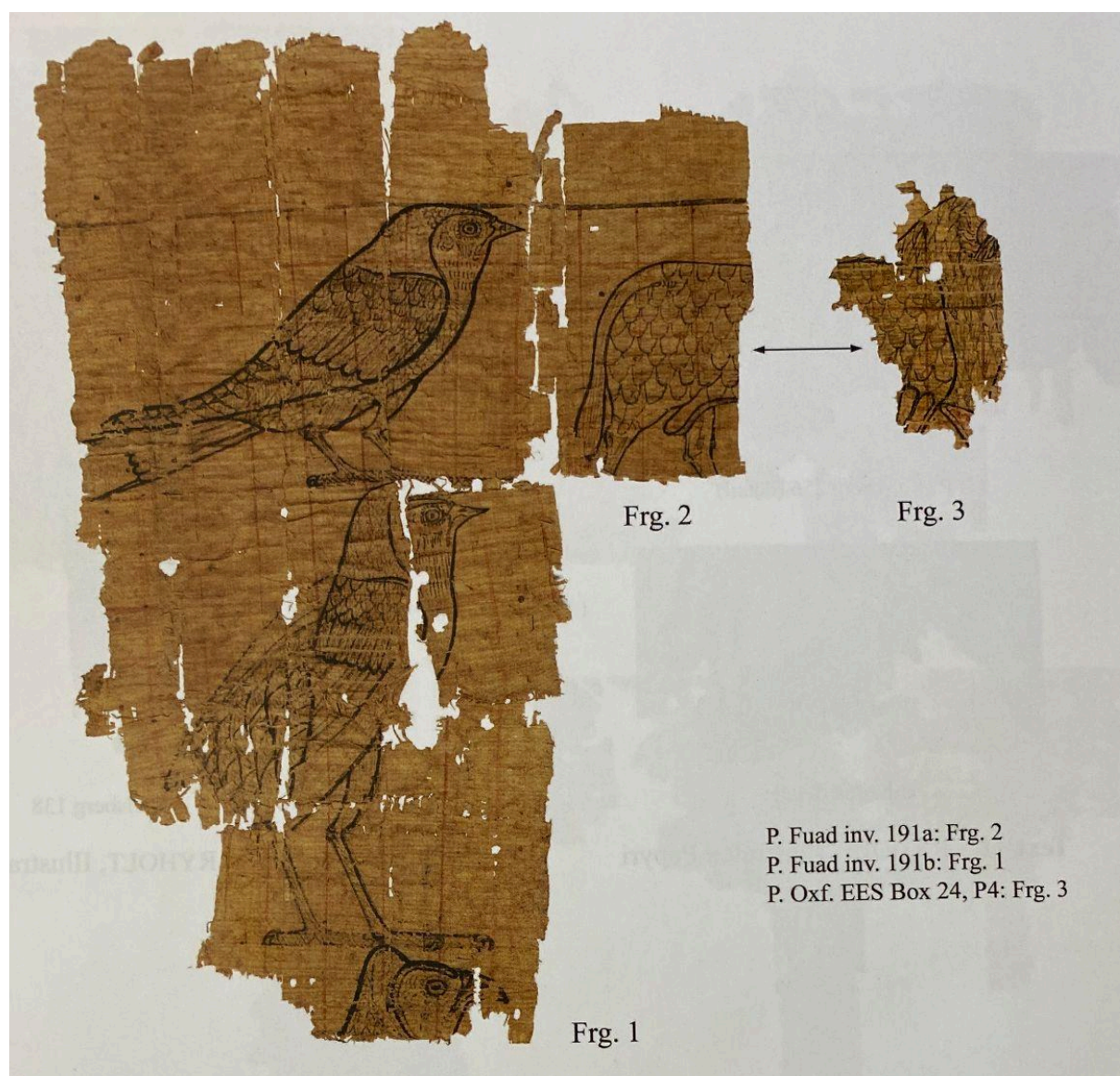


Figure 3. P.Fouad inv. 191a+b and P.Tebt.Tait inv.0421 front (drawing of animals over grid), c. 199 BCE – 199 CE, red and black ink on papyrus, H: c. 13.9 cm, W: c. 12.1 cm, Institut Français d'Archéologie Orientale and The Bancroft Library's Center for the Tebtunis Papyri. Plate 42 from *P.Carlsb.* XV.



Figure 4. P.Tebt.Frag.14,291+14,292 back (Demotic register), c. 150–50 BCE, black ink on papyrus, H: 17.6 cm, W: 12 cm, The Bancroft Library's Center for the Tebtunis Papyri, <https://digicoll.lib.berkeley.edu/record/231557>.



Figure 5. CG 33,411 (sculptors' model of queen/goddess), Dynasty 30 – early Ptolemaic period, limestone, H: 30.5 cm, W: 14 cm, D: 2.3 cm, Cairo Museum. Plate 46 c from Tomoum, *Sculptors' Models*.



Figure 6. CG 33,412 front (sculptors's model of queen/goddess with *uraeus modius*), Ptolemaic Period, limestone, H: 32 cm, W: 20.5 cm, D: 5 cm, Cairo Museum. Plate 46d from Tomoum, *Sculptors' Models*.



Figure 7. Detail of a goddess from west jamb of south doorway of Imhotep Temple at Philae, 204–180 BCE. Plate XVI C from Vassilia, *Ptolemaic Philae*.

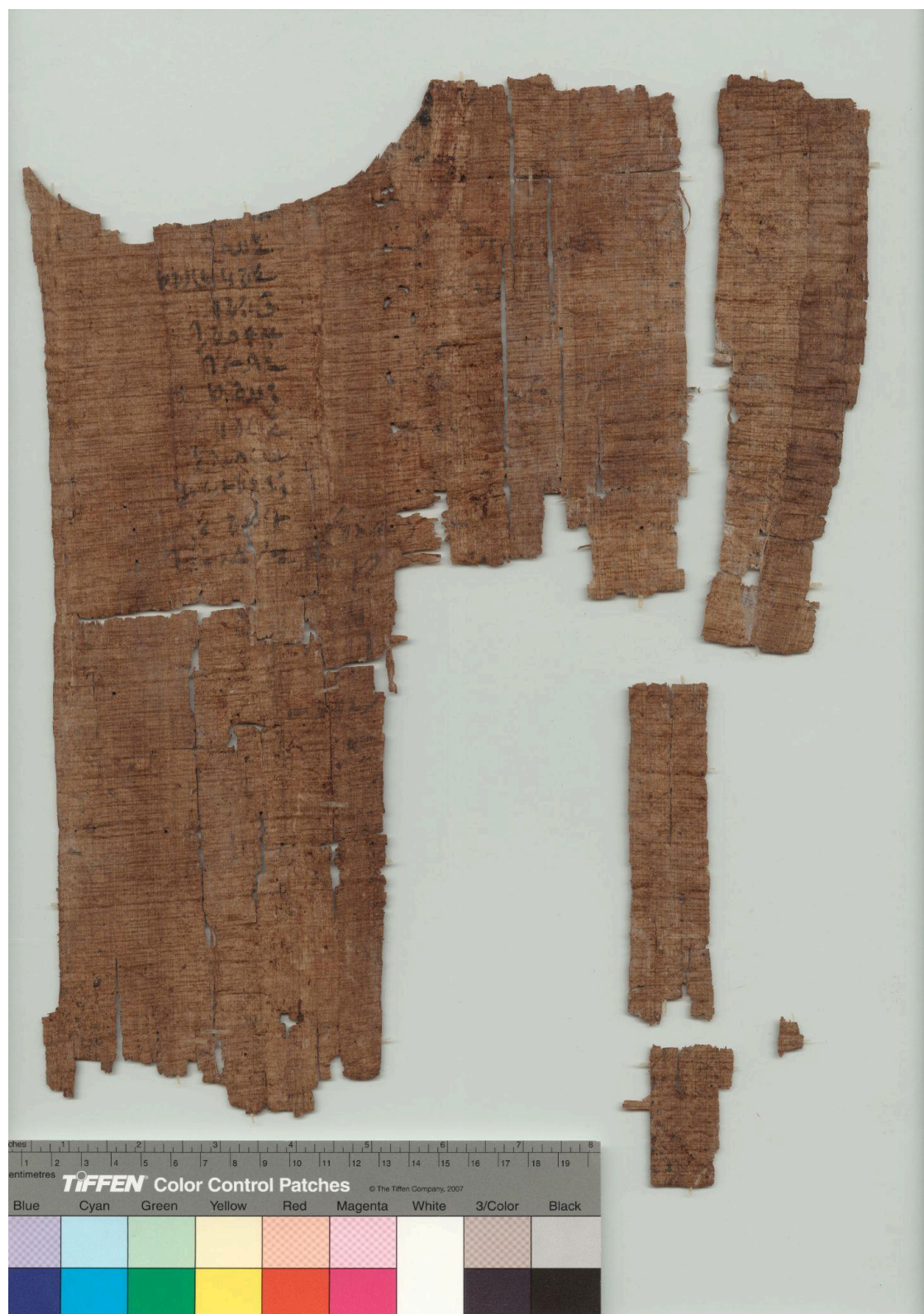


Figure 8. P.Tebt.Frag. 14,221–14,226 back (Demotic documentary text), c. 299–100 BCE, black ink on papyrus, H: 34.4+ cm, W: 27.4+ cm, The Bancroft Library's Center for the Tebtunis Papyri.

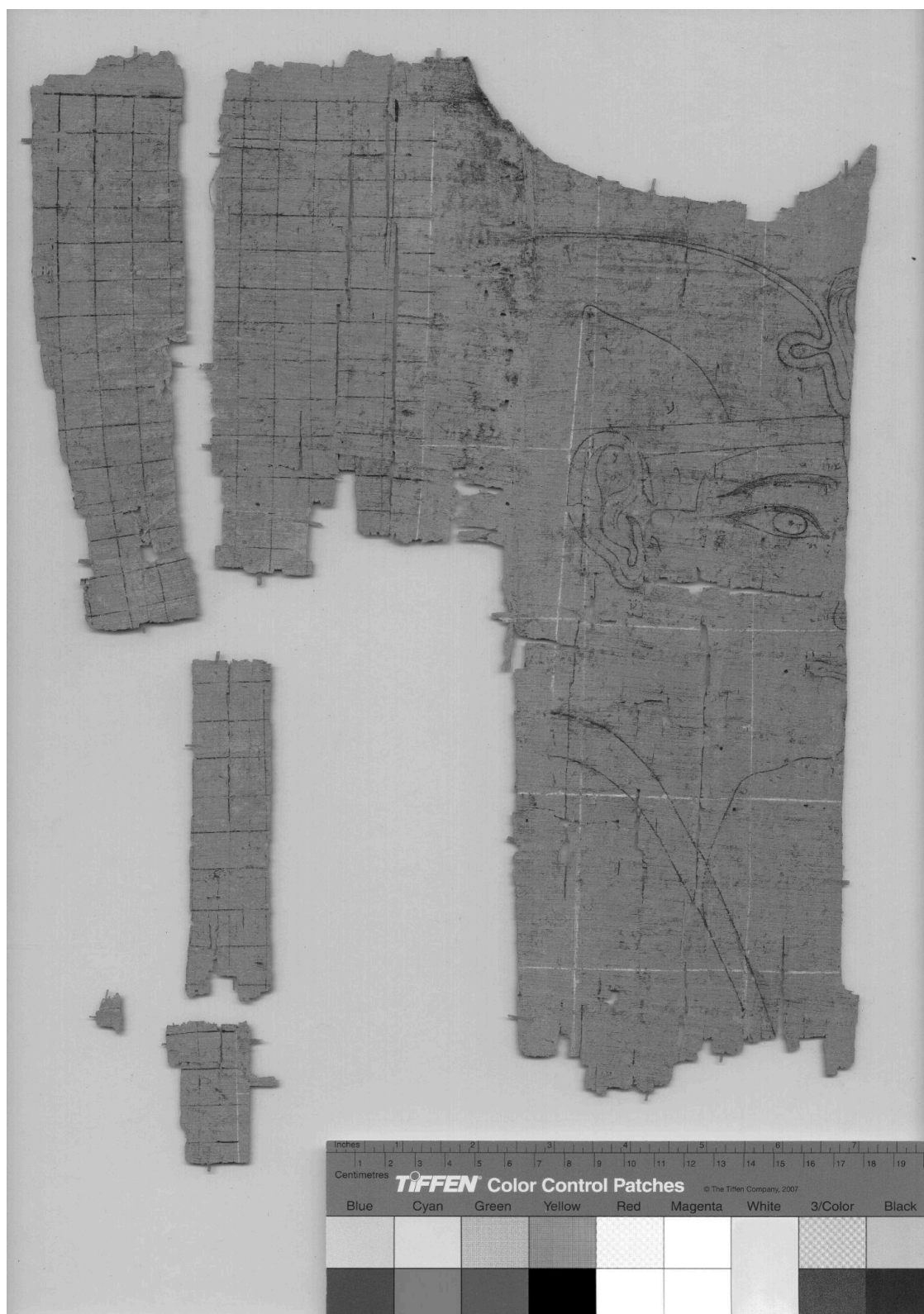


Figure 9. False-color image of P.Tebt.Frag. 14,221–14,226 front: the red lines appear as white (achieved by converting the photo to black and white, lightening red values, and darkening yellow values).

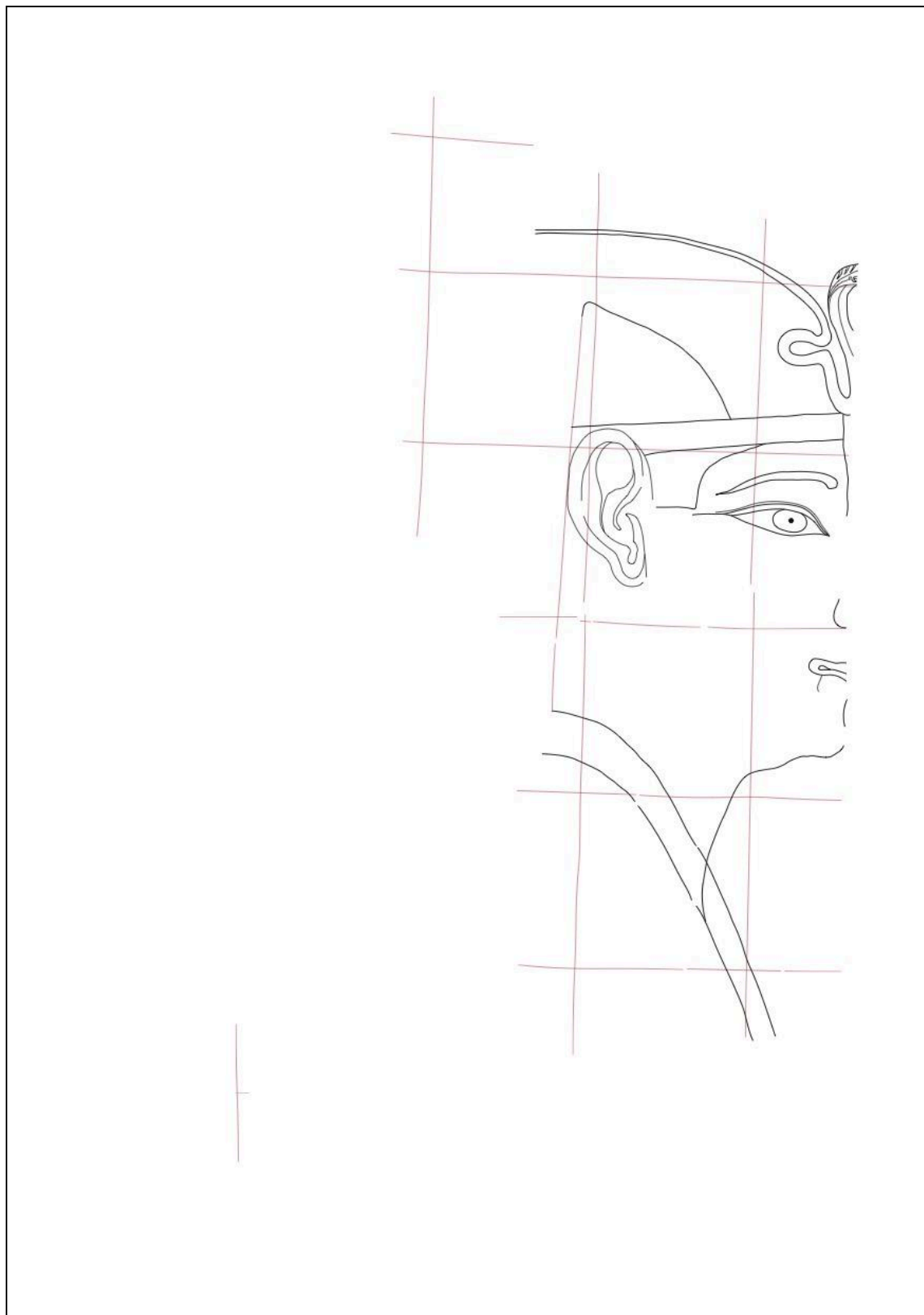


Figure 10. Drawing of P.Tebt.Frag. 14,221–14,226 front: the drawing in black ink is traced in black (shading ignored), and red ink is traced in red.

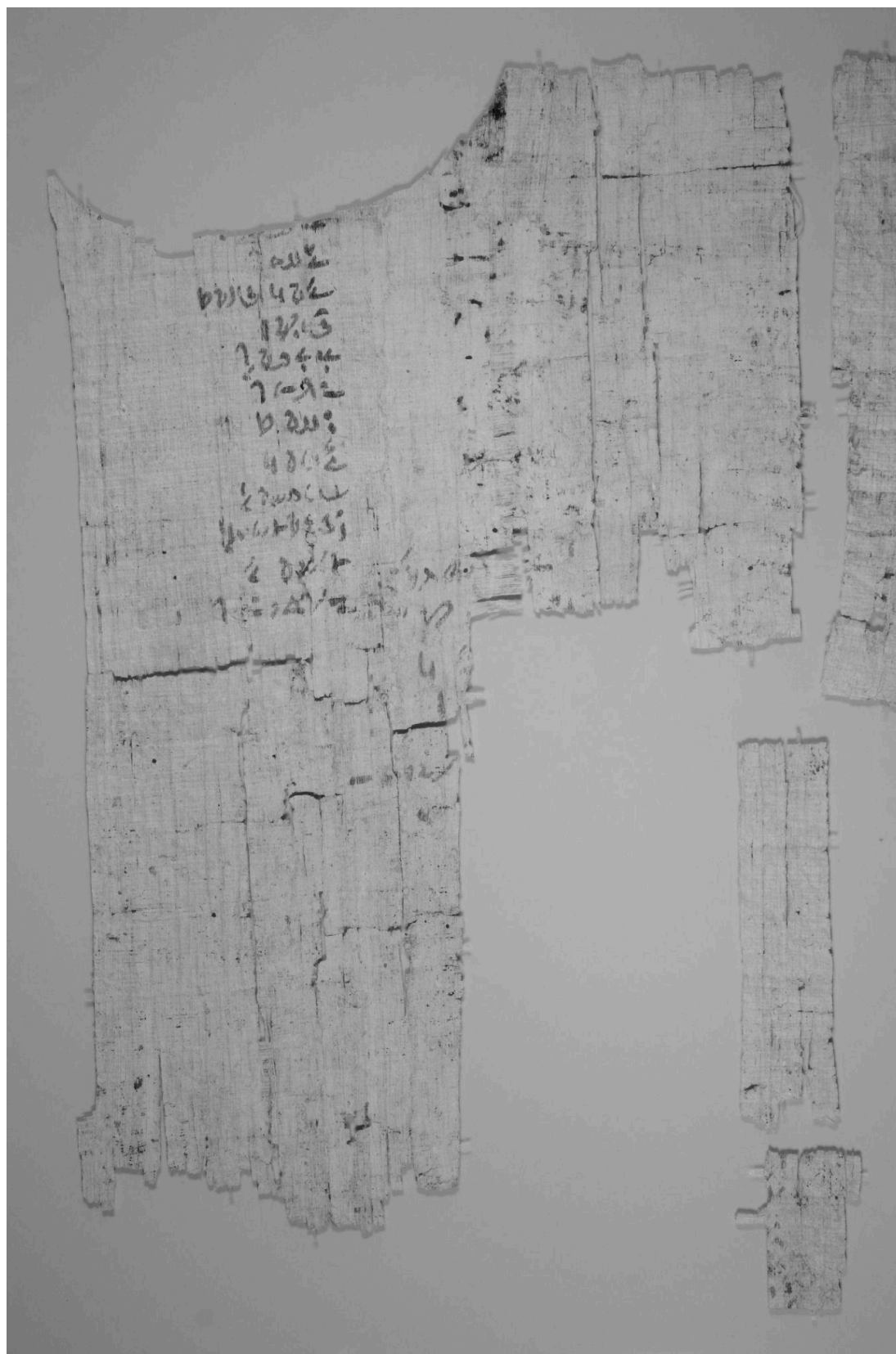


Figure 11. Infrared photograph of left part of P.Tebt.Frag. 14,221–14,226 back.

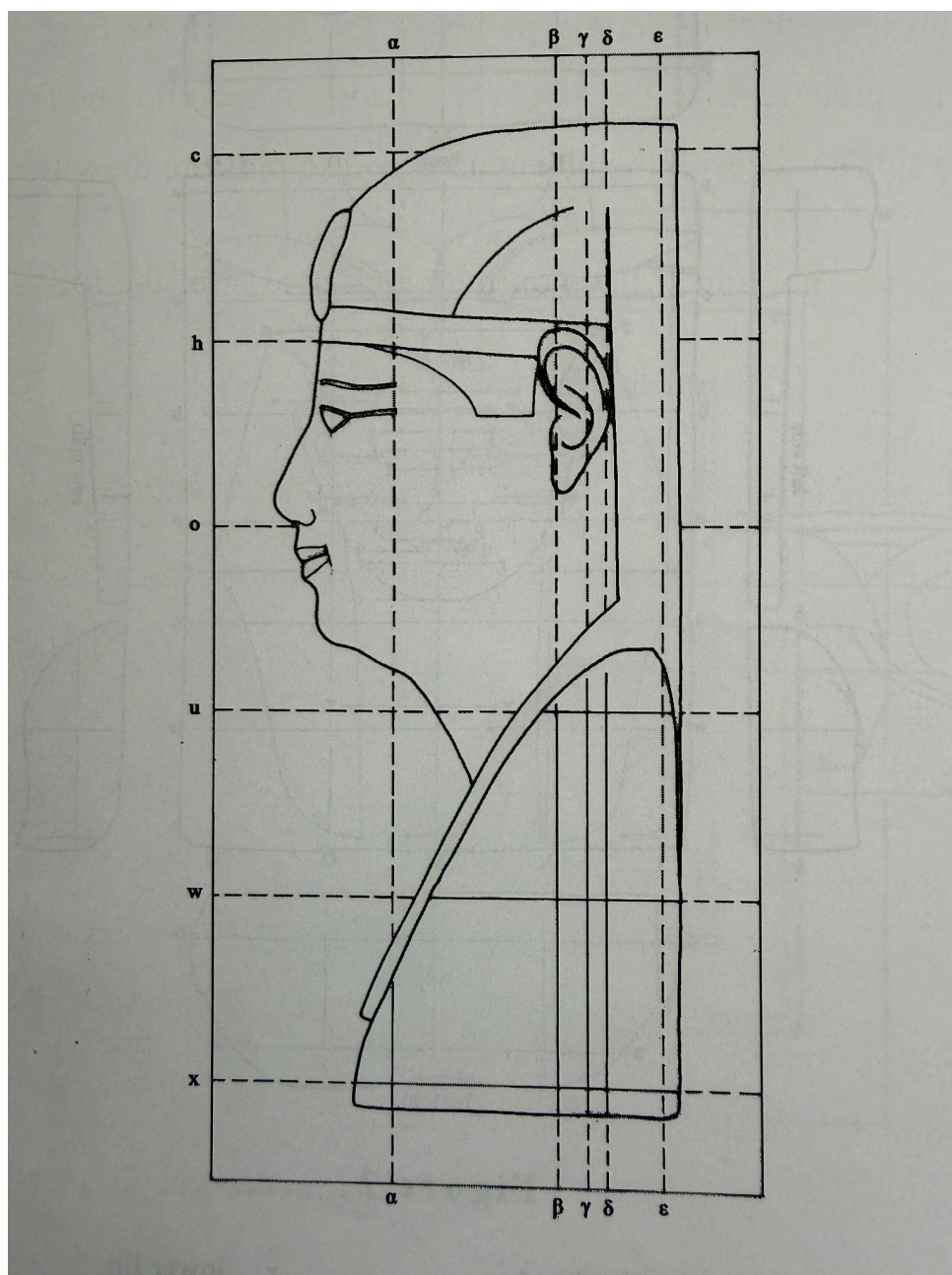


Figure 12. Diagram of grid lines on Cairo Museum JE 45906, figure 3 from Tomoum, *Sculptors' Models*, 38.

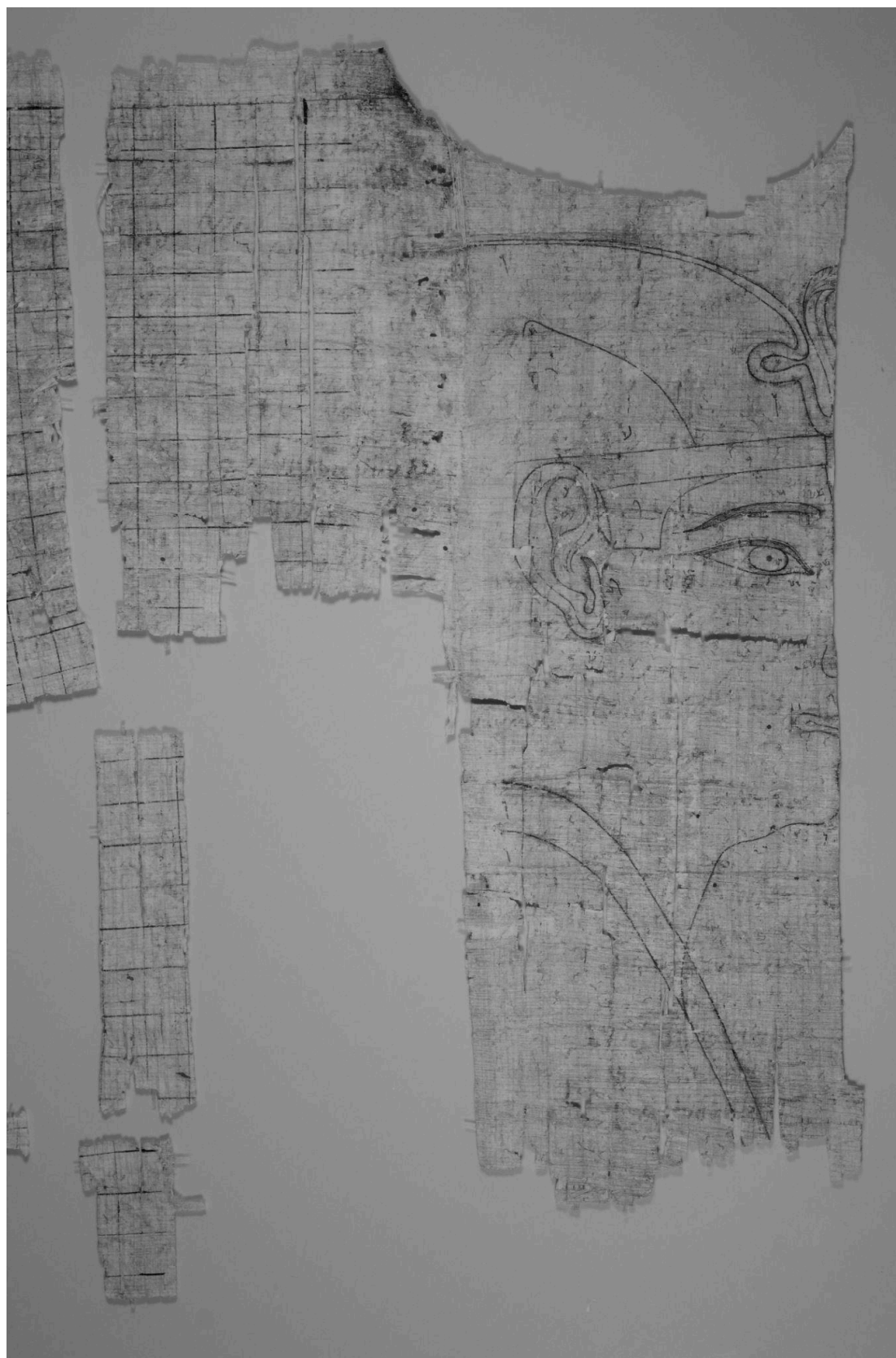


Figure 13. Infrared photograph of P.Tebt.Frag. 14,221–14,226 front.

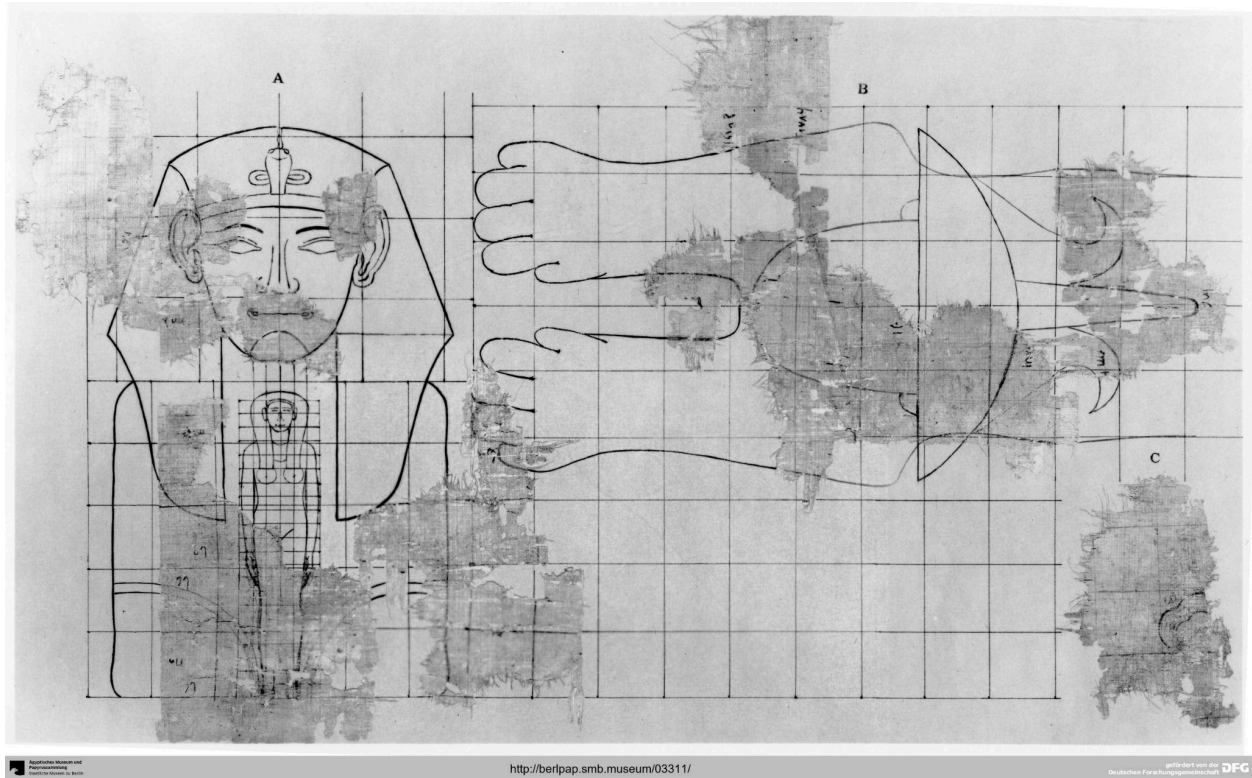


Figure 14. Reconstruction of P. Berlin 11775 (cartoon of sphinx), <http://berlpap.smb.museum/03311/>.



Figure 15. Bust of Pharaoh (JE 45906), c. 360 to 343 BCE, limestone, H: 23 cm, W: 18.3 cm, D: 10 cm, Cairo Museum. Plate 15 a and b from Tomoum, *Sculptors' Models*.

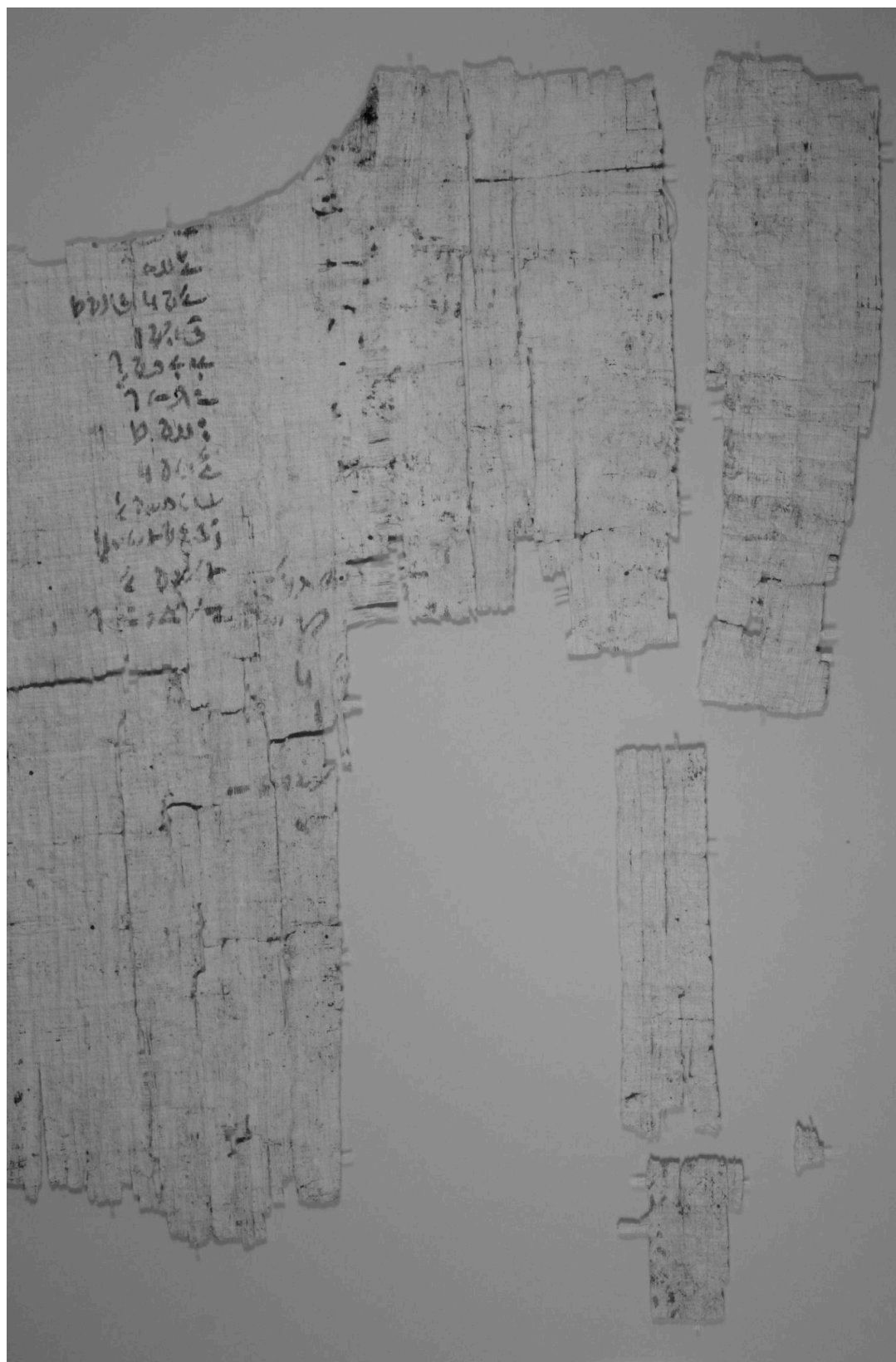


Figure 16. Infrared photograph of right part of P.Tebt.Frag. 14,221–14,226 back.

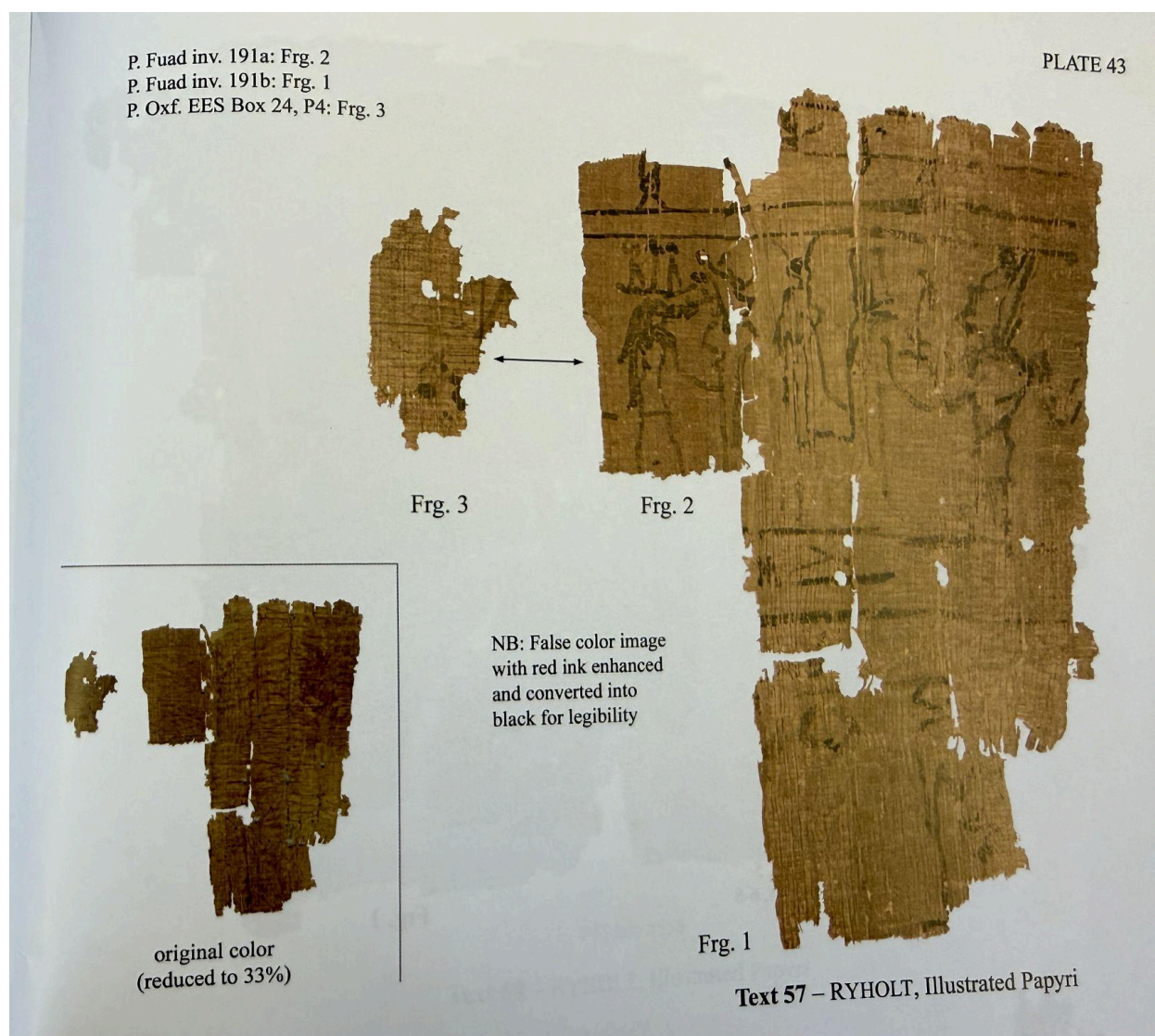


Figure 17. P.Fouad inv. 191a+b and P.Tebt.Tait inv.0421 back (rough sketch of ritual scenes), c. 199 BCE – 199 CE, red ink on papyrus, Institut Français d'Archéologie Orientale and The Bancroft Library's Center for the Tebtunis Papyri. Plate 43 from *P.Carlsb.* XV.



Figure 18. Cairo CG 33452 front (sculptor's model with vulture), Late-Ptolemaic period, limestone, H: 7.7 cm, W: 11.3 cm, Cairo Museum. Plate 75d from Tomoum, *Sculptors' Models*.

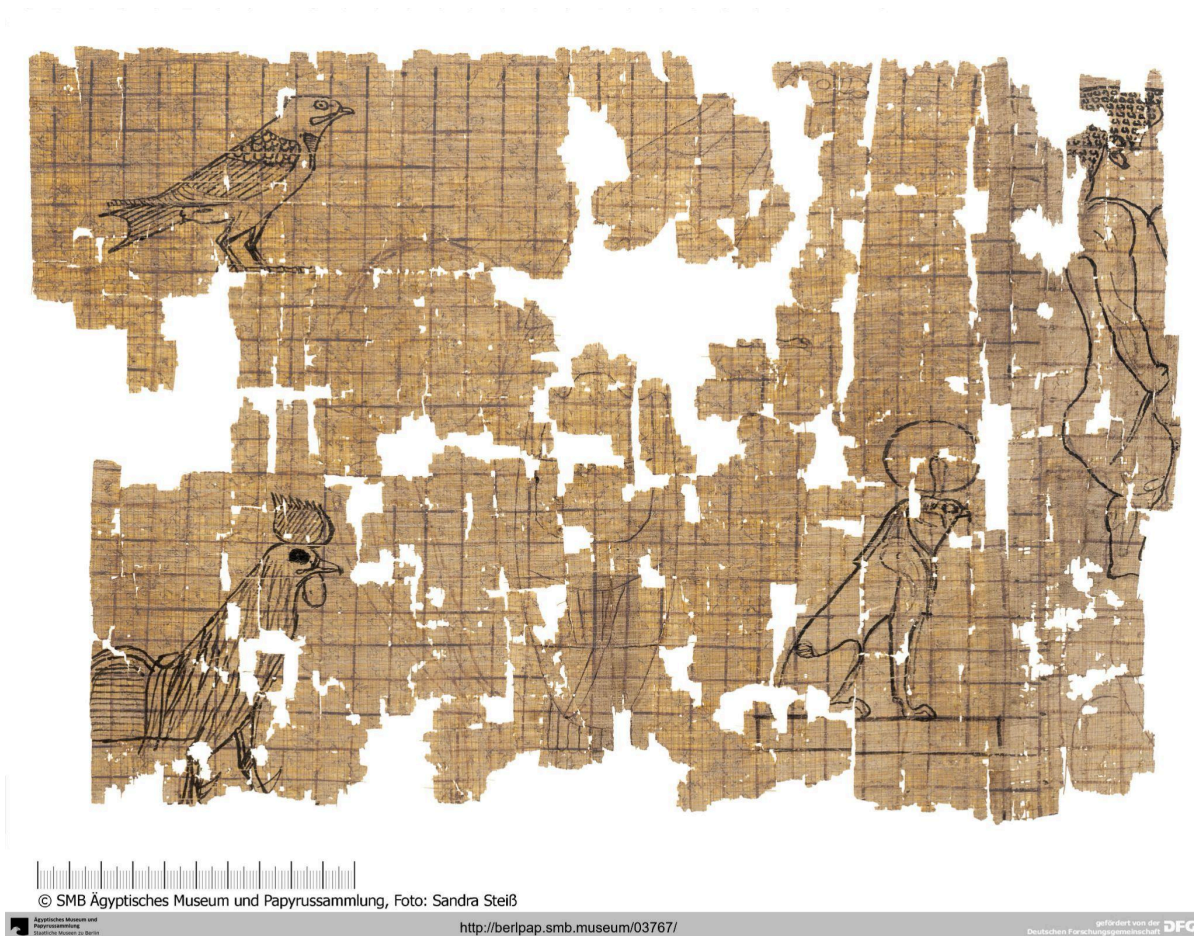


Figure 19. Fragment from P. Berlin 13558 (drawings over a grid), second-first century BCE, black and red ink on papyrus, Berlin Museum, <http://berlpap.smb.museum/03767/>.



Figure 20. P.Turin cat. 2036 (animal drawing over grids), New Kingdom, black and red ink on papyrus, H: 32.5 cm, W: 22.5 cm, Museo Egizio,
<https://collezionepapiri.museoegizio.it/en-GB/document/274/>.



Figure 21. Sculptors's model with swallows and quail chicks, 400–30 BCE, limestone, H: 15 cm W: 13.8 cm D: 0.9 cm, Metropolitan Museum of Art, <https://www.metmuseum.org/art/collection/search/552041>.

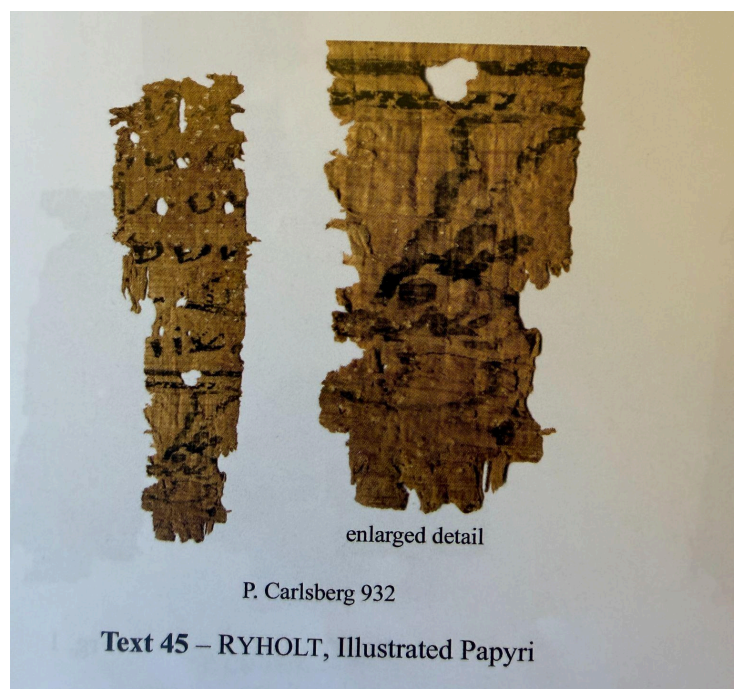


Figure 22. P.Carlsberg 932 (Demotic text and drawing of an antelope), c. 2nd century BCE, black ink on papyrus, The Papyrus Carlsberg Collection. Plate 41 from *P.Carlsb.* XV.

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