18th Dynasty *dipinti* from Gebel el-Silsila (East Bank)

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Abstract:
The current paper serves as the primary publication of a group of 30 dipinti (painted epigraphic documents), including 19 hieratic texts and 11 pictorial images or quarry marks. These were found and recorded within a series of quarries located on the east bank of Gebel el-Silsila. Recently excavated archaeological material places the creation of these quarries chronologically within the 18th dynasty. The texts predominantly consist of dates, but also include signatures and titles. Among them is an exceptional four-lined text from early in the reign of Amenhotep IV. This includes a novel graphical element relevant to the chronological development of Ra-Horakhty-Aton representations. Included in the material is a unique representation of the hippopotamus goddess depicted dressed and holding knives. This can be dated to the 33rd regnal year of Amenhotep III.

Introduction
Since 2012 the Swedish mission led by M. Nilsson and J. Ward (Lund University) has conducted detailed survey and excavations of Gebel el-Silsila including a series of subterranean and collapsed gallery quarries from the 18th dynasty. Among these are the two preserved galleries GeSE.Q11 and Q14, as well as the collapsed gallery and stone workshop Q15 (see topographic overview in fig. 1). The three adjacent quarries are situated in the northern part of the east bank at Gebel el-Silsila and are accessed via a series of ancient pathways meandering through vast spoil heaps. The Nile is located some 300 m to the west.

The epigraphic dipinti documents nos. 1-16, 24, 26-27 were documented during the 2013-2014 fieldwork season, followed by nos. 18, 20-21 in 2016, and nos. 19, 22-23, 25, 28-30 during the 2019 excavation works. Traditional hand-drawn copies were produced in situ, which were combined with...
photographs that were analysed and colour-enhanced using DStretch® software and inverted in Photoshop to produce facsimiles. The vast majority of the documents are poorly preserved, sun-bleached, and damaged by beehives and bat feces, and are almost impossible to see with the naked eye. Each catalogue entry includes information about dimensions (L. – length; W. – width), field number (inv. no.), orientation, state of preservation, original photograph, DStretch® manipulated photograph, facsimile, transcription to hieroglyphs, transliteration, translation, and commentary.

**Quarry 14 (GeSE.Q14)**

Quarry 14 is one of five preserved subterranean galleries on the east bank. Its interior measures approximately 80 x 50 m at its longest and widest. It includes nine ‘rooms’ or extraction chambers and is a massive cathedral-like structure with a sandstone ceiling held up by 11 square pillars, some more than 10 m tall. Its northern section, in which the epigraphic documents nos. 1-17 and 25-27 are situated, was backfilled as the extraction work progressed in a southern direction. It neighbours a Roman quarry, Q12, to the north, and an 18th dynasty collapsed gallery Q15, including its workshops to the south. Q13 is situated on top of its northern partition, followed by a series of rough stone huts to its south-east. To its west are situated enormous spoil heaps created by the extensive quarrying while the Nile river bank is located further down at a distance of approximately 300 m.

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8 Colour Decorrelation Stretching or ‘DStretch®’, see www.dstretch.com. For the methodology and application of DStretch, see for example Evans and Mourad 2018; Gunn et al. 2014.
For the archaeological team, the gallery is commonly referred to as the ‘White Stela Gallery’ due to the presence of a large white stela with iconographic traces of Amarna-like features including a centralized sun disc (fig. 2). Activity during the reigns of Amenhotep III and IV is further indicated by the in situ occurrence of prepared, but not extracted, talatat-blocks.

The quarrying work progress sequence is indicated by a series of drawn parallel horizontal and vertical gridlines on the ceiling (fig. 3a-b), especially in the southern part. These lines guided the ancient workers to the preferred block size and were placed in relation to the natural geological stratification of the stone. The average distance between the horizontal lines is approximately 20 cm, although variations occur and appear to have been caused by the presence of geological features that had to be circumnavigated. Some block-grids were marked with one or two vertical strokes, c. 4-5 cm high, protruding from the lower bar. A few were marked with a dot placed

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10 Klemm and Klemm (2008), pp. 185-186 suggested that this quarry was initially of a Middle Kingdom date based on the presence of ad hoc tool marks. There is, however, no other archaeological or epigraphical support for such a claim, and the quarrying technique referred to is indeed present in all 18th dynasty quarries at Gebel el-Silsila. Based on the archaeological evidence unearthed during smaller excavations within and around the quarry, it is here considered to be of 18th dynasty origin, not earlier.
11 For the extraction indicators, see Nilsson (2015), pp. 91-92 with fig. 15.
12 Cf. Nishimoto et al. (2002), p. 22: “Concerning the short dividing lines observed along the parallel long lines, their purpose is not yet known with certainty. However, one possibility is that they serve as measures for estimating the volume of daily extraction work.”
centrally within the indicated area. The singular mark appears to indicate smaller blocks of *talatat* size, while the double lines show a larger block. Habitually, the lines were drawn in a red/mauve colour, although cream-colored lines were also noted: one cream-colored horizontal line forms the base from which a depiction of a papyrus plant rises (no. 24). In contrast to the quarries of Amenhotep III in Qurna,¹³ none of the gridlines at Gebel el-Silsila are labelled with a date. Dates are instead situated on the horizontal surface, below the ceiling.

Textual documents

All texts in Q14 except for no. 15 are situated in the backfilled northern part, on the vertical quarry faces just below the ceiling (see fig. 4 for spatial distribution). Texts and illustrations/quarry marks were produced with a brush applying local red/mauve iron oxide found within the geological strata of the sandstone (often close to the mud-bed).¹⁴ The irregular sandstone surface with diagonal short tool grooves left by the masons made it difficult for the scribe to produce ‘clean’ hieratic signs; instead they appear distorted and irregular as the scribe’s brush occasionally skipped across the surface.

Fig. 3a-b. Original photo and image processed in DStretch® (YYE Layer) of ceiling grid in Q14. Photo by Maria Nilsson.

¹³ Nishimoto *et al.* (2002).
¹⁴ As noted by the authors and team geologist James A. Harrell.
The texts are generally short, composed in one horizontal line, and provide dates. All dates occur within the period of Akhet I, Day 21, and Akhet II, Day 17. Two dates occur repeatedly: Akhet I, Day 21 (nos. 2, 8, 11) and Day 30 of the same month (nos. 1, 3, 7, 12) (for spatial relation see fig. 5). Nos. 1-3 (and 4) are organized in horizontal sequence from north to south, with a maximum of 30 cm distance between them. However, nos. 1 and 3, both produced during Day 30, are physically separated by no. 2, which was created nine days earlier (if indeed in the same year). A work progress orientation from north to south (or reversed) can thus be dismissed. Instead, it can be assumed that the work progressed from west to east, and that the workers applied a trenching technique in which the central part was removed initially, followed by the excavation of the back and front rows nine days later.
The nine-day chronological relationship is also noticeable in nos. 7-8, and 11-12, equally positioned next to each other. The distance between 7 and 8 is comparable with nos. 1-3, with a maximum 30 cm gap between them, while nos. 11 and 12 are separated by approximately 1 m. Spatially, however, nos. 8 and 12, as well as 7 and 11, correspond linearly across the corridor, perhaps indicating a work progress in this part from south to north.

Nos. 4, 16, and 17 list the name Mery-Re. While nos. 4 and 17 are modest signatures, no. 16 is a somewhat longer text positioned on the lintel above the main south-facing entrance: ‘Scribe of the work of the House of Ptah, Mery-Re. Sandal-bearer Nebamun.’ Their full identities, however, are difficult to determine without further epithets or chronological information.

**Pictorial documents**

Four painted illustrations or pictograms have been recorded within Q14. Nos. 24-25 are located in the southern section, and nos. 26-27 in the northern part. They were equally produced with a brush and paint of similar colour to that of the texts. No. 24 depicts a papyrus plant with six buds and a central flower situated on the ceiling, with its base on a cream-colored indicator line and its buds pointing towards the west. No. 25 shows two intersecting lines, perhaps the two crossed planks of *imi* (Gardiner Z11). The sign is situated just below the ceiling, and was likely an indicator or team mark.

No. 26 is an enigmatic illustration, which at first appears to represent a boat, based on the presence of a triangular feature in the right lower corner that resembles a rudder. A series of descending lines from the lower part could, correspondingly, be intended as oars. The placement of a seated anthropomorphic figure inside the feature’s lower left part, however, positioned as within a room, could be seen not as a person within a cabin, but instead as a figure seated within a quarry/gallery.

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room. As such, the perpendicular lines may represent ropes attached to the quarry (corresponding to physical rope holes found in situ), and the central line may indicate a separating wall between two gallery rooms.

No. 27 shows a horizontal bar topped by a triangle (right) and a semicircle (left), perhaps intended as the \textit{dhv}-hieroglyph (Gardiner N26). Nos. 26-27 are equally positioned in an area without texts and on a mid-low level (eye-level or below).

In addition to the numbered illustrations, a series of 17 drawn perpendicular lines, approximately 7-10 cm long and of unknown date, is located on a flat surface exterior to the quarry. Also, several engraved \textit{was}-scepters were documented in the north-western partition, chiefly situated on surfaces currently exterior to the gallery. Other marks, including obelisks, ankh, and birds, were incised in series or clusters with \textit{was}-sceptres. The present paper focuses on \textit{dipinti}, however, and these marks, as well as later text graffiti (Greek), will be dealt with elsewhere.

\textbf{Quarry 11 (GeSE.Q11)}

The smaller, dynastic quarry Q11 (approximately 40 m x 21 m at its longest and widest) is an underground gallery situated approximately 300 m south-east of the guardian’s house and 325 m east of the Nile. It borders a larger contemporaneous gallery (Q10) to the north and an early Roman quarry (Q12) to the south. It consists of three main quarry faces (N, E, S) and opens up towards the west and south-west. Footprints in the sandstone reveal the use of a traditional step-extraction technique in which a small tunnel was created along the ceiling towards the back of the quarry from which stone was removed progressively, moving towards the entrance. The block sizes are identical to extractions in Q3, 5, 7, 10, 14, 15, 17, and 19, and include examples of \textit{talatat} blocks. These quarries were likely opened up by Amenhotep III and reused by Amenhotep IV based on the combination of epigraphical documents, newly excavated archaeological artefacts, and quarrying techniques.

The recovery of the epigraphic documentation in Q11 was a strenuous task due to poor light conditions, bat and pigeon habitations, and heavy accretion layers of dirt. Despite the circumstances, at least five \textit{dipinti} have been recorded, as well as a shallow inscribed Greek graffito text.

\textbf{Textual document}

On the perpendicular surface facing west, and situated just below the ceiling at the southern part of the entrance, a smoothed surface carrying a black ink hieratic \textit{dipinto} (no. 18) divided into four registers, and with a centrally placed sun-disc adorned with a uræus was found. While lines 1-2 are illegible, lines 3-4 provide the name of the producer, ‘Amenmose’, combined with a cartouche carrying the name ‘Aton’ and followed by the life-prosperity-health formula \(\text{\textasciitilde hnw n zt R^\#-hkw n pr^\#-nh} \) (\textit{nh-wd3-snb}), generally abbreviated as ‘\textit{a.w.s}’ or ‘l.p.h.’ It reads: ‘[[the name of the producer, ‘Amenmose’],[19] combined with a cartouche carrying the name ‘Aton’ and followed by the life-prosperity-health formula \(\text{\textasciitilde hnw n zt R^\#-hkw n pr^\#-nh} \) (\textit{nh-wd3-snb}), generally abbreviated as ‘\textit{a.w.s}’ or ‘l.p.h.’] [to his lord(?)].’

\textit{Cf.} Ranke (1935), p. 29, col. 1, no. 8; Redford and Redford (1989, no. 8 with figs. 90 and 91 refer to a hieroglyphic graffito in wadi Abou Kouâ from the time of Amenhotep IV that lists the name ‘Amenmose’ with the title: \textit{idnw n zt R^\#-hkw n pr^\#-nh} (adjutant of the company “Re, of the Rulers (and?) of the House of Life”).

\textit{Gardiner (1957), pp. 50 and 239.}
Pictorial documents

In addition to the text, five epigraphic documents were found in this gallery. All are situated on the quarry face that opens to the south and comprise four pictorial dipinti and an incised Greek text. The latter is excluded from the current catalogue due to its later date (although it is visible in the facsimile of no. 22).

The first dipinto (no. 20) was painted in red ink with a narrow brush upon a smoothed, triangular surface close to the western entrance. It depicts a barge, possibly with an antelope head, moving away from the quarry and towards the Nile. This type of depiction appears frequently throughout the Middle and New Kingdoms, information which, when combined with the 18th dynasty excavation technique, indicates that the graffito is likely contemporaneous with the quarry.\(^{21}\)

The second dipinto (no. 21) is situated further into the gallery, almost opposite the main inscription (no. 18), and illustrates a horseman or perhaps a man mounted on a donkey. It is produced with red ink and a rather thick brush. Although poorly preserved, the style of the anthropomorph finds parallels throughout the Middle and New Kingdoms.\(^{22}\) The horse/donkey is stylized and outlined, and follows stylistic features characteristic for New Kingdom rupestrian quadrupeds.\(^{23}\) While horses are habitually associated with chariots, there are a few examples of illustrated horsemen, and the act of riding (also of donkeys) during the late 18th dynasty, is hypothesized to represent an early form of a cavalry, perhaps scouts or envoys.\(^{24}\) Military presence during quarry expeditions is a known factor,\(^{25}\) and if the hypothesis is accepted, no. 21 may indeed symbolize one of the men sent to guard and protect the quarry, or alternatively a protective deity on horseback.

The third dipinto was applied using red ink and a narrow brush (no. 22), and although in a terrible state of preservation it appears to show a large barge, illustrated with a mast, sail, and a series of oars (or perhaps a cabin?), moving towards the Nile. Vessels of this type were common during the New Kingdom, which indicates contemporaneity with the quarry.\(^ {26}\)

A fourth dipinto (no. 23) illustrates a quadruped moving out of the quarry, in a similar direction to the boats. No details are preserved other than its outline. To its right are vaguely drawn lines that form a stick-figure anthropomorph, comparable with no. 21. All four dipinti are difficult to see in regular daylight, but the latter two in particular were enhanced significantly by the application of DStretch®.

In addition to the text and pictorial graffiti, parts of the ceiling and the upper part of the perpendicular walls have received linear demarcations, perhaps to indicate block size or an area selection and presumably contemporaneous with, or immediately preceded, the extraction. These were produced with red ink and a brush thickness comparable with the equine illustration.

Quarry 15 (GeSE.Q15)

Quarry 15 is the southern neighbour of Q14 and was originally a subterranean gallery that subsequently collapsed and was reused in parts as an open quarry by the Romans.\(^ {27}\) It stretches out

\(^{21}\) Červíček (1974), pls. XV, XX.

\(^{22}\) E.g. Huyge (2002), pp. 195-196, fig. 2: following the dynastic anthropomorphic styles of Horizons IV and V. For a parallel image, although in much more detail, of a horseman graffito from Wadi el-Hôl, see Darnell (2002), pp. 138-139 with fig. 5.

\(^{23}\) Huyge (2002), pp. 195-196, fig. 2: Horizon V.

\(^{24}\) E.g. Schulmann (1957), listing, but not limited to, pictorial graffiti, an ostracon, a plaque, a relief, and statuettes.

\(^{25}\) See Köpp (2006; 2013) with further references.

\(^{26}\) Červíček (1974), pls. XVIII, XXIV, XXV.

\(^{27}\) Cf. Klemm and Klemm (2008), p. 186 who considered the gallery to have collapsed during the time of Amenhotep III.
over an area of approximately 100 m x 80 m, and includes partially preserved gallery sections in the north, east, and south. Its central part is characterized by a series of architectural and statuary fragments scattered across the ground, combined with two unfinished crio sphinxes recently retrieved from the spoil during excavation works. Its topography includes several blank stelae, a naos (Naos E/F), and a stone workshop that was exposed during recent excavations. The monuments belong to the latter part of the reign of Amenhotep III, and are presumably contemporaneous with Naos A and Stelae B-C, constructed during Year 34-35. To its south, along the plateau, is located the contemporaneous quarry Q18, and below it Q19, also in use during the 18th dynasty based on the combination of extraction techniques and the presence of blue-painted pottery.

The quarrying technique and block size(s) are parallel with extractions in Q3, 5, 7, 10, 11, 14, 17 and 19, and include partially attached talatat and footprints of removed blocks, as well as detached semi-dressed blocks prepared for shipping (fig. 6). Based on the archaeology and epigraphy, Q15 was opened during the end of Amenhotep III’s reign, followed by partial collapse and destruction of the monuments during the reign of Akhenaten. Excavations are still ongoing.

Two paved transportation routes run from the northern and southern parts of Q15 respectively, and connect with a large rock-cut harbour (GeSE.Q26; fig. 7a-b) next to which is situated a series of rectangular structures (GeSE.HC – marked “station” in fig. 1). The 2019 excavations of one

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29 Legrain (1903), pp. 204-212.
31 Legrain (1903), pp. 197-203.
32 E.g. Aston (2011).
of the rooms exposed dozens of 18th dynasty beer jars, several blue-painted ceramic fragments, plates, and other artefacts that together indicate a storage facility or a feeding/drinking station. Preliminary results from the initial excavation (2019) of the mouth of the harbour indicate that it was in use only during the flood season, with the northern part operational at higher water levels and the southern section at lower levels, correlating with the dates listed in Q14 and Q15 (Akhet-season). The harbour allowed for safer loading of the blocks and statuary, as well as a shorter distance of only c. 100 m for transportation over land.

Epigraphic documents

On a perpendicular plinth surface facing west, and situated below the front/entrance of Naos E/F, a red inked scene (no. 28) that depicts a hippopotamus goddess next to a hieratic date (no. 19) was found below two meters of quarry spoil. The goddess is in a standing position, facing right/south. She wears an oval object on her head, perhaps a cone, which encloses seven dots. A crocodile clings to her back. Characteristically, the goddess is illustrated with a large abdomen, and uniquely wears clothing. Two knives appear from her feet. She holds a circular object in her hands although its details are too faded to determine any further details. It can be presumed that the scene was placed so as to decorate the entrance to the subterranean gallery, similar to text no. 15. The overall message communicated is likely associated with protection and this was emphasized by the presence of knives and with an association with the underworld; perhaps an allegorical reference to the adjacent subterranean galleries. The goddess has perhaps here assumed a role comparable with that of Hathor as Lady of the Mountain, and with celestial reference.

Written behind the goddess is a hieratic text (no. 19) that places the scene in Year 33, Akhet IV, Day 27. While the image and text are separated in the catalogue, they are considered associated and composed by the same author. The date is likely referring to the opening of the quarry, approximately one or two years before the monument above (Naos E/F) was completed and during which time the quarry would have had a gallery character instead of the open surfaces that are exposed today. Below the date are located a series of lines that resemble scribbles, perhaps where the scribe tested the brush. However, a few signs appear similar to hieratic, including a male determinative, and perhaps an ankh.

Situated on the same plinth, towards the northern corner of the west-facing side, are two signs. The first (no. 29) reveal the hieroglyphic ms (Gardiner F31), and could possibly be related to the epithet ‘mstn’ given to Taweret in the Speos. The second sign (no. 30) is more enigmatic although it has a stylized and heavily abbreviated form with features reminiscent of the depiction of the hippopotamus goddess. The oval at the top may represent the ‘crown’ or headdress, and the upper horizontal line the snout. The thicker back stroke may represent the pendant crocodile. The front vertical stroke may denote the most characteristic feature of the goddess, the rounded abdomen. If this theory can be accepted, this sign may represent a cursive variant of the divine image, placed there as an indicator of where to produce the scene. However, with no previous hieratic signs of the goddess known, other alternatives should be considered, including that it is the sign A34 (ḥwsf), representing a ‘builder’ or ‘quarryman’.

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34 The plinth originally supported the roof of the subterranean quarry, and Naos E/F sat on top of the roof.
36 For the cone in general, see Stevens et al. (2019). See also the headdress terminus of the hippopotamus represented on the Middle Kingdom ivory apotropaic wand held in the Metropolitan Museum collection (MM 30.8.218
37 Cf. Metropolitan Museum of Art, item MM 30.8.218.
38 An estimated ‘guess’ would be the characteristic sA-sign, which so often accompany Taweret in statuary and illustrated forms.
Fig. 7a-b. Google Earth overview of harbour area, marked with main transportation routes. Courtesy of Google Earth Pro; harbour entrance (during excavation 2019) with the Nile and west bank in the background. Photo by Robert Mittelstaedt.
Records from a transformative period – what can be learned?

The current paper aimed to present a group of 30 *dipinti* found in the 18th dynasty gallery quarries on the east bank of Gebel el-Silsila. The 19 texts predominantly consist of dates (nos. 1-3, 6-14, 19), and all dates listed indicate that quarrying activity took place during the reigns of Amenhotep III and IV and during the first season of the year, *Akhet*, i.e., the flood season. The earliest day listed is *Akhet* I, Day 21, which is recorded thrice in the main gallery (Q14), followed by Day 30 of the same month. From the second month of *Akhet*, Days 10, 11, 14, and 17 occur, and together indicate approximately a month of active work in this quarry if accepting that all documents were produced during the same year. Quarry 15 lists the latest season’s date, *Akhet* IV, Day 27. It is also plausible to suggest a production date during *Akhet* I or II for text no. 18. This would correspond with dates listed on contemporaneous *talatat* blocks found in the II and IX pylons at Karnak, currently stored in the Khonsu magazine.40 One of the plausible causes for extraction work to take place during the summer months is that the flooding allowed the Nile to reach and fill the rock-cut harbour that is situated approximately 100 m to the west of Q15. This would minimize the heavy and perilous labour of transporting the blocks from the quarry/quarries to awaiting cargo barges.

In addition to dates, the texts include a few signatures and titles that belong to individuals active on site during this period. These include ‘Mery-Re’ (nos. 4, 16-17), ‘Nebamun’ (no. 16), and ‘Amenmose’ (no. 18), and the professions of a ‘scribe’ (no. 4), ‘scribe of the work of the House of Ptah’ (no. 16), ‘sandal bearer’ (no. 16), and ‘chief of […]’ (no. 18). The name of Aton appears in a short form in no. 18.

No. 18 is an exceptional four-line ‘opening of the quarry’ text from the early reign of Amenhotep IV that requires a brief discussion on temporal considerations. The appearance of the sun-disc (i.e. Aton) adorned with a uræus, combined with the mentioning of ‘Aton’ within a cartouche, is a stylistic indicator of when the inscription was produced. This is based on a relative chronology of stylistic developments showing how the name and iconography of Ra-Horakhty evolved into Aton during the first five years of the reign of Amenhotep IV (prior to changing his name to Akhenaton).41 Some of the characteristic images and texts include a date and thus act as stylistic chronological markers for those without. It should be noted, however, that 1) different forms could be used together or simultaneously (when an older style was still ‘tolerated’ contemporaneously with the introduction of a new); 2) there may be a temporal delay in the application of phases in parts of the kingdom, especially in rural areas such as Gebel el-Silsila; and 3) it is questionable if minor and private sources (e.g. dockets, but also graffiti) follow the same phases of evolution as official monuments.

Amenhotep IV ascended the throne at the beginning of the first month of *Peret*-season, probably Day 2 (*Peret* I, Day 2),43 when the wine harvest was almost at its end.44 From the start of his reign, the sun-god Ra-Horakhty was always prominent. Initially, the god was textually known as ‘Ra-

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40 Among them, inv. no. ARCE 090 411 B. We would like to thank Jacquelyn Williamson for discussing with us preliminary results during the ARCE 68th annual meeting, which were presented with Marc Gabolde as ‘Hieratic Inscriptions on Talatat and Other Blocks from the Khonsu Magazine at Karnak’. See also Lopez 1987.
42 Redford (1976), pp. 47-61; Laboury (2010), pp. 55. Block Berlin 2072 depicts Ra-Horakhty and Behedety, whose aspects were later combined to form the image of ‘Aton’.
Horakhty, great god, lord of heaven. The division of the epithets developed in or before Year 3, when the god’s name was written as ‘(long live) Ra-Horakhty (who rejoices in the horizon) in his name of Shu, who is in the Aton’. This long ‘didactic name’ of Ra-Horakhty would later become the official name of the Aton. The northern stela of Amenhotep IV at Gebel el-Silsila (fig. 8) was produced during this early period, and the site’s sandstone blocks were used to construct the ‘great Benben-temple of Ra-Horakhty in his name of Shu, who is in the Aton in Ipet-Sut (Karnak)’.

Some of the wine dockets found in Amarna date to the early part of Year 4 and are inscribed with the name of the god as ‘Ra-Horakhty’ in its short form without a cartouche. Shortly thereafter, the name was developed into a longer form, in which the god’s name, Ra-Horakhty/Aton, was written within a cartouche(s). Simultaneously, the short form changed from ‘Ra-Horakhty’ (without cartouche) to ‘Aton’ (in a cartouche), and ‘Ra-Horakhty’ does not appear on dockets after Year 5.

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46 Carter no. 281 / JE62705: a scarf dating to Year 3, found in the tomb of Tutankhamen, see http://www.griffith.ox.ac.uk/gri/carter/281a-c281a-3.html.
47 Legrain (1902), pp. 259-266. The part ‘who rejoices in the horizon’ is not included.
48 Pendlebury (1951), pl. 86, no. 44; Petrie (1894), pl. 25, no. 91.
49 This name form is known from a linen scarf from the tomb of Tutankhamen, dated to Shemu II, halfway through regnal Year 4; see Carter no. 281 (JE62703), http://www.griffith.ox.ac.uk/gri/carter/281a-c281a-3.html; Laboury (2010), p. 129, pl. V-1.
50 Pendlebury (1951), pls. 94, no. 218 and 86, nos. 45-46.
The iconography of Ra-Horakhty remained consistent during Year 3 and consisted of a falcon-headed anthropomorphic figure crowned with a sun-disc and adorned with a ureaus. In Year 4, while the god’s name developed, the image remained unaltered, for which images of the anthropomorphic form can be seen next to the long epithet of Aton written in cartouches. Towards the end of Year 4, however, during Akhet III, Day 11, the High-Priest of Amon produced graffiti in Wadi Hammamat during a quarry expedition(s). One of these graffiti, plausibly contemporaneous, demonstrates the relinquishment of the deity’s anthropomorphic form as it is replaced with a sun-disc with two uraei illustrated with descending rays. The sun-disc protects cartouches that appear to be those of Amenhotep IV and Nefertiti. A similar image of the sun-disc (although without the uraei) was found in the Eastern Desert, next to which is situated the name of Amenhotep IV (two cartouches were erased, presumably holding the king’s second cartouche, and the name of Nefertiti). Thus, it can be concluded that during the end of Year 4, the iconography of the god had developed from its original anthropomorphic form to a sun-disc with descending arms. The presence of one or several uraei appears to be a feature that was still in development.

Prior to reaching its fully developed Amarna style, and while the king was still referred to as Amenhotep IV, the now non-anthropomorphic deity was textually described with its long name ‘Ra-Horakhty/Aton’ placed without cartouches. This phase marks the final transition period, and is preserved in an Amarna-influenced balcony-scene in vizier Ramose’s tomb in Thebes. Finally, in Year 5, Peret IV, Day 13, the king was referred to as ‘Akhenaten’ when declaring in his ‘Early Proclamation’, the building of the new capital ‘Akhetaten’. This speech was incised on boundary stelae that encircled the city and they show the fully developed Amarna-style and iconography.

It is evident from the examples listed above that one stylistic phase could replace another within a few months, and were sometimes separated by only a few minor details. The current text and image, no. 18, displays the name of the god written as ‘Aton’ within a cartouche and followed by the l.p.h.-formula, and is combined with a sun-disc adorned with a ureaus. Without any direct parallels, it is likely that no. 18 represents yet another intermediate phase to be dated prior to the final addition of rays and life-giving hands to the disc (terminus ante quem in Year 5, Peret IV, Day 13). This would place no. 18 in close temporal connection with the Wadi Hammamat inscription from Year 4, Akhet III, Day 11, in which the sun-disc is illustrated with the uraei. In no. 18, however, the sun-disc remains in the form of the crowning element on the falcon-headed Ra-Horakhty, and was likely a less developed concept of the Aton iconography. Thus, no. 18 plausibly predates the Wadi Hammamat inscription, and was made prior to the introduction of the life-giving arms as part of

51 Redford (1976), p. 54 suggests that the name of the anthropomorphic form was never written in cartouches and that the cartouches instead were later (Year 4) additions to older (pre-Year 4) buildings. Laboury (2010), pp. 124 (figs. 3-12), 130, disputes this based on the existence of talatat found with the image of the anthropomorphic form of Ra-Horakhty with the long divine name written in cartouches. No other form of the god’s name is mentioned. If Redford is right, it would mean that these talatat were derived from a building dedicated to an anonymous falcon-headed god. Indeed, there are examples in which the name of the Aton placed within cartouches was added to earlier constructions, but it does not explain the joint appearances of the anthropomorphic form and the encircled name of Aton, which indicates contemporaneity. Therefore, when the encircled ‘long’ name of Aton appeared (in the first half of Year 4), the iconography of the god was still as an anthropomorph.

52 Goyon (1957), pp. 106-107, pl. 25.

53 Couyat and Montet (1912), p. 69, pl. 23. The cartouche of Nefertiti is recognizable due to the straight feathers on top, which are different from the plumes crowning the cartouches of the king. The graffito was later covered by an image of Seti I, during which the artist reused the sun-disc and superimposed the cartouches with images of flowers. It is possible that Seti added the uraei to the sun-disc as it was a common feature in Seti’s iconography, but they were more likely part of the original graffiti as demonstrated in contemporaneous depictions of Behedety from the early reign of Amenhotep IV.

54 Redford and Redford (1989), pp. 3-49, no. 6; 44-46, figs. 87-88.

55 Davies (1941), pls. 23, 29.

56 Murnane and van Siclen III (1993), p. 35. The production date for the boundary stelae, following the ‘Early Proclamation’, is still debated.
the Ra-Horakhty/Aton iconography, i.e. prior to Year 4, Akhet III, Day 11. While chronological overlaps cannot be ruled out especially in terms of private documents placed in a remote, rural landscape, the relative chronological framework for no. 18 (during the last half of Year 4) correlates with the prime quarrying months evidenced at Gebel el-Silsila by nos. 1-3, 6-14, 19.

In terms of the graphical representations published herein, the discussion of the hippopotamus scene deserves some further elaboration. Based on Taweret’s prominent role on the west bank and her role as the spouse of Sobek Lord of Kheny this would appear to be the obvious identification of the scene. In support of such a claim is the presence of a circular handheld object with no indications of appending perpendicular elements, i.e. it is not a š3-sign nor a mooring post. It may in fact be a water vessel which would indicate an association with Taweret’s role at Gebel el-Silsila; with the ‘pure waters’ and the inundation. Reference to the flooding season is also provided by the associated hieratic text (no. 19: Akhet IV).

Taweret, as the goddess of daylight, is, however, rarely depicted with knives, and the presence of a crocodile clinging to her back indicates a celestial role. Iconographical parallels can be found in astronomical diagrams. The seven dots inside the cylindrical headdress were perhaps intended as stars, corresponding to the seven stars depicted on the hippopotamus-crocodile figures in astronomical charts on the tomb ceilings of Seti I and Pademenope. Based on this, an association with the night sky is advocated here, and the celestial reference may denote the hippopotamus’s dominant role in the northern constellation of circumpolar stars. The illustration, its orientation towards the south, and the allegorical reference to the underworld may also play on an Osirian theme in which the hippopotamus represents the northern constellations and the gallery, the southern constellations.

The wider archaeological context must also be considered. This includes Naos E/F and two crisosphinxes. In its original form, Naos E/F was a small, albeit complete, sanctuary. Its façade consists of a pylon decorated with two stelae on which the king presents offerings to Amun. On its sides vizier Amenhotep is seen adoring the cartouches of the divine king, emphasizing the personal worship of the solarized manifestation of Amenhotep III. Crowning the monument stood a centrally positioned falcon-statue flanked by two obelisks. If reading the two obelisks as a joint symbol for the horizon and the throne of Re-Horakhty and the divine (statuary) falcon as the deified Amenhotep III, then the hippopotamus’ role becomes clearer. Her presence can be understood as associated with the birth of both the sun and the king, and her image perhaps commemorates the divinization process itself; the transmission of Amenhotep III’s royal ka which in the horizon takes the form of ‘Neb-maat-Re-is the dazzling sun-disc’. The goddess’ association with the birth of the sun and the king, and with the horizon, and depicted carrying knives, resonates with the description found on a statue in the Louvre (accession number E25479):

57 E.g. Thiem (2000), 133, 158, 240, 317, 327, 336; KRI II, 851, 16; LD III 120c, 175c.
58 KRI IV, 91, 15.
60 E.g. Lull and Belmonte (2009), p. 167, Figure 6.4, p. 168, Figure 6.7.
64 Billing et al (forthcoming); Legrain (1903), pp. 205-209.
65 For Ipet’s association with the birth of the sun and the king, see Graves-Brown (2018), pp. 42-43.
66 For the deification of Amenhotep III and his divine titulary, see Johnson (1996).
‘I am Taweret, the power who fights for what belongs… I am Reret who attacks with her voice and who devours… I am Ipet who lives in the horizon and protects the knife and the universal master, the mistress who fears, one whose appearance is adorned and decapitates those rebels against him.”

As a protector of the sun and the king, positioned below a monument in which the horizon is manifested, holding knives and associated with the northern constellations, the hippopotamus goddess depicted at Gebel el-Silsila was most likely intended to be Ipet.

The divinization theme is likely also manifested by the criosphinxes, which were for example also produced in their dozens to line and symbolically protect the avenue between Karnak and Luxor Temple. The measurements and statuary details of the roughly dressed criosphinxes found at Gebel el-Silsila correspond with the sculptures currently situated to the south of the Temple of Khonsu at Karnak. If indeed the southern avenue was the intended destination for the statues, the combination of Ipet, the divine transmission of the royal ka, and the criosphinxes may be related to quarry work for Amenhotep III’s Opet-festival. The unusual way in which Ipet is clothed recalls the jubilee robe introduced during the reign of Amenhotep III. The temporal difference between the production of the dipinto and the completion of the naos above also indicates one or two years of quarry work progress, correlating with the repetition of the Heb-Sed in Year 34. If so, Q15 could be understood as the source of materials for the Festival Hall at Malkata. Continued excavations will hopefully contribute information for a more secure conclusion in the future.

Despite its simplicity in comparison with motifs on the architectural monument erected above, the Ipet scene provides deeper understanding of the overall significance of the entire area. This demonstrates how a single graffito can help with detailed chronological issues, which in turn helps to locate the entire operation within a much broader historical context.

Abbreviations


Bibliography


68 For the various names of the hippopotamus goddess, see Leitz (2002), pp. 218-220.

69 For a discussion regarding Amenhotep III sandstone blocks and sphinxes at the Temple of Khonsu, and the possibility that they derived from the mortuary temple on the west bank, see Arnold (1999), p. 30; Epigraphic Survey (1979), p. xvi.

70 E.g. Darnell (2010), esp. p. 6.

71 E.g. MMA 30.8.74.

72 Hayes (1951), p. 36 with n. 10, including reference to sandstone fragments.

73 This would favour the west bank as the origin for the criosphinxes and sandstone blocks bearing Heb-Sed scenes currently in and outside of the Temple of Khonsu at Karnak.
JAEA 5, 2021

18th Dynasty dipinti from Gebel el-Silsila (East Bank)


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http://www.griffith.ox.ac.uk/gri/carter/281a-c281a-3.html

Catalogue
No. 1

Measurements: 9 x 23 cm

Inv. no.: GeSE.Q14.In.1

Orientation: situated on west-facing quarry face, next to no. 2

State of preservation: in general well preserved, last sign somewhat faded

Commentary: Cf. nos. 3, 7 and 12.

First month of Akhet, day 30
No. 2

**Measurements:** 9 x 26 cm

**Inv. no.:** GeSE.Q14.In.2

**Orientation:** situated on west-facing quarry face, between nos. 1 and 3

**State of preservation:** in general well preserved, central signs somewhat faded

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3bd 1 3ḥt sw 21
First month of Akhet, day 21

**Commentary:** Cf. nos. 8 and 11
No. 3

*Measurements:* 7 x 12 cm

*Inv. no.:* GeSE.Q14.In.20

*Orientation:* situated on west-facing quarry face, between nos. 2 and 4

*State of preservation:* poorly preserved, especially latter part is very faded

\[\text{Abd 1 Axt arqwy}\]

First month of Akhet, day 30

*Commentary:* Cf. nos. 1, 7, 12
No. 4

*Measurements:* 9 x 26 cm

*Inv. no.:* GeSE.Q14.In.3

*Orientation:* situated on west-facing quarry face, next to no. 3

*State of preservation:* very faded, barely visible

[... ir.n sš Mry (-R₆)]

[...] made by scribe Mery (-Ra)

*Commentary:* Cf. nos. 16 and 17
No. 5

*Measurements:* N/A (only the first sign is preserved)

*Inv. no.:* GeSE.Q14.In.23

*Orientation:* situated on north-facing quarry face

*State of preservation:* very poor and faded, only partially legible

Illegible
No. 6

*Measurements:* 9 x 26 cm  
*Inv. no.:* GeSE.Q14.In.4  
*Orientation:* situated on east-facing quarry face, next to no. 7  
*State of preservation:* in general well preserved, some details damaged by beehive

3ḥd 2 śḥt sw 11  
Second month of Akhet, day 11
No. 7

Measurements: 9 x 21 cm

Inv. no.: GeSE.Q14.In.10

Orientation: situated on east-facing quarry face, between nos. 6 and 8

State of preservation: in general well preserved, central signs somewhat faded

3bd I 3ht  earkyw

First month of Akhet, day 30

Commentary: See also nos. 1, 3 and 12
No. 8

*Measurements:* 9 x 22 cm

*Inv. no.:* GeSE.Q14.In.6

*Orientation:* situated on east-facing quarry face, between nos. 7 and 9

*State of preservation:* in general well preserved, first sign somewhat damaged by beehives

*Cf. nos. 2 and 11*
No. 9

Measurements: 9 x 21 cm
Inv. no.: GeSE.Q14.In.7
Orientation: situated on east-facing quarry face, next to no. 8
State of preservation: in general preserved, central signs somewhat faded

3bd 2 3ht sw 17 […]
Second month of Akhet, day 17 […]
No. 10

*Measurements:* 7 x 9 cm  
*Inv. no.:* GeSE.Q14.In.5  
*Orientation:* situated on north-facing quarry face  
*State of preservation:* first sign is well preserved, followed by signs damaged by tool marks

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3bd 2 3ḥt
Second month of Akhet

*Commentary:* No day-sign.
No. 11

Measurements: 9 x 18 cm

Inv. no.: GeSE.Q14.In.8

Orientation: situated on west-facing quarry face, next to no. 12

State of preservation: in general well preserved, although somewhat faded

3bd l 3ht sw 21

First month of Akhet, day 21

Commentary: Cf. nos. 2 and 8
No. 12

Measurements: 9 x 20 cm
Inv. no.: GeSE.Q14.In.9
Orientation: situated on west-facing quarry face, between nos. 11 and 13
State of preservation: poorly preserved, damaged by a beehive

Commentary: Cf. nos. 1, 3 and 7
No. 13

*Measurements:* 9 x 20 cm

*Inv. no.:* GeSE.Q14.In.11

*Orientation:* situated in the corner on west-facing quarry face, next to no. 12

*State of preservation:* poorly preserved

"abd 2 ḫt sw 14"

Second month of Akhet, day 14
No. 14

*Measurements:* 9 x 23 cm

*Inv. no.:* GeSE.Q14.In.12

*Orientation:* situated on east-facing quarry face

*State of preservation:* in general well preserved, central signs somewhat faded

\[ \text{\textit{ḥd 2 ħt sw 10}} \]

Second month of Akhet, day 10
No. 15

Measurements: 9 x 16 cm

Inv. no.: GeSE.Q14.In.16

Orientation: situated on north-facing quarry face

State of preservation: poorly preserved

Illegible
No. 16

Measurements: 13 x 39 cm

Inv. no.: GeSE.Q14.In.13

Orientation: situated on south-facing ‘lintle’ quarry face above the entrance, to the left of no. 16

State of preservation: very faded, barely visible

1. sšt3 k3w(t) pr Pth Mry-rε
2. tbw Nb-imn

1. Scribe of the work of the House of Ptah, Mery-Re
2. Sandal-bearer Nebamun

Commentary: Cf. nos. 4 and 17.
No. 17

*Measurements:* 9 x 26 cm

*Inv. no.:* GeSE.Q14.In.14

*Orientation:* situated on south-facing quarry face above the entrance, to the right of no. 16

*State of preservation:* faded

*Mry-Ra

*Mery-Re

*Commentary:* Cf. nos. 4 and 16
No. 18

*Measurements:* 18 x 34 cm

*Inv. no.:* GeSE.Q11.In.1

*Orientation:* situated on north (N-W)-facing quarry face at the gallery entrance

*State of preservation:* poorly preserved, L1-2 barely visible

1. .......... 
2. .......... 
3. .......... *lr.n ḫry* ..........
4. *Itn*. w.s. *Imn-msw p3 3h? [(r) nb=f?] 

1-4. [(praise or an building/quarry-activity?)] done by the chief [… of the temple of?] Aton l.p.h. Amenmose, the one who is useful? [to his lord?].

*Commentary:* The surface has been prepared to receive the inscription by applying a series of consecutive broad chisel strikes horizontally, creating a sunken appearance. Similar to the other texts, however, the surface was never smoothed, and some tool marks prevented the continuity of the brush strokes, resulting in irregular signs.
No. 19

**Measurements:** text inscription: 21 (max) x 67 cm; complete scene: 132 x 126 cm.

**Inv. no.:** GeSE.Q15.In.1

**Orientation:** situated on west-facing plinth-surface, below Naos E/F, next to hippopotamus.

**State of preservation:** the text is well preserved.

Commentary: Below the hieratic text several intersecting vertical and diagonal lines are situated, some with features similar to cursive script, although currently illegible.
No. 20

*Measurements*: 4.5 x 14 cm

*Inv. no.*: GeSE.Q11.P1

*Orientation*: situated on perpendicular west-facing quarry face, oriented westwards, out of the quarry

*State of preservation*: faded

![Image of dipinti from Gebel el-Silsila (East Bank)](image-url)
No. 21

Measurements: 20 x 21.5 cm

Inv. no.: GeSE.Q11.P2

Orientation: situated on perpendicular west-facing quarry face, oriented eastwards, towards the back part of the quarry

State of preservation: well preserved, although covered with bat feces
No. 22

Measurements: 64 x 83 cm

Inv. no.: GeSE.Q11.P3

Orientation: situated on perpendicular west-facing quarry face, oriented westwards, out of the quarry

State of preservation: very faded, covered with bat feces
No. 23

*Measurements:* 12 x 32 cm

*Inv. no.:* GeSE.Q11.P4

*Orientation:* situated on perpendicular west-facing quarry face, oriented westwards, out of the quarry

*State of preservation:* very faded, covered with bat feces
No. 24

Measurements: c. 22 x 28 cm

Inv. no.: GeSE.Q14.P1

Orientation: situated on ceiling, oriented downwards, blooms directed westwards, out of the quarry

State of preservation: well preserved

No. 25

*Measurements:* c. 12 x 9 cm

*Inv. no.:* GeSE.Q14.P4

*Orientation:* situated on perpendicular west-facing quarry face, above the white-painted stela

*State of preservation:* very faded, covered with bat feces
No. 26

*Measurements:* 25 x 49 cm

*Inv. no.:* GeSE.Q14.P2

*Orientation:* situated on perpendicular east-facing quarry face

*State of preservation:* very faded
No. 27

*Measurements:* 14 x 34 cm
*Inv. no.:* GeSE.Q14.P3
*Orientation:* situated on perpendicular west-facing quarry face, oriented westwards, out of the quarry
*State of preservation:* very faded, covered with bat feces
No. 28

*Measurements:* 114 x 74 cm

*Inv. no.:* GeSE.Q15.P1

*Orientation:* situated on perpendicular west-facing quarry face, oriented westwards, out of the quarry

*State of preservation:* generally well preserved, although faded in parts, especially in the area of the hands/handheld object

No. 29

Measurements: 16 x 6 cm

Inv. no.: GeSE.Q15.P2

Orientation: situated on perpendicular west-facing quarry face

State of preservation: very faded, fragmentary
No. 30

Measurements: 14 x 9 cm

Inv. no.: GeSE.Q15.P3

Orientation: situated on perpendicular (south-)west-facing quarry face, oriented southwards

State of preservation: faded