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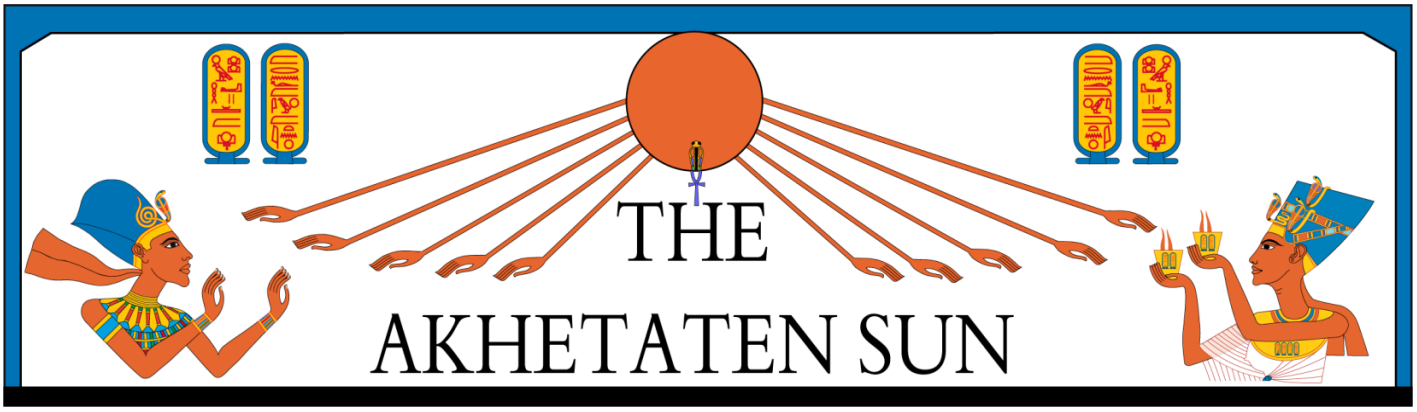

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Officers and Directors

The President's Papyrus

Greetings Amarnaphiles,

Well, 2022 has arrived with all the uncertainty that has evolved with the Pandemic and, yet the Sun continues to go forth thanks to your unwavering support.

I think that you will enjoy this edition very much. We are very pleased to introduce two new scholars, Briana C. Jackson and Fabien Balestra, who have submitted articles about their work. Also, we are treated to another wonderful instalment of "The Royal Court of Amana" by very own David Pepper, along with another report of continuing work at Amarna by world famous Egyptologist and TARF beneficiary, Barry Kemp.

Speaking of which, by your support of TARF you are helping to support the work of Barry Kemp, undoubtedly the world's leading authority on the Amana period. In case you did not know he was honored a few years ago by Queen Elizebeth for his lifetime of work at Amarna and his exceptional contribution to Egyptology.

So, if you have friends who are interested in Egypt and not members of TARF, be sure to tell them what we do, and the world class quality and scholarship of the TARF newsletter. Please spread the word, and thanks again for your loyal support!.

With best wishes always and be safe,
Floyd

A Summary Examination of Akhenaten's Widespread Aten Temple Program

Briana C. Jackson, Pratt Institute

In the scholarly sphere and in the mainstream, Amarna Period studies, specifically those concerning the reign of Akhenaten, have often been removed from the context of ancient Egyptian history except for the occasions where it is interpreted through a comparative lens, that is interpreting the events and rulers of that time period by how they differ from others. Namely, this comparative lens is from the perspective of early 19th Dynasty kings, Seti I and Rameses II, but sometimes also Amenhotep III when there is a preference for disregarding his influence on Amarna Period innovations.

Furthermore, studies on this time period are also geographically focused on two sites, Thebes and Amarna. Sometimes, Akhenaten's decision to found and move to a new capital is presented with some degree of dramatic alarm, never mind that Ramesses II did similarly. A strong geographic focus on the site of Amarna (Fig. 1) is valid because there is much still to be studied and excavated and understood. There is no paucity of material to study. However, this focus also gives the illusion that Akhenaten was not active in any other site in Egypt or beyond.

Figure 1: *Panorama of Amarna, view from the Tomb of Ahmes. Photo by Briana C. Jackson.*

The illusion that is often presented in mainstream examinations, and sometimes in scholarship, is that Akhenaten ensconced himself in Amarna and had lost interest in the world outside his new city. This would indeed have made him a poor ruler, especially compared to successful and active ones like Amenhotep III and Ramesses II. But abundant evidence shows that Akhenaten was active throughout Egypt and Sudan. Most of this activity was in the format of constructing temples, most of them dedicated to his god Aten, but also there is a recorded instance of a major battle against Nubian insurgents.

This article shall primarily address the topic of my dissertation that examined the spread of Aten cult throughout Egypt and Sudan, and across the social strata, during the reign of Akhenaten. This study is not the first to catalog Amarna Period artifacts found in Egypt and Sudan, as there have been site-specific catalogs as well as general surveys [1], however it is the first that systematically and comprehensively examines

in detail the archaeology indicating Aten worship at several sites. I do not focus only on talatat blocks, but also include other architectural monuments, stelae, and small finds like amulets and jewelry.

Of course, this creates a rather dense investigation, but it shows the ways in which Atenism was practiced at a given site, and how it relates or differs to/from the practice of Atenism at Amarna. For example, Atenism at Nubian sites may have differed from the standardized version of Atenism practiced in Egypt because it served a different demographic as well as was probably overseen by the Viceroy of Kush rather than the king. Practice of Atenism may have been nuanced at provincial sites like Abydos where Osiris may have been worshipped simultaneously with the Aten. Temples of Re and Ptah continued to function during the Amarna Period at the major religious and administrative cities Heliopolis and Memphis, and may also have incorporated Atenism in a way that differed from practice at Thebes and Amarna.

One of the major themes of my study was not only to present a detailed survey of the presence of Atenist practices, but also to examine whether the various sites were somehow interconnected as a religious network. My corpus of material used to test this hypothesis was collected based on temple and other cult building names that were applied to buildings at several sites and that matched with named buildings at Amarna. Figures 14 and 15 show the names of the cult buildings I collected and which have identical names to buildings constructed at Amarna. The concept of a network has been examined recently by other scholars such as Josef Wegner, who proposed a network of religious buildings between Amarna and Heliopolis [2], and Ben Haring who proposed a network among all the cult buildings in Thebes that were dedicated to Amun [3]. However, I attempt to I approach this concept much more intensively and apply it to the analysis of my material in a broad and comprehensive way.

Another theme is my suggestion that Akhenaten did not implement an imperialist program by adding Aten temples to cult sites already dedicated to other deities, namely cult sites for creator or regenerative gods. Rather, Akhenaten possibly incorporated traditional worship of such creator/regenerative gods within Atenism, and in this way the Aten's creative powers could be enhanced through assimilation with other creator gods. Worship of specific creator gods might not have only been accepted, but perhaps even encouraged, specifically in the case of Re, Ptah, Atum, Osiris, and perhaps even Min.

Following Timothy Kendall's proposal that the Aten's mythological origins were believed to have been established in Nubia, namely Gebel Barkal [4], my study begins with an examination of monuments erected or modified by Akhenaten at several sites in Nubia (Fig. 2). First, I take a brief look at the last ten years of Amenhotep III's reign when he had deified himself as both a solar god with the epithet Dazzling Sun-Disc and a moon god with the name Nebmaatre, Lord of Nubia. Amenhotep III built a temple dedicated to this latter god at Soleb, and its artistic program highlighted the sed-festival celebrated in Amenhotep III's 30th regnal year [5]. Akhenaten contributed to the artistic program of the Soleb temple, even returning his attention to the temple in

his regnal year 5 or later to have the name and images of Amun erased and to replace his own name Amenhotep with Akhenaten. Year 5 is the year generally accepted as the beginning of the Amun erasure program.

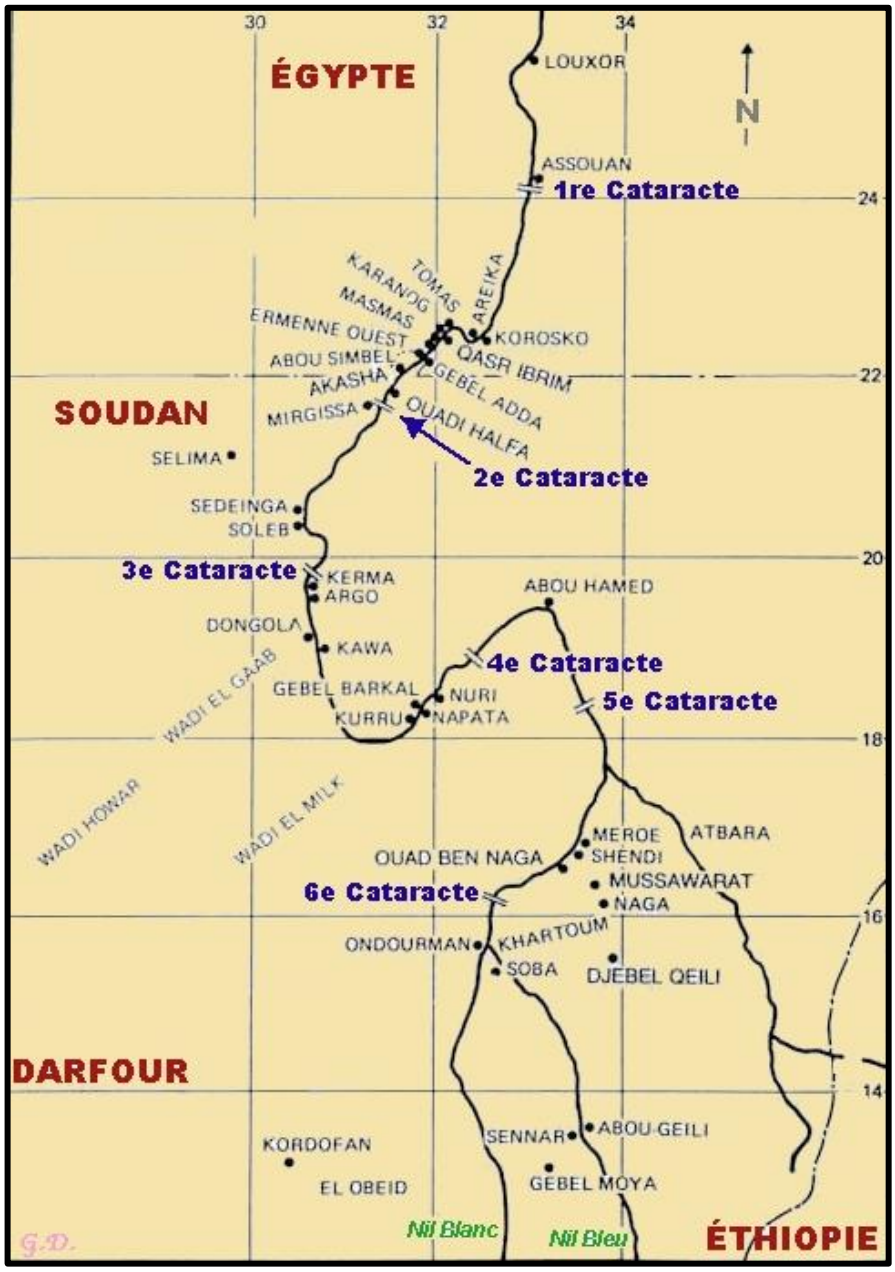

Figure 2: *Map of ancient Nubia. Wikimedia Creative Commons CC BY-SA 2.5. Map by Gérard Ducher.*

Akhenaten had two other temples built at Sesebi, a site just south of Soleb and a bit north of the 3rd cataract. One of the temples was later usurped by Seti I. Furthermore, Akhenaten usurped temples (possibly two) at the site Dokki Gel, near Kerma; several talatat had been discovered there. [6] The site Kawa was originally called Gm-(pA)-Aten, the name of Akhenaten's earliest Aten temple at Thebes and probably the name of the Great Aten Temple at Amarna [7]. This ancient name for Kawa, which archaeologists had first attributed to Gebel Barkal, continued to be used through the Napatan period.

Figure 3: *Map of ancient Egypt. Wikimedia Creative Commons CC BY-SA 4.0. Map by Jeff Dahl.*

It seems plausible that Kawa was founded by Akhenaten, but currently the temple built there has so far been attributed to Tutankhamun at the earliest. However, a stela discovered there mentions the name or epithet "Sehetep-Aten", further indicating ties to Aten cult, and possibly Akhenaten himself.

Gebel Barkal has considerable archaeological remains confirming that Aten cult buildings were constructed there [8]. The major Aten temple, B-500, comprised of

undecorated talatat, had been built on the site of an earlier temple built by Thutmose IV. Some smaller chapels were built in the vicinity, and their talatat appear to have been decorated and reused during Tutankhamun's reign for a chapel erected by Tutankhamun's Viceroy of Kush [9]. The Aten cult buildings date to the earliest years of Akhenaten's reign, but it is not clear whether they had been used throughout his reign.

Two stelae found at Buhen and Amada detail a large battle that took place in Nubia in Akhenaten's regnal year 12, [10] and which was led by his Viceroy of Kush, Thutmose, indicating that at least some sites in Nubia were still occupied at this time. However, determining which Aten temple sites, whether some or all, in Nubia remained inhabited during the later years of Akhenaten's reign is not currently possible.

The sites in Egypt that I investigated are naturally Thebes and Amarna, but also major administrative and religious sites Heliopolis and Memphis, the northeastern peripheral site Tell el-Borg/Tjaru, and southern provincial sites Assyut, Akhmim, and Abydos (Fig. 3). The amount of data collected from these sites is enormous, and so only some will be highlighted here, particularly that which is inscribed with the name of a temple or associated cult building.

The existence of Aten temples at both Heliopolis and Memphis are indisputable, evidenced by extant inscriptions specifically stating that Aten temples were constructed at these sites. The temple precincts at both sites were each called Pr-Itn (House of Aten) with the site specifiers Mn-Nfr (Memphis) and Iwnw (Heliopolis). However, there is also archaeological evidence suggesting other buildings associated with Aten cult were constructed at these sites. Figures 4 and 5 present my proposed layout of the cult buildings at Memphis and Heliopolis. In my analysis, I determined Pr-Itn to be a precinct or enclosure, as opposed to a temple, because evidence indicates a Pr-Itn often consisted of multiple buildings nested within it. Therefore, henceforth, use of Pr-Itn is to be understood as a temple precinct or enclosure.

The Pr-Itn at Heliopolis accompanied a Pr-Ra, likely another temple precinct or enclosure, which might have been composed of a temple called WTs-Ra-m-Iwnw-n-Ra together with a colossal stela (Fig. 6), a statue of Meritaten, and possibly sunshade chapels for both Meritaten and Meketaten. The Pr-Itn at Heliopolis, along with its constituent buildings, are referenced in the titles of an official named May, whose tomb is found at Amarna. His titles include: Overseer of Pr-n-sHtp-Itn; overseer of pr-n-Wa-n-Ra in Heliopolis, and overseer of cattle in Pr-Ra in Heliopolis [11]. The Pr-n-sHtp-Itn does not include the site specifier "Heliopolis", but, considering the other two buildings being specifically situated in Heliopolis, it can be argued that the Pr-n-sHtp-Itn also existed in Heliopolis. Moreover, a block that was discovered in Heliopolis and which belonged to a sunshade dedicated to Meritaten bears inscriptions that situate the sunshade within a Pr-Wa-n-Ra in Akhet-Aten (Amarna). The debate surrounding this block is that 1.) it was transported there from Amarna for reuse, or 2.) the sunshade was erected at Heliopolis and merely references Amarna because that was the primary cult site of Aten.

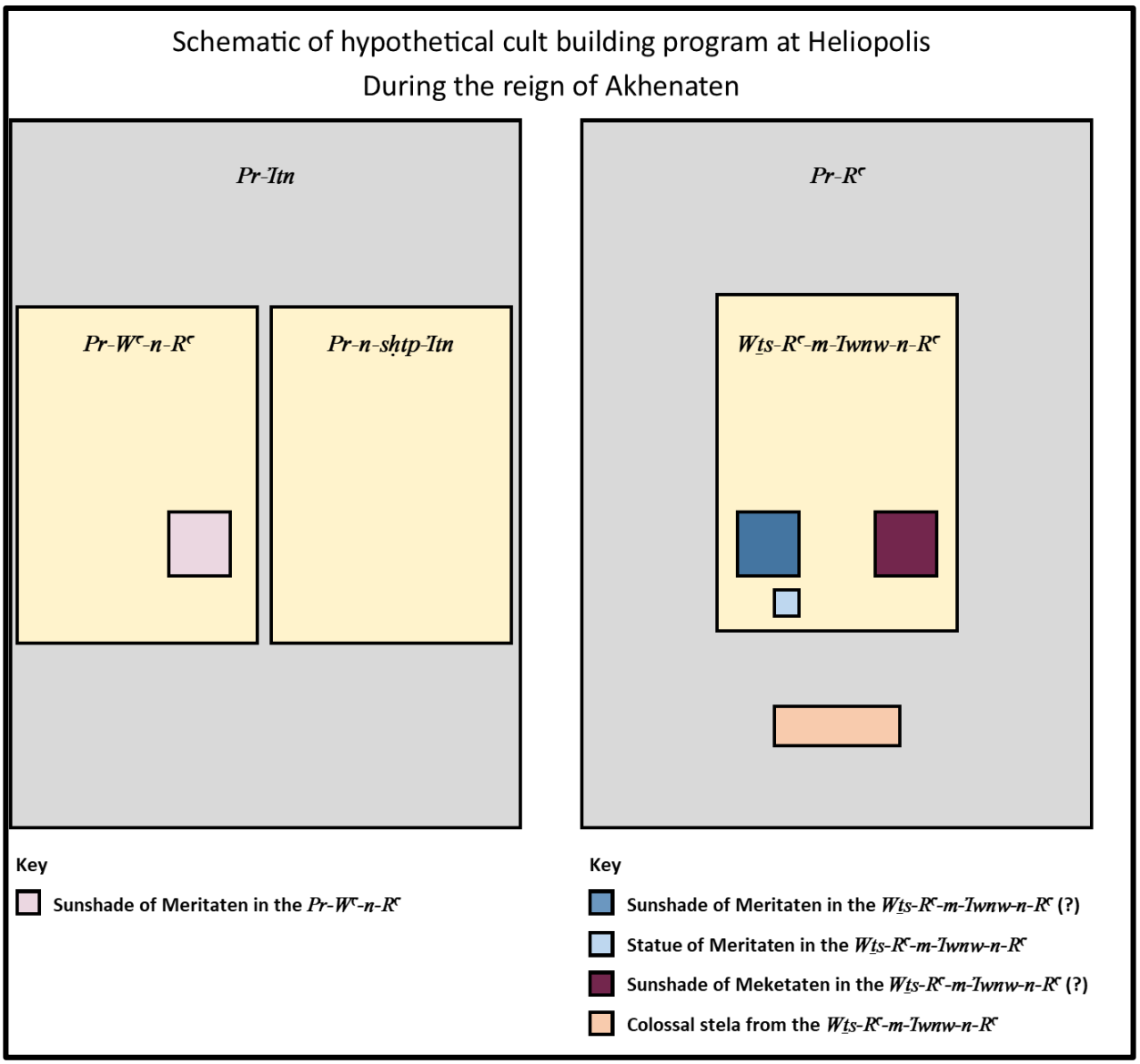

Figure 4: *Schematic of temple program at Heliopolis. Drawn by Briana C. Jackson.*

In any case, worship of both Aten and Re was practiced simultaneously at Heliopolis. This is likely not surprising because the name Re is found often in the names and epithets of Akhenaten and his family. It should also be noted that a Pr-Ra may have been constructed at Amarna, and was affiliated with two officials, Panehesy and Pawah [12].

Numerous structures had also been built at Memphis, many of them associated with men by the name of Hatiay (it is not clear how many Hatiays there were) who were employed as overseer of the double granaries in the Pr-Itn and @wt-pA-Itn, and scribe of the treasury in the Pr-Itn [13]. Perhaps the best-known official who was employed in the Pr-Itn in Memphis was the high priest of Aten, Meryneith, who changed his name to Meryre (Fig. 7). His tomb was discovered in Saqqara and was recently thoroughly published [14]. A sunshade dedicated to Ankhesenpaaten may have been erected at Memphis [15], and there was also another temple named Ax-n-Itn (Fig. 8). Moreover, several talatat were excavated near the temple of Ptah.

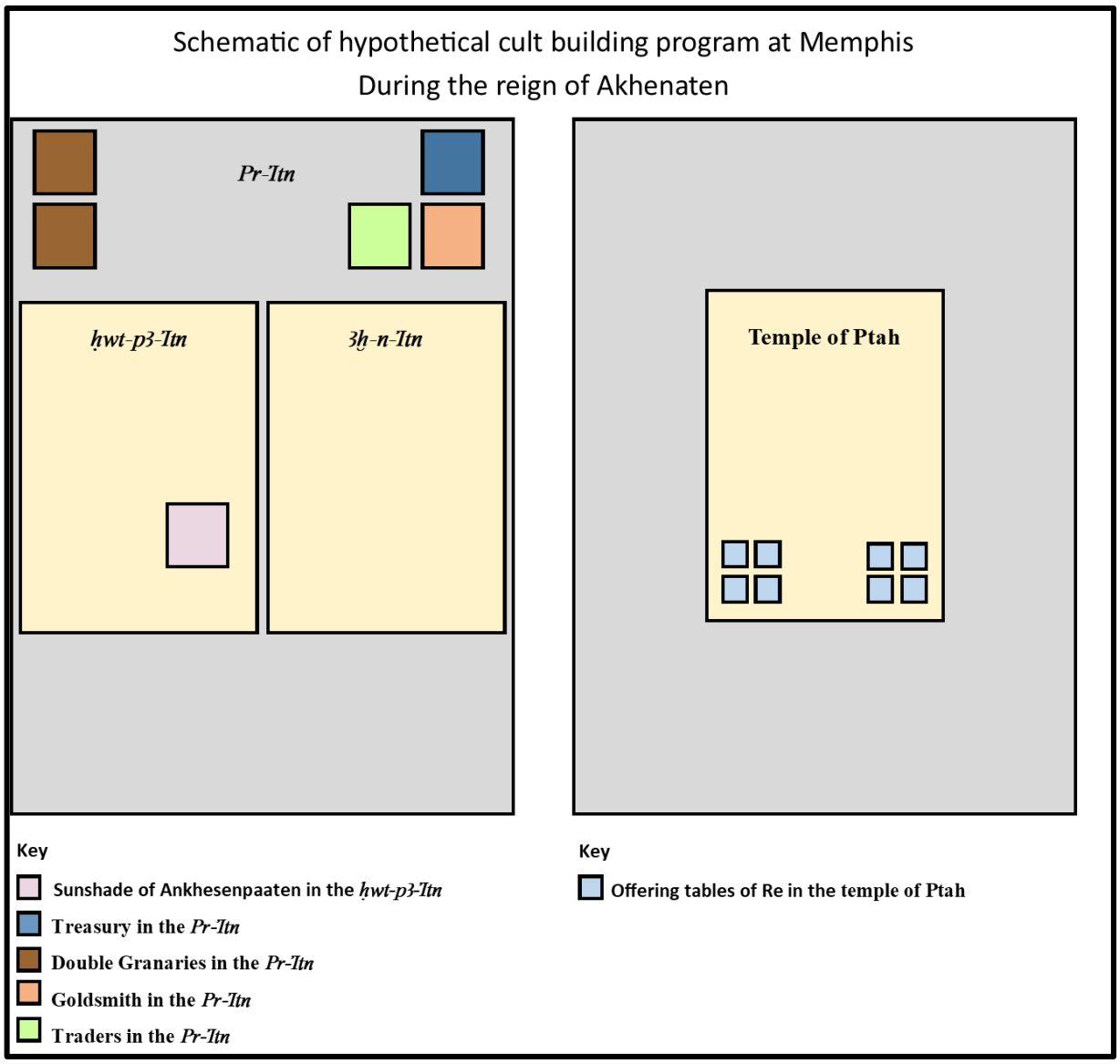

Figure 5: *Schematic of temple program at Memphis. Drawn by Briana C. Jackson.*

Interestingly, a letter dated to Akhenaten's year 5 and just months before the founding of Amarna, states that the Ptah temple in Memphis was functioning well [16]. An offering list discovered at Karnak in the 9th Pylon, together with the talatat blocks that comprised the Aten temples, also indicates the Ptah temple continued to be in use at least in the early years of Akhenaten's reign, and housed several offering tables dedicated to Re [17]. As in the case of Heliopolis, it can be argued that worship of Ptah was not only accepted but also was maintained by the king himself.

Tell el-Borg, near Tjaru, a military outpost at the border of Egypt and Sinai also yielded jar labels and talatat pointing to activity dating to Akhenaten's reign [18]. Moreover, wine jar labels from Tutankhamun's tomb reveal that a Pr-Itn had existed at Tjaru and was the source of superior wine [19]. The southern provincial sites Abydos and Akhmim as sites where Aten temples or chapels were constructed are a matter of debate. A more detailed examination of Akhenaten's cult building program that possibly existed at Abydos and Akhmim is presented in my forthcoming article.

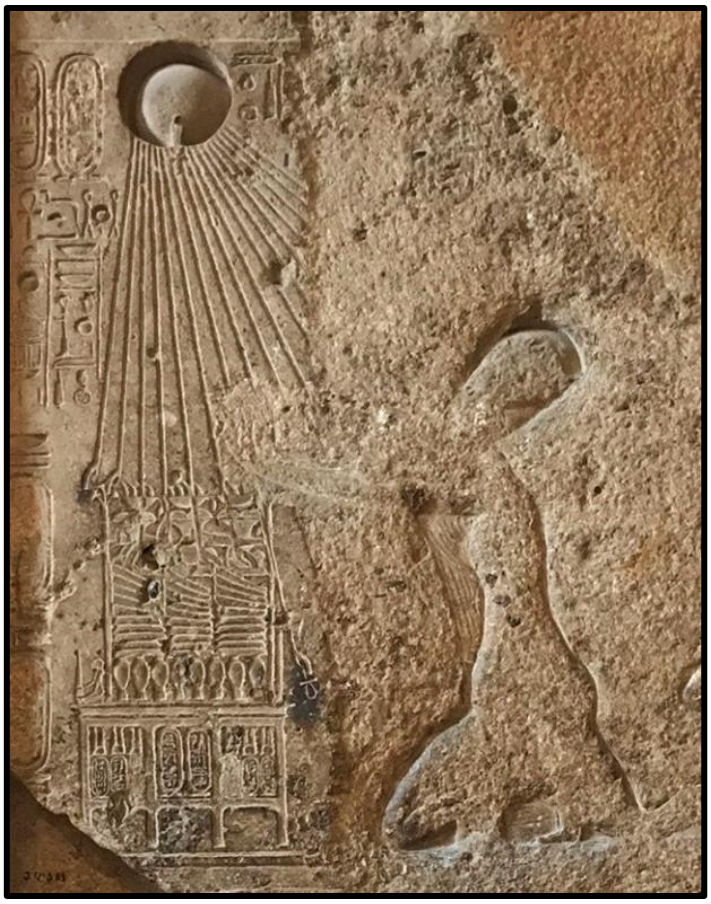

Figure 6: *Colossal stela from the WTs-Ra-m-Iwnw-n-Ra. Egyptian Museum, Cairo CG 34175. Photo by Briana C. Jackson*

Figure 7: *Statue of Meryneith/re and wife Anuy. Egyptian Museum, Cairo JE 99076. Photo by Briana C. Jackson*

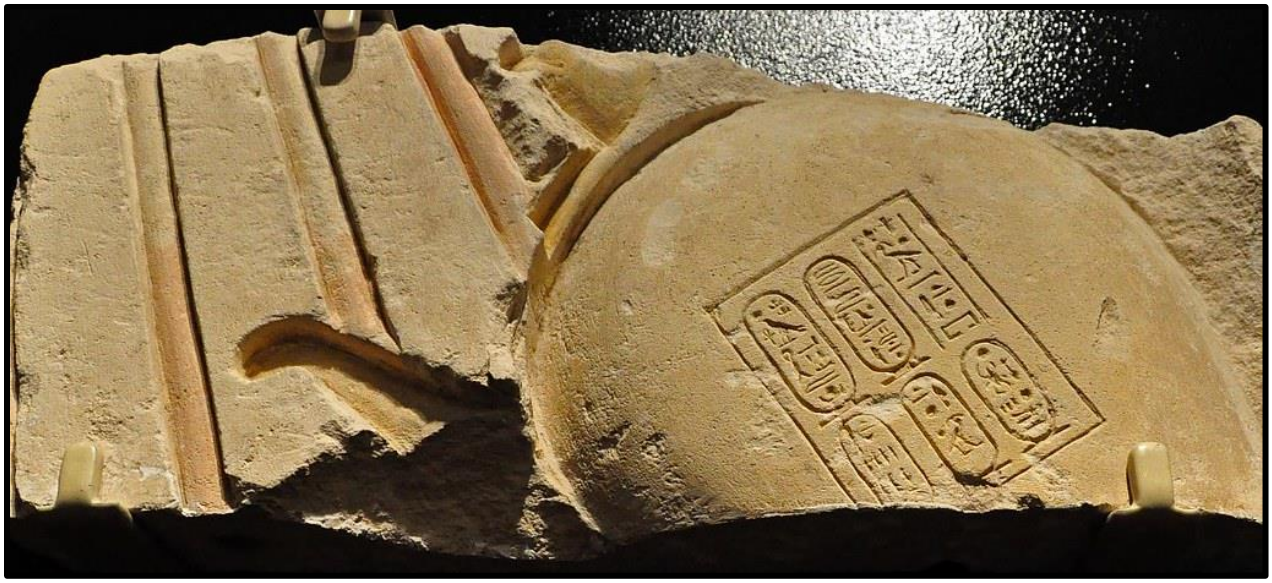

Figure 8: *Talatat from the Ax-n-Itn in Memphis. Nicholson Museum, Sydney NMR.1143. Flickr CC BY-SA 2.0. Photo by JC Merriman.*

At Akhmim at least one talatat with an inscription including Gm-pA-Itn was found, but of primary interest are the enormous limestone blocks undoubtedly belonging to an

Aten temple that were found in the foundations of the Rameses II and Meritamun statues that were erected in the temple of Min (Fig. 9). It has been argued, as is usually argued, that the blocks were transported there either from Thebes or Amarna, but nearby limestone quarries make such a hypothesis less convincing [20]. I think it probable that an Aten temple was built in Akhmim, which was not only the cult site of the creator god Min, but also the hometown of Akhenaten's mother, Tiye.

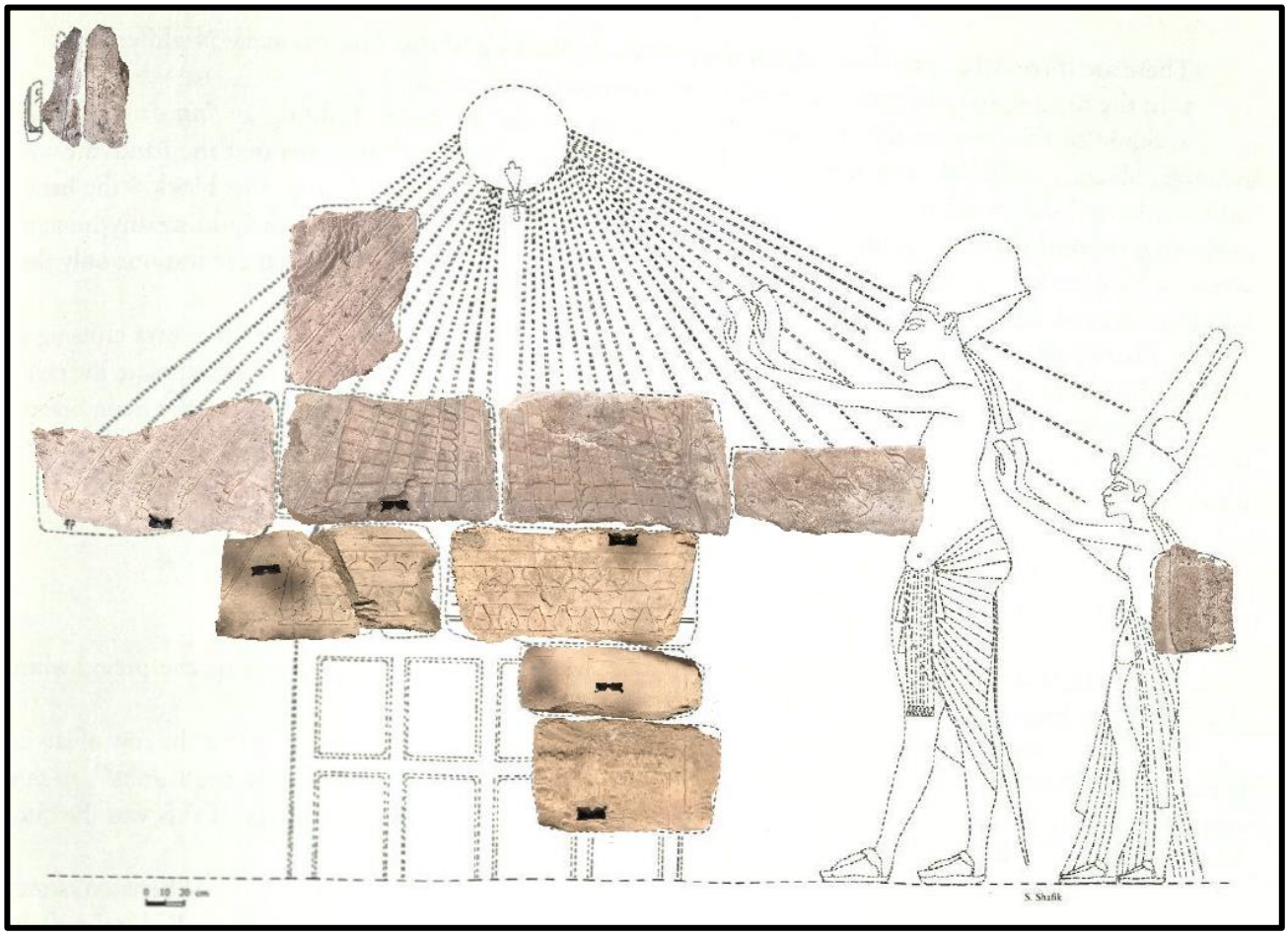

Figure 9:: *Reconstruction drawing of the Aten temple in Akhmim. Line drawing by Sameh Shafik, adapted with superimposed photos by Briana C. Jackson. Sunglasses in each photo are for scale.*

In Abydos there is also evidence for Aten cult buildings, and again their construction at Abydos is debated. Talatat were found reused in the Portal Temple of Ramesses II to the west of the Osiris Temple enclosure (Fig. 10) [21]; a talatat was discovered inside the Osiris Temple enclosure [22]; and a talatat was discovered near Umm el-Qaab. [23] Among these talatat, three are inscribed with two temple names: the Rwd-anxw-Itn and the Qd.f-Axt-n-Itn (Fig. 11). The former is associated with a sunshade dedicated to Nefertiti at the site Kom el-Nana in Amarna, and the name is also found on a talatat discovered in Assyut. Jacquelyn Williamson has argued against a temple named Rwd-anxw-Itn existing at Abydos [24], but in my forthcoming article I argue the opposite. The Qd.f-Axt-n-Itn may more easily be argued to have existed at Abydos, because the only other occurrence of this temple name is found on four unprovenanced "sphinx panels" from a sunshade (Fig. 12).

Figure 10: *Talatat showing Akhenaten from the Portal Temple of Ramesses II in Abydos. Photo by Ayman Damarany.*

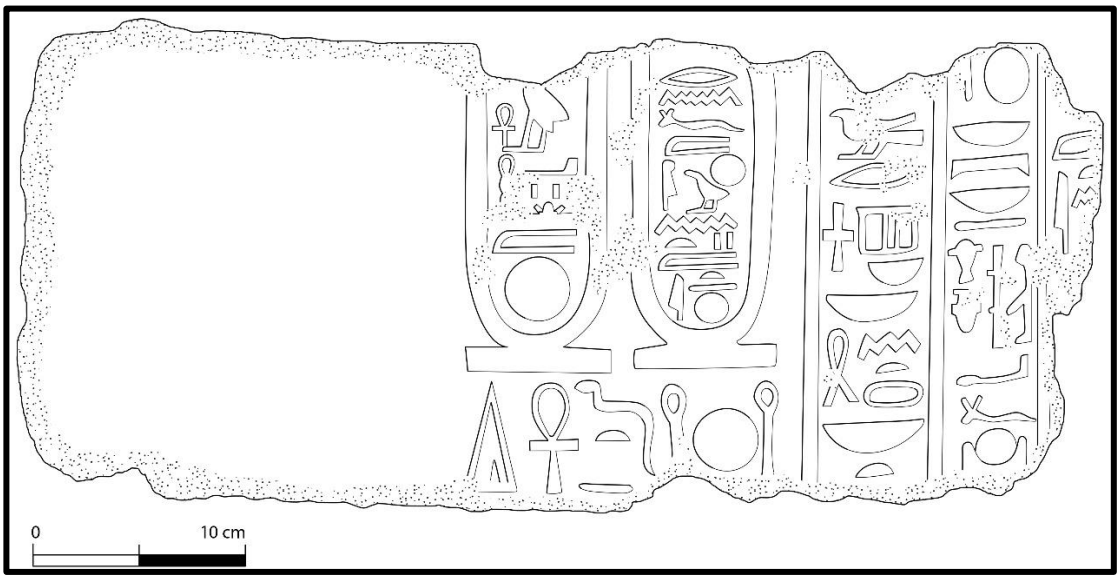

Figure 11: *Line drawing of talatat inscribed with the temple name Qd.f-Axt-n-Itn from the Portal Temple of Ramesses II in Abydos. Drawing by Ahmed Abd el-Halim.*

The inscriptions from these blocks state the sunshade in the Qd.f-Axt-n-Itn is "in Akhet-Aten". But, I argue that the site specifier Akhet-Aten does not necessarily mean the building was only at Amarna, but it may be referencing Amarna as the parent site of Aten worship. Furthermore, other archaeological evidence from Abydos reveals that Amun's name was stricken from monuments and small finds, but the name and images of Osiris were not. Therefore, I argue, as with Re and Ptah, that the creator/regenerative god Osiris was not only accepted in Akhenaten's religious program, but perhaps even incorporated into it. Whether a similar case can be made for Min in Akhmim remains to be seen.

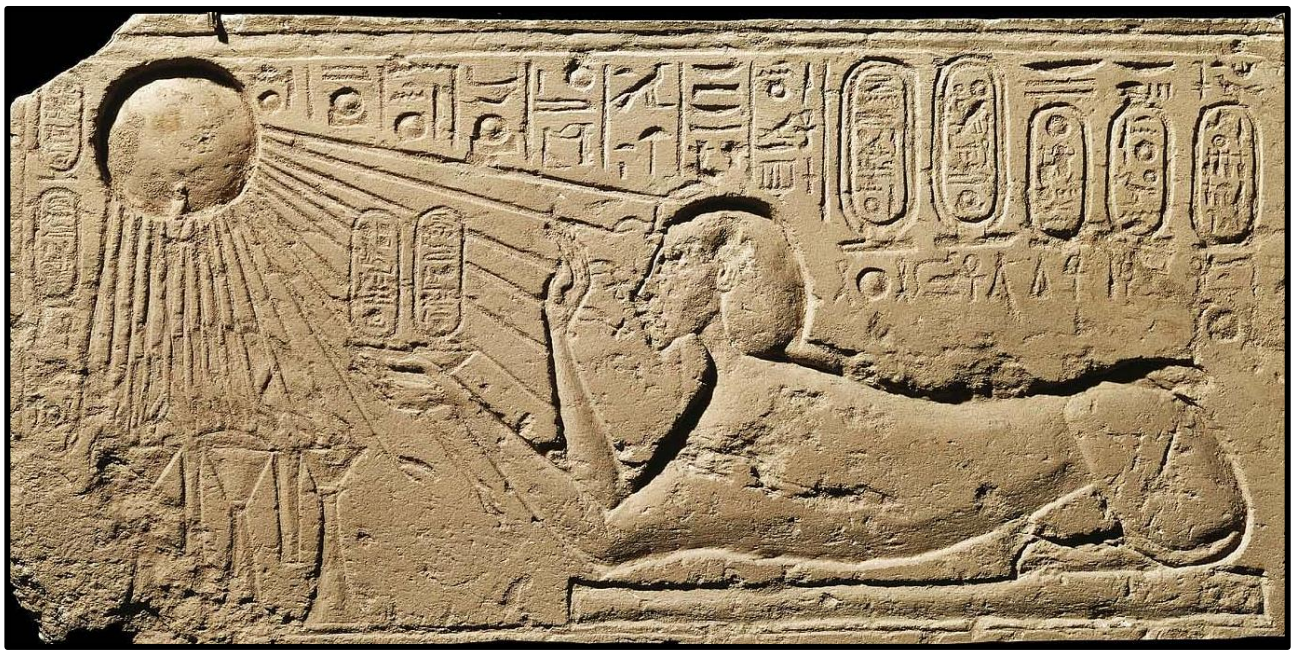

Figure 12: *Sphinx panel from the sunshade in the Qd.f-Axt-n-Itn. Museum of Fine Arts, Boston 64.1944. Photo from museum's website https://bit.ly/3znfLar*

My dissertation also examined cult buildings and ceremonial palaces built at Amarna and Thebes as a means to situate the buildings at other sites within the chronology of monument building programs during Akhenaten's reign (Fig. 13). Some buildings outside Amarna and Thebes were constructed before the move to Amarna, and some were constructed after. I argue that the move to Amarna was a pragmatic choice to establish a site specifically dedicated to Aten as a means to maturate the religion; mature gods should have their own center of worship. It was possibly a necessary act to completely disassociate the Aten cult from the city of Amun. This could be seen as a means to centralize the religion following its introduction at several other sites. Then, following the establishment of Aten's sacred city, the religion re-expanded to other sites.

Figure 13 presents the chronology I mapped, based on dating certain text formulae and their alterations, as well as other datable events, such as the establishment of Amarna. It shows, in part, my proposed outward → inward → outward stages of the spread of Atenism through temple construction. It does not, however, indicate the duration of Aten worship at those sites. Figures 14 and 15 compare names of temples that existed or possibly existed outside Amarna with those that existed at Amarna. What I aim to illustrate is the connection between these outlying temples/chapels and their "parent temple/chapel" at Amarna. I argue that the income of these outlying religious buildings contributed a tax to buildings by the same name at Amarna and perhaps also each named building served a very particular purpose compared to other named buildings.

I offer that these temples/chapels formed both an administrative and religious temple network, and inclusion of worship of other creator/regenerative gods in Aten worship was meant to bolster the creative powers of Aten.

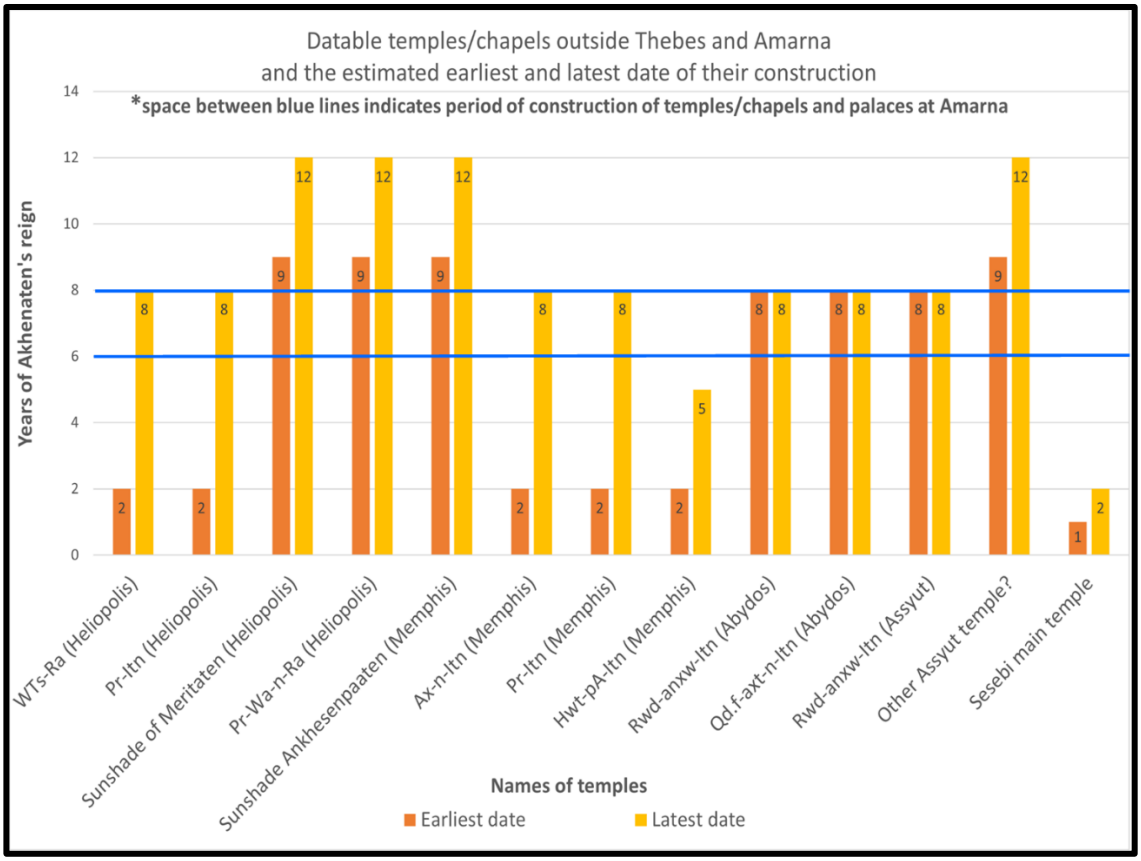

Figure 13: *Chronology of Aten temple construction. Chart by Briana C. Jackson.*

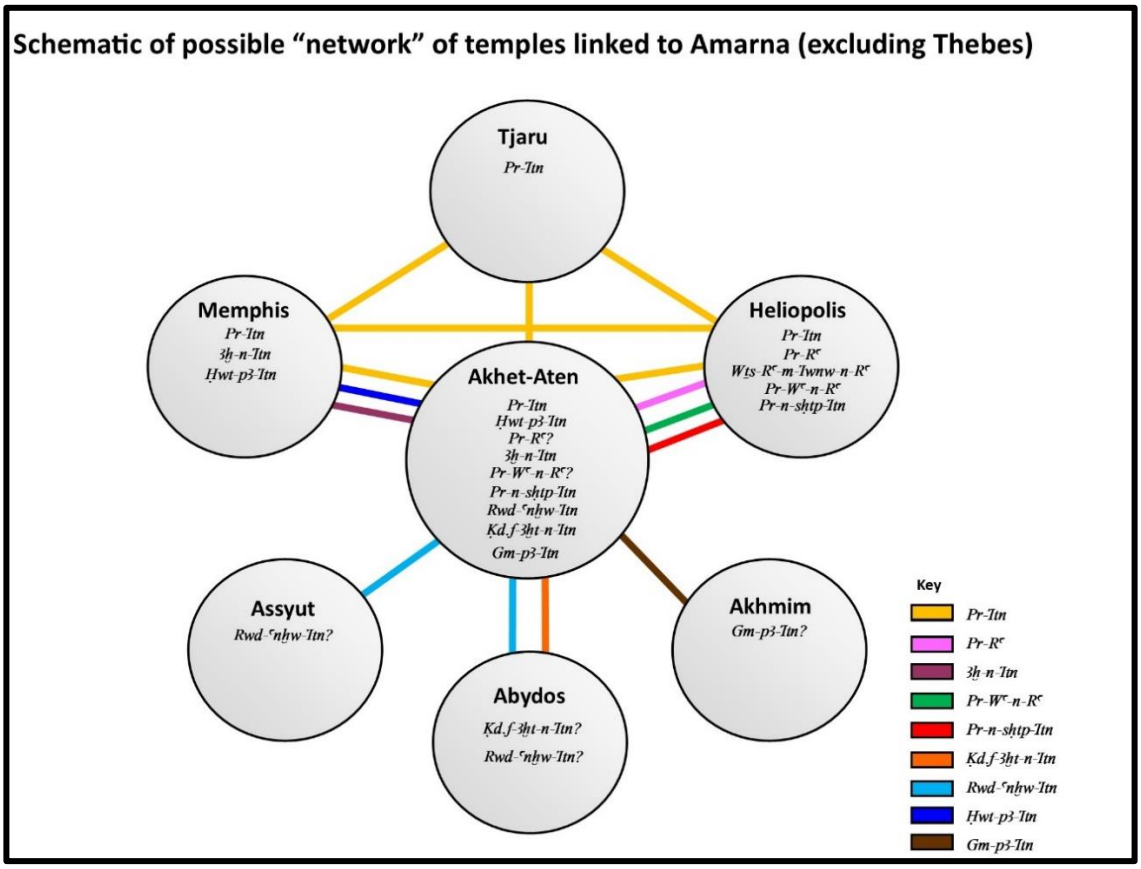

Figure 14: *Schematic map of temples throughout Egypt (minus Thebes). Drawing by Briana C. Jackson.*

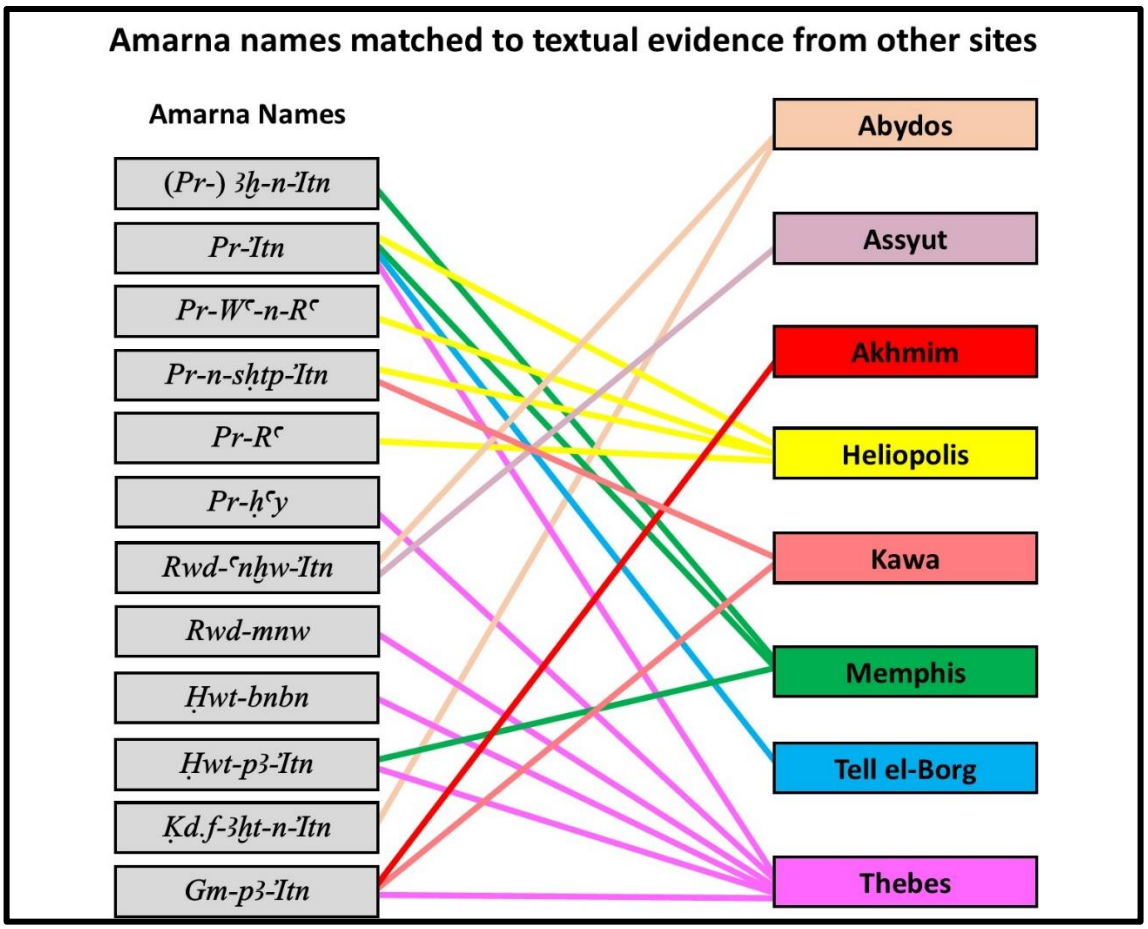

Figure 15: *Temple names matched to sites. Chart by Briana C. Jackson.*

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The Royal Court at Amarna – Part 3

David Pepper

The following article continues my discussion of the members of the Royal Court at Amarna. Parts 1 and 2 can be found in the Fall 2020 and Spring 2021 issues of the Akhetaten Sun [1]. More members of Akhenaten's court will be covered in the next issue of the *Sun*.

AHMES, Steward of the House of the King – tomb TA3

Ahmes' titles include Royal Chancellor, Seal Bearer of the King, Steward of the Estate of Akhenaten, Superintendent of the Court-House, and Fanbearer on the Right of the king [2]. In a portrait on the wall of his tomb, Figure 1, he is shown praising the Aten, wearing his insignias of office, shown by the blue arrows, carried by a strap over his shoulder: a fan signifying his role of fanbearer to the king, and a military axe, showing he had command of (at least some of) the king's soldiers [3].

Figure 1: *Ahmes prays to the Aten* [4]

Military soldiers, Figure 2, led by a bugler, are depicted in his tomb. They are followed (Figure 3) by a bearded Syrian (blue arrow), and two bowman, a Libyan (red arrow), and a Nubian (green arrow). The platoons of soldiers are followed by Egyptians brandishing sickle swords and a punishment stick.

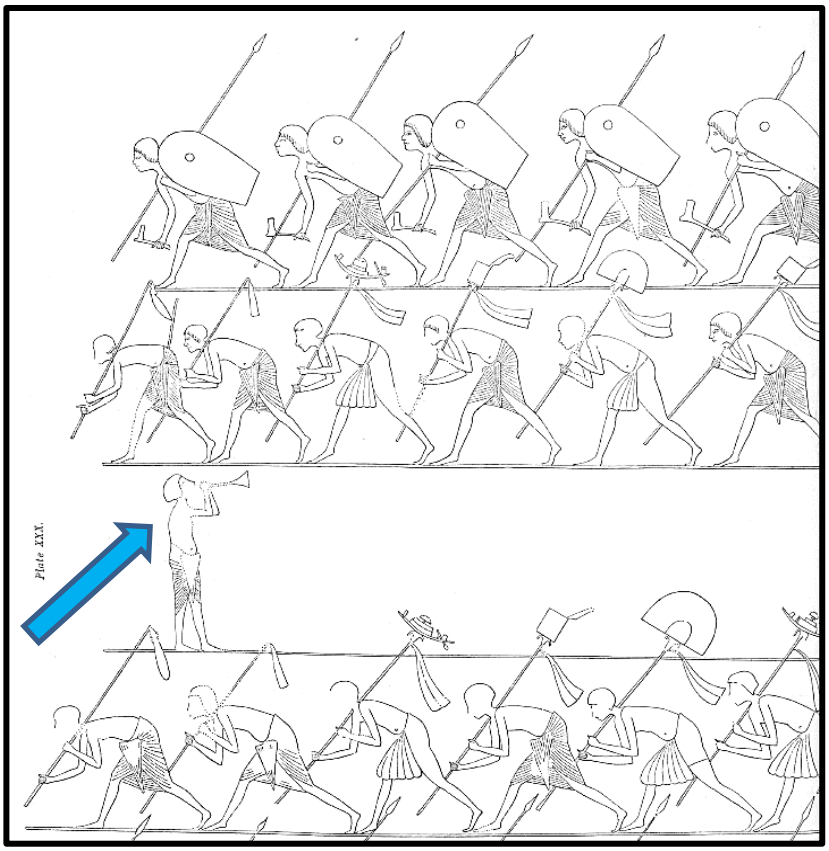

Figure 2: *Soldiers preceding the king in Ahmes' tomb* [5]

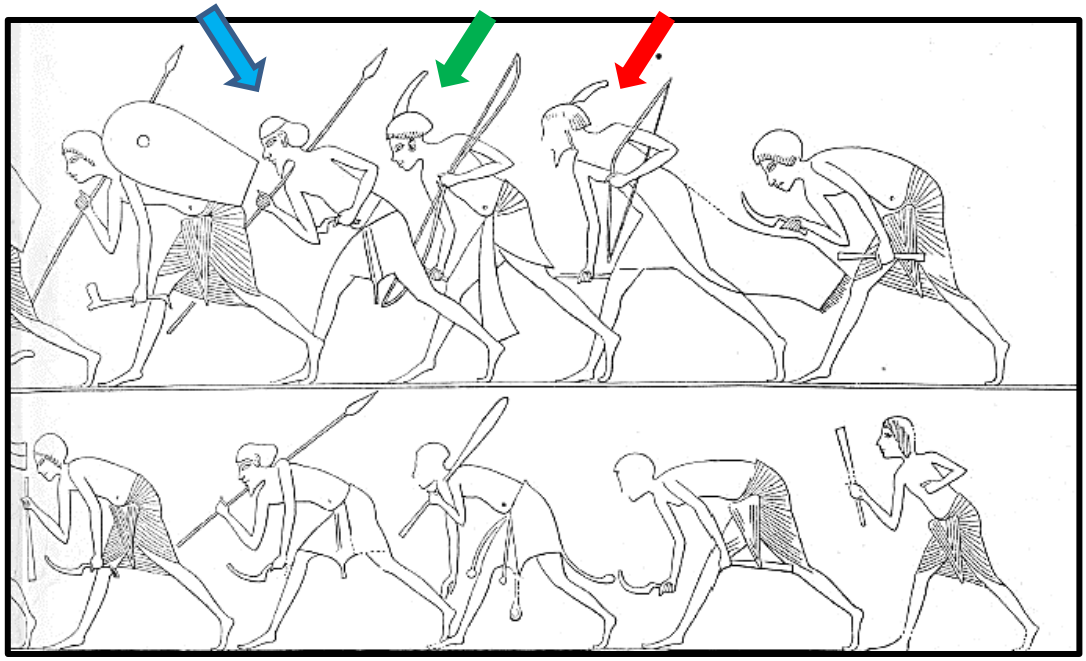

Figure 3: *Foreign soldiers depicted in Ahmes' tomb* [6]

Following the soldiers are the king and queen and one of their daughters, probably Meritaten, who peeks over the rim of the chariot (Figure 4, blue arrow). Nefertiti looks up affectionately at Akhenaten, as the rays of the Aten bless them.

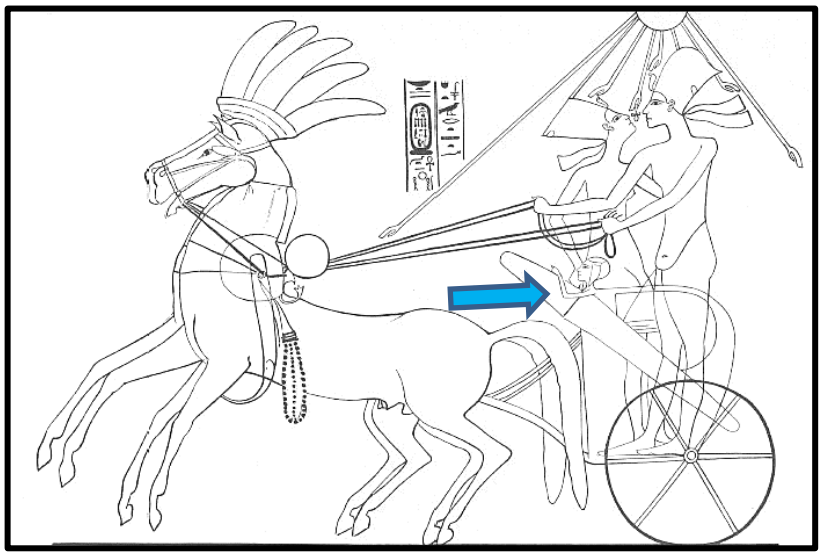

Figure 4: *The entourage arrives at the gates of the Temple* [7]

The soldiers would have also protected the king's possessions. Chancellors tracked the supplies and possessions of the king, and ordered stores as needed. Figure 5 shows a building hold food and drink at Akhetaten. Along with clothing and jewelry, are beer (blue arrow), wine (green arrow), and Grain (red arrow).

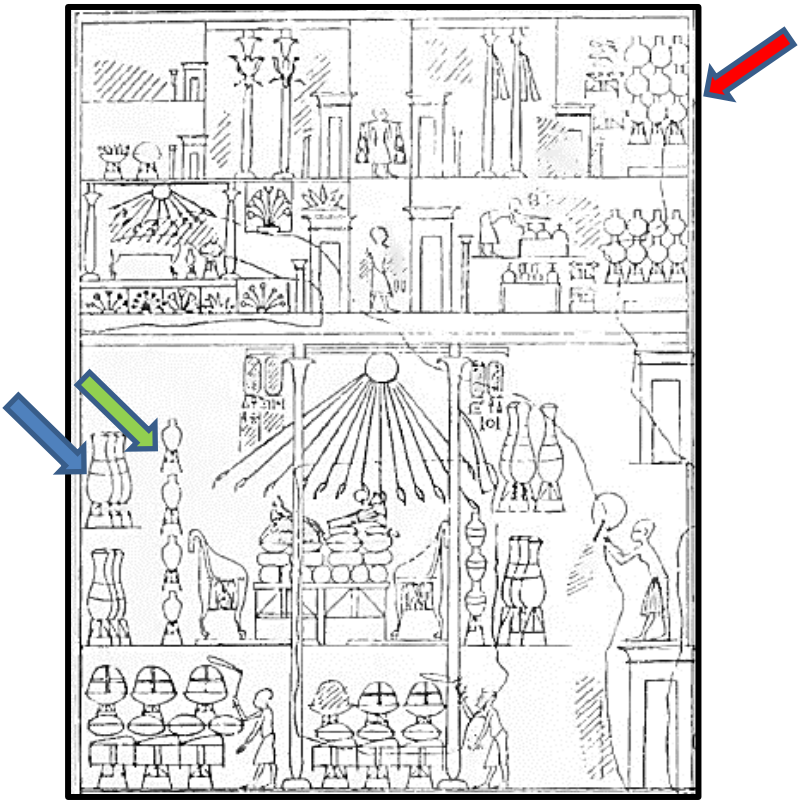

Figure 5: *Royal Storeroom at Akhetaten* [8]

Figures 6 and 7 are actual scenes from Ahmes tomb. Figure 6 shows Ahmes, as sketched in Figure 1 Figure 7 is Ahmes Ka statue in a niche at the back of his tomb.

Figure 6: *Ahmes adoring the king* [9]

Figure 7: *Ahmes statue in his tomb, TA3* [10]

PENTHU – Physician – tomb TA5

Penthu's titles include Chief Physician, Chancellor, Privy Councilor, Royal Scribe, Intimate of the King, and Chief Servitor of the Aten. [11]

Physicians, *swnw* in ancient Egypt, used a combination of practical skills such as herbal treatments and surgeries, and sympathetic magic, which was thought to enhance medical treatments. [12]

Penthu (Figures 8 & 9, blue arrow) may have survived into the reign of Tutankhamun, as a vizier named Penthu was recorded. However, he may – or may not – have been the same person. Names in ancient Egypt can be confusing as often various individuals had the same name.

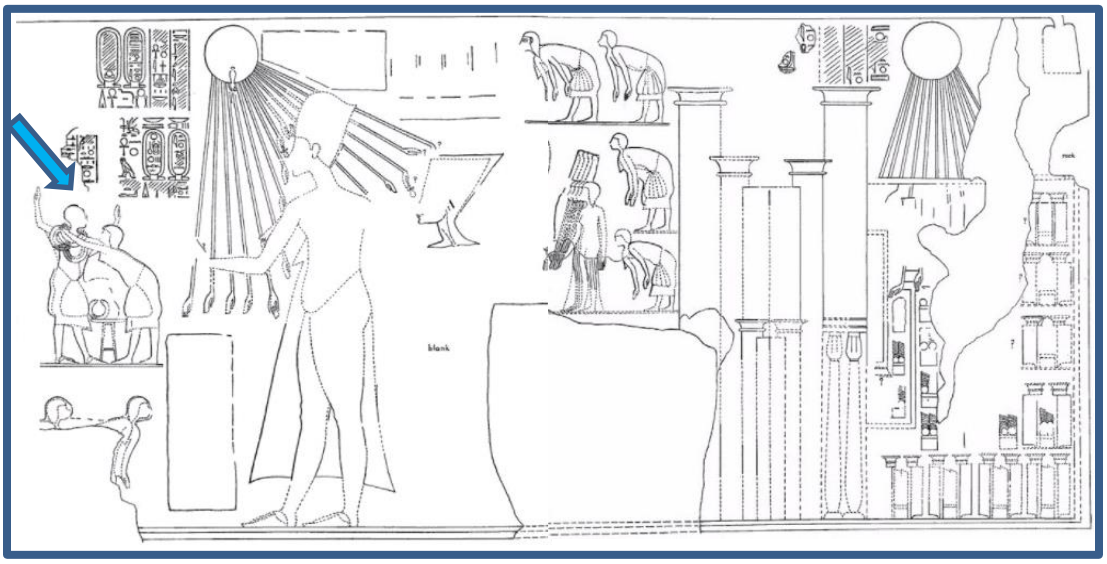

Figure 8: *Penthu being decorated with gold collars* [13]

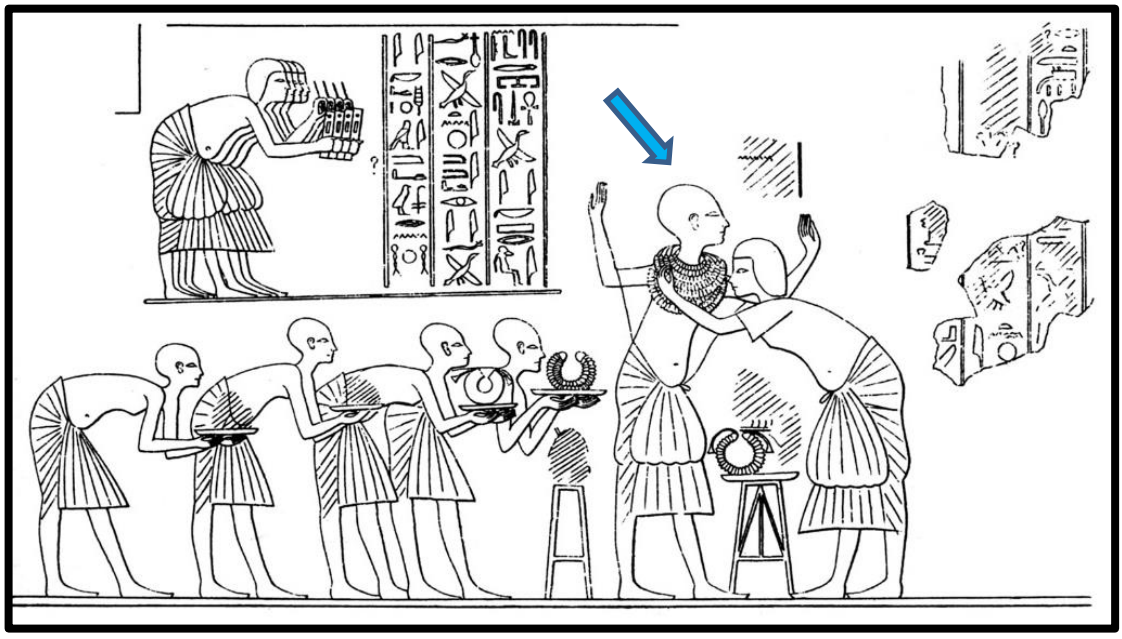

Figure 9: *Detail in Figure 8, Penthu being decorated with gold collars* [14]

Since Penthu was Chief of Physicians, he probably did not have to treat the builders and workers at Akhetaten, but instead he would have tended to the king, his family, and other nobles.

Egyptian physicians were well-trained and there were papyri, such as the Edwin Smith Papyrus and the Ebers Papyrus, that described which diseases responded to treatment, and which ailments should not be treated.

One of the Amarna Letters from the king of Ugarit even asks for an Egyptian doctor to be sent to his court [15].

Unfortunately, evidence suggests that the citizens of Akhetaten suffered from a variety of diseases: Malnutrition, Plague, Malaria, Hookworms, and other Infectious Diseases [16]. Enough to keep Egyptian Physicians quite busy!

Recent studies of the documentary evidence and bio archaeological remains in the Amarna cemeteries by Dr. Gretchen Dabbs does not support the theory that plague ravaged the city during the reign of Akhenaten [17].

Penthu's tomb scenes are now badly damaged. Figure 10 shows Akhenaten and Nefertiti in their chariot.

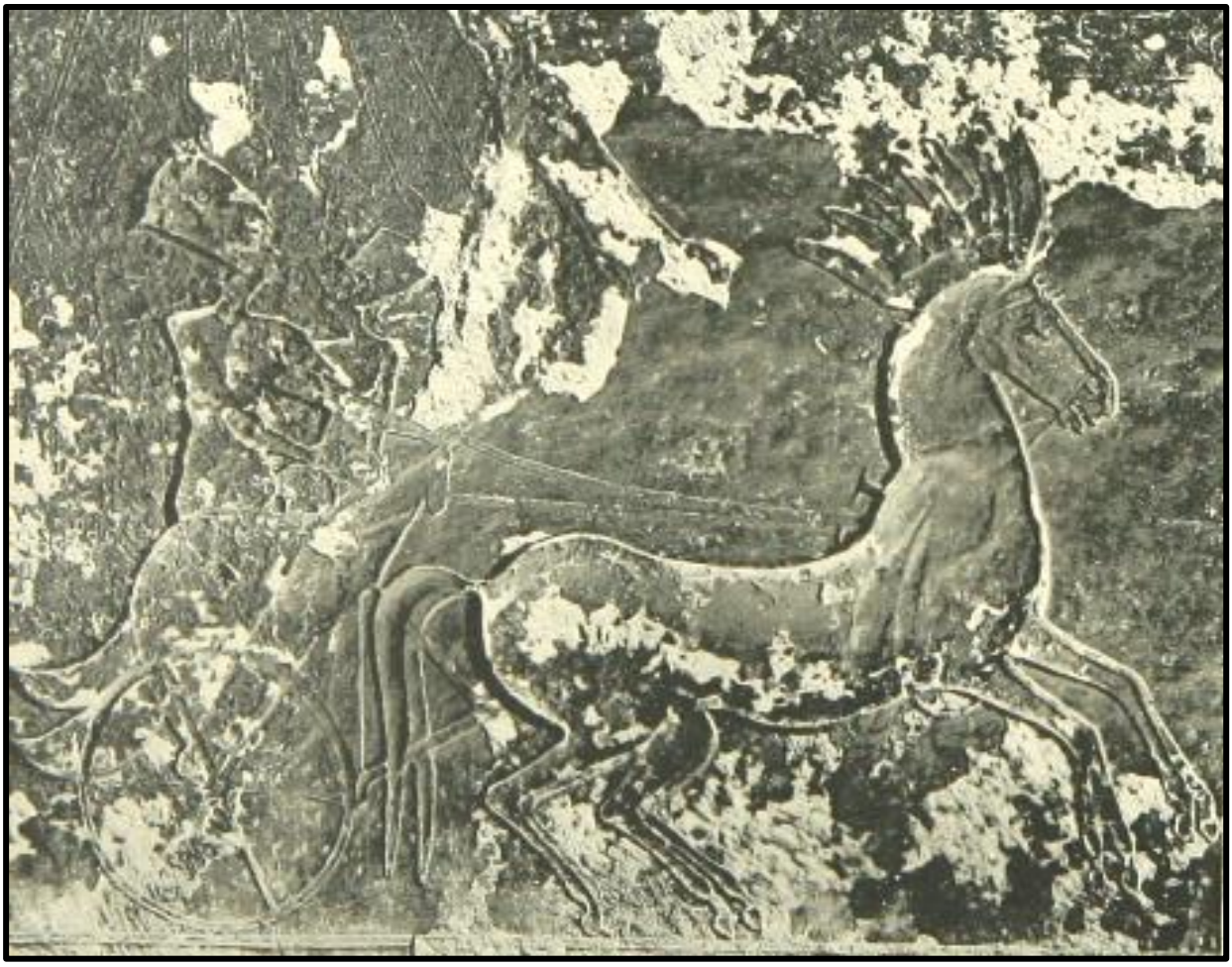

Figure 10: *Akhenaten and Nefertiti in their chariot, tomb TA5* [18]

PARENNEFER, Royal Butler

Parennefer's titles were Craftsman of the King, Washer of the King's Hands, and Royal Butler. Ridley, Kemp, and Aldred, refer to him as the "Royal Cup-Bearer [19].

In Figures 11-13 he is shown being rewarded by Akhenaten and Nefertiti.

In Egyptian, Royal Butler was ***dpw nswt***, literally "Butler of the king". The Royal Butler looked after the day-to-day needs of the king and his family, much like a modern butler. In addition they accompanied the king to the battlefield and negotiated for him with foreign dignitaries [20].

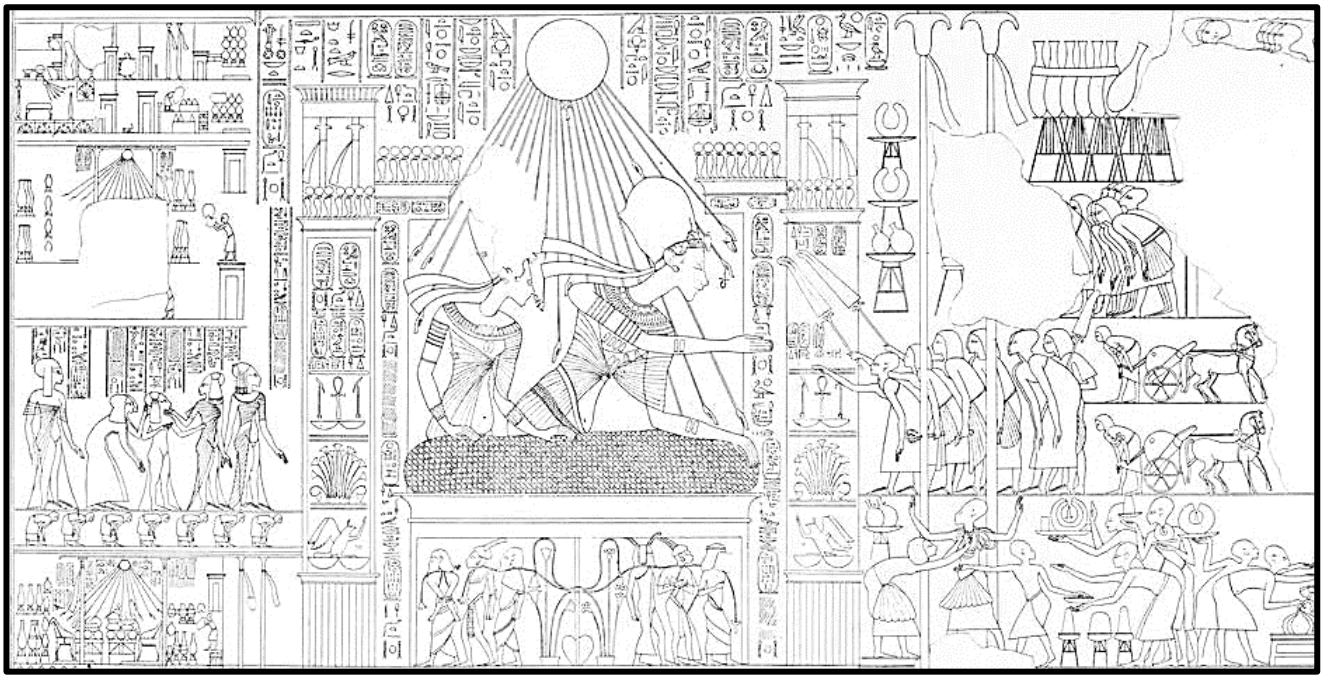

Figure 11: *Parennefer rewarded by the king and queen, tomb TA7* [21]

Figure 12: *Detail from Figure 11, Parennefer receiving gold collars*

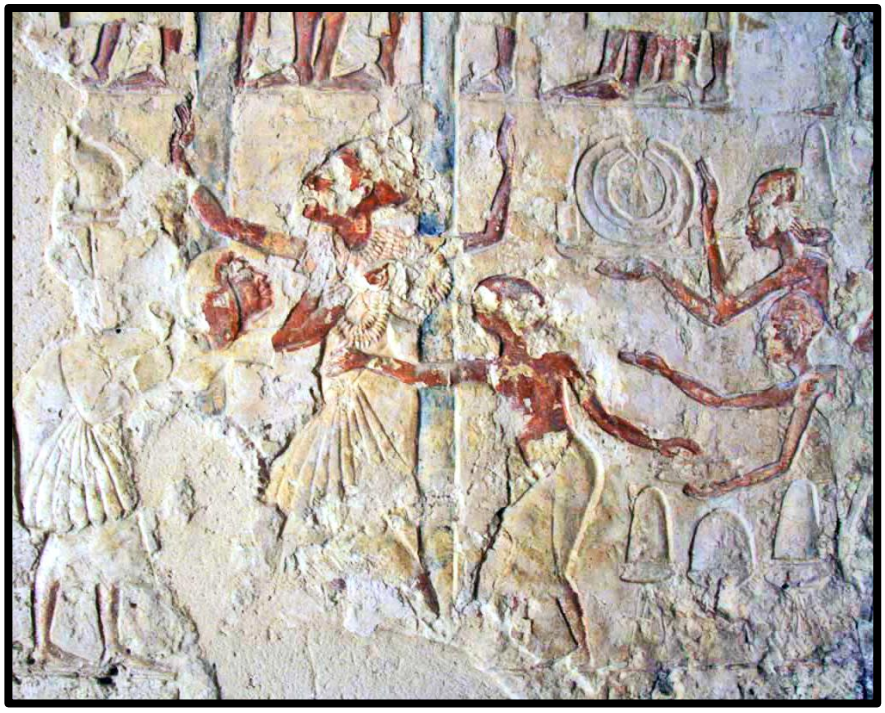

Figure 13: *Close-up of reward scene shown in Figure 11* [22]

Kemp comments that “the rewards scene shows his retainers carrying off bulkier commodities in amphorae, sacks and heaped baskets, suggesting that the king’s rewards were not confined to ostentatious gifts,” as shown in Figures 14 & 15 [23].

Figure 14: *Parennefer’s rewards* [24]

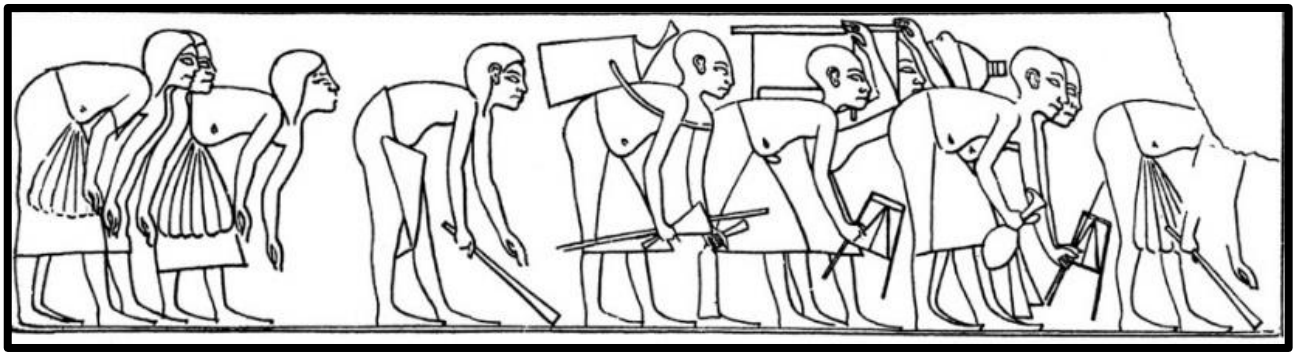

Figure 15: *Servants bring gifts for the king, tomb of Parennefer* [25]

Nefertiti's sister Mutbenret, also called Mutnodjmet, is depicted in Figure 16, standing behind three of the Royal daughters, Meritaten, Meketaten, and Ankhesenpaaten, and their nurses.

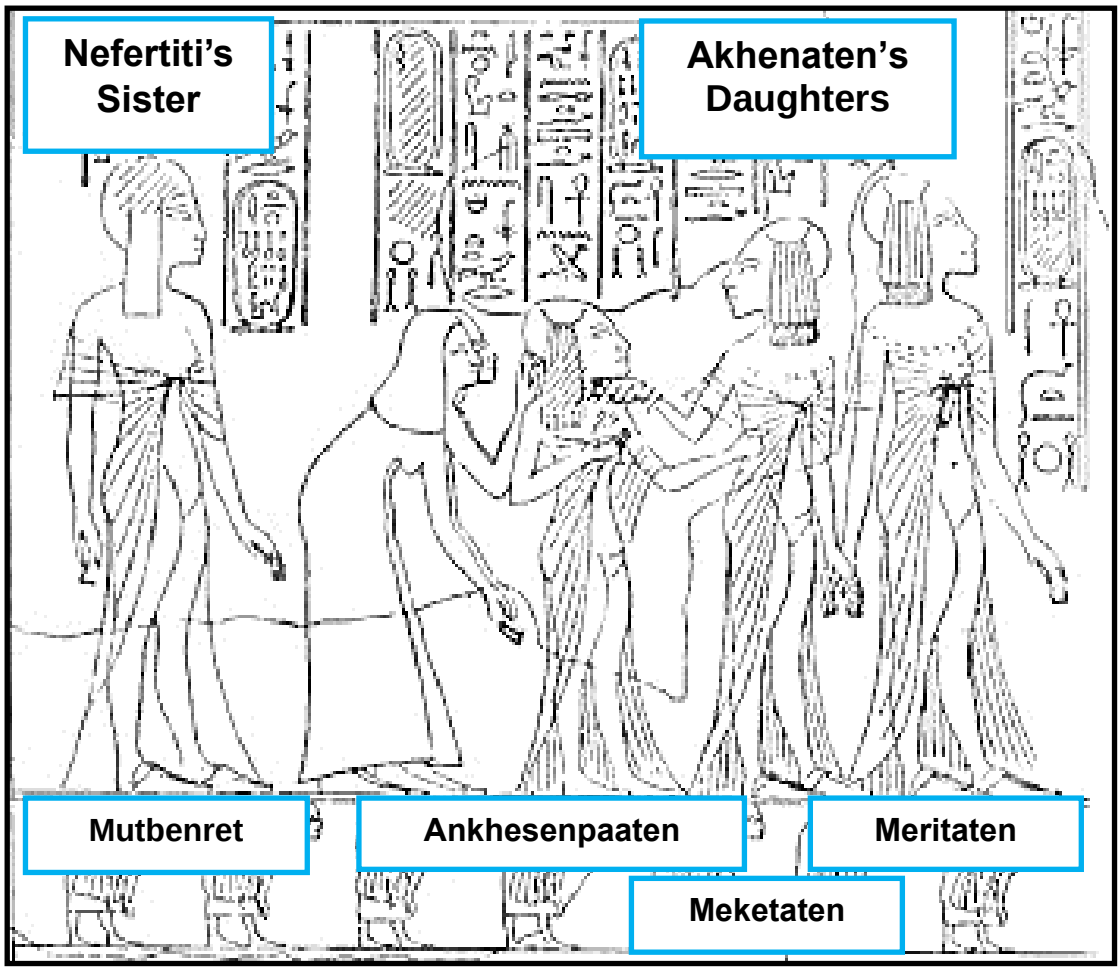

Figure 16: Detail from Figure 11, Nefertiti's sister Mutbenret

Text in his tomb at Amarna mentions he originally served Akhenaten when he was still a prince [26]. Parennefer originally had a tomb at Thebes (TT188) constructed during the early reign of Amenhotep IV (Akhenaten) in the Amarna style, which was vandalized after Akhenaten's reign ended. His tomb at Amarna does not appear to have been used for a burial.

The scenes in the tomb of Parennefer at Thebes, may be the first to show Queen Nefertiti. An unnamed royal woman sits beside Akhenaten as he worships the Aten in a scene showing Parennefer before his king and queen. The queen is thought to be Nefertiti [27]. The scenes show some of the earliest examples of Amarna style depictions. The figures show the rounded form that will become typical in Amarna art, and courtiers are shown bending from the waist with their arms hanging down [28].

Figure 17, from Parennefer's Theban tomb show him supervising the recording of the grain supply.

Figure 17: *Parennefer reports on grain supply, tomb TT188* [29]

In Figure 18, Parennefer recites a prayer to the Aten. Figure 19 shows this same scene as it looks today in his tomb.

Figure 18: *Parennefer prays to the Aten* [30]

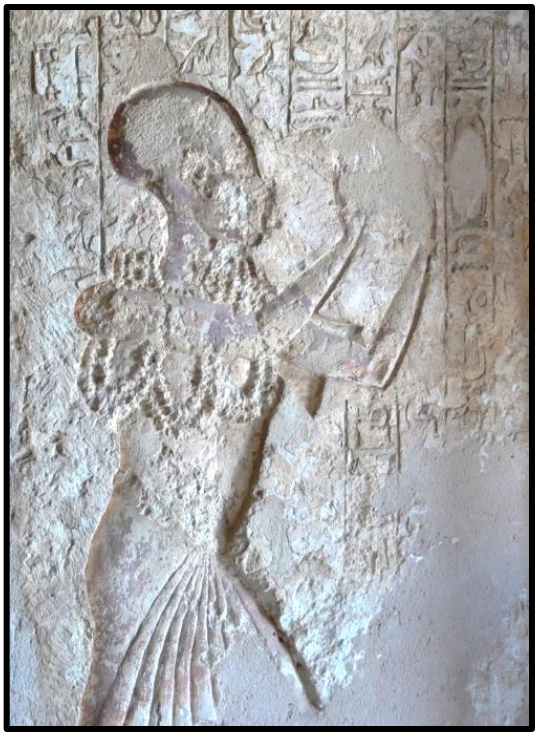

Figure 19: *Photo of Parennefer, from Figure 18* [31]

AY, Overseer of Horses

During his tenure under Akhenaten, Ay, Figures 20 & 21, built an unused tomb at Amarna. In this tomb his titles listed are: “Father of the divinity (Nefertiti?)”, “Fan bearer on the right of the King”, “Head of the Companions of the King”, “Acting Scribe of the King”, and “Overseer of all the horses of His Majesty” [32]. After Akhenaten died, Ay lived on to become Tutankhamun’s vizier, and in his last years became pharaoh, succeeding Tutankhamun to the throne.

Figure 20: *Ay receiving the Gold of Honor* [33]

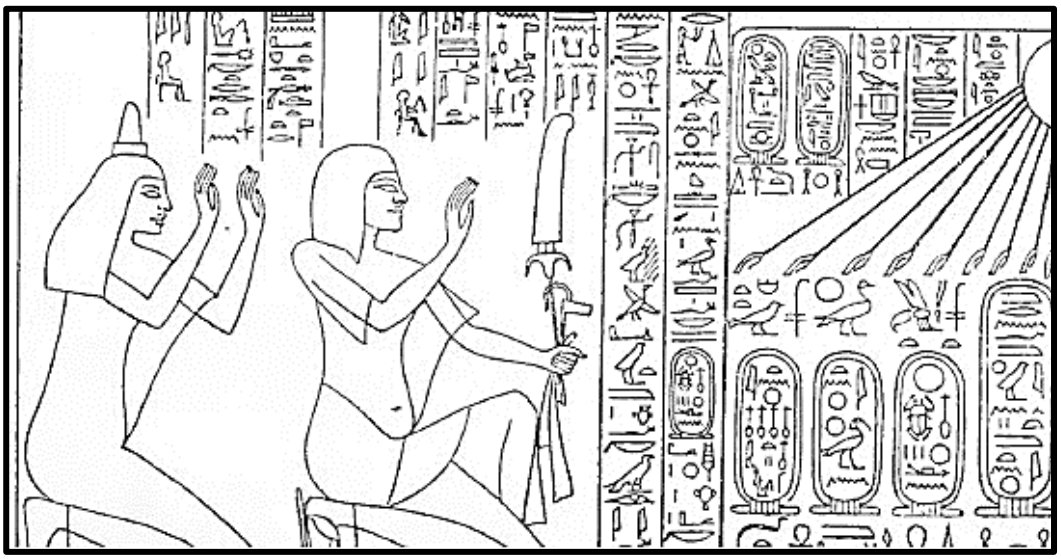

Figure 21: *Ay and his wife Tey praising the Aten* [34]

Ay's tomb is best known for the long version of the Great Hymn to the Aten, shown in Figure 22.

It says, in part:

"Splendid you rise in heaven's lightland,
O living Aten, creator of life! …
You fill every land with your beauty,
You are beauteous, great, radiant,
High over every land:
Your rays embrace the lands,
To the limit of all you have made …
You bend them (for) the son whom you love.
…
When you set in western lightland,
Earth is in darkness as if in death; …
Earth brightens when you dawn in lightland,
As you dispel the dark,
As you cast your rays,
The two lands are in festivity,
Awake they stand on their feet,
You have roused them;
Bodies cleansed, clothed,
Their arms adore your appearance … [36]

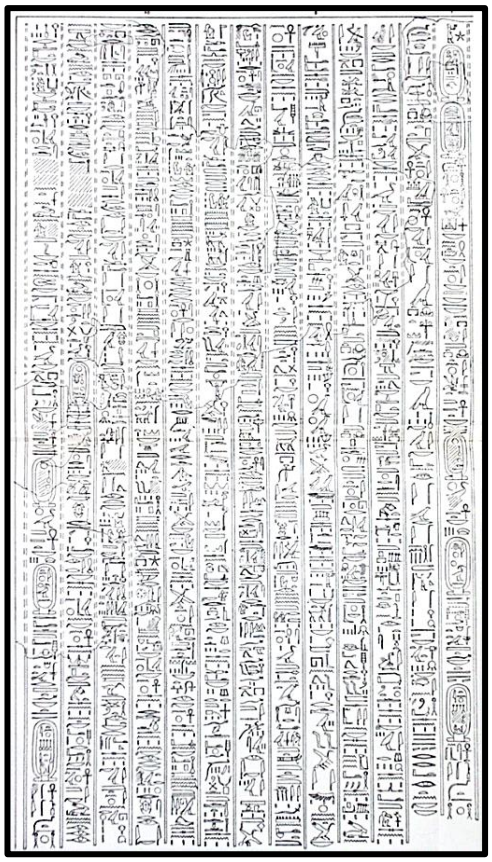

Figure 22: *The Great Hymn to the Aten, tomb of Ay* [35]

At Akhetaten, pairs of horses were used to pull chariots.

In the 18th Dynasty, Kings and elite members of the court used chariots for transportation, and of course they were used in warfare. Figure 23 shows three teams of horses depicted in Ay's tomb.

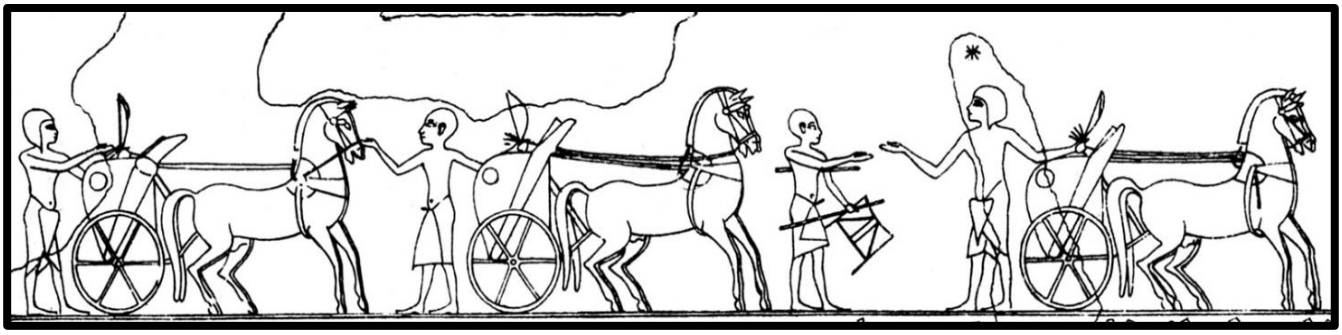

Figure 23: *Chariots and horses in Ay's tomb* [37]

Figures 24 and 25 are photos from Ay tomb, TA25, at Amarna.

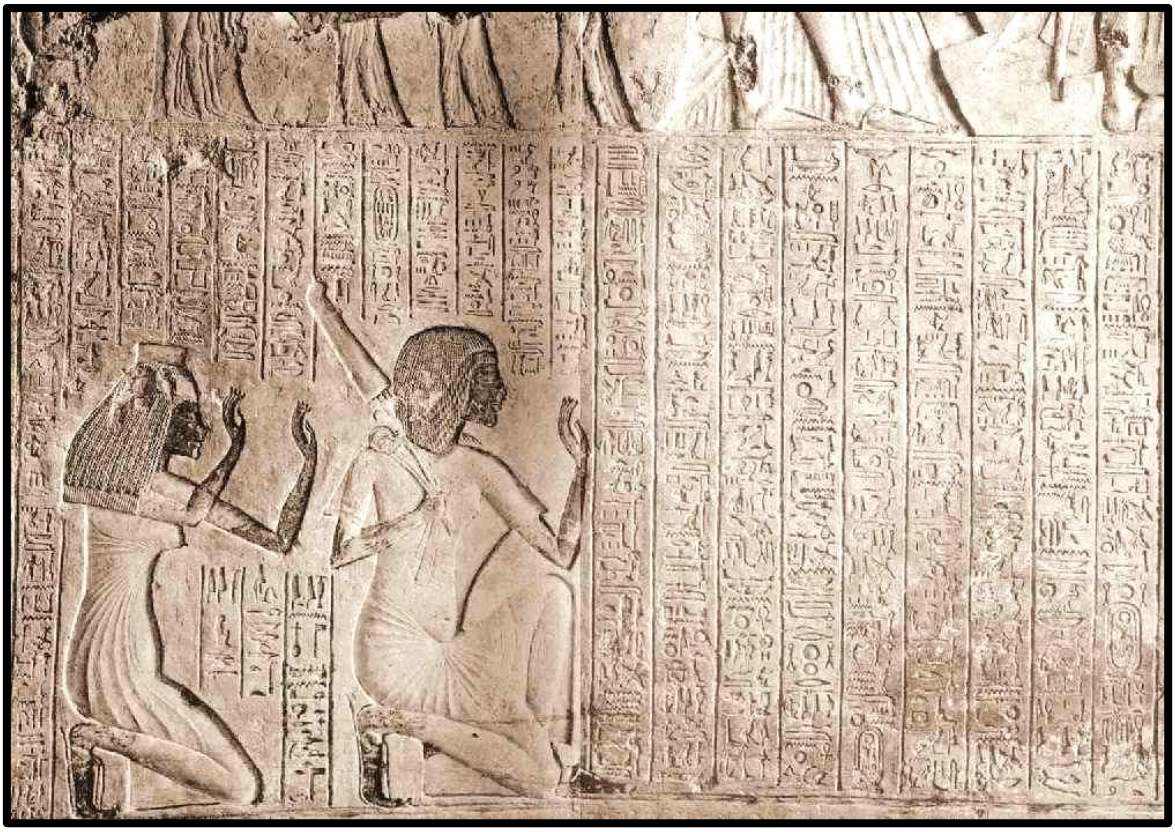

Figure 24: *Ay and his wife Tey venerate the Hymn to the Aten* [38]

Figure *25*: *Pillared Hall in Ay's unfinished tomb at Amarna, TA25* [39]

ENDNOTES:

[1] Available at www.theAmarnaResearchFoundation.org/articles.html
[2] Davies, *The Rock Tombs of el Amarna*, Egypt Exploration Society, 1908, Vol III, p 32
[3] Davies, Ibid. Vol III, p 27
[4] Davies, Ibid. Vol III, pl XXIX
[5] Davies, Ibid. Vol III, pl XXXI
[6] Davies, Ibid. Vol III, pl XXXI
[7] Davies, Ibid. Vol III, pl XXXIIA
[8] Davies, Ibid., Vol VI, pl IV
[9] https://khaledgamean.wordpress.com/the-amarna-tomb-ta03-of-ahmes-ahmose-northern-group/
[10] https://khaledgamean.wordpress.com/the-amarna-tomb-ta03-of-ahmes-ahmose-northern-group/
[11] Davies, Ibid. Vol II, p 6
[12] https://www.medicalnewstoday.com/articles/323633
[13] Davies, Ibid. Vol IV, pl VII
[14] Davies, Ibid. Vol IV, pl IX
[15] Mandell, Alice Helene, *Scribalism and Diplomacy at the Crossroads of Cuneiform Culture,* UCLA, 2015, p 1
[16] Kuckens, Kathleen, *The Children of Amarna: Disease and Famine in the Time of Akhenaten,* University of Arkansas, 2013, pp. 51-63
[17] Online lecture by Dr. Gretchen Dabbs, Amarna Study Day, July 17, 2021.
[18] Davies, Ibid., Vol IV, pl XX
[19] Ridley, Ibid., p. 140; Kemp, Ibid., p. 41; Aldred, Cyril, *Akhenaten: King of Egypt*, Thames & Hudson, 1989, p. 16
[20] Aly, Reham, *Ceremonial and Economic Life in the Royal Palace of New Kingdom Egypt*, PhD Dissertation, Penn State University, 2014
[21] Davies, Ibid., Vol VI, pl IV
[22]https://www.osirisnet.net/tombes/amarna/tombes_amarna/photo/parennefer7_xx_0609.jpg
[23] Kemp, *The City of Akhetaten and Nefertiti: Amarna and its people*, Thames & Hudson, 2012, p 209
[24] Davies, Ibid., Vol VI, pl IV
[25] Davies, Ibid., Vol VI, pl III
[26] Ridley, Ronald T., *Akhenaten: A historian's view*, AUC Press, 2019, p 22
[27] Tyldesley, Joyce, *Nefertiti: Egypt's Sun Queen*. Penguin, 1998, p. 50
[28] Nims, Charles F., *The Transition from the Traditional to the New Style of Wall Relief under Amenhotep IV,* Journal of Near Eastern Studies, Vol. 32, No. 1/2 (Jan. - Apr., 1973), The University of Chicago Press, pp. 181-187
[29] Davies, Norman de Garis, *Akhenaten at Thebes*, JEA 9 No. 3/4, 1923, pl XXV
[30] Davies, Ibid. Vol VI, pl III
[31] Davies, Ibid. Vol VI, pl VII
[32] Davies, Ibid. Vol VI, p 24
[33] Davies, Ibid. Vol VI, pl XXXI
[34] Davies, Ibid. Vol VI, pl XXXI, Ridley, Ibid. p 151, points out that, curiously, Ay comments in his text, "May you see Re at the morning when he rises on the eastern horizon, and may you see the Aten when he sets in the western horizon." The question is why two different names for the solar god?

[35] Davies, Ibid., Vol VI, pl XXVII &
https://upload.wikimedia.org/wikipedia/commons/9/9d/Aten_worship_-_Great_Hymn_to_Aten.jpg
[36] See Kemp, Barry, The Akhetaten Sun Vol 21 No. 2, p 25, http://www.theamarnaresearchfoundation.org/Sun2015%Fall%20Vol%2021%20No%202.html
[37] Davies, Ibid., Vol VI, pl XXIX
[38] https://www.pinterest.com/pin/712905815985126465/
[39] https://www.pinterest.com/pin/712905815985126465/
[40] Photo by David Pepper, 2010
[41] https://www.flickr.com/photos/cultnat/23234875531

Walkway along the North Tombs at Amarna [40]

Decorative frieze of corn, chamomile, lotus, and grapes, Egyptian Museum, Cairo [41]

Great Aten Temple excavation report of squares EZ38–39, FA38–39 & FB38

by Fabien Balestra

Introduction and background

A major question behind the current project is why the stone temple is surrounded by so much seemingly empty space. An answer that is worth exploring is that it was to provide for the gathering of very large crowds from the city. Yet the main entrance to the enclosure on the west side, provided with large brick pylons placed only a short distance in front of the monumental front of the stone-built Long Temple, seems poorly designed for large crowds.

At the end of his 1932 season, John Pendlebury examined on behalf of the Egypt Exploration Society a gateway in the enclosure wall on the far side (thus at the back) of the temple precinct. The work in the area is not reflected in his 1951 publication, as the East Gateway report comprises only two short sentences and lacks illustrations. The eastern entrance is not included on the final plan made by his architect Ralph Lavers (Pendlebury 1951: Pl. I), one photograph was taken from the east in 1932 (not published) and the gateway is just visible on an aerial survey by the Royal Egyptian Air Force (Pendlebury 1951: 6; Pl. XXIV.2). Likewise, the report does not mention the objects found during the fieldwork in contrast with those discovered around other parts of the grand temenos (Pendlebury 1951: 17–20).

The existence of a gateway would, however, fit a pattern of access to the temple from the city by means of routes which skirted the eastern edge of the city (Figure 1). The location of the northern house of Panehesy, a principal administrator of the temple, close to the south-east corner of the enclosure wall is a pointer to the existence of this thoroughfare. Moreover, within the temple enclosure, including around the East Gateway, a superficial examination of the flat ground reveals irregular spreads of small sherds which suggest human activity but activity which did not require brick buildings.

It was decided, therefore, to open this year a small exploration at the very back of the temple's enclosure wall to run simultaneously with the excavation and rebuilding work of the Long Temple (Figure 2). The investigation was conducted between 27 Sept. and 4 Nov. 2021 with the assistance of 5 to 7 workmen and covered a total area of 125 m² that comprised 5 squares of 25 m² each. It first started with two encompassing the enclosure wall (FA38–39) and two in its interior (EZ38–39). A further exploration was rapidly expanded into FB38 due to the presence of features extending in that direction

but, because of time constraints, square FB39 was not opened and the spoil heap of EY39 was removed while one a little to the south was left untouched.

The main objectives were thus to re-examine Pendlebury's former excavation at a place where 'a small mud-brick ramp was leading to a threshold in which were two pivot-holes' (Pendlebury 1951: 6). The other goal was to start obtaining evidence on what had been happening in a zone largely empty of visible features when seen from the ground and from above.

The initial setting out of the grid squares was done by total station and the grid extended by tape measure, in particular for FB38 and EY39. Prior to excavation, a topographical survey was undertaken across each grid square. Workmen were then employed to remove overburden layers, which usually consisted of wind-blown sand and/or backfill from the 1932 season when recognisable. All archaeological deposits were removed by trowel and brush and were 100% sieved for finds. Hollow features, for example, pit cut <19705> or foundation trenches, were initially sub-sectioned before being fully excavated in order to have sectional information. The entire area was planned at different stages at a scale of 1:25. The excavation was backfilled after the completion of the work, using spoil from the excavation and clean sand. The unit numbers used during this season were a continuation of those employed in the Spring 2021 season. No former numbers were reused but, when relevant, similarities and equivalences were noted between the newly-created ones.

Amarna Period

In terms of the temple-life phasing, the excavation carried out in the far east temenos found only evidence of one phase whereas several have been observed, recorded and discussed in the space between the front of the temple and the Sanctuary area. It appeared that the first human activity on the unused land was marked by the foundation trench <19719/19721/19797> that would hold the narrow enclosure wall [19907]. The plan and profile of the cut were irregular with a full width extent of *c*. 3.40 m while the wall was 2.64 m wide. A similar measurement was noted for the western enclosure wall [16284] in 2018 although Pendlebury previously wrote it was of 2.50 m. It was possible to observe that the foundation trench was filled with at least two different layers: one of almost clean sand (19720/19796/19798) and one of crumbled mud bricks mixed with greyish sand and medium stones (19709/19718/19723). It is quite possible that comparable strata were to be found further down where the sand deposits would have acted as a sort of natural bonding between the different levels giving a better stability to the whole structure (Figures 3–5).

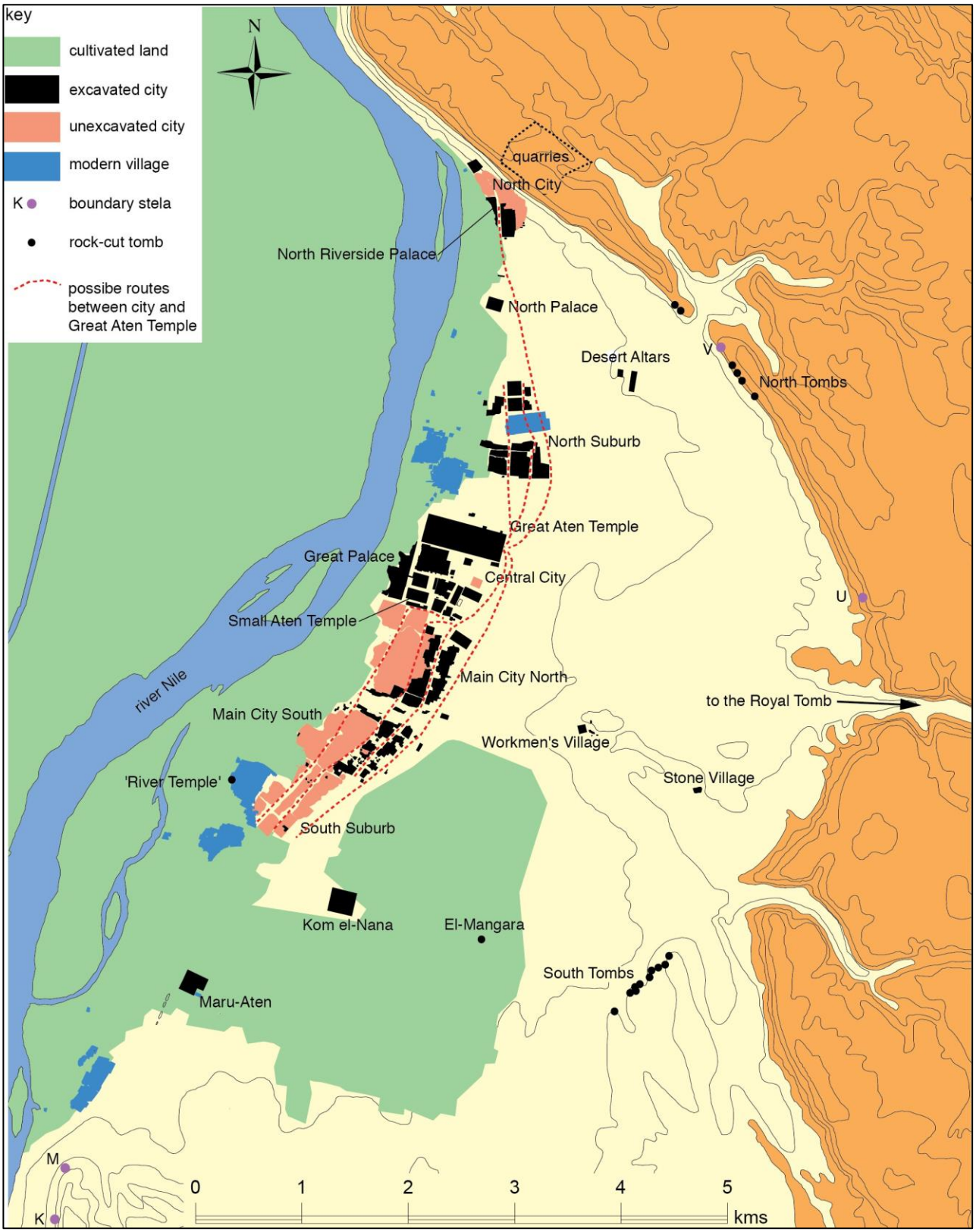

Figure 1: *Map of Amarna showing how traffic within the city could have taken people to the East Entrance of the Great Aten Temple enclosure.*

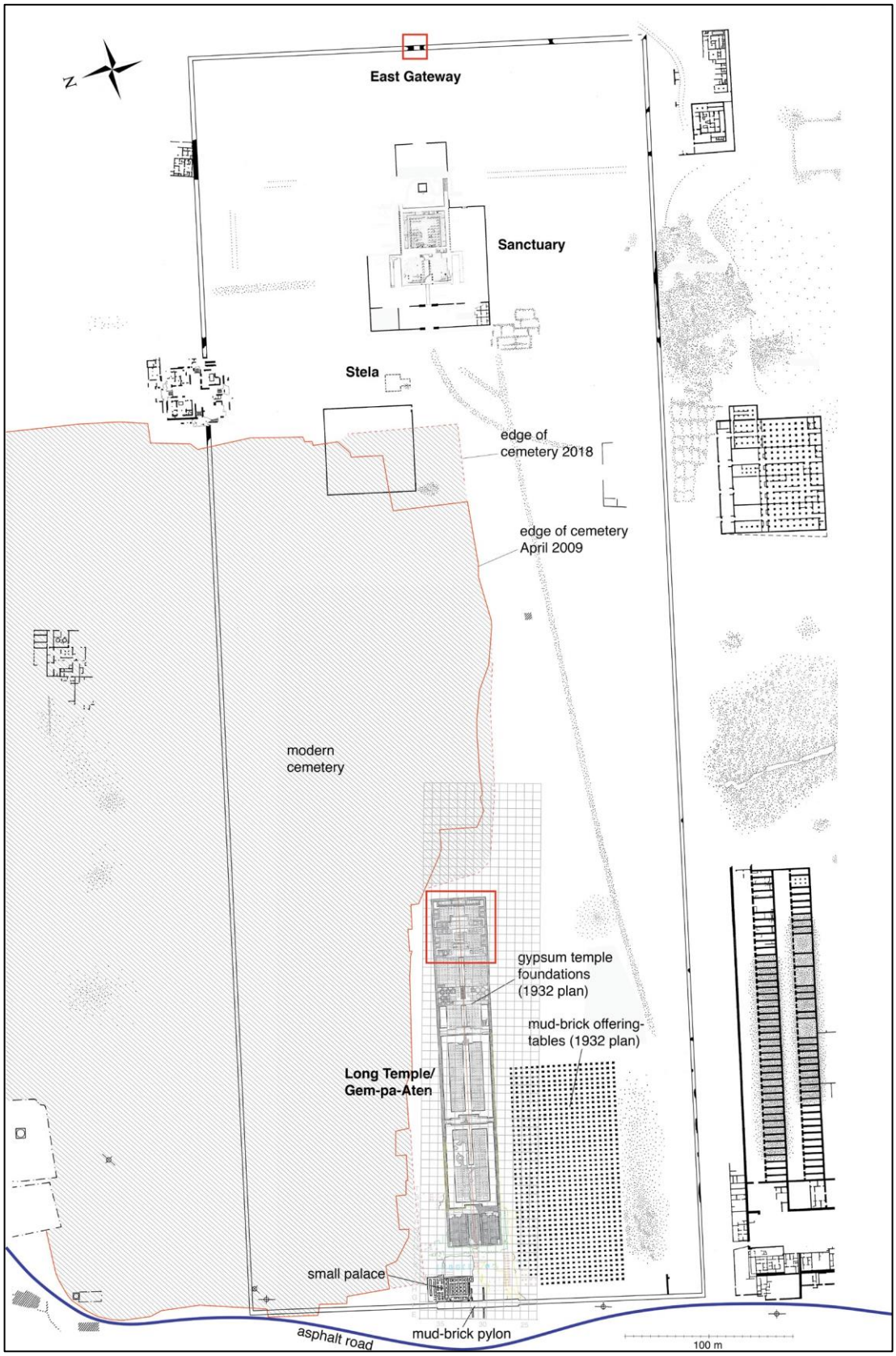

Figure 2: *Plan of the enclosure of the Great Aten Temple. It shows the main features within the enclosure and the main areas of the 2021 season which are outlined in red.*

Amarna Period

In terms of the temple-life phasing, the excavation carried out in the far east temenos found only evidence of one phase whereas several have been observed, recorded and discussed in the space between the front of the temple and the Sanctuary area. It appeared that the first human activity on the unused land was marked by the foundation trench <19719/19721/19797> that would hold the narrow enclosure wall [19907]. The plan and profile of the cut were irregular with a full width extent of *c*. 3.40 m while the wall was 2.64 m wide. A similar measurement was noted for the western enclosure wall [16284] in 2018 although Pendlebury previously wrote it was of 2.50 m. It was possible to observe that the foundation trench was filled with at least two different layers: one of almost clean sand (19720/19796/19798) and one of crumbled mud bricks mixed with greyish sand and medium stones (19709/19718/19723). It is quite possible that comparable strata were to be found further down where the sand deposits would have acted as a sort of natural bonding between the different levels giving a better stability to the whole structure (Figures 3–5).

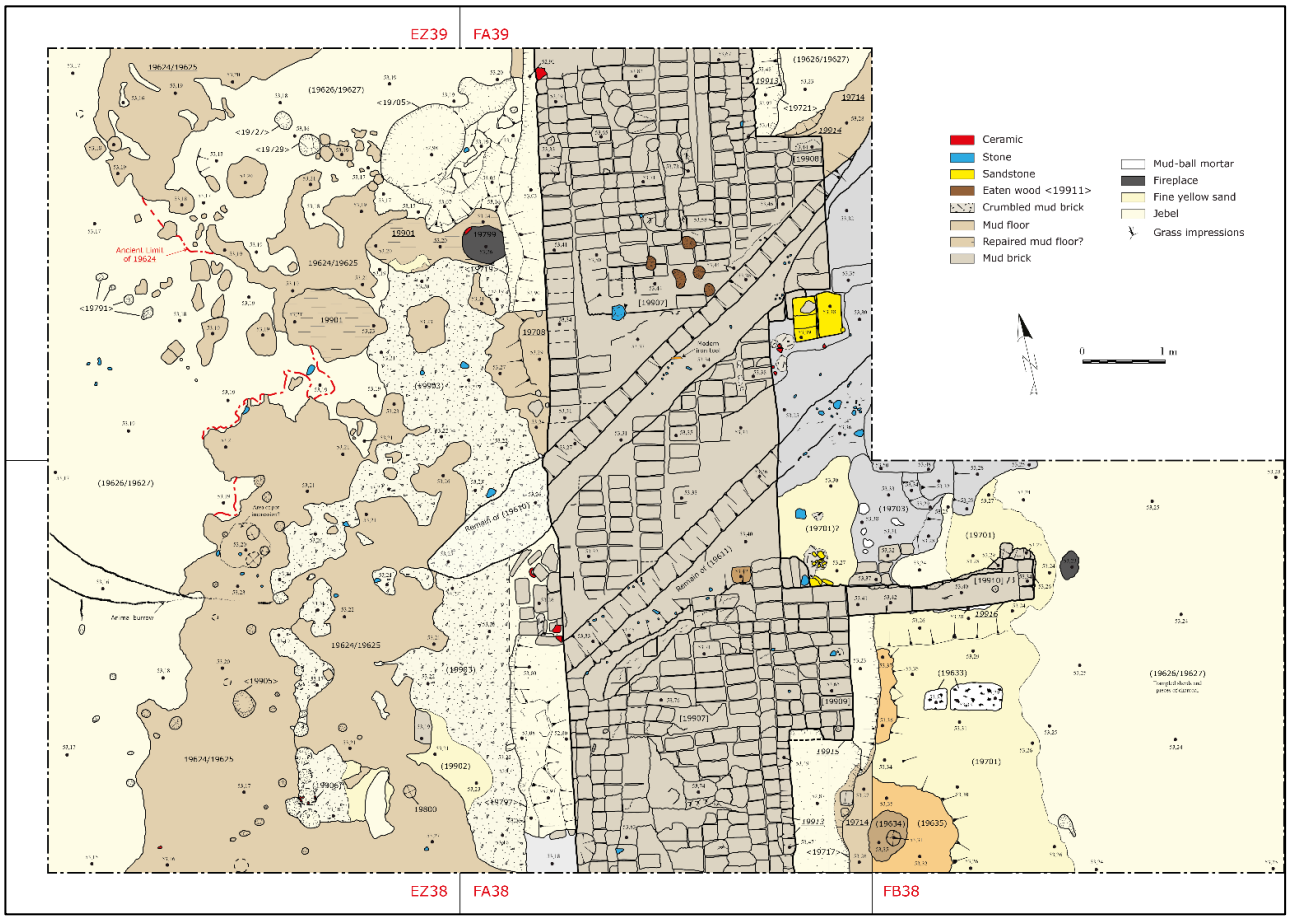

Figure 3: *Final plan of the East Gateway.*

Figure 4: *Aerial overview of the East Gateway, the mud-floor cut by post- and pot-holes. South is towards the bottom. Orthomosaic by Paul Docherty.*

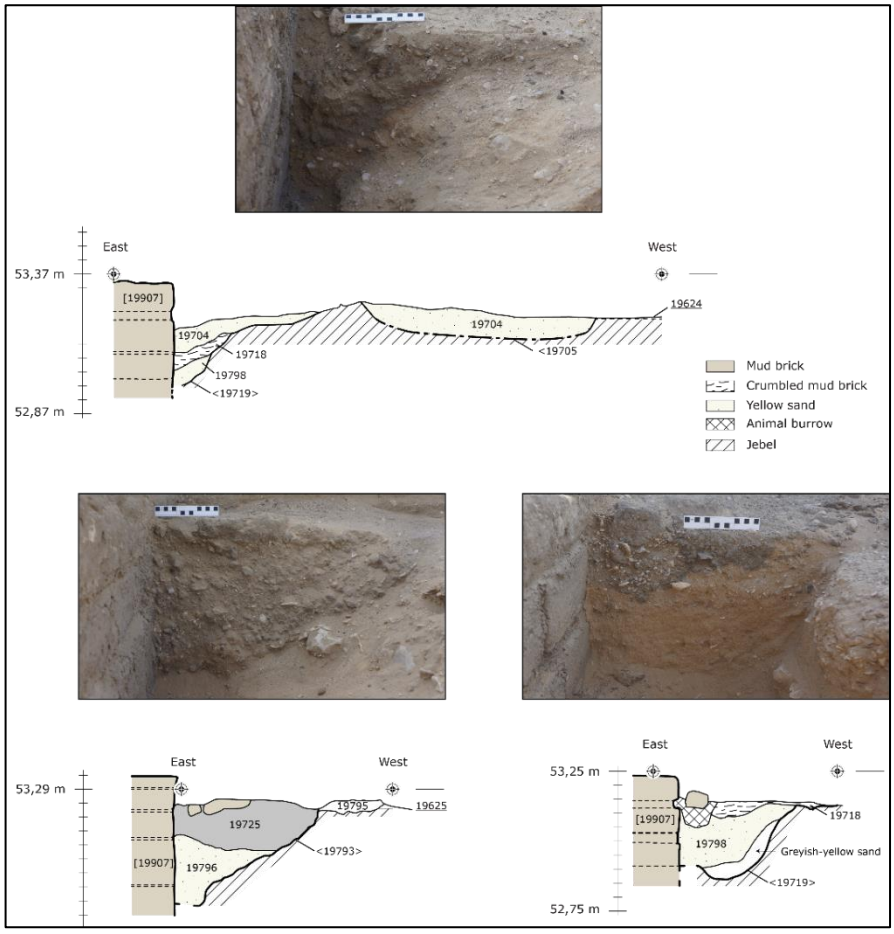

Figure 5: *Sections of the foundation trench of the enclosure wall [19907].*

Incense was found in several deposits. This material is no longer found in abundance on the site, despite it being a common substance likely used in temple rituals. It was found in raw lumps, on pot sherds, on charcoal and, mainly in this sandy filling (19796), in processed form — as tiny curving rods or filaments resembling dark ruddy-orange glass (Figure 6). Margaret Serpico has suggested that this shape had probably resulted from the incense being passed through a strainer in a viscous form, hence explaining the 2 mm-diameter size. Similar material was found in almost all the ditches, pits and postholes of Phase I at the Stela Site which is located to the west (Figure 6; Spring report 2012: 23, Figure 24; 28). The fact that these finds (object no. 43722) were recovered from the foundation trench fillings might suggest that it could have been used as a rubbish pit connected with the use of the Stela Site. Of course, the still-standing eastern mud-brick enclosure wall does not necessarily date to Phase I but rather seems to have been built later.

Figure 6: *Incense filaments found in the foundation trench of the enclosure wall. Photo by Anna Hodgkinson.*

Pendlebury had already pointed out the possibility that the temple precinct had expanded, referring to the 1935 aerial photograph on which can be seen shallow depressions running in the same direction as that of the current enclosure wall with the eastern linear depression passing beneath the court behind the Sanctuary's first period Altar. The original trenches would have been 100 m west and 10 m both north and south inside the new temenos although the south line is invisible compared to the rest (Pendlebury 1951: 5–6). This likely foundation cut is still visible from above (Figure 7).

A second argument in favour of such an expansion of the temenos is given by Henry Frankfort (Pendlebury's predecessor at Amarna) when describing the overall plan of house T39.1 and its closeness to the northern enclosure wall, especially since the house of Panehesy (first Servant of the Aten), located on the opposite side to the south, is quite far from the precinct wall (Figure 7; Pendlebury 1951: 25, Figure 5). The extension of the temenos to the north destroyed the south part of house T39.1 and a remodeling had to be made towards the east which took into account the angle of the new temple enclosure.

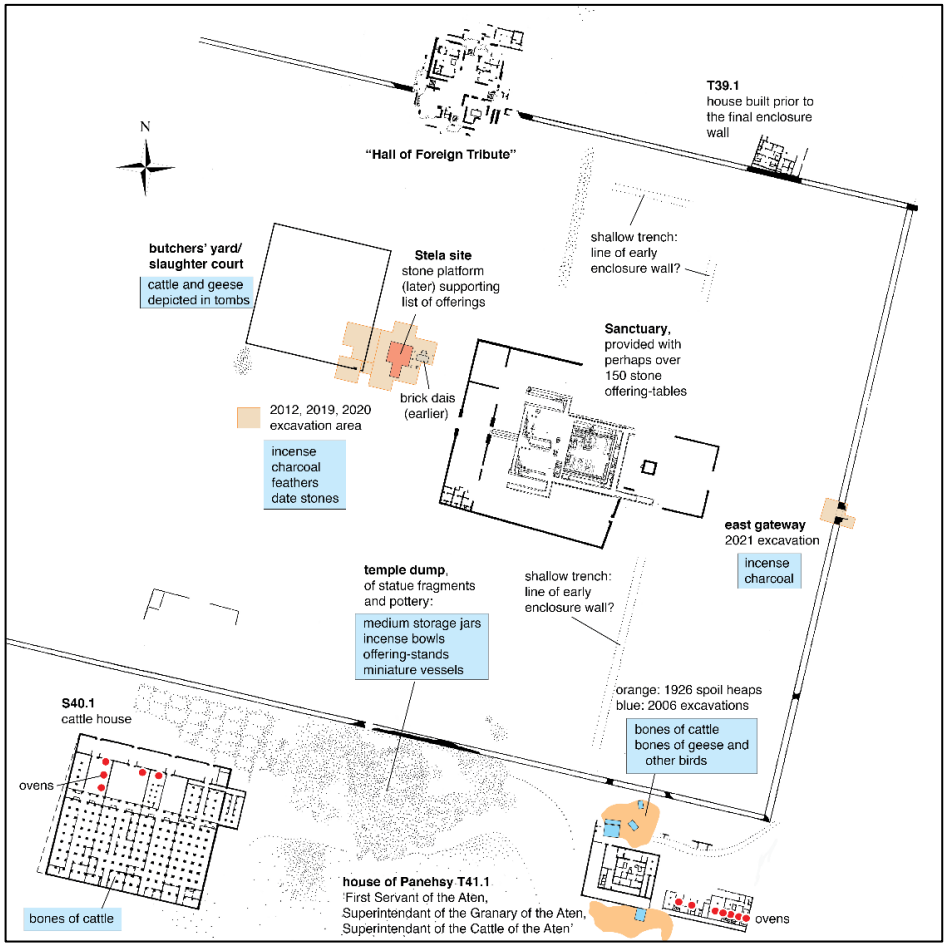

Figure 7: *The temple back and its associated buildings.*

As with most buildings at Amarna, the narrow temple precinct was made from mud bricks, a material easy to produce in large quantities as the raw material was easy to find. While the clay extracted from the Nile banks made the best adobes, some were also produced using desert mud but, in both cases, the brick-making process remains the same. The mud was mixed with sand, gravels or tiny pebbles from the desert and sherds of different sizes to which water and straw were added to bind the whole together. The mixture was then generally put into a standardised rectangular wooden mould. It was then lifted off, leaving the brick to be dried in the sun for eight to nine days and turned on its side for optimal overall (Emery 2009).

The narrow mud-brick enclosure wall [19907] was built from squarish and rectangular bricks (respectively 20 x 18 x 12 cm and 36 x 16 x 12 cm), vertically arranged on their sides within the foundation trench. They were then covered with mud mortar for soil insulation and consolidation of the substructure after a further horizontal north/south row of bricks had been added. The bricks used for the elevation were then laid horizontally in an east/west orientation probably following a running stack pattern (Emery 2011: 4, Figure 1). Some of the bricks show the impressions of grass layers between brick courses, probably to assist good adhesion within the superstructure itself. As with other large buildings at Amarna, the outer façade of the wall possessed a plinth set forward by one row and composed of two courses overlying the substructure. The foundation courses ran continuously beneath the gateway (Figures 5; 8–9).

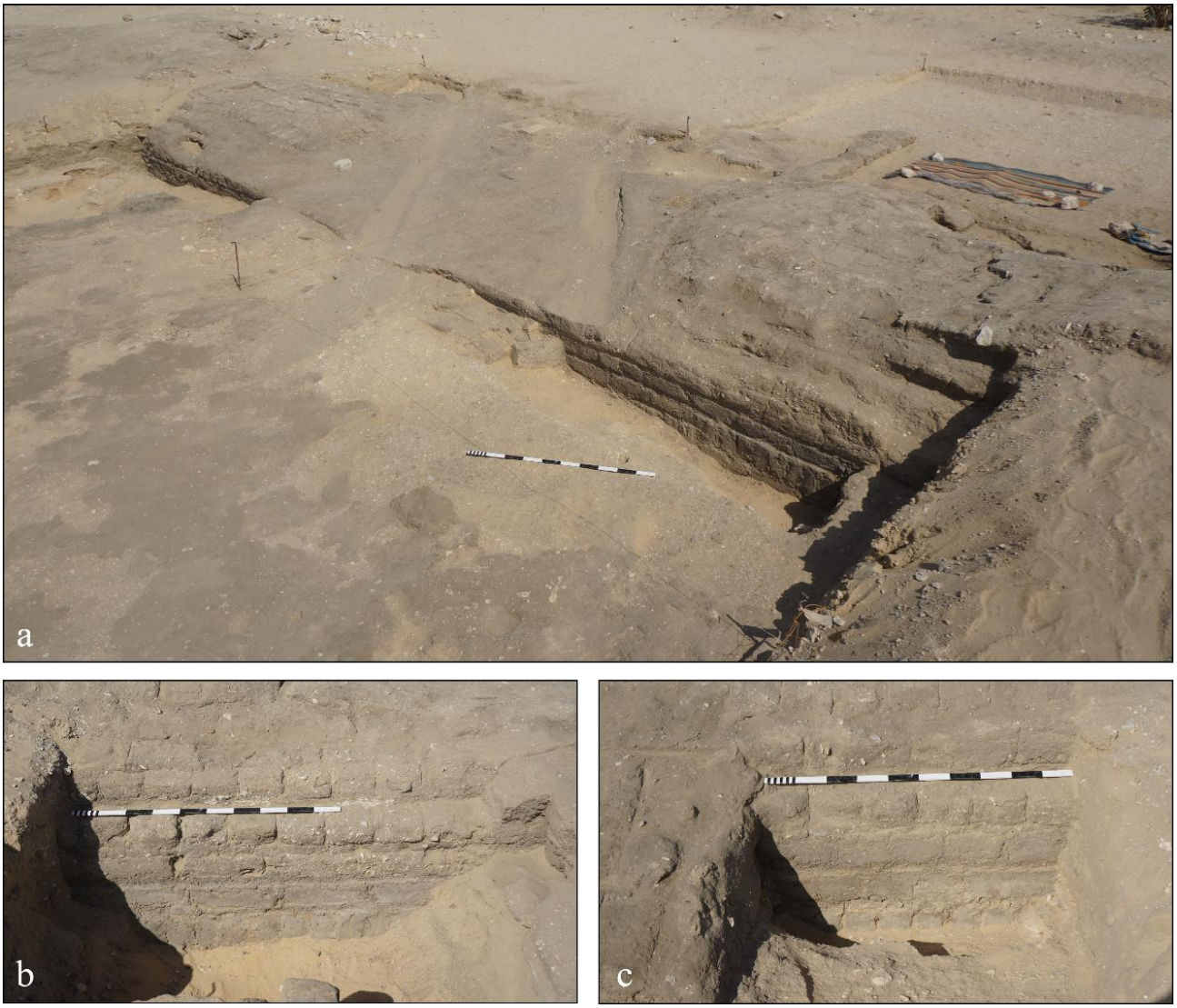

Figure 8: *a) View of the enclosure wall [19907] foundation facing north-east, b) at the south end facing west and c) at the north end facing west.*

Figure 9: *View, to the south-west, of the East Gateway at the end of the excavation. The gateway itself is occupied by modern tyre tracks which cross at a sharp angle.*

Two buttresses were discovered abutting the eastern façade despite the fact that Pendlebury wrote that no such features had been part of the Great Aten Temple's enclosure wall (and even though his 1932 photograph seemed to demonstrate to the contrary). Moreover, on the excavation plans of house T39.1 and the house of Panehesy, projections are shown at the easternmost ends of the north and south temenos walls (Pendlebury 1951: 25, Figure 5; Pl. XI). While one might consider them as potential buttresses, there are no such representations depicted in the rock tombs. Only re-excavation might give new information on the subject. The projecting walls exposed during the 2021 season are of rectangular shape and of almost the same dimensions (Figures 3–4; 9). The northern one [19908] measures 1.86 x 0.92 x 0.42 m and the southern one [19909] is 1.90 x 0.90 x 0.50 m and both appear to have been built directly over the desert surface (19626) or a thin layer of sand (19701). No foundation trenches were observed, though small mud mortar nodules were noticed at some points and interpreted as possibly intended to increase adherence between the ground surface and the buttresses. In other words, it was a mud-mortar bedding for the structure. But, in reality, the excavation at the south angle of the enclosure wall [19907] and the buttress [19909] showed a discrepancy with the northern buttress. In this particular area it seems that disturbance had occurred, perhaps through animal digging or the previous excavation as described below (Figures 3 and 10).

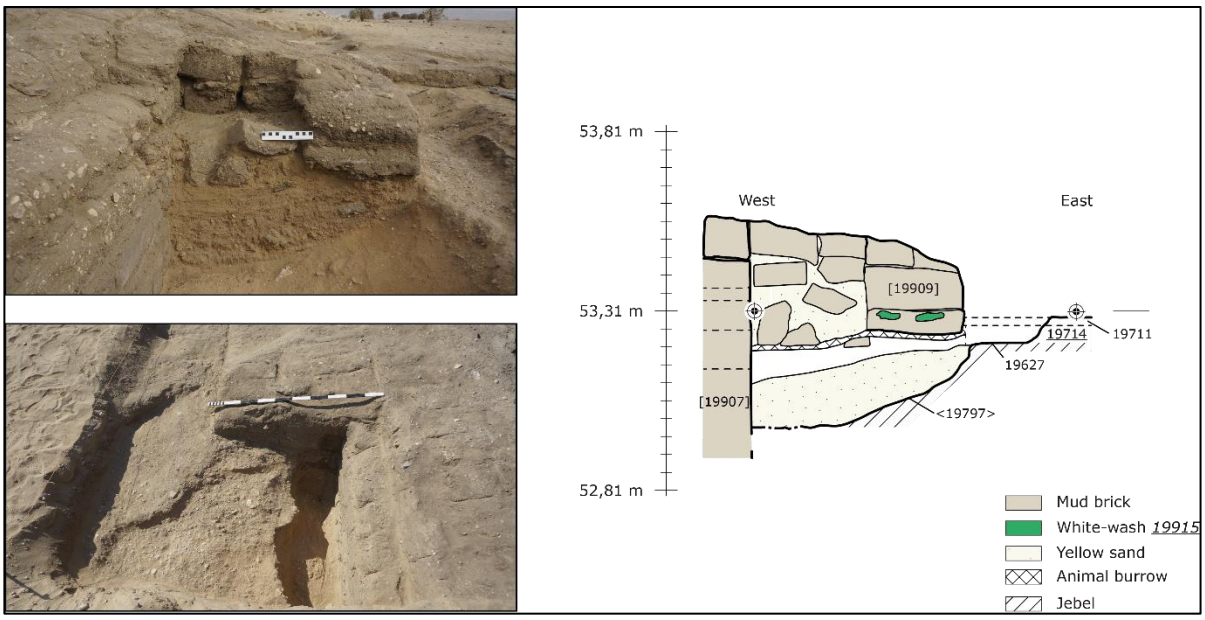

Figure 10: *North section of the buttress [19909] at the top and south section of the buttress [19908] at the bottom.*

A 2.30 m-long mud-brick wall [19910] abutted at right angles the north-eastern edge of the south buttress [19909]. This structure, measuring 0.30 m wide by 0.40 m high, presented the same characteristic construction as that of the buttresses: no foundation trench and partial mud mortar nodules as substructure. Preserved over two courses, this feature could be the remains of the south edge of Pendlebury's ramp since a layer made of a pebbly-stony-sandy mud combined with a few mud bricks (19703) was observed in a corresponding position towards the north. The same layer was noted in the *c*. 3.50 m gap left between the two buttresses, almost reaching the edge of a mud-brick platform of which the width was identical to that of the enclosure wall [19907], including the plinth. The stone threshold with its two pivot-holes was not rediscovered, however. A fragile rectangular structure, 59 x 52 x 5 cm, composed of three or six sandstone pieces, was observed near the south-east corner of the north buttress [19908]. A few similar fragments lay close to the south buttress [19909]. It is possible that these are the poor remains of Pendlebury's threshold; likely visible on his photograph by the whiter line in the centre of it (Figure 11).

Once all these structural elements had been built, a mud floor had been laid on both sides of the enclosure wall. Inside 19624/19625, from west to east, it covered either directly the compact desert surface (19626/19627) or a yellow sand deposit (19902) overlying a fine gravelly layer (19903) which was on the top of the desert. The explanation of the gentle rise towards the east was because of the presence of the platform. A few activities seemed to have taken place at this entrance since two roughly circular fireplaces, respectively

(19799) and measuring 46 x 50 cm and (19794) and measuring 42 x 44 cm, were found on both sides of the pathway. Likewise, the pot-holes <19727> and <19730>, measuring 25 x 22 x 17 cm and 28 x 23 x 20 cm, were observed close to the north fireplace (19799) and a multitude of others further south. The pit <19995>, measuring 34 x 27 cm and 20 cm deep and containing pieces of charcoal at its bottom, could be also added to these pot-holes. Nonetheless, some of these circular holes, despites their similarities in shape and depth, could also have been either animal burrows or very small post-holes for ephemeral structure(s). With the lack of material found within, it is difficult to distinguish between the two possibilities even if a circular pattern seems to be emerging when seen from above (Figures 3–4).

Figure 11: *View westwards of the gateway, its central part eroded by modern tyre tracks. The northern buttress is to the right. In the centre, above the metre scale, is the square patch of sandstone pieces, the remains of a stone threshold.*

The internal area showed a few rodent tunnels but also a larger burrow, *c*. 1.58 x 1.50 m, in the north part which hadprobably disturbed a former sub-circular pit, *c*. 1.16 x 0.82 m, since the overall cut <19705> contained two deposits: (19704) attributed to the burrow itself (it was possible to follow its direction in the foundation trench fillings), and (19710) interpreted as the original filling of the pit. This latter consisted of greyish sand including some mud-brick fragments, small stones and sherds. Nine fragments of incense bowls were present in the upper layer. The whole was then covered with a yellowish-grey sand deposit (19702) containing pebbles and a few mud-brick fragments as well as some artefacts (Figure 4 and 12).

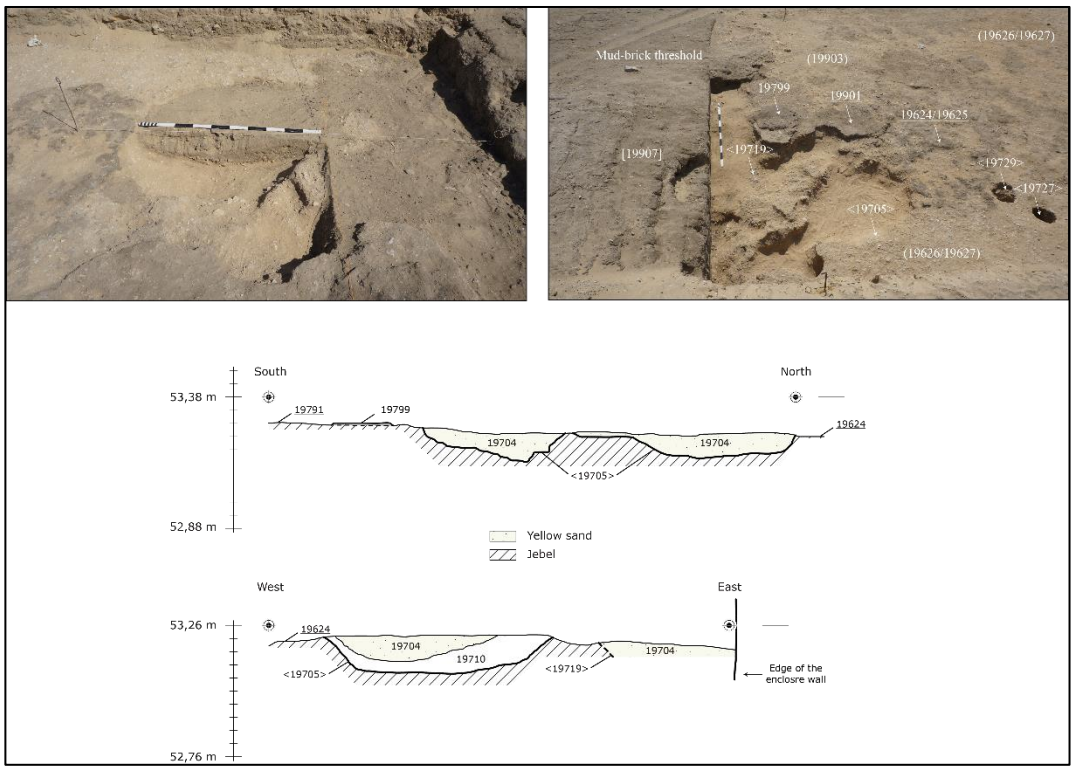

Figure 12: *View of the north section of the pit <19705> during (top left) and after (top right) excavation. The bottom shows its sections*

The mud floor 19714 outside the boundary wall was thicker and seemed not to have been made with the same care as the interior, as it was composed of many pebbles and gravel mixed with a little sand. Two burnt patches (19733), overlying a fine yellow sandy layer (19701), ran in the same direction as the mud-brick wall ramp [19910] but their function remains unclear. Another burnt area was found towards the south-west of the latter ones. The darkest circle (19934) probably extended further and showed as brownish sand (19935). Both deposits seem to have covered either the mud floor 19714 or the sandy layer (19701). These burnt zones will be fully excavated in the future in an attempt to understand better the possible ramp as well as the explanation of the burning.

Eventually, the internal and external mud-floor would have lapped against the edges of the different structures. In the case of the enclosure wall, some traces of the floor 19624/19625 were still visible at the junction between the first and second course of mud bricks having been put over the foundation blocks before having been finished with a white coating. The whole enclosure wall, buttresses and long wall had also been plastered with white *(19912/19913)*, *(19914)*, *(19915)*, *(19916)*, as shown here and there on their respective façades. Nevertheless, it is more likely that the thick mud floor 19714 had not gone beyond the long projecting wall, as a probable fireplace, several trampled sherds and pieces of charcoal were detected directly on the compact desert

surface. Finally, the possible presence of wooden sticks/posts should be mentioned on the north side of the gateway: five circular features <19911> contained the vestiges of wood which had been presumably eaten by termites. Close to each other, they all presented a similar shape, size and depth but their real roles will probably remain unclear, (Figures 3–4).

Post-Amarna Period

After the Amarna Period the area was no longer maintained. The desertion and degradation of Akhenaten's great city are visible in the different layers of sand, some having been blown in by the wind, and in the discovery of several episodes of wall collapse inside and outside the enclosure wall. The dislocation *in situ* of the mud-brick wall and of the threshold were also noticeable to some extent (Figures 13–14).

The mud bricks of the four internal collapses (19620, 19623, 19631 and 19632), mainly exposed in the north, had remained partly articulated, meaning that these events might have occurred at a time when the wall was still well preserved and standing quite high, as they could extend up to 4 m away from the wall edges. Another point supporting the interpretation that these deposits were the remains of fallen brickwork is the presence of white-plastered surfaces found upside-down. By contrast, the collapse (19728) exposed at the foot of the south buttress [19908] lacked consistency and the mud bricks, despite being close to each other, were slightly scattered (Figure 15).

All collapses covered sandy layers which appeared to have overlaid probable Pendlebury cuts. One, <19793>, was observed along the west edge of the enclosure wall while the other, <19717>, was found at the angle formed by the buttress and the wall (Figures 3–4; 9a; 16). The cuts were thought to have been made in the search for the foundation courses of the boundary wall since the mud floor on both sides had been cut in a very irregular shape. Furthermore, the trench running along the east façade of the south buttress had stopped right above the desert surface rather than continuing down, as in the corner with the enclosure wall. Consequently, the sandy layers found under the collapse layers inside and outside the temple could be Pendlebury's backfilling. The remains of a thin layer of mud, (19606/19717), caused by moisture over the surface of one of these layers, mainly in the angle of the buttresses and the wall, would support this hypothesis (Figures 13–14). (According to another team member, Sue Kelly, a similar layer above Pendlebury's excavation backfill was observed in the front of the temple in the basin area.)

Figure 13: *Aerial view of the East Gateway at an early stage in the excavation, with the gateway itself occupied by modern tyre tracks which cross at a sharp angle. South is towards the bottom. Orthomosaic by Fabien Balestra*

A series of aerial photographs show that the position of the East Gateway has been used as a road since at least the end of Pendlebury's fieldwork. The removal of the overburden exposed parallel tyre tracks <19610> and <19611> and revealed how they had compacted the surface over the subsequent period (Figures 13–14). This traffic compressed earlier deposits, notably a former, natural yellowish-grey sand deposit containing much fine gravel and tiny stones. This layer (19605) was noticed because of the hard small ridges in the trough of the tracks. Running roughly NE/SW, the tyre tracks had damaged the temple precinct, partially the north buttress and more considerably the mud-brick threshold. A modern iron tool (hacksaw blade) with paper remains were found pressed into a hollow in one of the tracks (Figure 17).

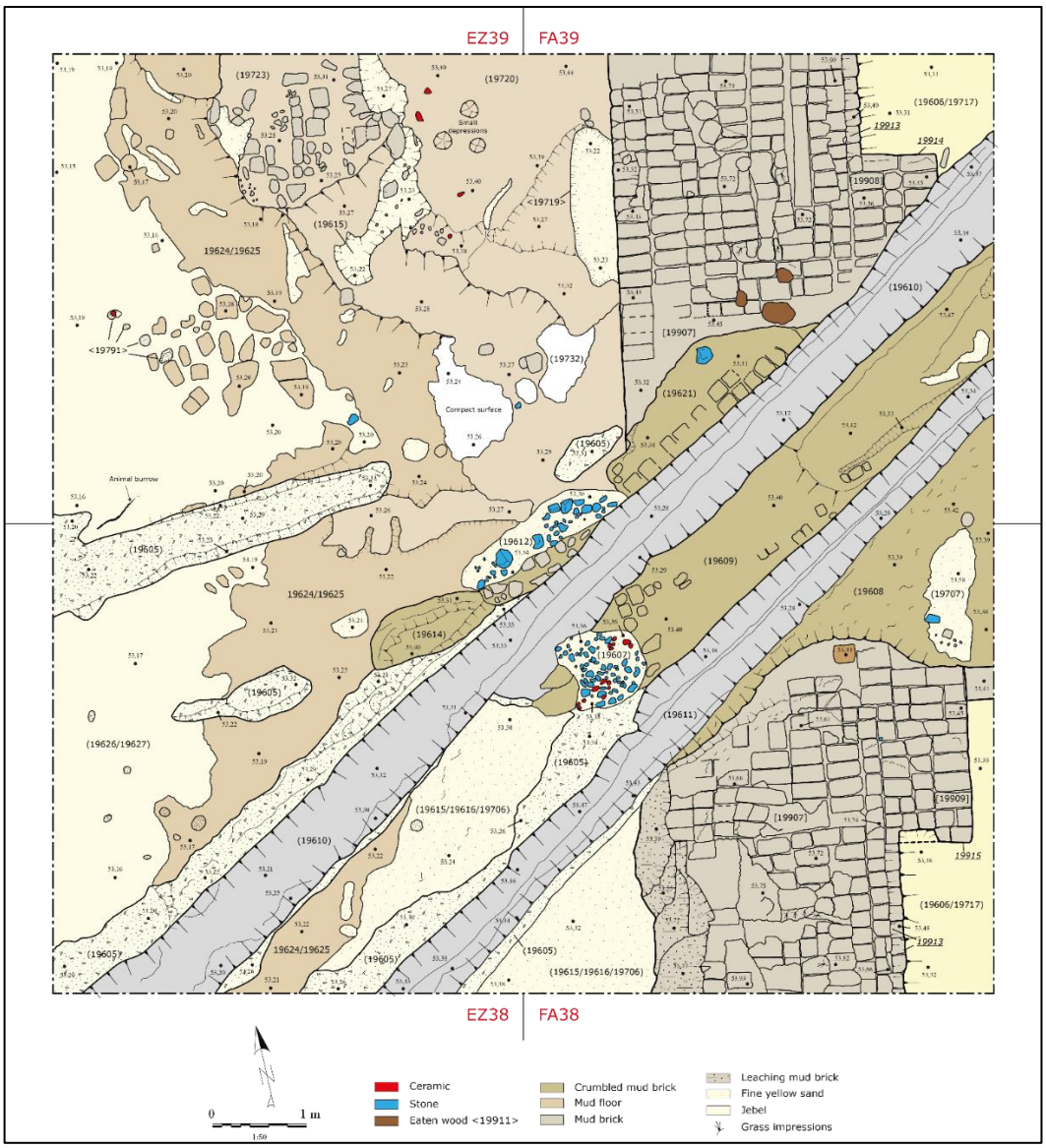

Figure 14: *General plan of the East Gateway after the removal of the first superficial layers.*

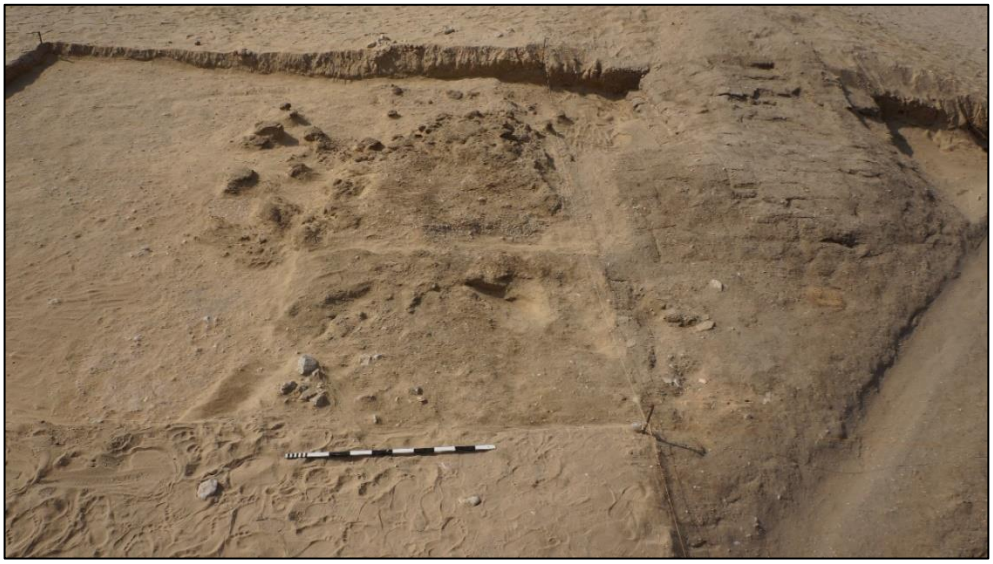

Figure 15: *View of the collapse (19728) behind the projecting wall [19910] towards the south.*

Figure 16: *Pendlebury's cut through the possible mud floor 19724 inside the enclose wall [19907]. North is at the top.*

Figure 17: *The modern iron tool found within the trough of (19610), facing north.*

Finally, two patches of stones were found in the middle front of the mud-brick threshold when coming from the west. The first one, (19612), of elongated shape, measured 1.96 x 0.42 m. The second, (19607), was circular and measured 0.80 x 0.86 m. Both were made of fist-sized unworked pieces of indurated limestone mixed with yellow sand and contained several potsherds. Both were also interpreted as modern features and perhaps had been used as supports when repairing a flat tyre (Figures 13–14; 17).

Figure 18: *View of the stony patches. (19607) at the back and (19612) at the front towards the south.*

A good way to comprehend the impact caused by the continuous passage of vehicles was revealed during the excavation, in particular at the end of the season, by the use of a pick-up truck to reach the area. A quick look at the former flat surface between the East Gateway and the Great Temple shows the creation of new tyre tracks with different depths. The more the car passed, the deeper the troughs became, obliging the driver to deviate his course before going back on the main path. If the deviation could not have been possible it is certain that the ground surface, and probably any archaeological deposits underneath, would have been more damaged, as has happened at the East Gateway. Also, the heavier the vehicle is, the more damage is done.

Figure 19: *View of the tyre tracks created during the 2021 season. View towards the west.*

The finds

The excavation yielded quite a large number of artefacts. They were sorted according to their material: pottery, worked stone, stone tool (hammer and flint), metal, faience, glass and organic remains (charcoal, animal bone, shell, jar sealing and others) before being separated into fragments, type of stone, beads, inlays and working pieces. The sherds received special treatment due to the amount and the variety recovered and were then pre-sorted into *standard* and *special* types. The first category was organised according to the use of Nile or marl clay with subdivisions according to their shape (rim, base, handle or body). The second category comprised all other vessels (blue-painted pottery, containers of gypsum, pigment or incense, and miniature vessels). The blue-painted fragments, being characteristic of pottery at Amarna, followed the same subdivisions as the standard vessels.

Although the post-excavation analysis is still in progress, a preliminary overview is possible. The overall amount of ceramic predictably outnumbers the other kinds of objects, with a large representation of Nile-clay standard vessels. A surprise discovery was the wide range of incense bowl fragments, along with many pieces of charcoal with resin residues. By contrast, the blue-painted pottery is barely represented at the East Gateway (Figures 20–21). Hopefully, a fuller study of the pottery will give an insight into the nature of human activity that occurred in the area or, at least, into the function of the vessels (amphora, beer jar, bowl, etc.). Eventually, hypotheses could emerge on the possibility of relationships with the Stela Site or the Sanctuary itself, the latter being almost on the east entrance axis, making it the first building to be seen by people entering the temple precinct from the east.

Mud jar-sealing fragments were discovered in a smaller quantity than at the front of the temple even though the vessels, having been sealed, were used in temple activities. Among the dozen of jar-sealings found, none showed the remains of recognisable stamped designs, although grass impressions remained on the underside, making the identification of the vessel contents and its institutional attachment impossible. The composition (dark grey Nile clay or yellowish-beige desert clay) and, perhaps to a lesser degree, the form of the sealing (cap, dome or cylindrical shape) may also indicate the organisation of the economic system within the country as well as outside, in particular its connection with Canaanite regions (Wegner 2018: 244–245; Bavay 2015). The majority of those found at the East Gateway were made of Nile mud and a small

proportion revealed the possible use of marl clay where the latter could also reflect the import of Canaanite jars. These containers might have contained products such as incense, olive oil or honey. These items of merchandise were widely used at the temple as offerings along with wine which, according to the number of recovered stamps, was the most characteristic edible liquid (Bertram 2019).

Very few worked alabaster pieces were discovered during the excavation. They are mainly of conical shape with one or two smooth surfaces. Faience items amounted to a fragmented vessel, one thin and long inlay, two tiny lumps, and three beads of which one is half-broken in its length but presents engraved hieroglyphs. Glass objects are exemplified by one opaque rod and some tiny lumps. There remains to be listed one very small and thin gold sheet, a broken feather, a few plant remains, including seeds, and samples of plaster.

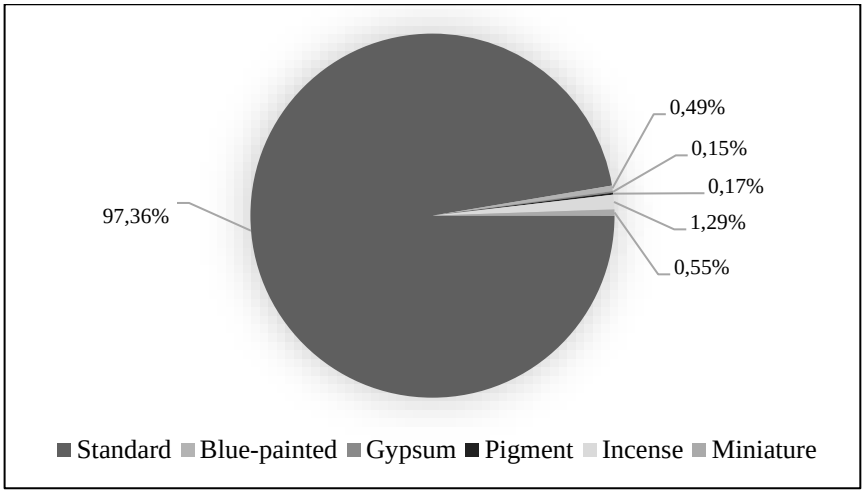

Figure 20: *General and specific type of vessels.*

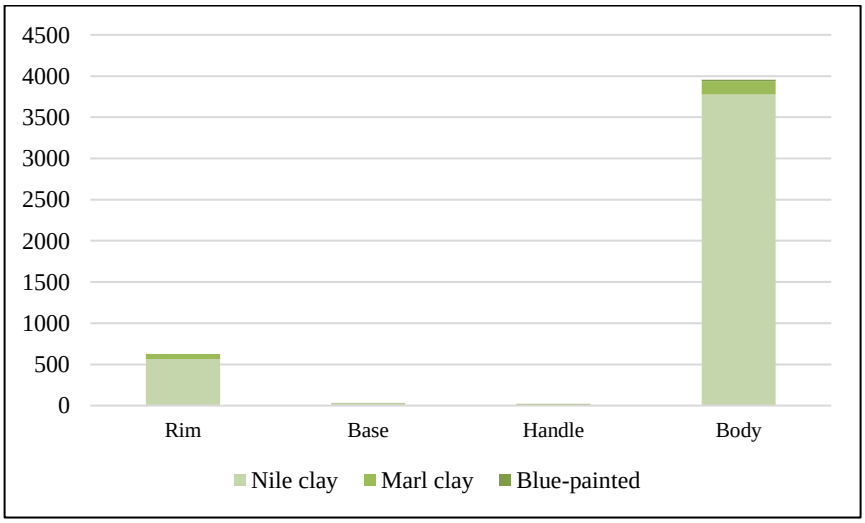

Figure 21: *Distribution of sherds by type of fragmentation and fabric*

Conclusions and perspectives

The investigation carried out this year in the eastern part of the enclosure highlighted the human presence at the Great Aten Temple as a whole. Although Phase I seems not to have reached the very back of the temple, it was nonetheless possible to attach some material to this phase, and perhaps to the area of the Stela Site itself. The zone had developed immediately after the construction of the boundary wall and the ramp leading to a mud-brick threshold during the expansion phase of the temple. The entrance had faced almost exactly the back of the Sanctuary. A few activities probably linked to guarding could explain the fireplaces, pot-holes and post-holes. These features and the finding of fragments of incense bowls and pieces of incense could also indicate the possibility that people procured such material on the way to the Stela Site, for instance.

Further investigations should be undertaken: to verify the existence of a second projecting wall which would validate the ramp assumption and to continue to explore the internal entrance and to sample areas of the desert surface between the gateway and the back of the Sanctuary. It would also be of interest to examine the wall further to the south, where another modern entrance occurs. When passing by, one can observe the presence of a long mud-brick feature running east–west; similar in shape and orientation to the one exposed this year. Whether it is a real parallel or is merely a large collapse from the enclosure wall remains to be seen.

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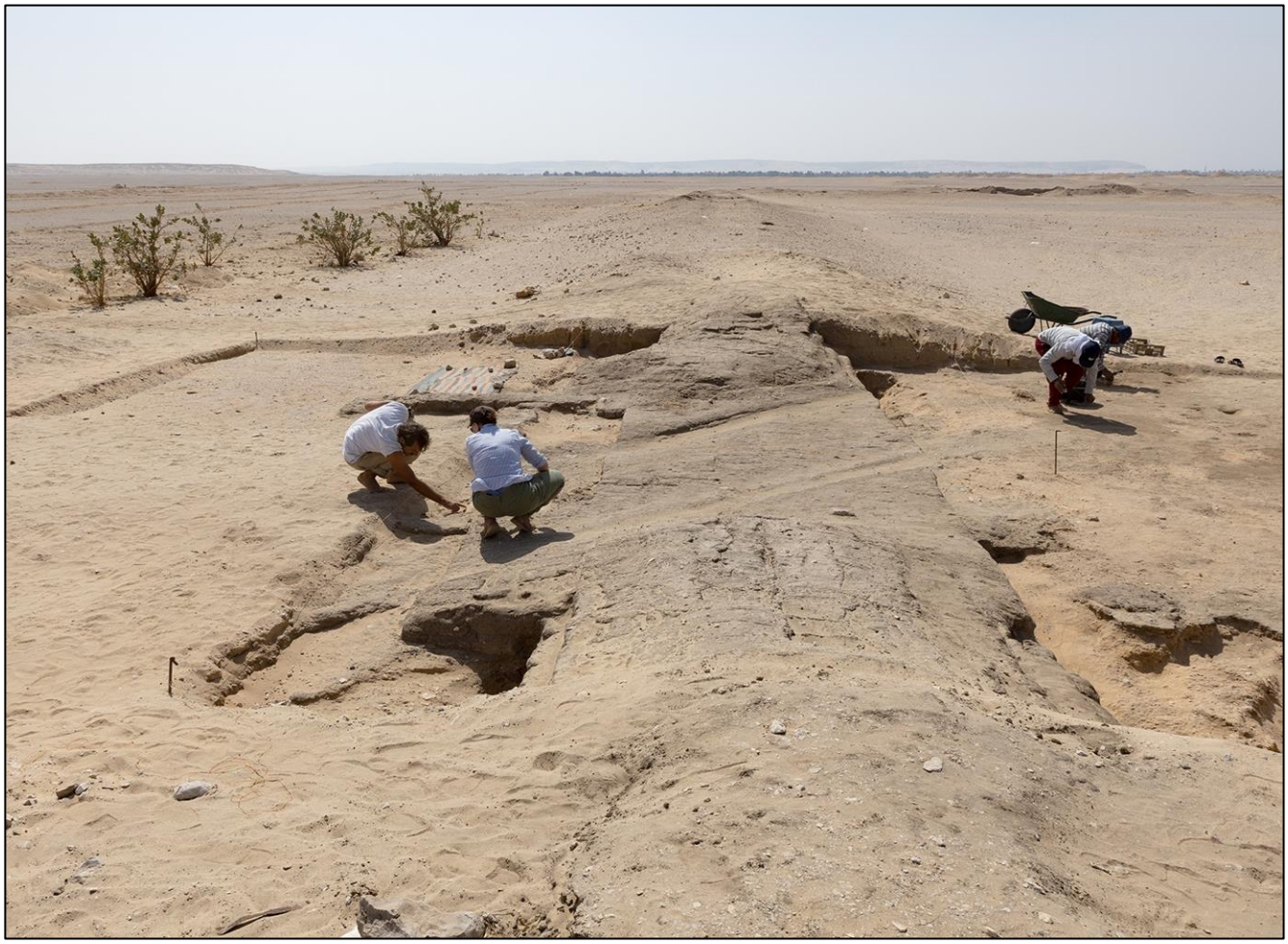
Photograph of the East Gateway taken in 1932 after excavation by the EES Pendlebury expedition. View to the west. The spoil heaps in the background are derived from the excavation of the Sanctuary. EES archive photograph Amarna 1932/A.41.



The East Gateway, mid-way through the excavation season, October 2021. View to the south. Photo. by A.Mesli.

Continuing the exploration of the Great Aten Temple

Barry Kemp

For some of the recent work at the Great Aten Temple we have jumped to the rear of the building we call the Long Temple, where a separate section of the temple was laid out with a maze-like pattern of stone walls and a dense filling of limestone offering-tables. By the end of the autumn season (September and October) we had removed the covering of wind-blown sand over an area 32 m wide (105 ft, the full width of the temple) by 30 m (98 ft) long. This is a large area to plan at our chosen scale of 1:25. As the ground was cleared, our archaeological planner, Juan Friedrichs, set up his drawing table, laid out his tape measures and proceeded to complete the task just in time. The surface to be planned is the ancient foundation layer of gypsum concrete. It is hard but also vulnerable to weathering. By the time we leave, it has to be protected by a layer of fresh sand. Juan ended his work with the sand moving ever closer to his ankles. Once back in our office in Cairo, the six sheets of plans from the season were scanned and the long task begun of digitising them in a vector planning program. A series of reference points taken by our Total Station ensures that the new plan fits into the outline of the whole temple. To complete the record the surface of the temple foundations was also photographed, in part by a tiny remote-controlled camera on top of a long pole. Computer software can then create a mosaic aerial photograph covering large areas.

The following pictures take you through the stages of the work. We plan to resume in the autumn, with more rebuilding at the rear of the temple and continuing the examination of the ground at the very back of the temple enclosure, between the newly excavated Eastern Gateway and the back of the Sanctuary (see the report in this issue by Fabien Balestra).

Figure 1: *Nearing the end of the season's clearance, Juan Friedrichs, seated at the table in the middle, measures and draws before the foundation layer is covered in sand. View to the south-east.*

Figure 2: *How we know where the walls stood. The black line that runs vertically down the middle of the picture was made by the original builder as a guide for the laying of limestone talatat-blocks for a wall. The wall ran to the right of the line. When, later on, the blocks were pulled up as the temple was demolished, the mortar also lifted to reveal the black line again.*

Figure 3: *The south-east corner of the temple, marked by the impressions of talatat-blocks in the foundation layer of gypsum concrete. View to the west.*

Figure 4: *In view of the large area of moist gypsum that the builders spread over the ground the almost total absence of impressions of human feet and animal paws is remarkable. This impression of a person's foot is on its own; it is not part of a trail of footprints. Considerable self-discipline is implied.*

Figure 5: *A fragment of a near-lifesize statue in purple quartzite. It depicts part of the edge of a sandal, the remains of the foot having been cut away. It is one of the few pieces of sculpture not moved to spoil heaps along the sides of the temple by earlier archaeologists. If the statue comes from near where the fragment was found, it would have stood close to the eastern large offering-table, the site of which is visible in Figure 1 as a rectangle of sand near the back wall of the temple (also Figure 9).*

Figure 6: *Builder Mohamed Shahata lays a preliminary line of blocks along a string guideline and checks that all follow a horizontal plane. The blocks rest on piles of sand which protect the underlying foundations and allow for easy adjustment of each block.*

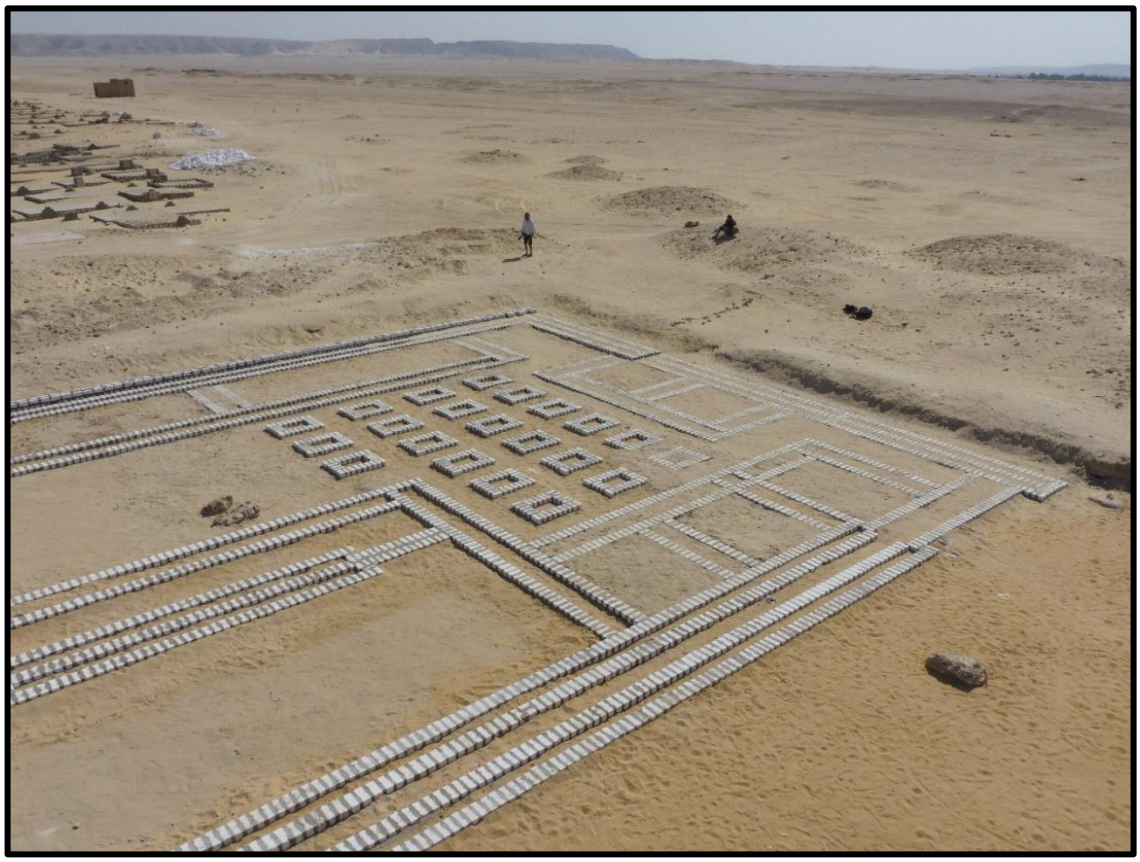


Figure 7: *By the end of the season the rear half of the excavated area had seen the builders lay the foundations for the walls and offering-tables to come. View to the south-east. Compare Figure 1.*

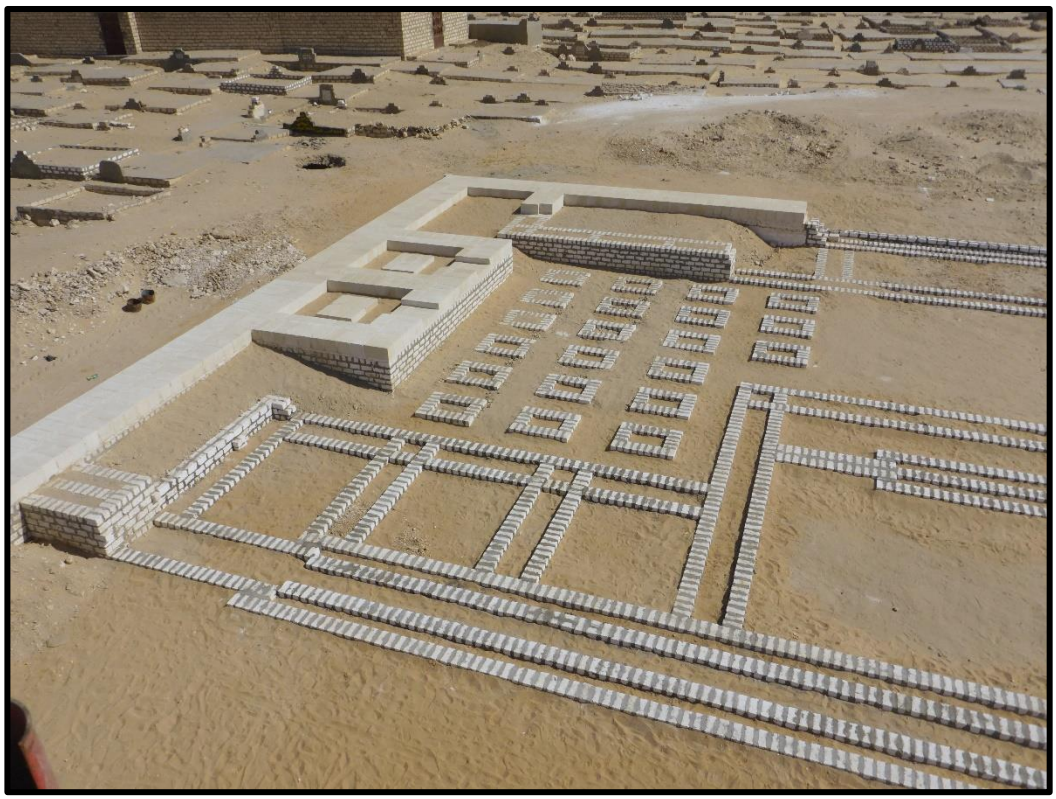


Figure 8: *A continuation of Figure 7, viewed to the south. A length of the north temple wall and a pair of offering-tables in their own rooms have been completed to show how the final appearance of the rebuilding will look.*

Figure 9: *The rear part of the temple was filled with offering-tables, many of them inside individual small chambers. This offering-table has been completed, inside its chamber, as a sample of how the final scheme will look. View to the south.*

Figure 10: *A view of the complete length of the Long Temple, taken from near the part at the back where the recent work has taken place. View to the west.*

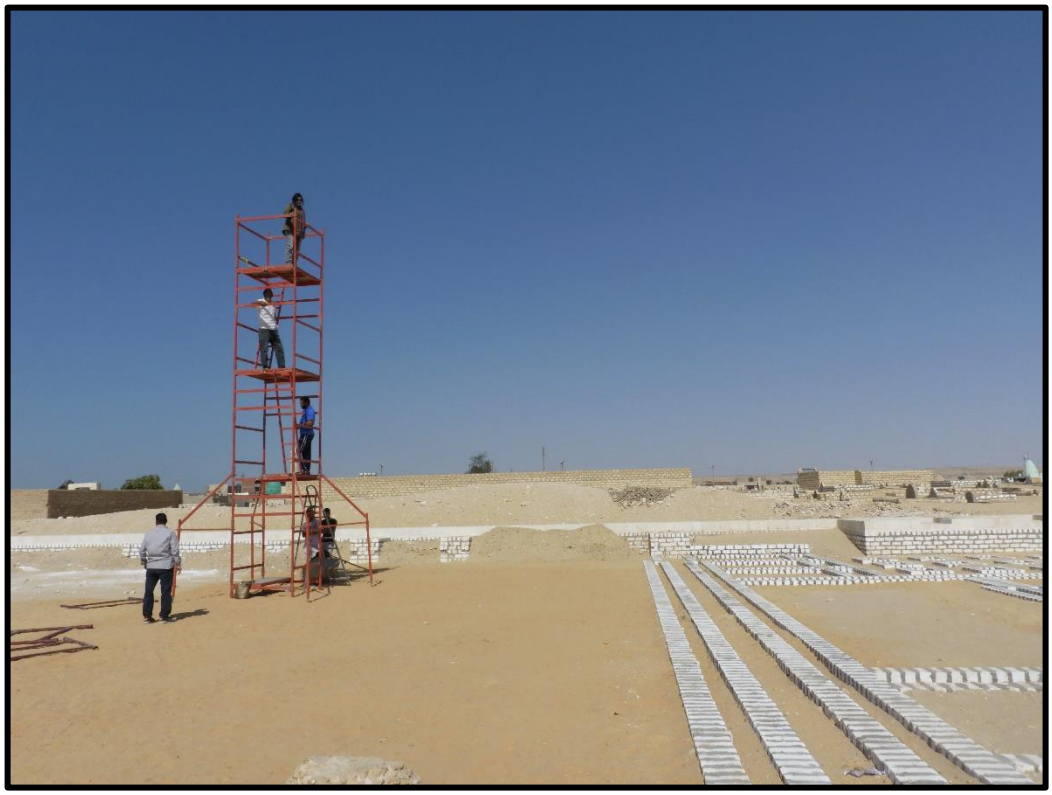


Figure 11: *High-level photographs from the end of the season were taken from a platform on top of a scaffolding tower. In this picture the person at the top is inspector of antiquities* Mariam Atef.

It remains, once again, to thank the members and board of The Amarna Research Foundation for their generous support of the work.

The Rays of the Aten shining over Amarna, photo by Jill Pepper, 2010

The Royal Road and ruins of the North Riverside Palace, photo by Jill Pepper, 2010

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