

**Volume 26, Number 2  
December 2020**

Published twice per year since  
1993

Copyright 2020, The Amarna  
Research Foundation

**Table of Contents**

Article -- Author	Page
<b>The Royal Court at Amarna – Part 1</b> <i>David Pepper</i>	2
<b>Amarna Excavation Update</b> <i>Barry Kemp</i>	22

**Officers and Directors**

President – Floyd Chapman  
Vice President – David Pepper  
Secretary – Anita McHugh  
Treasurer – Robyn Steffelin  
Membership – Jill Taylor Pepper  
Publications – David Pepper  
Director – Merrie P. Wycoff  
Director – Tim Henry  
Director – Laura Engel  
Director – Rodney Shuff  
Founder – Robert Hanawalt

**The President's Papyrus**

Greetings Amarnaphiles,

As 2021 proceeds, the world finds itself in the grip of the COVID pandemic. It is almost surreal how it has altered our behavior and the way that we must conduct our daily activities. It is my sincere hope that none our members have been directly affected by this modern plague.

I personally had plans of going to Egypt this last March but COVID stepped that. So, I was planning to go this coming March but in both cases I was not going to going until the Grand Egyptian Museum was open. But the Ministry of Antiquities has once again delayed the opening until fall of 2021. But the truth is that COVID is no more under control in Egypt than it is here. The US state department has issues a warning not to go to Egypt. So once again my Egypt travel plans are in limbo.

With this issue of the Sun, David Pepper is providing us with another installment of his wonderful book about the Amarna Court. Following that we are once again treated to another insightful excavation report by Barry Kemp. I think you will all enjoy them both.

We are a small organization, but we have been instrumental in helping Barry and his teams accomplish great things over more than 20+ years. All of this has only been possible because of your continued interest and support. Thank you! Take care and be safe.

With best wishes always,

Floyd

# The Royal Court at Amarna

*David Pepper*

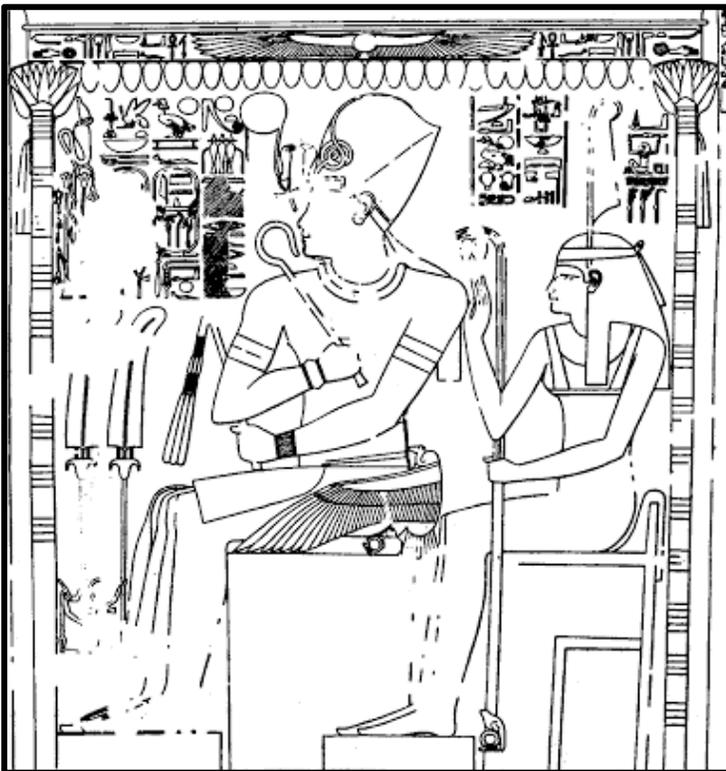
## THE KING:

Amenhotep IV was the son of Amenhotep III and his chief wife, Queen Tiye.

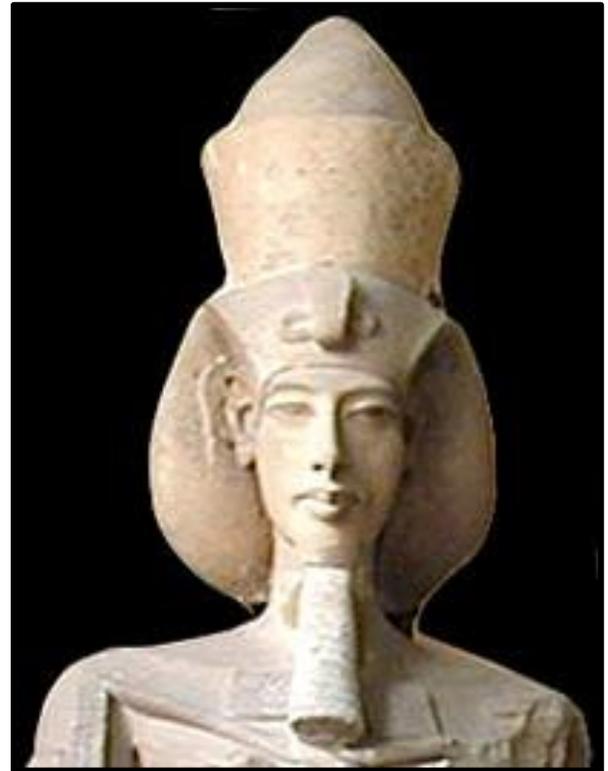
On the death of Amenhotep III about 1353 BCE, Amenhotep IV became pharaoh [1]. Initially he ruled Egypt from Thebes, building at least three temples beside the Temple of Amun at Karnak [2].

He also seems to have married Nefertiti during the first year or so of his reign [3]. Nefertiti 'may' have been the daughter of Ay (who constructed tomb TA25 at Amarna, and later tomb WV25 at Thebes) and Ay's first wife, Iy, but this is uncertain [4].

In the 5<sup>th</sup> year of his reign, Amenhotep IV changed his name from *Amenhotep* (Amun is pleased) to *Akhenaten* (servant of the Aten), after a religious conversion which rejected the worship of the god *Amun*, and instead venerated the god *Aten*, symbolized by the sun disc. He also changed the way he was depicted, as shown in Figures 1 and 2.



**Figure 1:** Amenhotep IV as shown in the tomb of Ramose TT55 [5].



**Figure 2:** Colossal statue of Akhenaten, Cairo [6].

## THE ROYAL FAMILY:

Akhenaten and Nefertiti had six daughters who were shown in various tomb scenes: from the eldest to the youngest, Meritaten, Meketaten, Ankhesenpaaten, Neferneferure, Neferneferuaten-Tasherit, and Setepenre (Figure 3; for a discussion of the six daughters, see *The Akhetaten Sun* Vol 25 No. 1, by this author [7]).

Akhenaten is also known to have had another wife, Kiya, who some speculate may have originally been the Mitanni princess, Tadukhepa [8].



**Figure 3:** Akhenaten, Nefertiti, and three oldest daughters, Berlin [9].

Akhenaten probably had two sons: the elder, Smenkhkare, who seems to have co-ruled between Akhenaten's regnal years 14 and 16 [10], and a younger son, Tutankhaten (who later ruled as pharaoh Tutankhamun, shortly after Akhenaten's death).

There is no universal agreement as to who Smenkhkare's parents were. Some propose he was a brother, not a son of Akhenaten, and also disagree who Tutankhaten's parents were, but recent DNA testing has determined that Tutankhamun was the son of the male mummy found in KV55 (Akhenaten? Smenkhkare? Or?), and the female mummy KV35YL (Nefertiti? Kiya? Or?) found lying beside Queen Tiye in a cache in the tomb of Amenhotep II [11].

## AKHENATEN'S WIVES:

Overseen by a male official, the *hnr*, or harem, was a set of buildings for the royal women and their children in a compound set aside to house and educate the king's wives and children. Harems have been identified at Amenhotep III's palace at Malkata, at Amarna, and at a palace dedicated to Queen Tiye (Amenhotep III's chief wife) at Gurob [12].

### Chief Wife – Nefertiti: (Figures 4 and 5)

Nefertiti is one of the most famous queens of ancient Egypt, in part due to the discovery of her bust in the house of the sculptor, Thutmose, at Amarna. Her name means "the Beautiful one has Come," perhaps referring to the goddess Hathor.

Nefertiti had one sister, Mutbenret, and bore Akhenaten six daughters. Many scholars now think that she ruled after Akhenaten as pharaoh Neferneferuaten, possibly in a co-regency with Tutankhaten.

Nefertiti's mummy has never been positively identified. There has been speculation that the mummy found in tomb KV35, "the younger lady" is Nefertiti, as DNA tests reveal this mummy was Tutankhamun's mother, but the mummy seems to be too young to have been Nefertiti.



Figure 4: Nefertiti, Ashmolean Museum, Oxford [13].

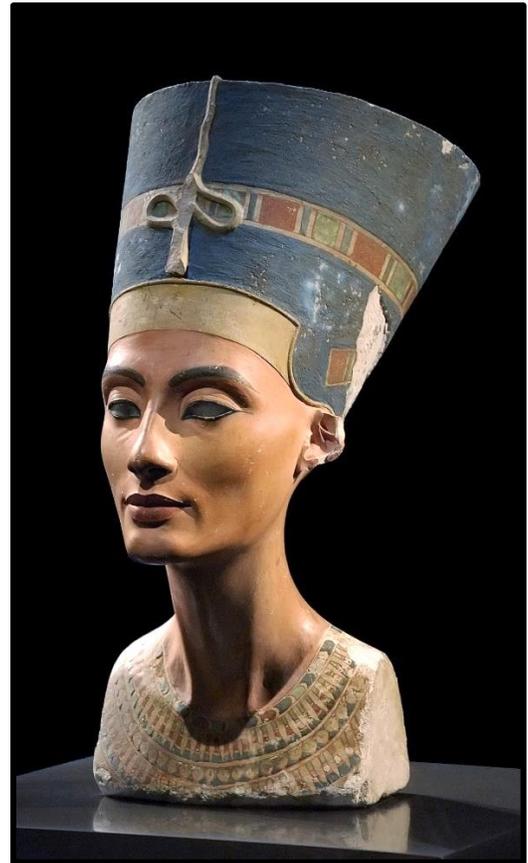
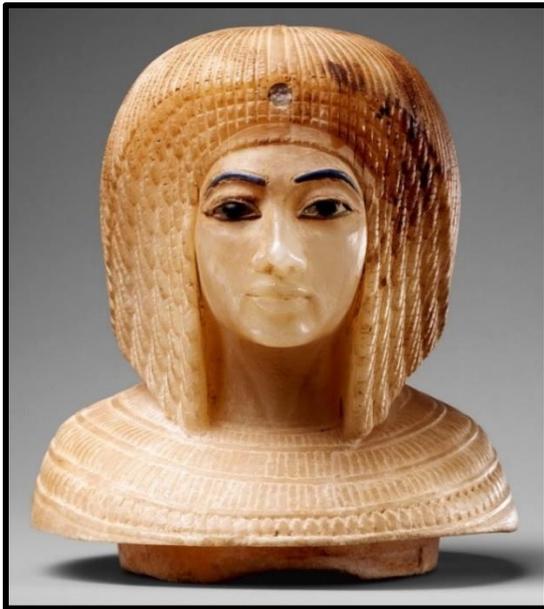


Figure 5: Nefertiti, Neues Museum, Berlin [14].

## Secondary Wives – Kiya, Tadukhepa: (Figures 6 and 7)

Tadukhepa was a Mitanni princess sent to marry Amenhotep III, who apparently died just as she arrived in Egypt, and Tadukhepa married Amenhotep IV (Akhenaten) instead. Not much is known about her. Very little is also known about Kiya. According to Aidan Dodson:

“Kiya is named and depicted on various blocks originating at Amarna, on vases in London and New York, four fragmentary kohl-tubes in Berlin and London, and a wine-jar docket. She may also be depicted by three uninscribed sculptor's studies. Her coffin and canopic jars were taken over for the burial of a king (probably Smenkhkare), which was ultimately discovered in Tomb KV55 in the Valley of the Kings. Almost all of Kiya's monuments were usurped for daughters of Akhenaten, making it fairly certain that she was disgraced sometime after Year 11 [of Akhenaten]” [15].



**Figure 6:** Canopic jar lid, identified as Kiya, Metropolitan Museum of Art [16].



**Figure 7:** Head found in the workshop of sculptor Thutmose, perhaps Tadukhepa or Kiya? [17]

## AKHENATEN'S DAUGHTERS:

- Meritaten, probably born about the first year of Akhenaten's reign. She was the daughter of Akhenaten and Nefertiti, as were all of the following daughters.
- Meketaten, born about year 3 of Akhenaten's rule.
- Ankhesenpaaten (later Ankhesenamun), born about year 5 or 6.
- Neferneferuaten-Tasherit, born around year 7.
- Neferneferure, born about year 8
- Setepenre, born about year 9.

For a detailed discussion of these daughters, see *The Akhetaten Sun Vol 24 No 2* (2018) by this author [18].

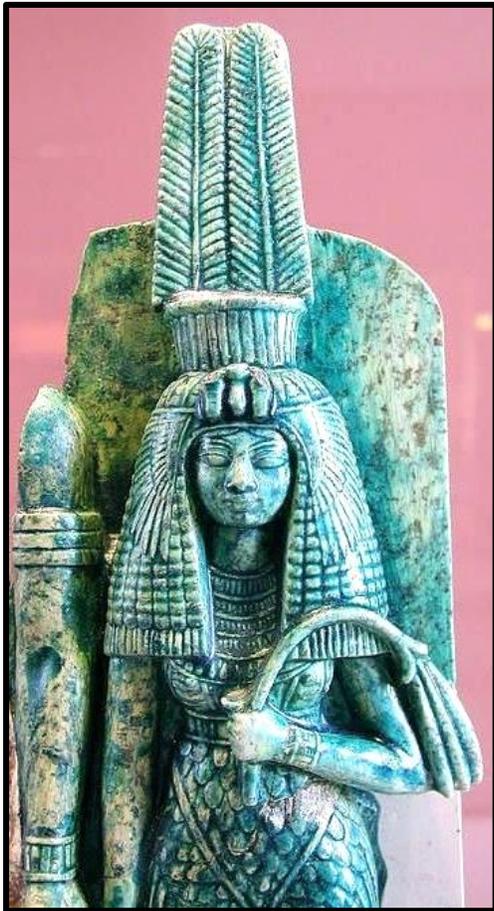
## AKHENATEN'S (POSSIBLE) SONS:

- Smenkhkare, born perhaps year 36 or so in the reign of Amenhotep III, his mother (and even his father) is uncertain.
- Tutankhaten, born about year 9, his mother (and also his father) is uncertain.

## AKHENATEN'S MOTHER:

Akhenaten's mother, Tiye, shown in Figures 8 & 9 survived some 12 years after Akhenaten's father, Amenhotep III, died. She probably had a house at Akhetaten, as depicted in her chief steward Huya's tomb, TA1. Tiye is also shown being escorted to her sunshade (Figure 80) at Amarna, and she is frequently mentioned in the Amarna Letters.

She may originally have been buried at Amarna, but the KV35 mummy 'the Elder Lady' has recently been shown by DNA analysis to match a lock of hair inscribed as Tiye's in a box found in Tutankhamun's tomb. For a discussion of Tiye's mummy and lineage see *The Search for the mummies of Akhenaten and Nefertiti*, by Aidan Dodson [19].



**Figure 8:** Tiye, Louvre Museum [20].



**Figure 9:** Tiye, Brussels [21].

## OFFICIALS OF THE COURT:

Ancient Egypt was successful, in part because of its efficient and well-organized administration. The king delegated authority to a number of officials, who reported up through a highly structured government. Akhenaten followed the time-honored administrative system, where civil authority was delegated topmost to two viziers, one governing the North, and the other the South. Local governors of the 42 nomes reported to these viziers, and they in turn supervised the mayors and headmen of the various cities and villages within their nomes. Military issues were handled by army generals, who reported to pharaoh, and religious matters were overseen by priests. During the New Kingdom, Egypt's foreign possessions were also controlled by governors, and local security was handled by a standing police force.

Tombs and artifacts have survived the ravages of time which identify some of the other members of Akhenaten's Royal Court: Viziers, Stewards, Priests, Generals, Chancellors, Overseer of the Treasury, Artisans, and the Chief of Police.

The Vizier, *Tjati*, in ancient Egyptian was the most important official under the king. Van den Boorn has identified three main areas of responsibility of the Viziers: (1) Managing Director of the *pr-nsw* (Royal Palace); (2) Head of the Civil Administration; and (3) Deputy of the king [22].

At Amarna, both the king's North Riverside Palace residence, and his ceremonial Great Palace in the city center were accessed through guarded gates [23]. The Great Palace also had a bridge over the Royal Road connecting it to a building sometimes called the 'King's House', but which was probably the *pr n ʿ3ty*, the Office of the Vizier [24].

While the king probably set the agenda for Palace activities, van den Boorn says it is clear that the management and operation of the palace was handled by the Vizier, and his co-director, the Overseer of the Treasury [25].

Texts left on tomb walls in the early New Kingdom, chronicle that viziers had a lot of responsibility. Daily meetings with officials, messengers from provincial governors, and the king ensured that the administration was kept well informed and that disputes were resolved in a timely manner. Documents were opened, read, and re-sealed with the vizier's stamp. Viziers also determined who had access to the palace [26], and insured that the various *hmtw* (secure enclosures) were properly opened, staffed, and then locked up at the end of each day. Davies comments that in the tomb of Vizier Rekhmire at Thebes 'The extent of the duties of the vizier, even if only nominally his in some cases, is amazing; It is not surprising that his task is described as "not pleasant; no, it is as bitter as gall' [27].

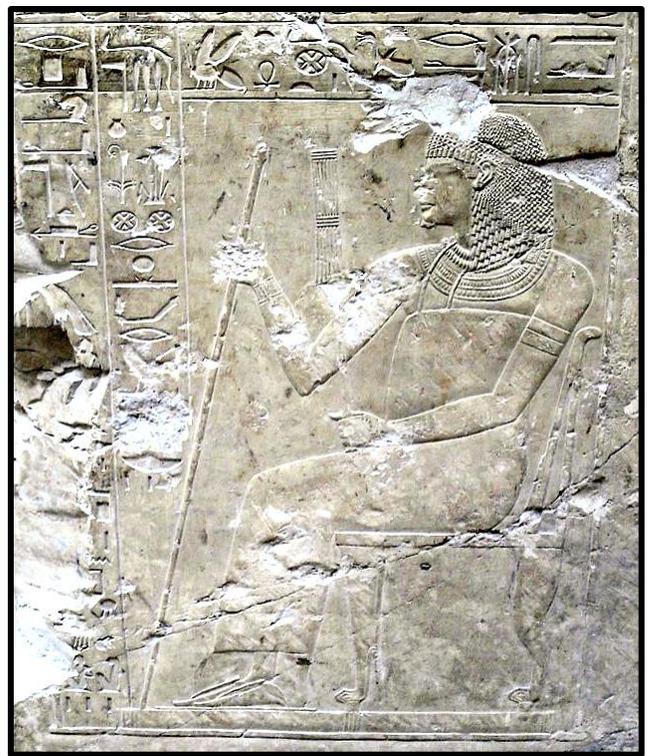
Another duty of the Vizier was to coordinate with the Chief of Police, and get reports from guard posts, outposts, and 'improper behavior' within the city [28].

## NAKHTPAATEN - VIZIER – (undecorated) tomb TA12:

Nakhtpaaten's titles were: Overseer in the House of "Satisfaction of Re", Overseer of works projects in Akhetaten, and *imy-r niwt t3ty*, "Overseer of the City, and Vizier" [29]. According to Stephen Quirke, "... there is no question that the Vizier stood above other officials at the Palace ... (but this should) not be interpreted functionally as an expression of control over all officials listed below him" [30]. Clearly, the king was the one who is in charge.

Quirke points out that the existence of two vizier's 'bureaus', *h3 n t3ty*, one in Northern Egypt and the other in Southern Egypt, does not necessarily mean that two separate viziers co-existed. However, if there were two viziers, it is possible that one lived in the North (perhaps at Memphis?) and the other, Nakhtpaaten (Nakht), who is known to have lived at Amarna, was responsible for the administration of the South [31].

Nakhtpaaten may have succeeded Ramose as 'Vizier of the South'. Ramose's tomb TT55 at Thebes shows he was Amenhotep III's vizier, and that he lived into (at least) the early reign of Amenhotep IV (Akhenaten). His tomb shows both Amarna and pre-Amarna style scenes, as shown in Figures 10 & 11 [32].



**Figure 10:** Amarna art style [33].

**Figure 11:** Traditional art style [34].

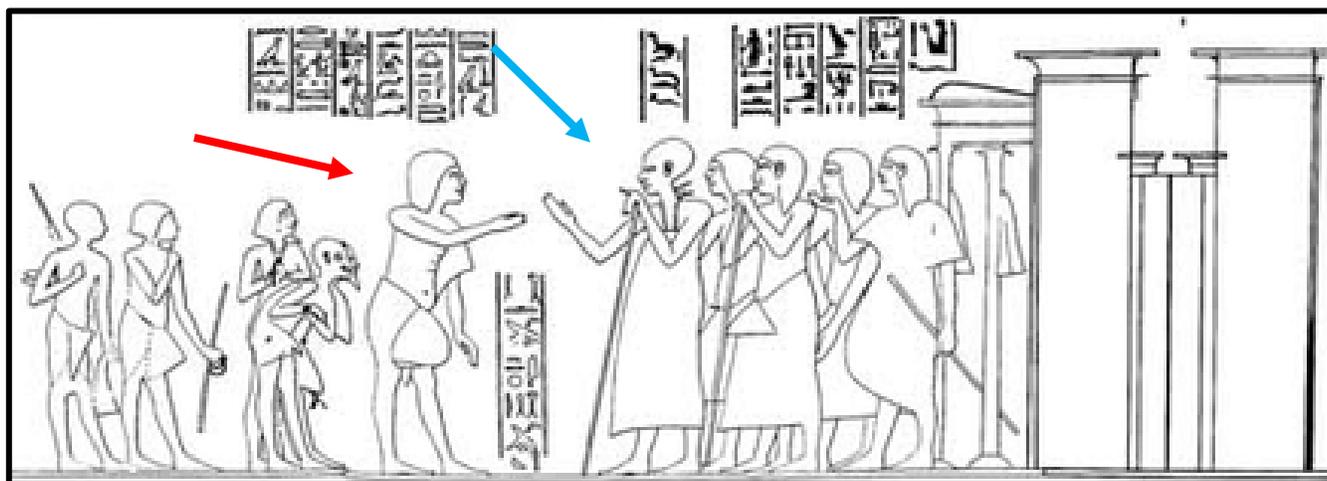
Both scenes from Vizier Ramose' tomb, TT55, at Thebes.

Davies, however, speculates that Nakht may have first followed May (who built Amarna tomb TA14) as Chancellor, before becoming Vizier [35].

One of the vizier's duties was the supervision of the police and holding court over those accused of transgressions.

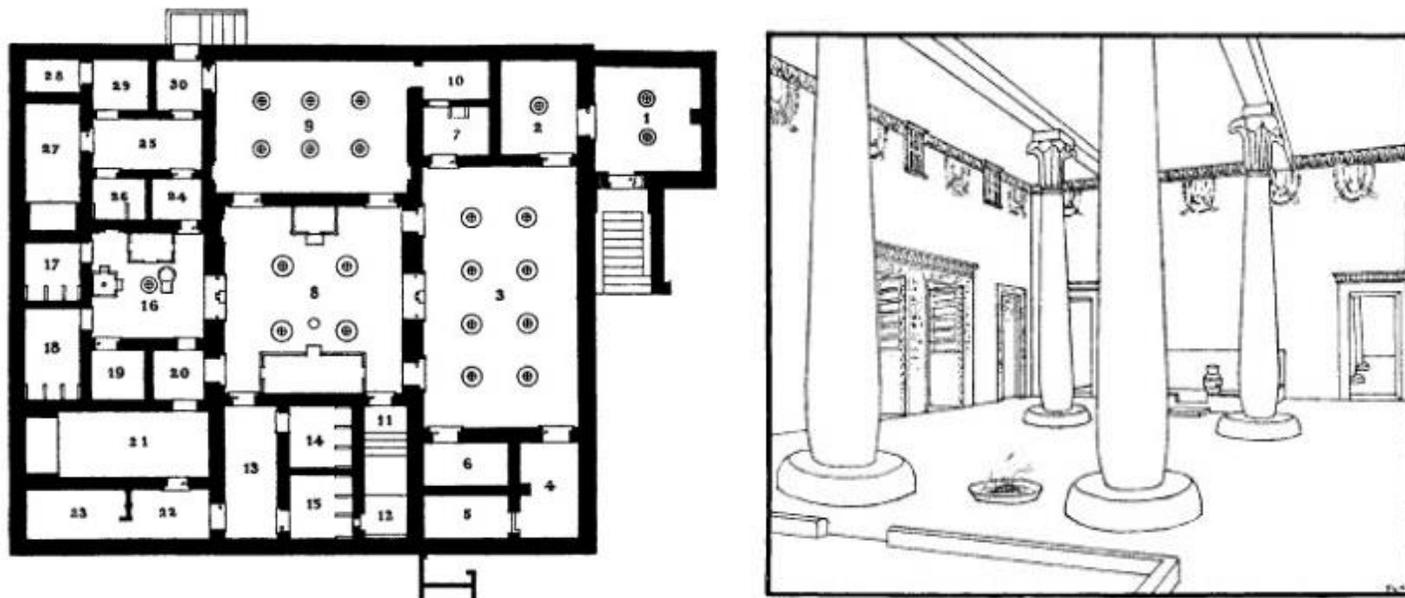
In the scene shown in Figure 12, from the tomb of Mahu, TA9, the Chief of Police at Amarna, Akhenaten's vizier (probably Nakht) is shown on the right standing at the front of a group of officials. Mahu is presenting three bound prisoners for judgment, saying "Let the officials hear the people who would join those of the desert hills" [36]. Another of the vizier's duties was to supervise the Royal Treasurer's collection of taxes.

Nakht's small tomb was barely started when it was abandoned.



**Figure 12:**The Vizier (blue arrow, probably Nakht) judges prisoners who are presented by the Chief of Police, Mahu (red arrow). From the tomb of Mahu, TA9 [37].

Nakht's large residential house in the southern part of the city (K 50.1) shown in Figures 13 & 14, was identified by inscriptions on its walls. This 30 room, 8,400 sq. ft. (780 sq. metre) mansion had reception halls, bedrooms, a bathroom, a lavatory and offices [38].



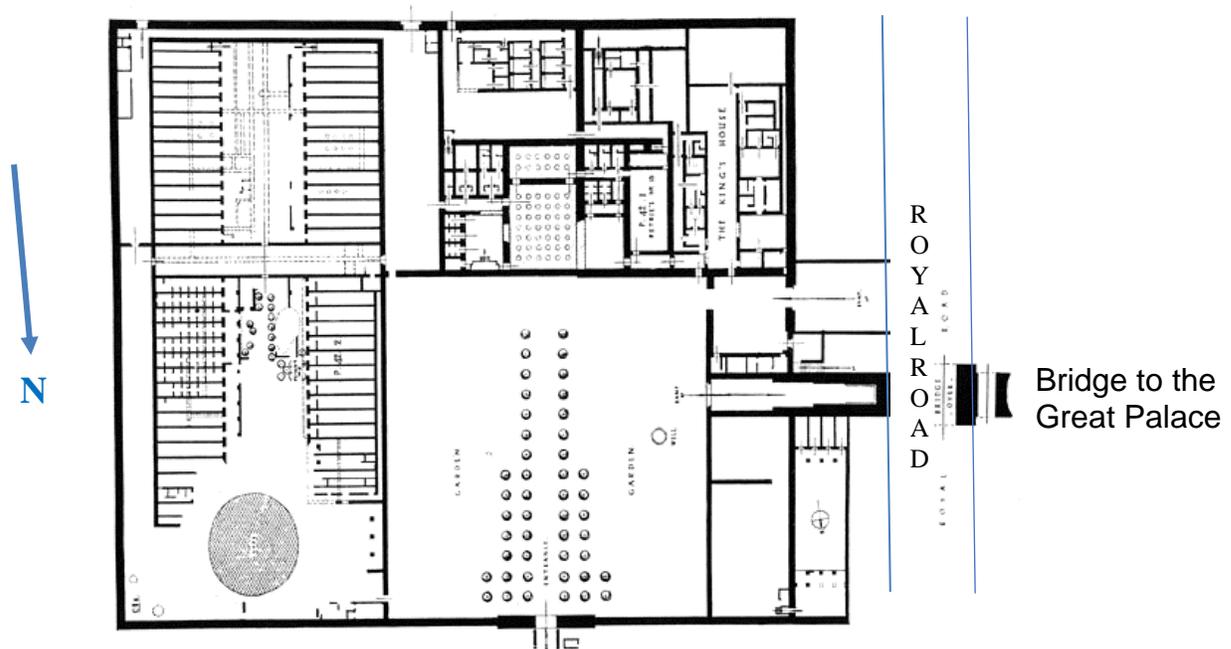
**Figure 13:** Plan & reconstruction of the house of Vizier Nakht K.50.1 [39].

The internal walls of Nakht's house were whitewashed, with colored friezes along the top. The ceiling was painted blue, and the floor plastered over and painted in bright colors of red and yellow [40].



**Figure 14:** House of Vizier Nakhtpaaten, photo taken in 1922 [41].

Nakhtpaaten's place of work, the "House of the Vizier," was in turn part of the "House of the King" [42]. The King's House was the structure located east of the bridge across the Royal Road which connected the King's House to the Great Palace. It was richly decorated and provided offices, greeting and meeting rooms, and storerooms stocked with supplies. Figure 15 shows the plan of the King's House at Amarna.



**Figure 15:** Plan of the King's House [43].

Akhenaten's Vizier of the North, Aperel, probably lived in Memphis, as his tomb is at Saqqara. He oversaw the king's affairs in Lower Egypt during the final years of Amenhotep III and well into the reign of Akhenaten, apparently dying in his 10<sup>th</sup> regnal year, to judge from the date on a wine docket. It is not known if someone else replaced him, the position remained vacant, or Nakht assumed responsibility for both the North and the South. Aperel is a Semitic name as were the names of his wife and son, which suggests he may have been a Semite [44].

## MERYRE I - HIGH PRIEST OF THE ATEN – tomb TA4:

After the vizier, the most important official was probably the High Priest. Priests were organized in a hierarchy, with the High Priest, *hm ntr tpy*, (also called The Greatest of Seers) who supervised the lector priests, *hry hb.t*, those who recited hymns and spells during temple ceremonies, *sem* priests, *sm*, who conducted funeral rights, and *wꜥb* (wab) priests who performed the mundane tasks of running taking care of the temple [45].

Before being promoted to High Priest, Meryre held the titles of: *Erpa Ha* prince, Friend of the King, Sole Companion, Royal Chancellor, and Fanbearer on the Right Hand of the King [46]. *Erpa Ha* signifies a person belonging to the first class of the nobility. *Erpa* means 'hereditary highness,' and *Ha* mean 'prince', often an honorific title [47]. Chancellors were responsible for the annual census, land registration, taxation, and the distribution of goods among the temple and court workers [48]. Fanbearer was an honorary title showing the holder was allowed to closely approach the king [49]. Meryre and his wife Senre are shown in Figures 16 and 17.

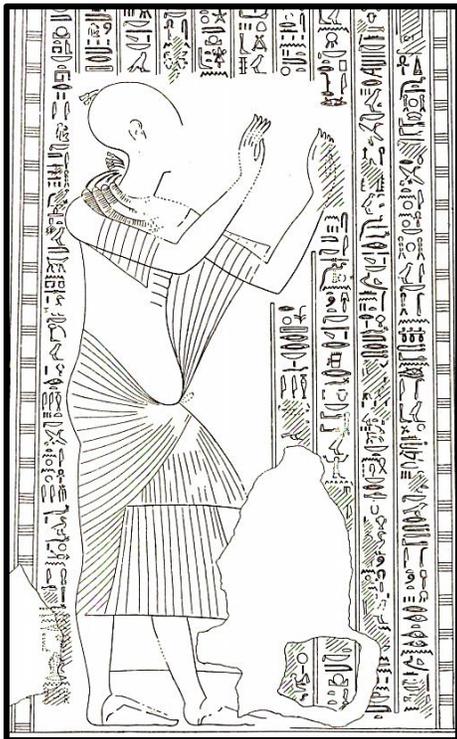


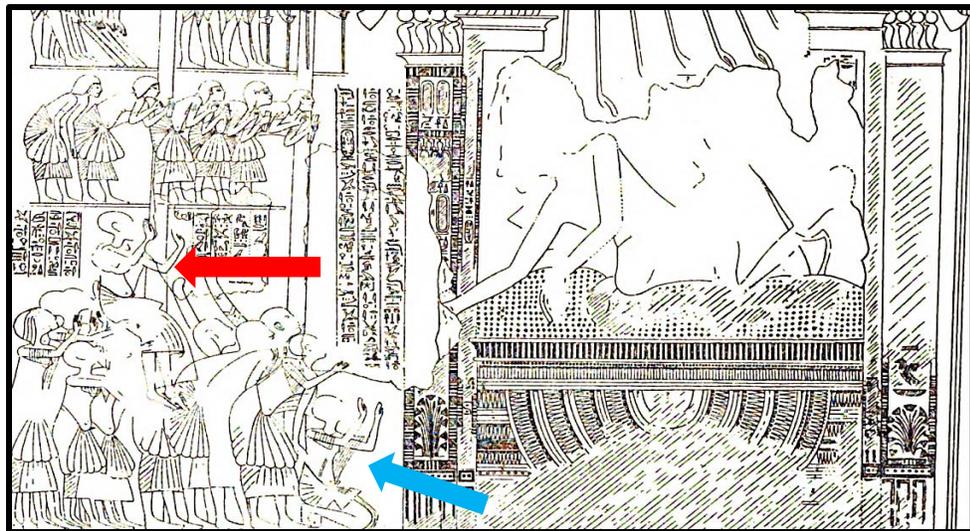
Figure 16: Meryre I [50].



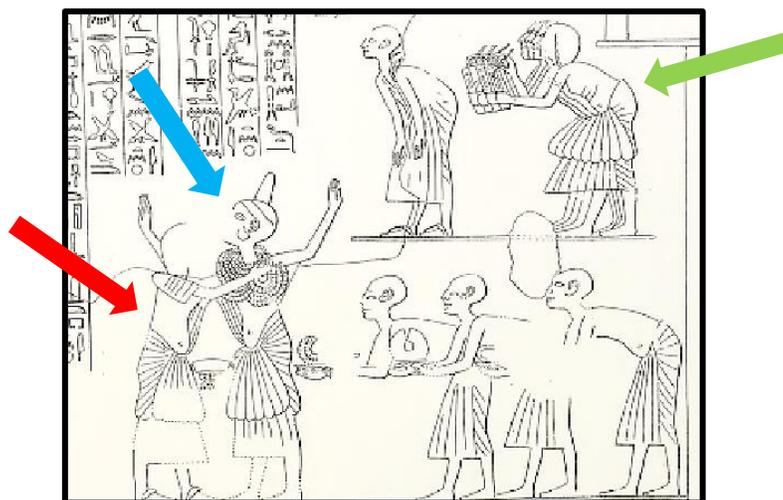
Figure 17: Meryre's wife, Senre [51].

A scene in Meryre I's tomb shows his devotion to the Aten. Figure 18, depicts Akhenaten bestowing upon him the title of *wr-m3w*, "High Priest," literally 'greatest of seers'. Meryre is shown in two vignettes in this scene: In the first, Meryre is praising pharaoh (blue arrow) while being awarded his title, and behind him are his family (and colleagues?). Akhenaten says, "Behold I make thee High Priest of the Aten ..." In the second area (red arrow), he has later been hoisted onto the shoulders of his jubilant friends, who shout "He promotes ... the good ruler. As the Aten rises (so) shall he be everlasting" [52]. In the register above, four scribes chronicle the event (green arrow).

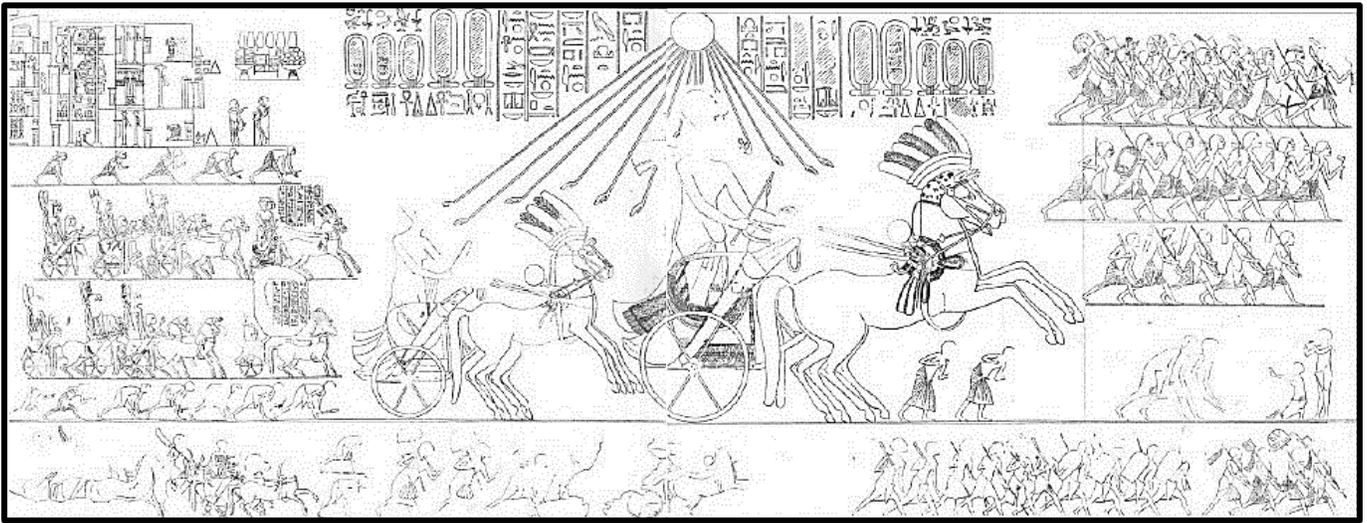
In another scene, Figure 19, Meryre is rewarded by the king with gold collars. Nearby, as depicted in Figure 20, Meryre visits the Aten Temple with the King and Queen. Figure 21 shows the offerings that have been prepared for the king in the Temple.



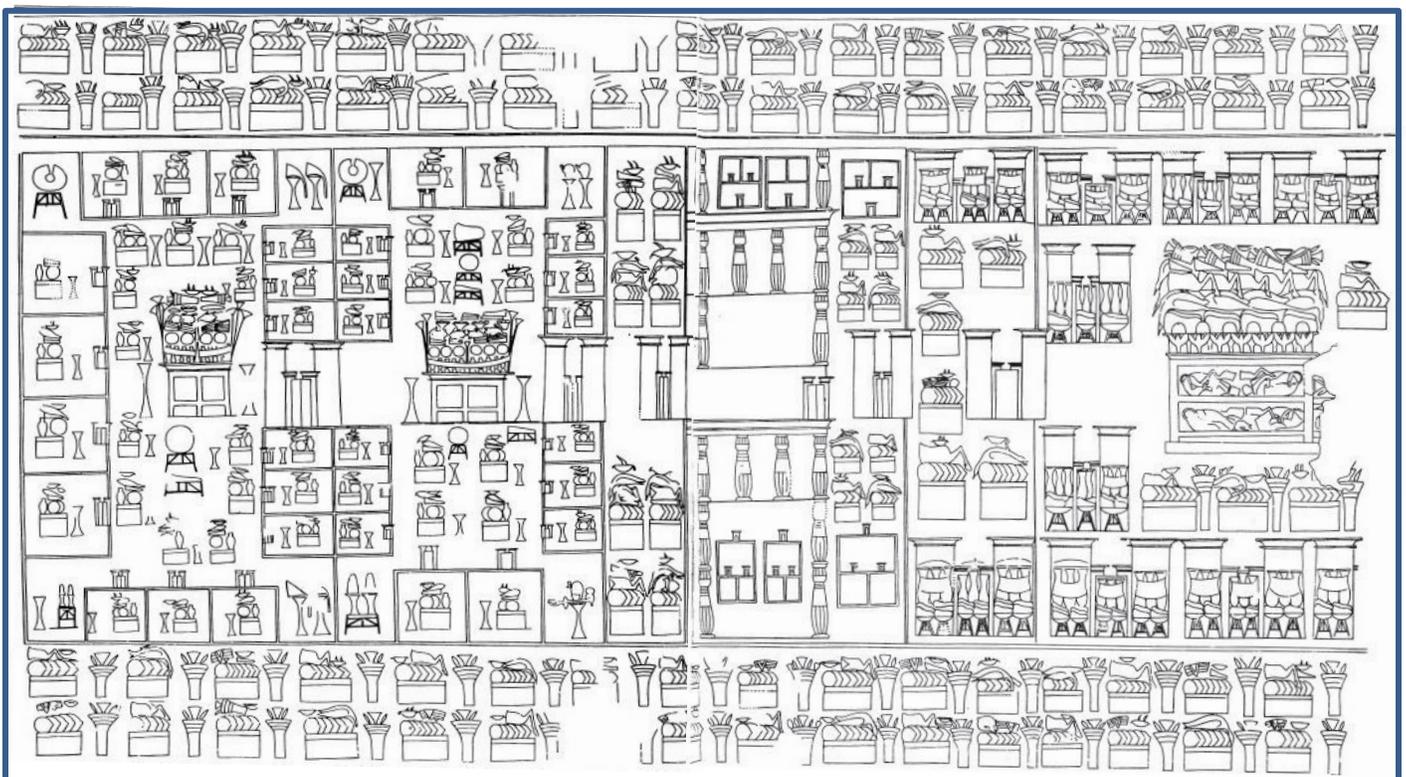
**Figure 18:** Meryre I installed as High Priest by King and Queen. Blue arrow shows Meryre receiving honor. Red arrow shows him afterwards hoisted in celebration afterwards [53].



**Figure 19:** Meryre I (blue arrow) rewarded by the king with gold collars placed on him by the Supervisor of the Treasury, probably Meryre II (red arrow). The event is also recorded by four scribes (green arrow) [54].



**Figure 20:** Arrival at the Great Aten Temple [55].



**Figure 21:** Offerings in the Great Aten Temple [56].

Meryre I's house, depicted on his tomb wall, Figures 22 & 23, showed he had a well with a shaduf (a water-raising bucket on a pivoted pole). However, fresh water would need to have been brought in from the Nile for drinking, as the water drawn from wells at Amarna was salty and brackish. The well water would have been suitable for washing and mud-brick making, however.

Also in Meryre I's tomb is the Hymn to the Aten (short version), the text of which is shown by the figure of Meryre in Figure 16. Some Egyptologists believe the Hymn to the Aten was written by Akhenaten himself; however there is no evidence that this is true.

The ‘Hymn’ was probably a chanted poem, praising the sun disk, and declaring that Akhenaten is acknowledging the Aten as the all-powerful creator god. Meryre’s versions ends with “The friend of the King, beloved of his lord, favorite of the Lord of the Two Lands, the High Priest ... Meryre, he saith it” [57].

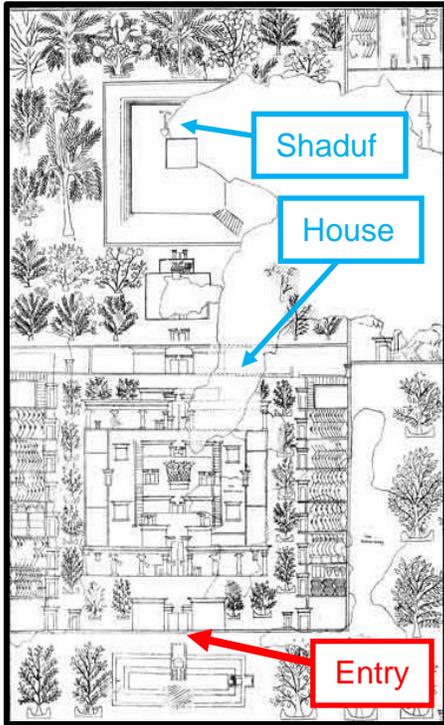


Figure 22: Plan of Meryre I's House [58].

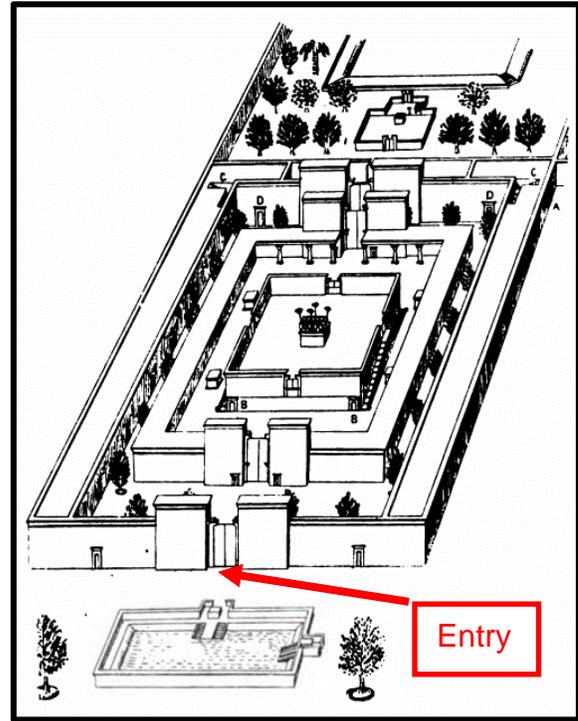


Figure 23: 3-D view of Meryre I's House [59].

Figures 24 & 25 are actual scenes from Meryre I's tomb. Figure 24 depicts the arrival of the king and queen at the gates of the Great Aten Temple, as shown in Figure 18. And, Figure 25 shows a group of blind singers entertaining in a temple building.

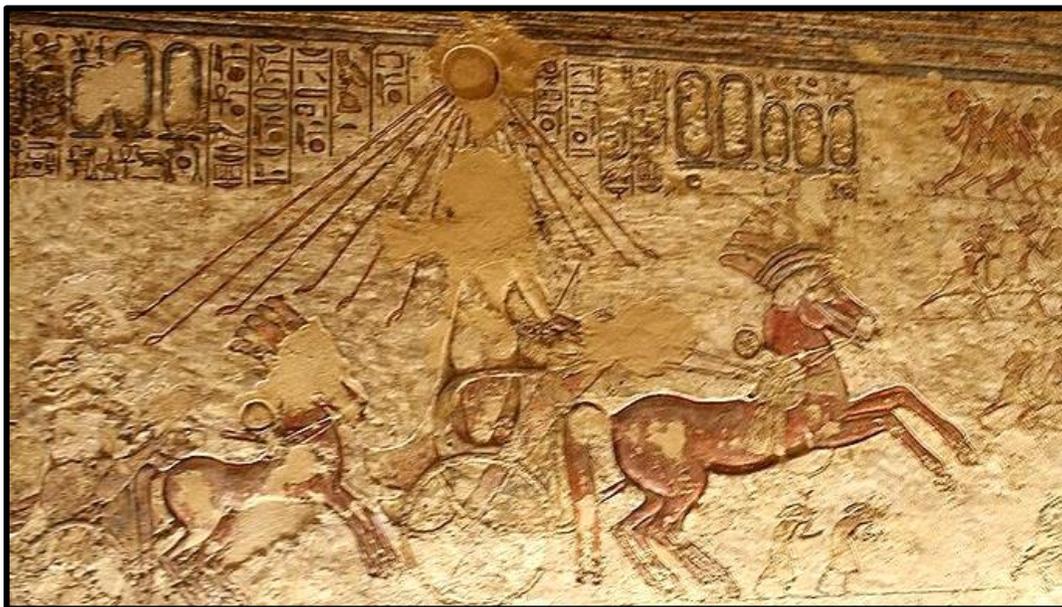


Figure 24: Akhenaten & Nefertiti in their chariots – tomb of Meryre I [60].



Figure 25: Blind singers – tomb of Meryre I [61].

## MERYRE II - OVERSEER OF THE TREASURY – tomb TA2:

The Treasurer, sometimes called the Chancellor, or *imy-r hntm* in ancient Egyptian, literally Overseer of Sealed Things. The treasury was the place valuable goods were stored, like gold, silver, cloth, wine, beer and grain. At Amarna, the Treasurer was responsible for the two treasuries. It is not known if this meant the Treasury of the Palace and the Treasury of the Temple, or two treasuries in two different places (e.g. Amarna & Thebes, or Amarna & Memphis).

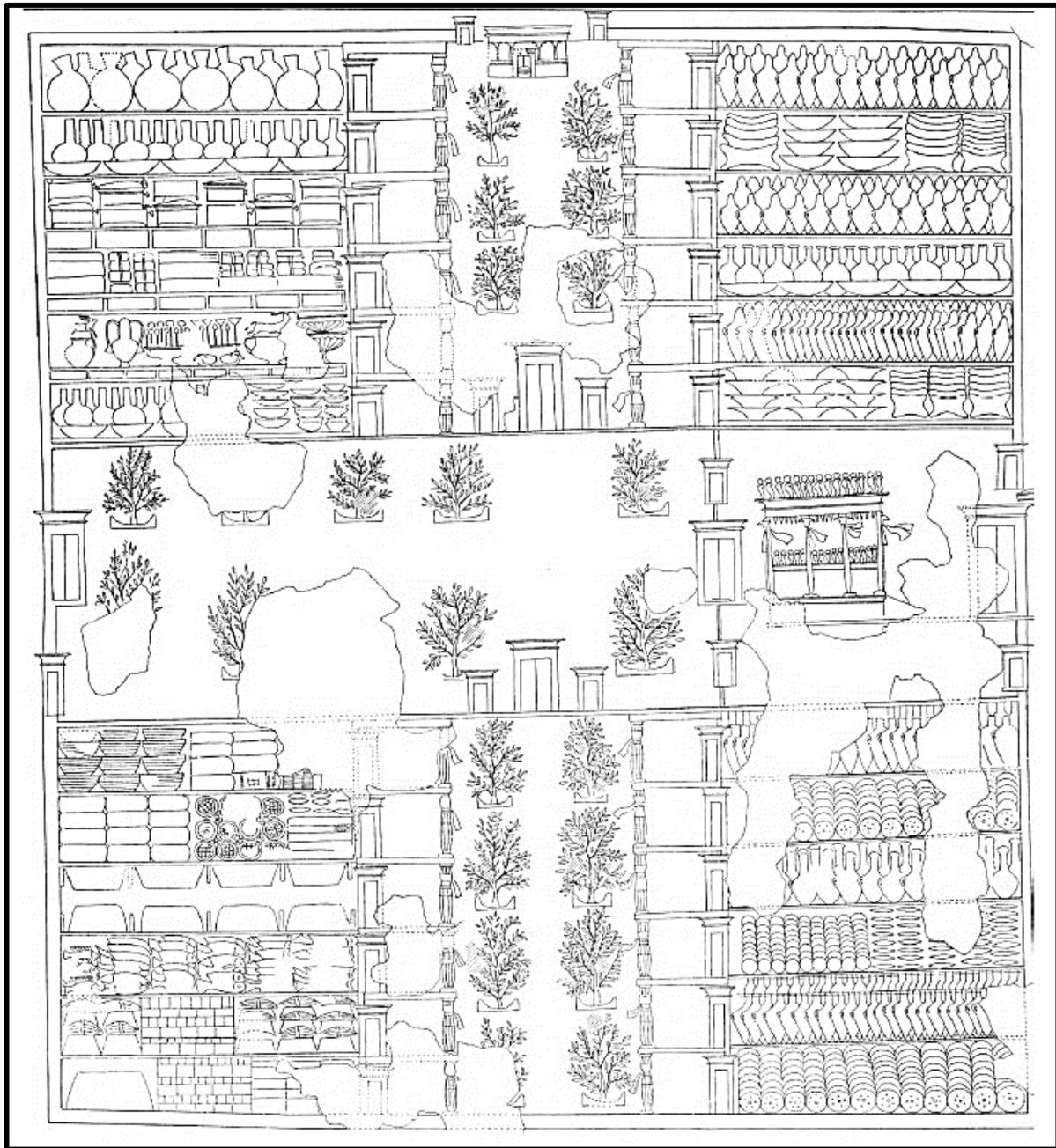
Another Meryre at Amarna, now called Meryre II, Figure 26, was Overseer of the Two Treasuries, Royal Scribe, and Overseer of the Royal Harem of Nefertiti.



Figure 26: Meryre II and his Officials [62].

During the New Kingdom, the temples and royal palaces had secure storage areas to hold the wealth of the nation. Valuable goods like gold, linens, perfumes, and foreign tribute were inventoried and held by the Overseer of the Two Treasuries, *imy r prwy* [63].

The Overseer of the Treasury was responsible for assessing and collecting taxes, and he monitored the redistribution of items brought in through taxes. The Overseer of the Treasury also had other officials under his command who helped collect taxes and keep tax records [64].



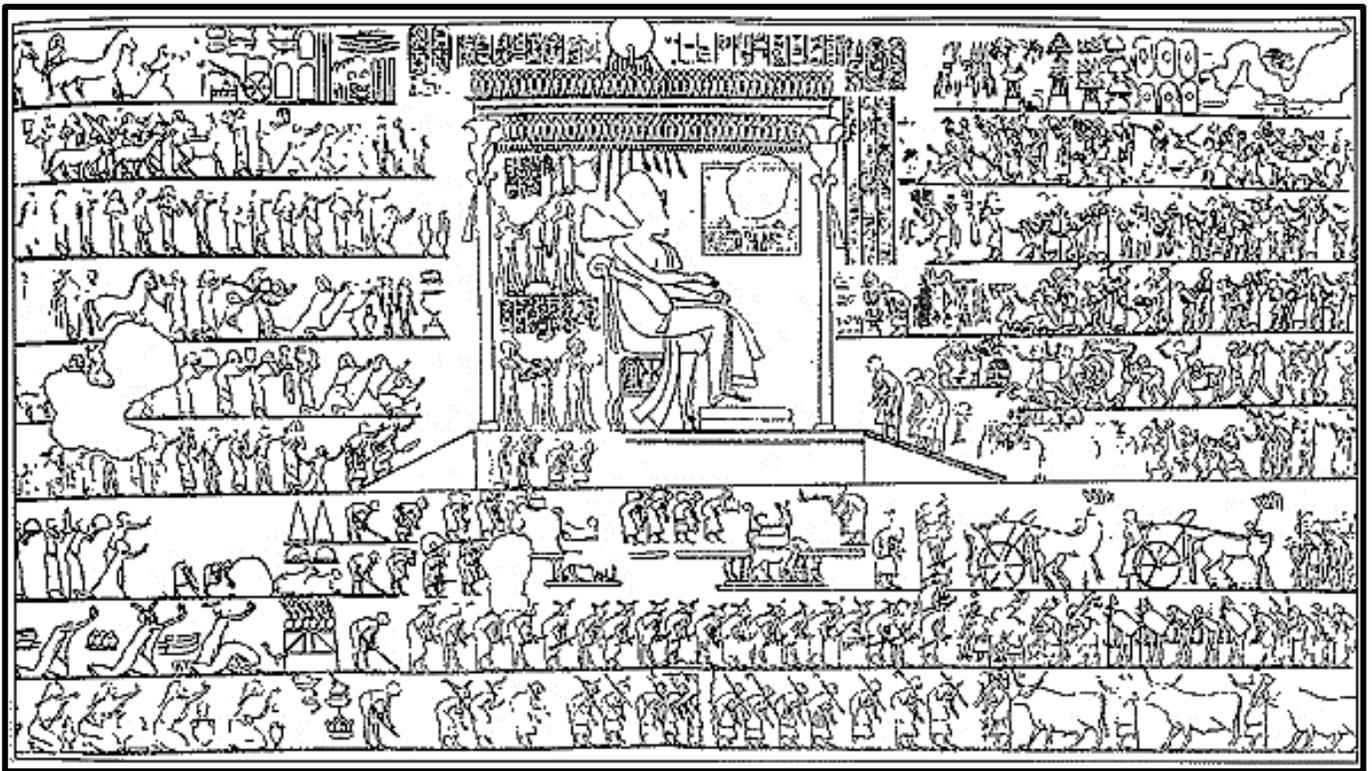
**Figure 27:** Storerooms of the Treasury at Akhetaten.  
Shown in Meryre I's tomb TA4 [65].

Rosalie David writes:

“There is more information about taxation in the New Kingdom than there is for earlier periods; for example, in the reign of Thutmose III it is known that taxes were collected in the form of cereals, livestock, fruit, and provisions, as well as gold and silver rings and jewels. The governors annually assessed the cereal payable for that year, basing their calculations on the surface area of each nome and the height of the Nile rising. The levels of inundation were recorded on Nilometers; built at the river's edge. Nilometers were designed to measure the annual height of the inundation. If there was a low Nile when the water did not reach the usual level, the tax to be paid that year was reduced accordingly” [66].

As treasurer, Meryre II would have received these goods and with the assistance of the Royal Scribes, cataloged and stored the valuable items (Figure 27) with the help of the city police (called the *Medjay*).

Meryre II's tomb also has a scene, dated to Akhenaten's year 12, of foreigners presenting tribute to the King and Queen. These are shown in Figures 28, 29 and 30.

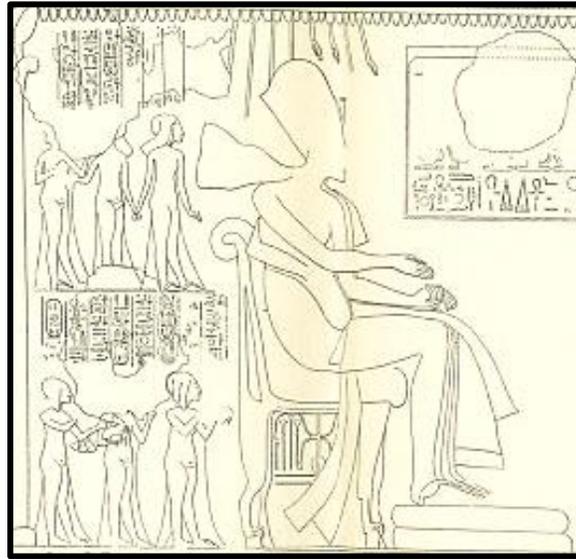


**Figure 28:** Meryre II *Durbar* scene [67].

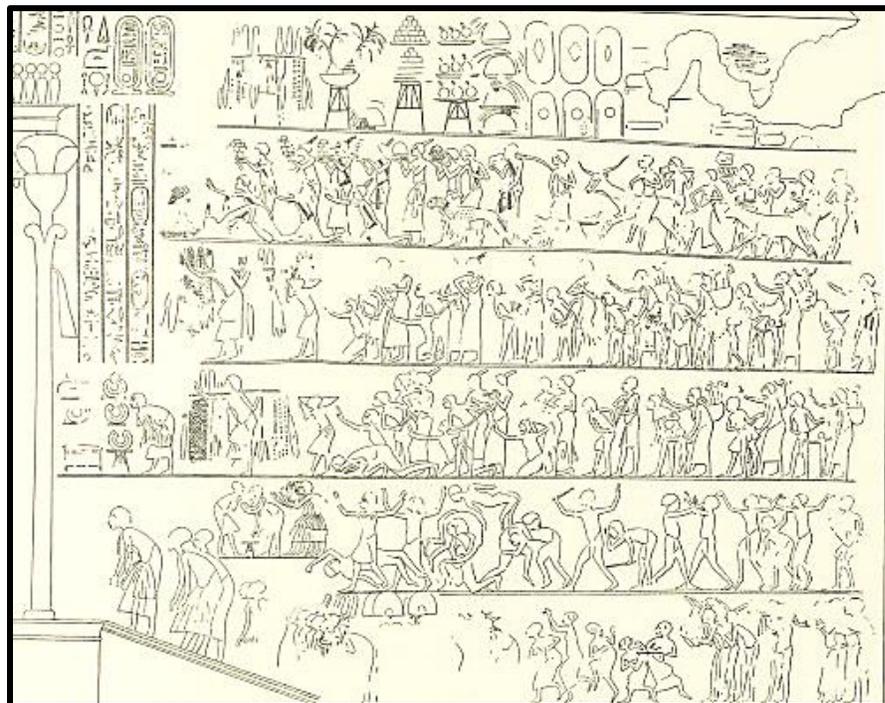
Now called the “*Durbar*” scene (named after a ceremonial gathering held in India), it shows Akhenaten and Nefertiti seated in the center, with his six daughters behind his throne.

On the right are foreigners of the southern nations, and on the left are foreigners of the northern nations, all humbly offering tribute goods to the king [68]. The accompanying text says,

“Year 12, 2<sup>nd</sup> month of Peret (the planting season), day 8 ... [the king and queen] appeared on the great carrying-chair of gold to receive the tribute of Kharu (Syria-Palestine) and Kush (Nubia), the west and the east. All countries collected together at one time, and the lands in the mist of the sea, bringing offerings to the king upon the great throne of Akhet-Aten for receiving the goods of every land, granting to them the breath of life” [69].



**Figure 29:** Detail from Figure 28, Akhenaten and Nefertiti side-by-side, with their six daughters behind them [70].



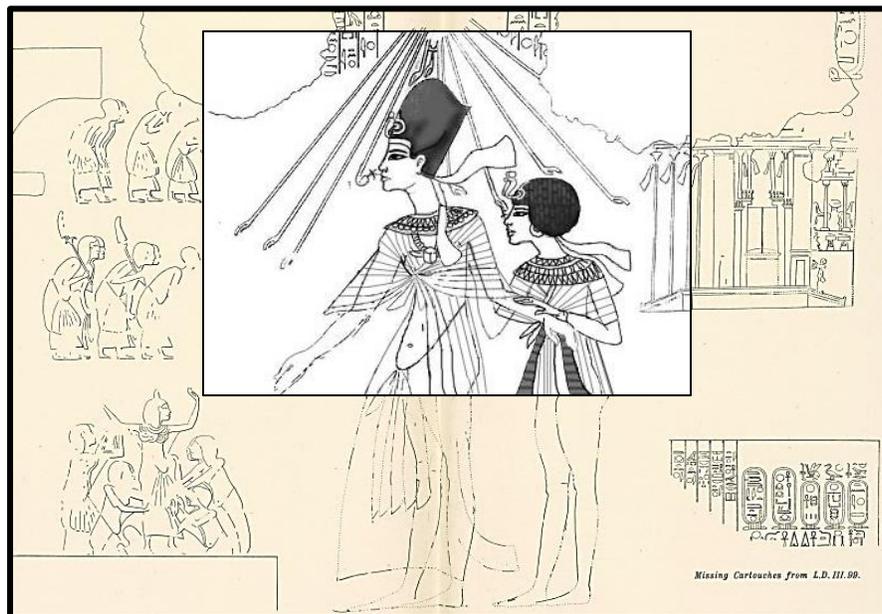
**Figure 30:** Detail from Figure 28 of tribute offered to Akhenaten [71].

Figure 31, from Meryre II's tomb, probably depicts the king sitting in Nefertiti's harem, where she fills up the king's cup, assisted by three daughters, and accompanied by musicians. No doubt the man officiating next to the musicians is Meryre II himself.



**Figure 31:** Nefertiti pours a drink for Akhenaten [72].

And, uniquely, another scene, Figure 32, shows Meryre II being rewarded by Akhenaten's co-ruler, Smenkhkare, and his wife (Akhenaten and Nefertiti's oldest daughter) Meritaten.



**Figure 32:** Smenkhkare & Meritaten rewarding Meryre II [73], with reconstruction inset [74].

Although we now know Nefertiti had a “sunshade” palace (the Kom el Nana) at Amarna, no mention of it has survived in Meryre II's tomb.

The next issue of the Akhetaten Sun will cover more of the members of Amarna's Royal Court.

## ENDNOTES:

- [1] Amenhotep IV may also have shared power with his father as co-regent for several years before Amenhotep III's death, See <http://www.thehistoryblog.com/archives/29044>, <https://www.dailynewsegypt.com/2014/02/06/pharaoh-power-sharing-unearthed-egypt/>
- [2] The *Gempaaten*, the *Rud-menu*, and the *Teni-menu*, all dedicated to the god Aten, and the *Hwt Benben*, dedicated to Nefertiti.
- [3] Dodson, Aidan, *Amarna Sunrise*, 2016, p 87
- [4] Dodson, Ibid. p 88
- [5] [http://tsimmsnb.tripod.com/Amarna\\_Kings.htm](http://tsimmsnb.tripod.com/Amarna_Kings.htm)
- [6] <https://www.flickr.com/photos/dalbera/2076962048/>
- [7] <http://www.theamarnaresearchfoundation.org/articles.html>
- [8] Murnane, William, *Texts from the Amarna Period in Egypt*, 1993, p 9
- [9] [http://www.egyptian-museum-berlin.com/c52.php#n\\_hausaltar\\_01.jpg](http://www.egyptian-museum-berlin.com/c52.php#n_hausaltar_01.jpg)
- [10] Dodson, Ibid. p 144
- [11] For further discussion on Tutankhamun's parents, see: Dodson, Aidan, The Search for the Mummies of Akhenaten and Nefertiti, The Akhetaten Sun, Vol 24 No 2, <http://www.theamarnaresearchfoundation.org/articles.html>
- [12] <https://www.world-archaeology.com/features/gurob-unlocking-a-royal-harem/>
- [13] <https://www.flickr.com/photos/amberinsea/9123249455>
- [14] [https://commons.wikimedia.org/wiki/File:Nofretete\\_Neues\\_Museum-edit.jpg](https://commons.wikimedia.org/wiki/File:Nofretete_Neues_Museum-edit.jpg)
- [15] Aidan Dodson & Dyan Hilton, *The Complete Royal Families of Ancient Egypt*, Thames & Hudson, 2004, p 155.
- [16] <https://www.metmuseum.org/toah/works-of-art/30.8.54/>
- [17] <https://www.ancient-origins.net/history-famous-people/unique-sculptures-thutmose-and-secret-love-one-his-muses-005606>
- [18] <http://www.theamarnaresearchfoundation.org/articles.html>
- [19] Akhetaten Sun, Vol 24 No. 2, p. 2
- [20] <https://www.ancient.eu/uploads/images/506.jpg?v=1569515133>
- [21] <https://www.nilemagazine.com.au/2016-february/2016/2/17/saved-by-tomb-robbers>
- [22] van den Boorn, G.P.F., *The Duties of the Vizier*, Routledge, 2015, p.310
- [23] Akhetaten Sun, Vol 26 No. 1, Figures 7 & 8, p.7
- [24] Akhetaten Sun, Vol. 26 No. 1, p. 16, and Figures 28 & 29, p. 17
- [25] van den Boorn, Ibid., p. 311
- [26] Kemp, Barry, *The City of Akhetaten and Nefertiti: Amarna and its people*, Thames & Hudson, 2012, p 133
- [27] Davies, Ibid. Vol. 1, 'Duties of the Vizier', p 32  
<https://libmma.contentdm.oclc.org/digital/collection/p15324coll10/id/168758>
- [28] van den Boorn, Ibid., p. 312
- [29] Murnane, Ibid. p 166
- [30] Quirke, Stephen, *The Administration of Egypt in the Late Middle Kingdom*, p 58
- [31] Quirke, Ibid. p 3
- [32] Dodson, Ibid. p 133
- [33] <https://www.pinterest.com/pin/657455245582539716/>
- [34] Photo by David Schmid
- [35] Davies, Ibid. Vol V, p 12

- [36] Murnane, *Ibid.* p 149
- [37] Davies, *Ibid.* Vol IV, pl XXVI
- [38] Ridley, Ronald T., *Akhenaten: A historian's view*, AUC Press, 2019, p 79
- [39] Woolley, C. Leonard, *Excavations at Tell el-Amarna*, JEA Vol. 8, 1922, p 48-82
- [40] Kemp, *Ibid.* p190
- [41] [http://www.amarnaproject.com/pages/amarna\\_the\\_place/main\\_city/index.shtml](http://www.amarnaproject.com/pages/amarna_the_place/main_city/index.shtml)
- [42] Kemp, *Ibid.* p 114
- [43] [http://www.amarnaproject.com/pages/amarna\\_the\\_place/central\\_city/index.shtml](http://www.amarnaproject.com/pages/amarna_the_place/central_city/index.shtml)
- [44] Zivie, Alain, *Pharaoh's Man, 'Abdiel: The Vizier with a Semitic Name*, *Biblical Archaeology Review* 44.:4 July/August 2018
- [45] Wilkinson, Richard H., *The Complete Temples of Ancient Egypt*, Thames & Hudson, 2000, p. 92
- [46] [https://osirisnet.net/tombes/amarna/meryra/e\\_meryra\\_01.htm](https://osirisnet.net/tombes/amarna/meryra/e_meryra_01.htm)
- [47] Brugsch, Heinrich Karl, *A History of Egypt under the Pharaohs*, Vol 1, p 50
- [48] Bunson, Margaret, *Encyclopedia of Ancient Egypt*, p 81
- [49] <http://www.touregypt.net/featurestories/fans.htm>
- [50] Davies, *Ibid.* Vol I, pl XXXVII
- [51] Davies, *Ibid.* Vol I, pl XXXVI
- [52] Davies, *Ibid.* Vol I, p 21
- [53] Davies, *Ibid.* Vol I, pl VI
- [54] Davies, *Ibid.* Vol I, pl XXX
- [55] Davies, *Ibid.* Vol 1, pl XXVIII
- [56] Davies, *Ibid.* Vol 1, pl X
- [57] Davies, *Ibid.* Vol 1, p 52
- [58] Davies, *Ibid.* Vol I, pl XXV
- [59] Davies, *Ibid.* Vol I, p 40
- [60] <https://www.pinterest.com/pin/294211788142067504/visual-search/>
- [61] <https://www.rom.on.ca/en/blog/restoring-a-rebel-pharaohs-kingdom-in-the-field-with-prof-barrykemp>
- [62] Davies, *Ibid.* Vol II pl XLI
- [63] [http://www.amarnaproject.com/pages/amarna\\_the\\_place/north\\_tombs/index.shtml](http://www.amarnaproject.com/pages/amarna_the_place/north_tombs/index.shtml)
- [64] <https://www.ancient-egypt-online.com/ancient-egypt-government.html>
- [65] Davies, *Ibid.* Vol I pl XXI
- [66] David, Rosalie, *Handbook to Life in Ancient Egypt*, Oxford Press, 2007, p 95, <https://www.ancient.eu/article/1012/ancient-egyptian-taxes--the-cattle-count/>
- [67] Murnane, *Ibid.* p 163
- [68] Ridley, *Ibid.* p 105, says "In Meryre II's tomb (TA2), southern tribute includes metal, gold, arms, ivory, animals, and slaves; northern tribute includes arms, slaves, ivory, and animals; together with calves and grain or incense from Punt, Libyans with ostrich eggs, and Hittites (?) wearing pigtails with metalwork.
- [69] Dodson, Aidan, *Amarna Sunset*, American University in Cairo Press, 2009, p 11. Barry Kemp also points out the half the quotation is from the tomb of Meryre II and the other half (including the 'islands') comes from the tomb of Huya.
- [70] Davies, *Ibid.* Vol II pl XXXVII
- [71] Davies, *Ibid.* Vol II pl XXXVII
- [72] Davies, *Ibid.* Vol II pl XXII
- [73] Davies, *Ibid.* Vol II pl XLI
- [74] Reconstruction inset by Lena Wennberg - <http://webspaces.webring.com/people/sl/lenaankh/smenkh-merit.html>

# Amarna Excavations Update

*Barry Kemp*

As I write this we have arrived in Cairo for a further season of work at Amarna. We have our permit for the whole year 2021. Because of corona-virus fears the team will be a small one (perhaps five persons) and this will mean a scaled-down programme of work at the Great Aten Temple. Last spring the programme successfully combined the two main elements of the work: opening new ground and continuing to mark the temple outline in new stone blocks (Figure 1). The local builders and workmen totalled 50, the largest number for some years. Even so, some of the programme had to be cut short when, in mid-March, the Egyptian government announced a forthcoming closure of Cairo airport and most of the archaeological team left in order to catch one of the last flights home. At the end of March all archaeological sites and foreign missions had to close but it emerged that the Amarna excavation house was deemed not to be part of the site. It then proved possible, if we (Miriam, Juan Friedrichs and myself) remained in the house, to work on some of the material stored in the magazines which stand adjacent to the house. Two months of productive work followed. After a break for the summer, we were able to resume for a further two months (October and November), again limiting the work to drawing and photography of stored material from the excavations.



**Figure 1.** The setting of the current excavations and rebuilding at the Great Aten Temple. View to the south-east, the cliffs of the eastern desert in the background. In the foreground, new stonework marks the outlines of a small palace. The stonework beyond reconstructs the stone front of the temple, with the staircase leading to a platform between pylons. The group of men beyond are close to the trench where the mud-brick offering-tables will shortly be uncovered.

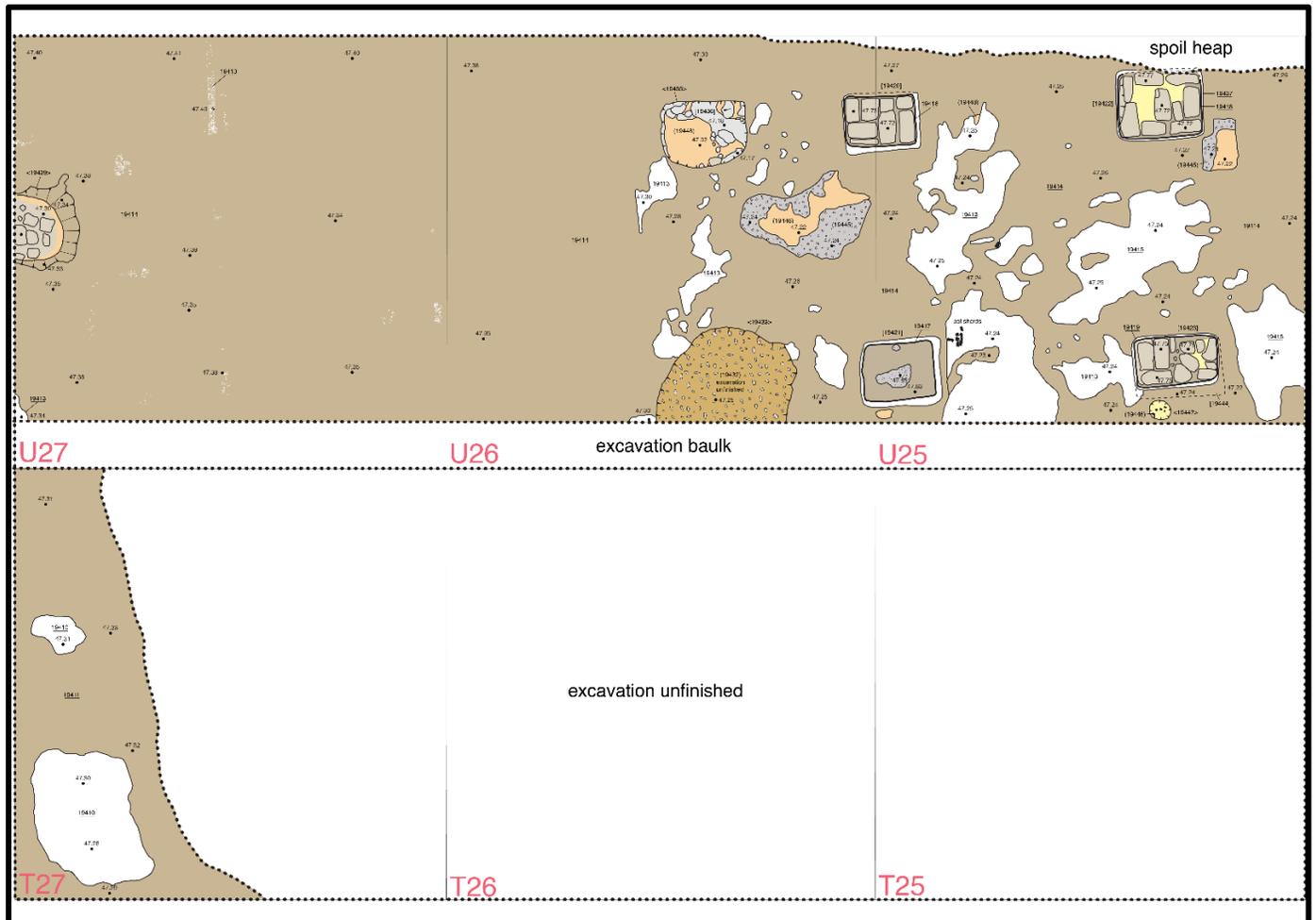
The last time I wrote for the *Akhetaten Sun* (25, no. 2, December 2019, 7–19) I described the findings of the major excavation season of autumn 2019. They add to the sense of there being two different realities present at Amarna. One is the reality defined by the ancient pictures and texts which show Akhenaten and his family adoring the Aten, supported by subservient officials and servants, all within a monumental stone temple complex open to the sky. The other, provided by archaeology, reveals that the stone temples stood within a gigantic open space which has an archaeology of its own which includes minor and sometimes ephemeral structures. For a good part of it the word ‘makeshift’ seems apt. It arouses the thought that on some occasions Akhenaten and his family performed their duties surrounded by crowds of several thousand people. Why were they there? What did they hope to gain? Was it just material (primarily food) or did it also include enlightenment? It is as if a hidden aspect of Akhenaten’s ideas and character, markedly different from common assessments of him, is struggling to emerge but still lacks the clear definition that comes from written sources.

One path of exploration is further study of the huge field of offering-tables which spread around three sides of the main stone temple. Most were of mud brick and belonged to an early phase before the main stone temple had been built. Those at the front had been buried in a layer of rubble which raised the floor level of the new temple. At the start of the spring 2020 season a trench was laid out over the expected site of the offering-tables on the south side of the temple. The area had been covered (and so protected) by large spoil heaps from previous excavations, either those of Pendlebury in 1932 or those of Flinders Petrie in 1891–2 (with a greater likelihood of the latter). The removal of an area of the heaps by excavation had begun in 2017. Now a sufficiently large area of ground, as it was in a time before archaeologists worked, was available for excavation.

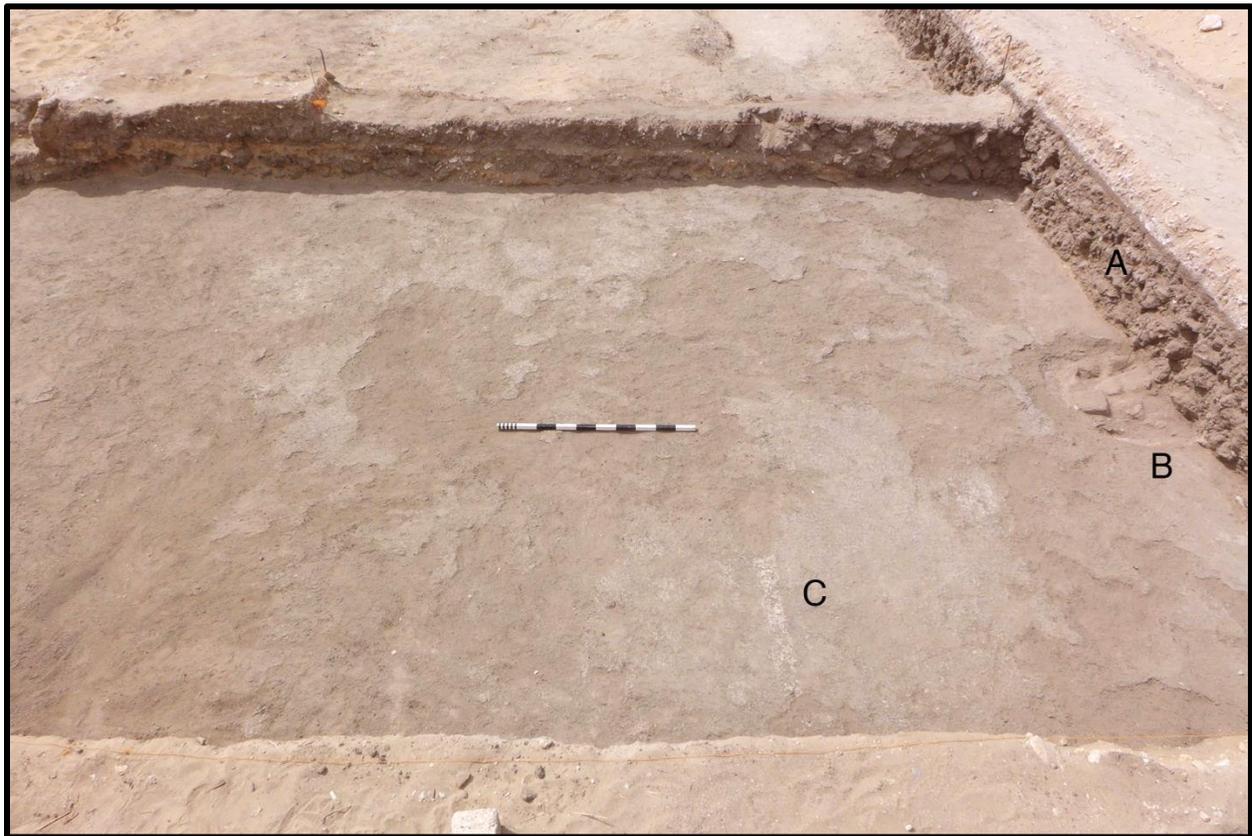


**Figure 2.** A group of newly-uncovered offering-tables on the south side of the temple. View to the south. Some of the whitened mud plaster which covered the offering-tables still survives. The workmen to the right are removing part of a spoil heap left by earlier archaeologists, down as far as the earlier ground level.

By mid-March and the closure of the work an area measuring 5 x 15 m (16.4 x 49 ft) had been excavated down to the mud floor of the early temple period (Figures 2–4). Although looking well preserved it had originally been covered with a thin layer of white plaster, but this had largely been worn away by the time the floor was buried. A straight strip of white survived, resembling the kind of line marked on modern sports pitches but this is an illusion. It must represent the survival of the white surface beneath a linear object, perhaps a wooden barrier.



**Figure 3.** *Above.* Plan of the offering-table area. North is to the left. After original plans by Fabien Balestra and Scott Allan. *Below.* Aerial photographic mosaic of the same area by Paul Docherty.



**Figure 4.** View, to the west, across the mud floor on which the offering-tables stand. At ‘A’ one can see a section through the dense brick rubble which had had been used to bury the floor and also to fill a circular pit ‘B’ (still unexcavated). The worn condition of the mud floor is as it was when buried mid-way through Akhenaten’s reign. It had originally been given a coating of white plaster. A narrow strip ‘C’ survives, evidently where a linear object (a wooden beam?) had protected it.

At the northern end of the trench the ground drops away towards the rounded sides of a deep trench which marks the line of the southern wall of the later stone temple. This was not investigated. The excavations concentrated on the ground to the south. After 7.5 m (24.6 ft) of uninterrupted mud floor the field of offering-tables began. The first line, crossing the trench from side to side, was represented by damaged patches of floor where a pair of offering-tables had stood originally made from limestone blocks. As had happened elsewhere, before the ground was buried, the blocks had been removed, leaving behind the damaged remains of the gypsum-cement foundation layer. Beyond this, to the south, came four mud-brick offering-tables belonging to two east–west rows. These were very well preserved, with areas of fragile, whitewashed mud plaster still clinging to the sides. The tables had been simply made without additional mouldings to emphasise the corners and top edges. In the case of one of them, its height of 60 cm (2 ft) is probably close to its original height. Each one must have been built with its centre over an intersection of a grid. The sides, however, had been built by eye so that each is slightly different.

We have assumed that the dark brown rubble used to bury the offering-tables around the front of the temple was the remains of a thick brick wall which had been temporarily raised around the front part of the temple when the rebuilding commenced (this is illustrated in the *Akhetaten Sun* 20, no. 1, June 2014, p. 16, Figure 5). Its purpose was probably to hold a mass

of sand which helped in the lifting of the large stone blocks which formed the colossal columns which stood in front of the temple façade. Sure enough, as one approaches where the wall ended on the south side, not far from where our excavation trench began, so the amount of dark rubble used to raise the level of the ground decreased. In its place the ancient workmen had used sand. This is particularly visible in the section along the line of the eastern edge of the trench.



**Figure 5.** Part of an aerial photograph of the Great Aten Temple taken in 1935 by the Royal Egyptian Air Force. The outlines of the foundations of the temple, as exposed by the Pendlebury excavations in 1932, are to the left. The rectangle outlined in black is the site of the 2020 excavations. The patterned area 'y' marks the presence of mud-brick offering-tables. The area with smooth surface 'x' is probably where the tables had been buried in sand during the Amarna Period. To the south (right) the linear marks across area 'z' must be excavation trenches from earlier archaeologists.

In this observation lies a likely explanation for the odd appearance of the ground where the offering-tables lie further away on the southern side of the temple (Figure 5). The plans made by Flinders Petrie and the architect Lavers, working for Pendlebury, show 900 or more brick rectangles arranged in parallel rows (the two plans giving differing numbers). Petrie describes how, having realised that the rectangles (which he thought belonged to a huge pillared hall) were at regular intervals, he was able to predict where to dig to locate sufficient of them to complete his plan. If one looks at aerial photographs of the area (the earliest having sufficient detail is dated 1935) much of the surface shows a regular pattern of shallow round pits, like dimples, the effect looking like a giant waffle, although this is barely visible at ground level. I used to think that the dimples were Petrie's test pits until I realised that archaeologists do not leave the ground with a surface so evenly modelled. Another explanation began to dawn when looking closely at an area just beyond the limits of the spoil heaps where the current excavation trench is situated. Without apparent extra disturbance, the dimpled surface fades into a smooth, flat surface. Our excavation trench stands at the edge of it. At this point the material which buries the offering-tables is clean sand, not rubble. An extension of the excavation to the south will be required to verify it properly, but the explanation which offers itself is that, not long after the ancient workmen ran out of rubble and began to use sand to bury the offering-tables, they stopped burying them altogether. Thus most of the area is a weathered remnant of offering-tables which had been left standing, the spaces between them gradually but not completely filling up with wind-blown sand. What we will be looking for when the excavations reach this far is evidence as to whether people continued to use the tables which lay outside the zone of burial. Whatever is the answer, we seem to have another example of makeshift operations in the temple zone.

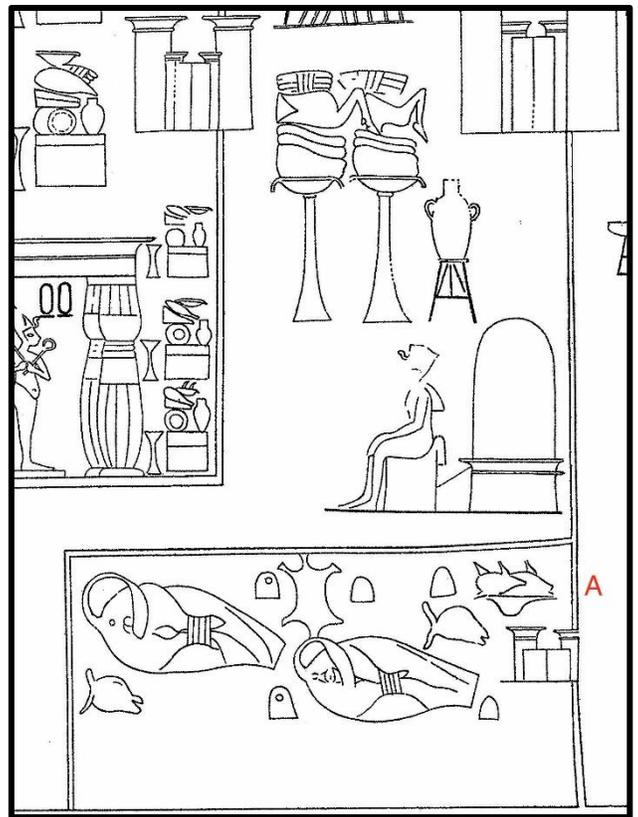


**Figures 6 and 7.** Limestone sculptor's practice piece, object no. 43535. Inked version by Andy Boyce.

The rubble and sand that covered the offering-tables in the excavation trench contained few objects. One was a rectangular slab of fine-grained limestone (object no. 43535, Figures 6, 7) where a start has been made on carving a human face in profile, perhaps that of an Amarna princess. When found, the back and sides of the slab were encrusted with mud and pebbles firmly cemented to the stone with salt. This deposit has not yet been removed. The artist has rapidly sketched the profile of a face with a few flowing black ink lines. The purpose was perhaps to help him to fit the face to the existing slab, filling the surface with the important features whilst omitting the rear part of the head. The carving was started with one or more fairly narrow chisels, following some but not all of the ink lines. The two black dots on the right side presumably were to help position the ear lobe. The part that has been most worked includes the cheek and eye, the latter beginning to be shaped as a slight bulge in the stone. The piece offers an instructive lesson in how sculptors worked during the Amarna Period. The dimensions are 14 cm (width=5.5 in) x 18.5 cm (height=7.2 in) x c. 5.3 cm (thickness=2 in), the dimensions including the mud surround.

At a distance of around 300 m (984 ft) behind the back of the large stone temple is a separate site which is also shown in the pictures of the temple in some of the rock tombs (Figure 8). Both on the ground and in the pictures it comprises two parts, side by side. One is a platform reached by stairs beside which is a seated statue of Akhenaten. On top of the platform stands a round-topped stela. Not far away is an enclosure (the Butchers' Yard) containing the carcasses of cattle and large birds (presumably geese, 'A' in Figure 8).

We are in the midst of a re-excavation of the whole area, which has a shallow depth of ancient deposits over much of it (Figure 9). Here and there the ancient ground surface has been cut by circular pits and irregular trenches. Most of the circular pits were for wooden posts or for providing support for pottery vessels. Some of them retain material which had become accidentally trapped at the bottom. Incense is one kind, feathers another. A likely explanation is that a layer of rubbish had developed around an area where food-offerings were prepared. Most of it was subsequently cleared away or was dispersed by the wind. The little trapped pockets are all that survives. If this is true we have rare direct evidence for one category of food-offerings, a collection of Amarna-Period feathers from an offering-area.



**Figure 8.** Part of the depiction of the House of the Aten in the tomb of Meryra at Amarna. It shows the stela with accompanying statue of the king. Below is one of the two butchers' yards. At 'A' two birds prepared as offerings lie on a dish. Other offerings are shown on cylindrical stands (perhaps of bronze) and one amphora stands in a wooden frame. After N. de G. Davies, *Rock Tombs*, I, Pl. XXXIII.



**Figure 9.** The site of the Butchers' Yard or Slaughter Court behind the main temple. In the foreground is the side of the entrance to the courtyard, made from mud bricks. Beyond it the original mud floor is still covered with an organic layer. View to the north.

But are we deceiving ourselves? Feathers are regularly amongst light debris which blows across the site. There is even a chicken farm across the modern road which runs past the temple and which produces heaps of feathers dumped on the nearby desert. Our deposits of feathers were only shallowly buried. On the positive side, we have excavated extensively across the site closer to the front of the temple and found post holes and pot holes. None has contained feathers (or incense). Then there is the coincidence that our deposits come from the very area where, in a temple scene in the tomb of the priest Meryra, the butcher's yard includes the plucked carcasses of large birds.

This is not our first encounter with ancient bird remains in the area. In 2006 we carried out a small excavation into the spoil heaps from the earlier excavation (of 1926, by Henri Frankfort) of the house-like offices of the priest and temple manager Panehesy, located just outside the southern temple enclosure wall, a short walk from the Butchers' Yard. Bones of cattle and birds were the main finds. In 2015 we were fortunate to have a bird expert join the team, Chris Stimpson from England (see *Akhetaten Sun* 21. No. 2, December 2015, 30, Figure 1). He was able, through a careful and thorough study of the collection, to identify many of the species. The collection was dominated by geese, as is to be expected, but a surprisingly wide range of other birds was present as well, not all of them water fowl. They included quail, doves and a variety of perching birds, amongst them at least two species of shrike. Were these the accidental inclusions from the use of large clapnets and a habit of not throwing away anything that was edible, or could they have been the offerings of poor people (or both)?

It is only a short walk between the area where the feathers have been found and Panehesy's offices. The intriguing possibility arises that the two collections, of feathers and of bones, are connected. The species identification of bones has to be done directly. This is not so with feathers. Chris Stimpson tells us that the identification of species from feathers (especially small fragments of feathers) is best done using microscope photographs, ideally at x300 magnification or above. Photographic microscopy has become much easier in recent years through the development of equipment which works in conjunction with a laptop computer (specifically of the PC type). The Dinolite company manufactures a range of models which are also relatively light in weight (the heaviest part is the base for the stand).



**Figure 10.** Photographer Andreas Mesli takes a microscope photograph of one of the fragments of feathers found in one of the pits close to the Butchers' Yard.

We purchased one of the Dinolite models and a dedicated PC and took them to Amarna in the autumn. Our photographer, Andreas Mesli, was also a member of the team (Figure 10). The feathers, all in fragmentary condition, had been removed from the site and stored in labelled groups in plastic bags in the magazine. The first job was to unpack, sort and repack them, each in a small separate bag. This job was done by team-member Marzia Cavriani, who compiled an Excel database for them, giving provenance details, as she worked. The fragments amounted to 380. Andreas set up the microscope and spent some time experimenting to get the best results. He then took pictures of each fragment, from both sides, and also separately photographed them with a conventional digital camera. Back in Cologne, where he lives, he has processed each picture to create a large digital archive of them. They are now on a hard drive waiting to be mailed to Chris in England. As circumstances allow he will then compare them with a large bird reference collection held in the Natural History Museum in Oxford. The hope is that he will obtain identifications of species and of the part of the body from which each feather comes.

The exercise will also be the final test of whether the collection really is genuinely of the Amarna Period and whether it is in a sufficiently good condition to give useful results. If they all turn out to be from chickens I will have made an embarrassing mistake. (The chicken seems not to have been part of the range of birds known from the Eighteenth Dynasty, although a sketch of a cockerel is known from a Ramesside ostrakon from Thebes). It will be a while before we know. This work takes time.

The feather project is an unusual episode of the regular work periods at Amarna devoted to the recording and study of the large quantities of material kept in permanent storage in the antiquities magazines beside the expedition house. It is generally the case that artefacts require description, scale drawing and photography. The year 2020 saw much time spent on this side of the expedition's work. Thus Andreas also photographed part of the collection of mud jar sealings (mostly from wine amphorae) from the Great Aten Temple, as a contribution to their study being undertaken by Marzia Cavriani at Pisa University. He also continued to photograph decorated stone fragments from the Great Aten Temple.

The stone fragments fall into two broad categories. Much of the body of the temple had been constructed from stone blocks of the kind referred to in modern times as *talatat*-blocks, each one an ancient cubit in length (52 cm, 20.5 in) and mostly cut from local limestone. Larger architectural elements were sometimes made from sandstone. The blocks, in particular, could be re-used and, after the end of the Amarna Period, the temple, along with all other stone buildings at Amarna, was thoroughly stripped of its stonework. Hundreds of the blocks have been recovered from other sites where they were later employed, especially at El-Ashmunein (Hermopolis) across the river. As the demolition took place pieces inevitably broke from the blocks and remained behind. These constitute one of the categories that we recover, along with sandstone fragments mainly from broken-up column sections. Although it is disheartening to admit it, because so much of the temple has been taken away the absence of joins is to be expected and future work is unlikely to change this.

The other main category comprises pieces made from several special kinds of stone. These comprise the hard stones quartzite, granite, grano-diorite, the marble-like indurated limestone and occasionally basalt; and the softer stone, alabaster (travertine). The working of the hard stones, at least in the later stages, was by hammering the surfaces, gradually reducing them until they reached the near-final stage of polishing. The unfinished surfaces show closely set, small rounded pits as if made by a metal punch. In contrast to many of the *talatat*-blocks which had been hastily and not very expertly finished, the hard-stone sculptors spared no effort to produce work of a consistently high quality.

Unlike the fragments of limestone wall blocks, of which we find only pieces of accidental breakage from blocks which were to be carried away, the hard-stone fragments seem to be the result of deliberate smashing of the whole surface of blocks (and of statues) into pieces that usually fit into the hand. This encourages us to hope for joins and thus a slow reconstruction of the originals. So far, the largest collection comes from the site of the stela behind the main temple. The fragments mainly come from the spoil heaps of previous excavators. They are nearly all in a red to purple quartzite, the designs and hieroglyphs cut in sunk relief. The total so far is around 1000 (not counting fragments with no worked

surface), of which perhaps a quarter are usable for reconstructing the design. More are expected as the remaining spoil heaps are cleared away.



**Figure 11.** A small part of the collection of fragments of carved quartzite from the site of the stela behind the main temple. Their sorting and recording is a joint project by Juan Friedrichs (whose artwork is shown) and Miriam Bertram.

When spread out on tables they are an impressive sight (Figure 11). They remind me of a card game that my grandmother liked to play and at which I was hopeless. She called it pelmanism (after the memory system taught by the Pelman Institute founded in London in 1898 or 1899). You spread the cards out, face down, over a table. In turn each person turns two cards face upwards, hoping they form a pair of numbers and if not, replaces them face down, trying to remember their position. The test, as the game proceeds, is to remember the positions of cards with a particular number so that you can make pairs. So, with the fragments (which remain face upwards), when you spot, say, a particular design of cartouche border or fragment of body profile, you have to try to remember where, on the table, you have already seen a fragment that might match. Three of us have, at various times, played the ‘game’. Juan Friedrichs, our Argentinian artist, is the best; Miriam comes second; I am third. But still the number of matches is fewer than anticipated across such a large body of material. The reason is not hard to find.

Each fragment has its own number and is drawn and photographed (Figure 12). Based usually on the drawings, one by one a selection of fragments is converted into a simplified outline at 1:1 scale in the drawing program Adobe Illustrator. I have, separately, made simple digital line copies in Illustrator of a selection of Amarna scenes (mostly of the royal family) from the standard sources: mostly the rock tombs and the boundary stelae. They act as templates. For individual fragments, when its subject matter has been identified, an appropriate template is adjusted to a scale which approximates to that of the fragment, which can then be inserted into the correct position.

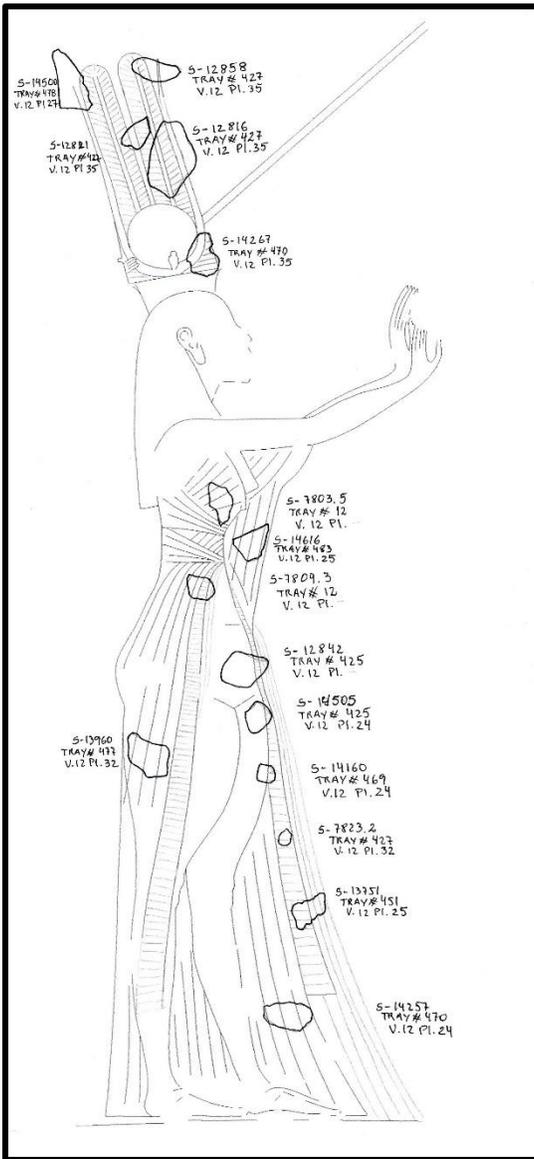


**Figure 12.** Artist and archaeologist Juan Friedrichs draws carved quartzite fragments in the expedition house.

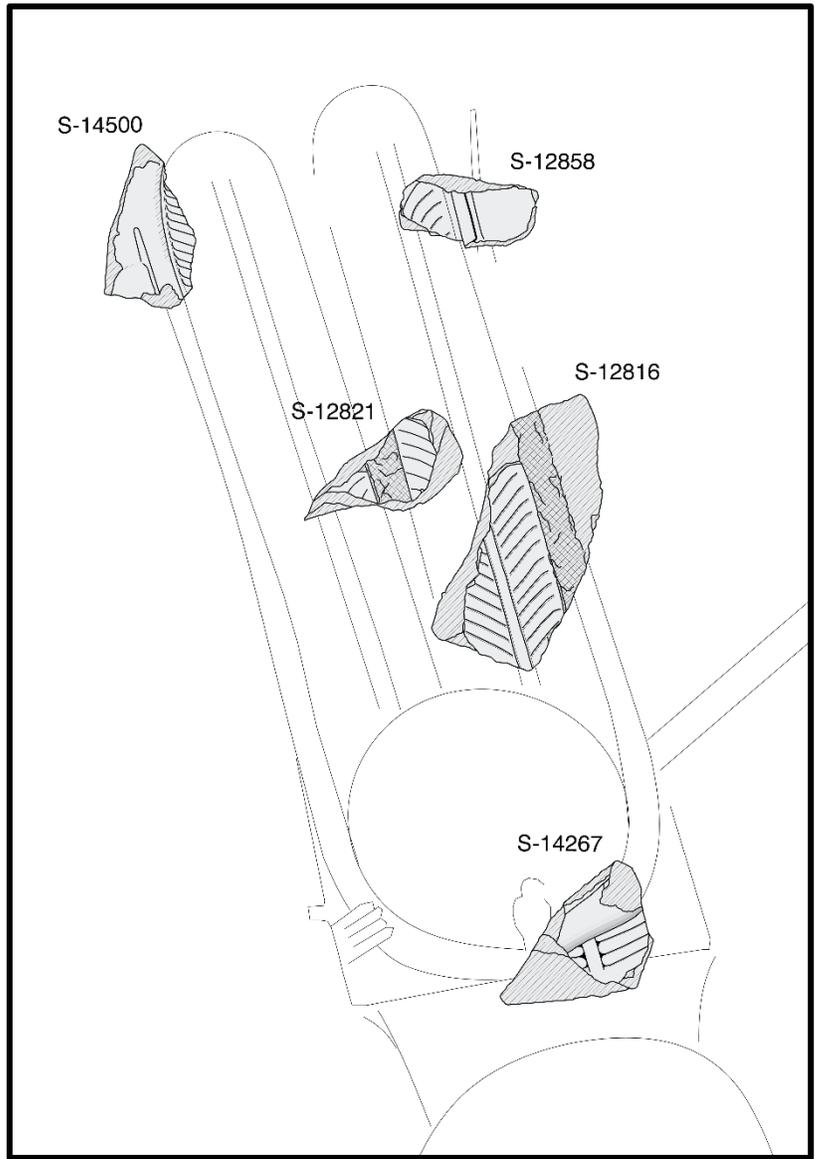
Figures 13 and 14 illustrate the process, using a template of Nefertiti derived from the top of Boundary Stela S. In Figure 14 the individual fragments shown are copies of Juan's scale drawings made at 1:1. These provide a measure of how tall the picture of Nefertiti was. The result, from top of the crown to ground line, is 1.6 m (5.2 ft). If we allow for the fact that accompanying figures of Akhenaten would have been taller, that an Aten disc and rays could have added half as much again to the height and that the original quartzite slabs would have had a blank strip along the bottom, we should perhaps be thinking of surfaces that were about 3 m (9.8 ft) tall. Did the individual quartzite slabs rise to this height or were the surfaces formed from blocks?

Many fragments have been recorded from a gridded surface on which were entered details, written in hieroglyphs, of an offering-list. This presumably occupied a surface to one side of the figures of the royal family. Once this has been realised it becomes evident that the tomb pictures which show a round-topped stela on a platform are a simplification. The stela (bearing the offering-list?) could have stood within a decorated chamber, perhaps roofless, on top of the platform and made from the same quartzite as the stela itself.

The exercise of reconstruction also explains why we find so few joins between pieces. Our fragments represent only a very small proportion of the original decorated surfaces. Some spoil heaps from around the site of the stela still remain to be excavated and sieved, so more fragments are to be expected. Moreover, there is some evidence that carved fragments in the same material have been found in the past at more distant locations, one of them the 'temple dumps' south of the stela site and outside the brick enclosure wall.



**Figure 13.** Juan’s provisional fitting diagram in which the rough outlines of individual fragments have been placed appropriately in a template of Nefertiti’s figure (derived from Boundary Stela S). Using the fragments as a scale, the height of the figure (including crown) is estimated at 1.6 m.



**Figure 14.** Nefertiti’s feather crown, now incorporating line versions of the fragments themselves. The fragments could come from more than one figure, so that exact matches should not be expected.

As the excavations proceed so a separate group of men, builders and workmen, continue the project to rebuild up to ground level, and a little higher, the main walls of the temple (Figure 15). The original walls were built within a foundation trench which was markedly different in depth from the front to the back of the temple, following the general slight upwards slope from west to east. Along some parts the original layer of gypsum concrete is well preserved, showing the impressions of the rectangular limestone blocks. In other places, when the blocks were lifted up as the building was demolished after the end of the Amarna Period, they also dragged up the foundation layer as well. In the spring of 2020, the workmen cleaned

out a further length of the trench, getting faster as the trench grew shallower towards the east. As they worked, so each stretch was photographed and planned, by Juan Friedrichs. As soon as a section was finished the builders, a family concern ruled by the chief builder Shahata Fahmy, took over (Figure 16). After spreading a protective layer of sand (Figure 17), they built a foundation of local limestone blocks up to the present ground level. Many of the blocks bear names and dedications of members of the public who have made donations to this effect (Figure 18). The hope was that, as the end of the season approached, all stages would finish at the same time (Figure 19). And so it happened, the builders having an uncanny way of pacing their work to end exactly on the last day.



**Figure 15.** The northern wall of the temple. Part of the way along the foundation trench the gypsum-concrete foundations step up, following the gradual slope of the desert. In places the foundation layer remains, in others only the edge strips survive. In the background a team of workmen are excavating the fill of the trench and the ground on either side. In the foreground the foundations for the final layer of fine Tura limestone are beginning to appear, built from small blocks of local limestone. View to the east.

They did, however, leave just enough time on the last day to set in place two pairs of granite slabs at the beginning of the reconstructed staircase that had once led to a platform between the front stone pylons of the temple (Figure 20). The original design would have seen waist-high decorated balustrades made from a hard stone (which could have been granite) running up the middle line of wide balustrade foundations on either side of the staircase.



**Figure 16.** The building team at work, under the supervision of Shahata Fahmy, the squatting figure in the wide-brimmed green hat.



**Figure 17.** A patch of the gypsum-concrete foundations still preserving the original builder's ink guide line. A layer of sand is being used to cover it but, for the moment, the line is exposed to allow the modern builder's line exactly to follow it.



**Figure 18.** A proportion of the new blocks bears names and other messages in ink requested by members of the public who have made block donations.



**Figure 19.** The foundations are made to be flush with the present surface of the desert. In the future they will be covered by a single course of blocks of fine Tura limestone cut to the ancient block size.



**Figure 20.** The finishing touch to the reconstruction of the front of the stone temple: two pairs of granite blocks marking the positions of balustrades which originally accompanied the staircase by means of which Akhenaten and his family climbed to a platform set between the stone pylons.

When at Amarna we live in an expedition house the core of which goes back to Ludwig Borchardt and the year 1907 when he built it up from the ruins of one of the ancient houses. It now has many rooms and open spaces but is also closed off from the outside. From time to time some of us make an excursion outside (other than to the place of the excavation) but otherwise we stay put. One of the safeguards against ‘cabin fever’ is the community of cats who live at the house. The first pair was brought from the village by our caretaker, Mohammed Omar, sometime in the 1990s. The reason was not entertainment. The house had become home to rats and mice. The rats, as is their style, were bold and could sometimes be seen strolling across a work table. The mice were more nimble but had the habit of chewing through plastic water pipes and electric wires. Once the cat pair was installed, rats and mice rapidly vanished and have not returned.

The original tabby pair recognised Mohammed Omar and the cook as friends but no one else. They passed away a long time ago but were the first of a continuous succession of cats who must possess some genetic representation of the original pair but increasingly mixed with the genes of outsiders. Their numbers fluctuate. Lives can be short, males often wander off to find territories of their own, some are given to villagers. Some become friendly to us, some remain distant. What remains constant is the variety of their characters (Figures 21, 22). We have developed a routine for supplementing their diet, especially when we are away. They are ever a subject of conversation amongst us, sometimes angry, sometimes loving. They act, I am sure, as a safety valve for us, whether we appreciate them or not. They allow us to direct our attention outwards from ourselves, even if we fall into regarding them as almost human.



**Figure 21.** Cat Eve with one of her kittens.



**Figure 22.** Kitten on a roof.

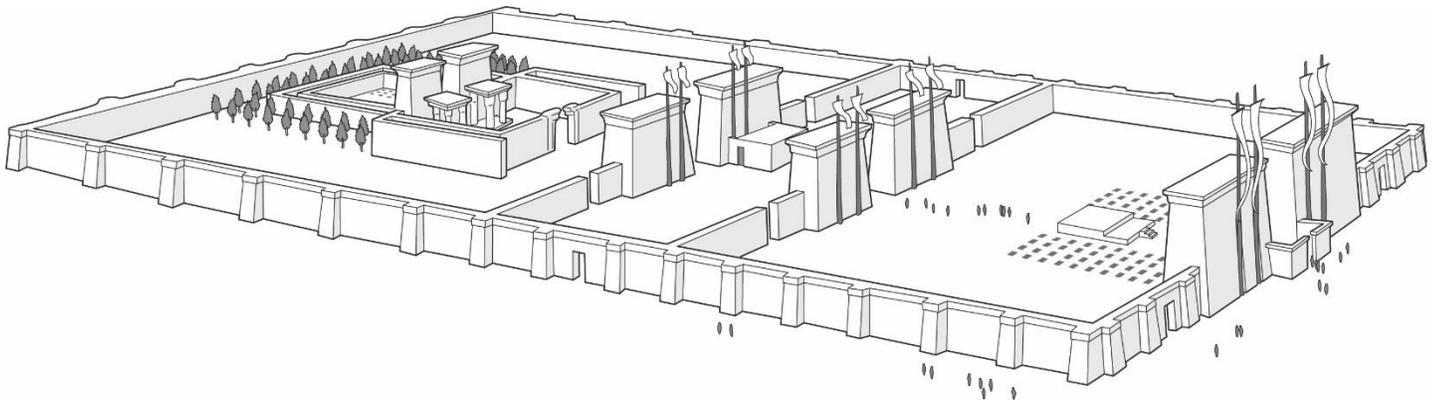
### **Further reading**

C. Stimpson, 'Bird bone study at Amarna.' *Horizon* 17 (Spring 2016), 2–4; C. Stimpson, 'Bird-bone study at Amarna.' In B. Kemp, *et al*, 'Tell el-Amarna 2016.' *Journal of Egyptian Archaeology* 102 (2016), 2–6.

S. Ikram briefly comments on the near-absence of evidence for chickens in ancient Egypt in P.T. Nicholson and I. Shaw, *Ancient Egyptian Materials and Technology* (Cambridge, Cambridge University Press 2000), 659.



**Prof. Barry Kemp at Pendlebury's Dig House**



One of a set of 36 information panels recently set up at Amarna, under the watch of Mr. Hamada Kellawy (left) and Mr. Fathy Awad (right). The project is a result of collaboration between the University of Cambridge and the Ministry of Tourism and Antiquities. Funding for the panels was provided primarily through an Institutional Links grant under the Newton-Mosharafa Fund partnership. Anna Stevens, Kate Spence, Yasmin El Shazly and Gemma Tully led the project, Mary Shepperson provided the artwork.

# Honorary Trustees of the Amarna Research Foundation

**Bob Brier, PhD**

Senior Research Fellow,  
C.W. Post Campus  
Long Island University,  
Brookville, NY

**Rita E. Freed, PhD**

Norma-Jean Calderwood Curator  
Egyptian, Nubian & Near Eastern Art,  
Museum of Fine Arts, Boston

**W. Raymond Johnson, PhD**

Director Epigraphic Survey  
Oriental Institute, University of Chicago

**Barry J. Kemp, CBE**

Director, Amarna Project;  
Senior Research Fellow, McDonald  
Institute for Archaeological  
Research, University of Cambridge

**Geoffrey Martin, PhD, LittD, FSA**

Edwards Professor of Egyptology  
University College London, Retired;  
Formerly Field Director  
Cambridge Expedition to the  
Valley of the Kings

**Dietrich Wildung, PhD**

Director, Retired,  
Egyptian Museum, Berlin

**Richard Wilkinson, PhD**

Regents Professor Emeritus, at the  
University of Arizona and founding  
director of the University of Arizona  
Egyptian Expedition

**The Amarna Research Foundation, Inc.**

**3886 South Dawson Street**

**Aurora, CO 80014**

e-mail: [RTomb10@comcast.net](mailto:RTomb10@comcast.net)

website: [www.TheAmarnaResearchFoundation.org](http://www.TheAmarnaResearchFoundation.org)