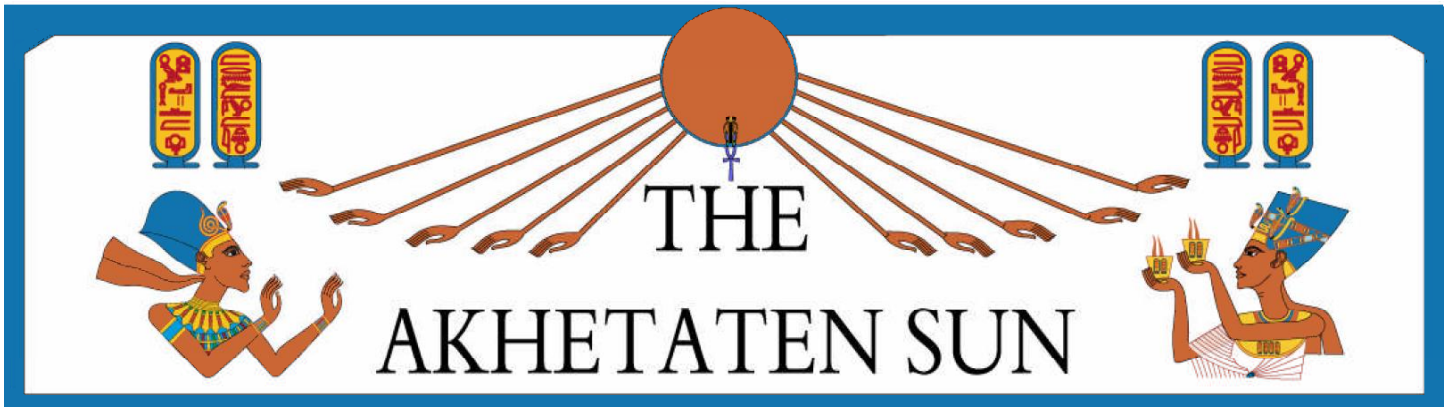

Volume 17, Number 1
July 2011

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Officers and Directors

The President's Papyrus

My dear fellow Amarnaphiles, as you know this publication's focus is that period of Egypt's history dealing with the reign and the religious revolution instituted by Pharaoh Akhenaten. But it would be remiss of me to ignore the momentous historic events, which we have all witnessed, taking place in Egypt during the past few months. President Mubarak was the ruler of Egypt for over half of my life. The tumultuous events that have taken place will have far reaching consequences affecting not only the future of the Egyptian people but the future of Egypt's antiquities. It is our most heartfelt wish that these historic changes now taking place will secure the fulfillment of the desires of the Egyptian people for a better life, now and in the future.

Concerning the work of Barry Kemp at Amarna, with the onset of the protests in Cairo, the security police asked Barry to shutdown his operation until June. His Cairo apartment is not far from Tahrir Square, so he has been a witness to much of the events taking place there. Currently, he continues to live at the Amarna dig house catching up on some of his writings for publication.

I would also like to thank Dr. Bob Brier who has just joined our distinguished group of honorary trustees. Our trustees have a vast breadth of knowledge about the Amarna Period and the people and places that make Ancient Egypt one of the most fascinating nations on earth. You have probably seen "Mr. Mummy" in a television program or two, read some of his publications, or heard about his lectures on tape or dvd. We are honored that he has joined us as an advisor. Thanks, Bob.

All the best to you all and heartfelt thanks for your continuing support,

Floyd Chapman

CURRENT WORK AT AMARNA

By Barry Kemp

Progress at Amarna, May 2011

My last report described the start of the field school at Amarna devoted to geophysical survey. I signed it off on January 15th. I was not alone in failing to foresee that, ten days later – and January 25th is now a date of popular celebration – large demonstrations would begin that would lead rapidly to the collapse of the Egyptian government. A period of growing unrest followed. The police order to close the field school coincided with a decision by the University of California, Los Angeles, to evacuate the entire US contingent. They made a smooth exit on the last day of January.

The field school had, nonetheless, put in three intense weeks of work, in the field in the mornings and in the house in the afternoon and evening, processing the day's data. Their report will be published in due course.

By February 28th, I was back at Amarna, with the agreement of SCA (Supreme Council of Antiquities) officials to re-start the work, which was planned to be a further season of excavation at the South Tombs Cemetery, and the completion of the current phase of repairs at the North Palace. Within a few days, I discovered that contact between the SCA and the local security police had not been maintained. The el Minia police did not want the responsibility of having foreign expeditions on their territory, and said no to fieldwork and to the idea of anyone else coming to stay at the expedition house.

For the next two months I remained at the house, and made repeated visits or telephone calls to the el Minia police. Finally, on April 27th, they agreed to allow the Arkansas anthropology team to come and stay at the house and work on the human bones during the latter half of May and early June. The first group of three arrived on May 18th. This is an important step in returning to normality. I am also planning to re-start both the excavations and the North Palace repairs in the period between October and December.

Figure 1. The garden court of the North Palace, looking towards the south.

Meretaten and the North Palace

Two and a half quiet months at Amarna have not been without benefit, mainly in providing time for writing.

I brought to the expedition house copies of the archive records of the original North Palace excavations of 1923 and 1924. Over many years, from time to time, myself and others have turned our hands to bringing together a full report on the palace, a project disrupted by the early death of the main excavator, F.G. Newton, near the beginning of the second season (he died from *Encephalitis lethargica* in Asyut hospital on Christmas Day 1924).

Amongst the records are small-scale copies of inscribed and decorated fragments of limestone. Most of the copies were made by G. Duncan Greenlees, a member of the 1924 excavation team, who had studied hieroglyphs and proved to be a careful copyist. He was assisted by a house guest, C.J. Lamm. W.B. Emery also made preliminary copies. Together they number around 600. Hardly any of the stones were photographed, and most of them seem not to be in museums, having most likely been buried close to the northern dig house in a location that has yet to be discovered.

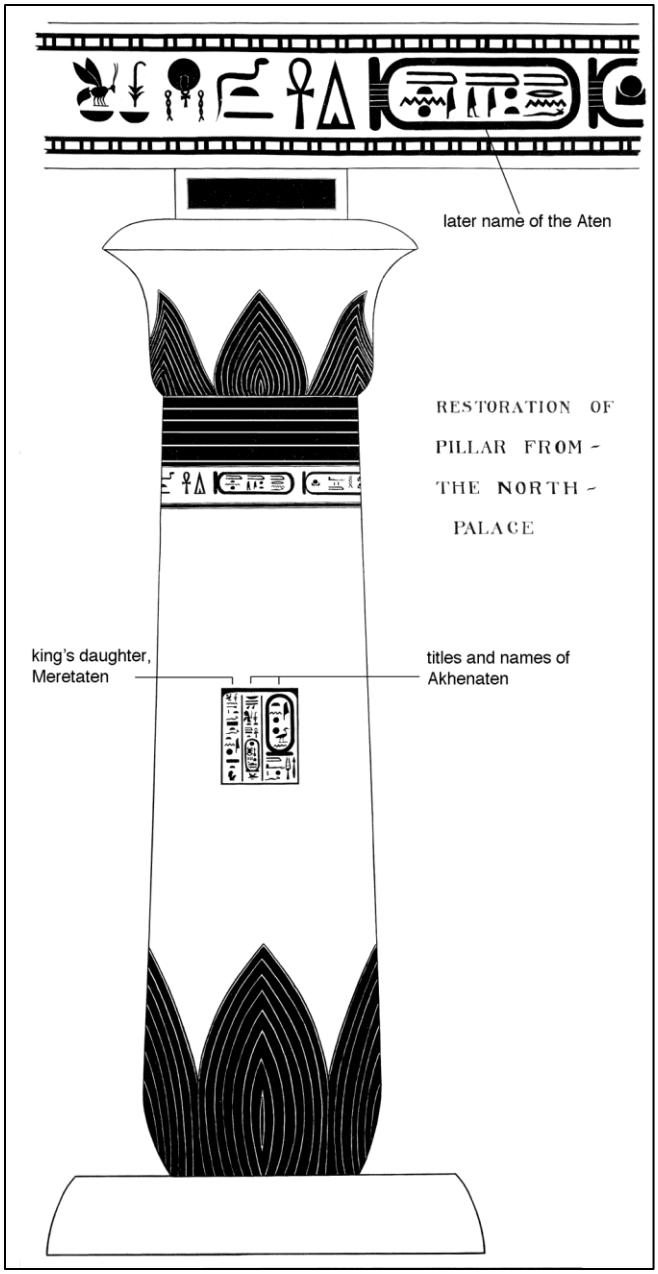

Figure 2. Reconstruction drawing, by F.G. Newton, of the column design in the garden court. EES archives.

Many of the fragments come from the 'Women's Quarters', the term used for the north-east part of the palace where a series of rooms looked out on to a central garden and were shaded by a colonnade (Figure 1). As described by the excavator: 'The colonnade consisted of 27 columns, of which only the bases of 11 remain, though the imprints of the others are traceable ... Any number of fragments of the columns and capitals and cornice were found broken up in the centre of the court and from these it was possible to make a complete restoration, including some of the inscription along the cornice' (Newton 1924, 298). Newton's drawing was never published but a photographic copy survives (Figure 2). The hieroglyphic parts incorporate the later cartouches of the Aten, something consistent with the general mass of fragments from the palace. This implies that the stonework was decorated after Akhenaten's ninth regnal year.

They also couple the king's name with that of his eldest daughter, Meretaten. Again this is representative of the fragments as a whole. An example is the pair of fragments 24/54a and b that are parts of a tall limestone door lintel (Figure 3). The regular pattern for cartouches at Amarna was a group of five: two large cartouches for the Aten and, beside them and on a smaller scale, two for Akhenaten and one for Nefertiti. Here we have only four cartouches, the missing one being Nefertiti's. Indeed, amongst the 600 fragments the name of Nefertiti cannot certainly be recognized at all. Thus, when the palace was abandoned, the inscribed stonework – mainly doorways that were present throughout the building – honoured the joint presence of Akhenaten and his eldest daughter Meretaten, who was destined to carry on her father's line. She was consistently referred to as 'his beloved bodily daughter', her name not written within a cartouche.

It was noted at the time of excavation that Meretaten's name had been carved in spaces where an earlier name had been obliterated. The excavator who took over from Newton, T. Whittemore, wrote: 'A fragment *in situ* of one of the door-jambs … bears the name Merytaten in palimpsest (an erased inscription), which is met throughout the edifice' (Whittemore 1926, 4). Exactly the same had been noted during the excavation of Maru-Aten in 1922. A careful study of the fragments found here, by the Egyptologist Battiscombe Gunn, was published in the volume *City of Akhenaten* I. Largely because one of the erased titles at Maru-Aten had read 'great wife' of Akhenaten, Gunn had concluded that Meretaten's name had replaced that of Nefertiti, although the traces of the erased inscriptions were barely legible. Although the publication date was 1923, unfortunately no copy of the volume seems to have been at Amarna in 1924, so Greenlees made his copies without the benefit of Gunn's study.

Much later, the title 'great wife' of Akhenaten was found to have been held by Kiya, whose very existence was unknown in the 1920s. She became the original 'owner' of at least parts of Maru-Aten as well as a portion of the Great Aten Temple. In 1988, Nicholas Reeves published three North Palace fragments that had been sent to the British Museum on which faint traces remained of erased hieroglyphs beneath the name of Meretaten. He interpreted them also as writings of the name and title of Kiya. If hers was the original name at the North Palace and elsewhere, it would imply that she was given a status that outranked that of Meretaten (and Nefertiti), an ascendancy that was followed by her 'downfall' that 'coincided with an increase in the status of Nefertiti herself' (in the words of Reeves). Are we witnessing an episode of harem politics?

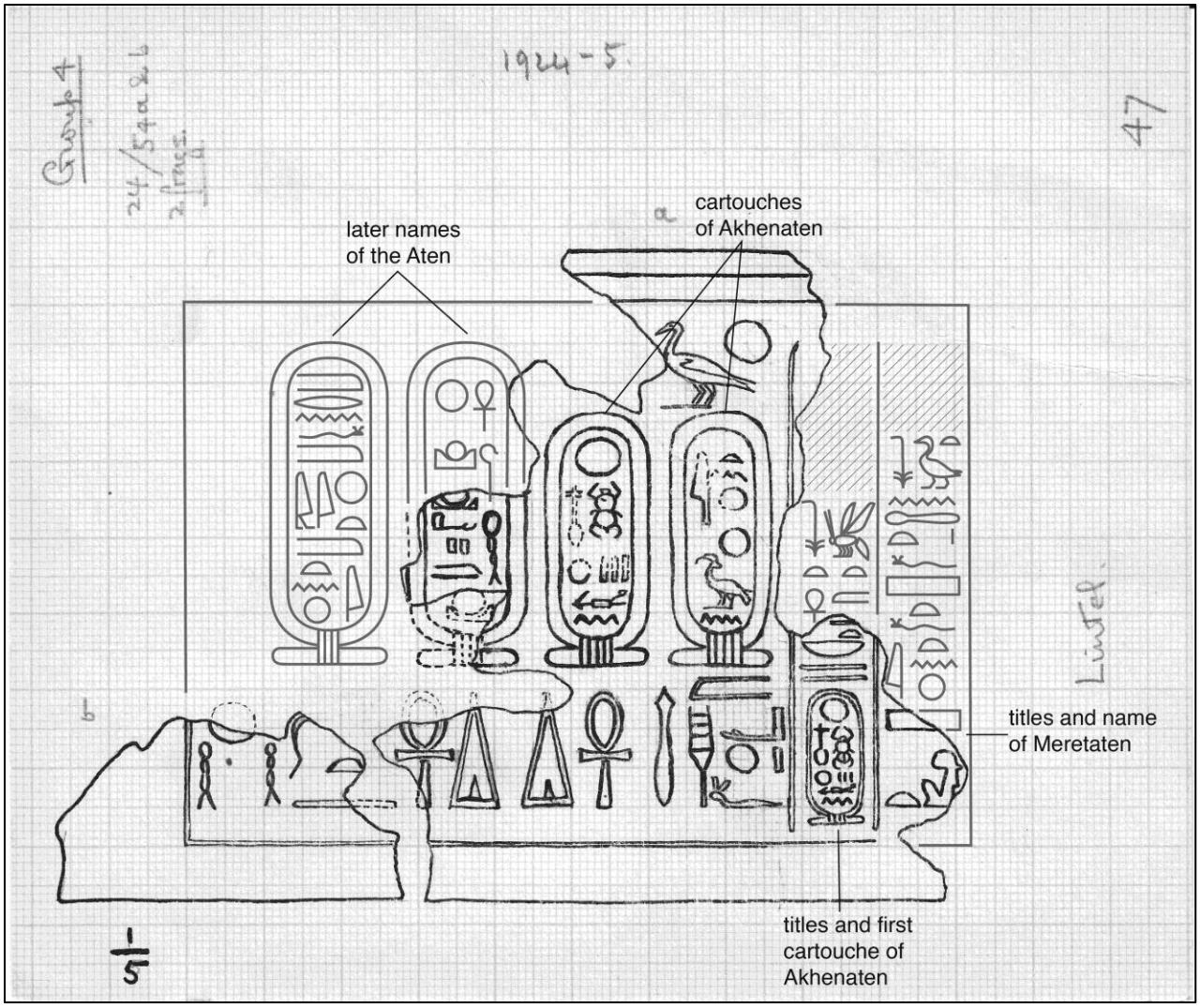

Figure 3. Greenlees' copy of fragments 24/54a and b, with interpretative comments added. The hatched portions are where, on similar fragments from Maru-Aten, texts had been altered which seem to have contained a title beginning 'great wife of…' EES archives.

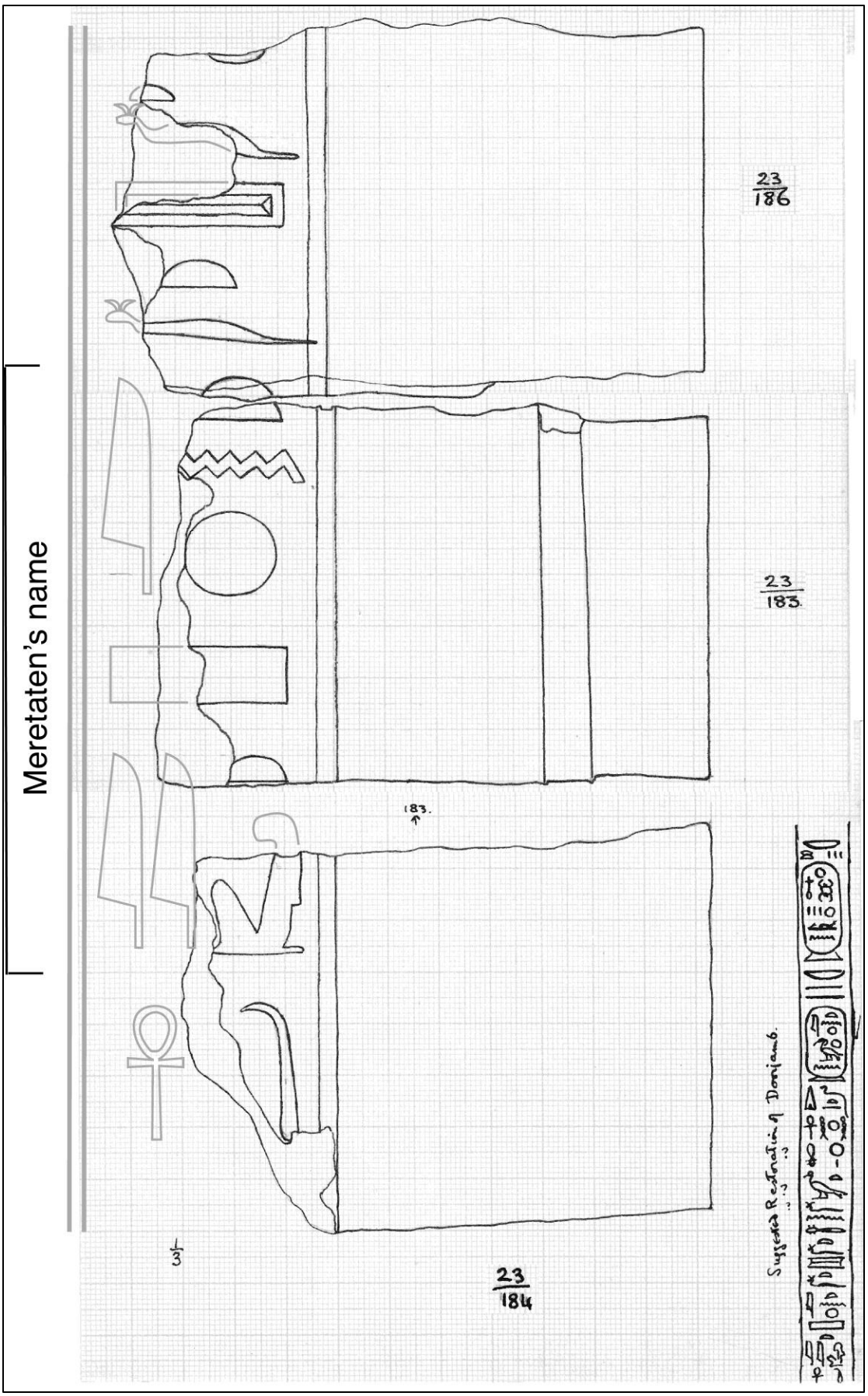

Figure 4. Greenlees' copies of three of the blocks from the side entrance to the cattle court, nos. 23/183, 23/184 and 23/186. EES archives.

The full set of fragments from the North Palace has not been made public before. A total of 37 of them record writings of the name Meretaten or her title (though five of them are uncertain). Of roughly half can it be said that the hieroglyphs have been added over an earlier name. If, in the remainder of the cases, the writings of the name and title of Meretaten were left unaltered, it compromises the case for a change of ownership.

Here we come up against a limitation in the sources. How reliable are the copies? Let us return to fragment 24/54a and b (Figure 3). It is very similar to fragments from Maru-Aten. The areas that are cross-hatched correspond to places which, on Maru-Aten fragments, had born short texts (including the 'great wife' phrase) that had been erased. The erasures at Maru-Aten had extended to the place where Meretaten's name had been carved (over the name, so it is argued, of Kiya). On 24/54 part of Meretaten's name was present. Greenlees makes no observation on recarving although he does on other fragments, even attempting to interpret the underlying signs. If we accept his copy at face value, the name Meretaten was there from the outset. Much depends on our faith in Greenlees.

One group of *talatat*-sized blocks at the North Palace was found tumbled on the ground, having fallen from an unusually heavy limestone doorway that led into the cattle enclosure that is separated by a corridor from the garden court (Figure 4). They appear in two 1923 photographs (Figure 5). Three of the blocks can be identified with drawings that show parts of the title and name of Meretaten. The hieroglyphs are large and well cut. They do not look as though they have been altered, but one views the blocks at a low angle and with imperfect focus, so one cannot be absolutely sure. Again Greenlees made no comment on reworking on his ostensibly careful scale copies of these pieces. If Meretaten's name was unaltered, it would mean that her name was present at the outset and that, for its entire history, at least one major doorway recognised her presence.

Figure 5. Stones from the side entrance to the cattle court, photographed in 1923 during the EES excavation, viewed to the south-west. They lie beside the limestone threshold of the entrance. EES archive photograph 23/121.

In two or possibly three cases, Greenlees included in his copies traces of the signs that underlay the name of Meretaten. If these are added to the traces of the name recorded by Reeves on one of the British Museum fragments (23/29, the other two refer to her title), what strikes the eye is the lack of consistency. The Kiya reconstruction on the latter does not work on the former.

This makes me wonder if we are looking in the wrong direction for an answer to the question raised by the alterations. Could they have involved only a rewriting of the text in which Meretaten' s name appeared? The building had nothing to do with Kiya.

I make these remarks on the basis of a first look at the fragments. They face the obvious objection that the phrase 'great wife' of Akhenaten (known mainly from Maru-Aten though Reeves has read it on one of the British Museum fragments, 23/79) does not seem at all appropriate to Meretaten. None the less, it seems right, when faced with a new body of material, to approach it as an independent set of data, and to follow the logic that it generates, before becoming swamped by the accumulated background literature.

I am grateful to the Egypt Exploration Society for their continuing co-operation in making this material available for study.

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F.G. Newton, 'Excavations at El-'Amarnah 1923–24.' *Journal of Egyptian Archaeology* 10 (1924), 289–305.

C.N. Reeves, 'New light on Kiya from texts in the British Museum.' *Journal of Egyptian Archaeology* 74 (1988), 91–101.

T. Whittemore, 'The excavations at El-'Amarnah, season 1924–5.' *Journal of Egyptian Archaeology* 12 (1926), 3–12.

Figure 6. Amarna's Northern Palace in February 2010 (photo by David Pepper)

AMARNA FROM ON HIGH

By Gwil Owen

Since the arrival of Google Earth more than a decade ago almost everyone is accustomed to seeing what's on the ground from on high. News bulletins often zoom in from space to details of the back garden where the reported celebrity has (mis)behaved. For the archaeologist this technology is a valuable resource; new sites can be found and known ones easily assessed.

Using the GPS coordinates that are built in to the images we can all zoom into Amarna in just a few seconds. The small Aten temple is at 27"38'42.61" N by 30"53'47.55" E, the North Palace at 20"40'11.72" N by 30"54'12.991" E, and the dig house at 27"37'49.60" N by 30"53'19.22" E. You will not be able to zoom in, however, to the courtyard there and catch the team sipping gin and tonic; not even the best satellite images can resolve the name on the bottle! If this is still too much technology, just enter "Amarna" and you will be whisked there automatically.

Why then, you may reasonably ask, do we still use conventional aerial photography on and around the site. Two reasons stand out. Low level images show much more detail, detail which is useful to an archaeologist. Also Amarna is first and foremost a site of topographic details, brought out by varying low sun angles at different times of the day and year; rarely is a satellite overhead at the best time for photography.

Therefore, since 1988 we have run our own aerial photography, in various ways, and what follows will be a potted history of our endeavours.

We started with kite based photography, initially as illustrations of the current excavations. The kite was a two metre delta wing affair, which was being sold then in England and targeted at archaeology. With two flying lines it was manoeverable to a high degree. It worked well in England but ... the Egyptian desert is a different kettle of fish. Here began the catalogue of difficulties and disasters which dog our efforts to this day.

The site is usefully photographable from dawn up to about ten o'clock, when the sun angle becomes too high to show the more subtle features. Also, flying the kite much before eight o'clock is not on because there's no wind to speak of. The wind is normally from the north; if it is southerly it is often stormy and equally useless. A bit later the wind does get up enough to raise a kite, and it can be quite brisk and gusty. But, when the sun gets up higher later on, the desert heats up and there is quite a strong thermal current vertically, canceling out the lift. And guess what, if the wind speed horizontally drops too much (because it gusts) the kite comes into the thermal and drops like stone. Kites are not indestructible.

The much broken kite was superseded by a hot air balloon (Figures 1 & 2). Ideal for very early morning calm conditions. Our one carried only cameras, not us. With foresight we could launch it from a ground based burner, and let it rise and drift over a preplanned flight path. Height could be about 800 to 1000 feet and we could get a 5 minute drift before it came down too low. Then we had to chase it across the desert to bring it back. Tethering it did not work very well, for in a breeze the envelope would deform and tilt the camera platform. Flying free it was very stable, and the vertical shots were ideal. Not so ideal was the difficulty of getting propane in Egypt - BP got it for us in the end. Another factor of which we were initially blissfully unaware was that the wind around the cliffs at Amarna could blow in different directions at different heights. What had been planned as a gentle quarter mile drift into the desert could become turned ninety degrees into the cultivation. We almost lost the balloon in the river once!

What about, I hear you cry, a helicopter? In a state closely and bureaucratically controlled by the army and the security services? Fat chance on any regular basis. We were loaned one once. It spent a week at the local airfield getting extra permission to take pictures, and then on the biblical seventh day just before lift off the pilot was told his permission was to land at the airfield, but not to land twice. He had a choice of flying the photography and running out of fuel on the way back to his Red Sea base, or flying straight back to his base.

Figure 1. The hot air balloon - launch

Figure 2. The hot air balloon - recovery

Then there was the next year when we had a huge helicopter from the Army Intelligence service. I was told the Colonel in charge needed some flying hours in his book and a jaunt up river seemed a good idea. They of course needed no special permits to do anything. What they wouldn't do was fly before mid morning tea break; indeed if it was a bit hazy they wouldn't fly at all. We had two days of that so the piccies were not always ideal. But we did cover areas that would have been impossible with a balloon.

Our next machine was a helium blimp about six metres long and two metres wide (Figure 3). This flew up to 1000feet, tethered and manoevered by two assistants. This is good for positioning over the site. One person either side for lateral position and the remote shutter operator looking, as it were, down the slot. However this sort of balloon is big and powerful and is unmanageable in any wind more than a mild breeze. It also leaks by osmosis, which comes costly. I have yet to hear of any material that is fully impermeable to helium.

Helium balloons are still the preferred choice, despite the leakage and their susceptibility to damage from grit and sand.

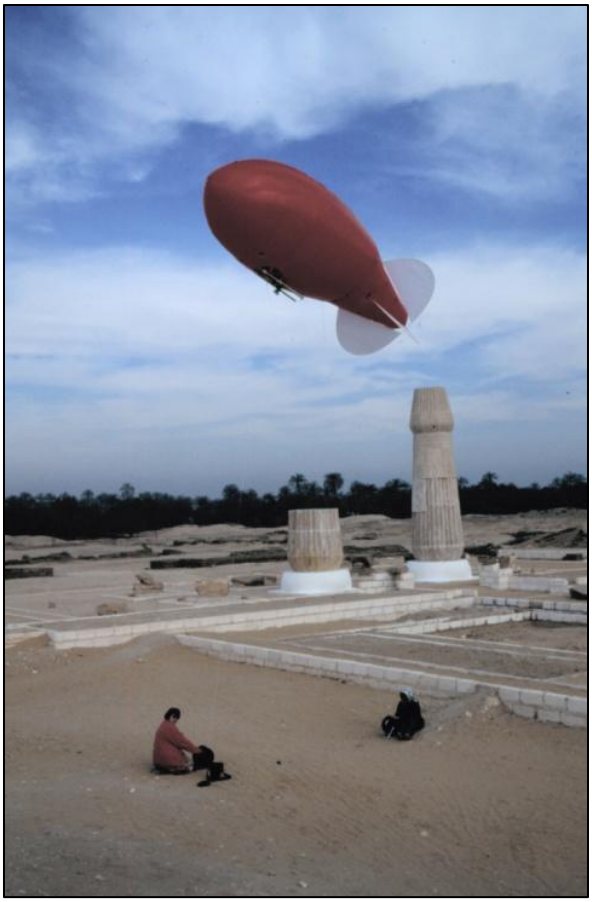


Figure 3. The blimp

Currently we fly a Helikite (Figures 4, 5, & 6). It's only a 3 cubic metre balloon but has a doughnut profile that allows it to fly in even the slightest wind. This is ideal for our climate in the early morning. We fly it with a "dyneema" line on a huge sea fishing reel. There is about 500 metres of line, but we rarely fly above 600 feet even though the transmitter for the remote shutter control will work at more than a kilometer. It is possible to operate the Helikite single handed, especially at greater heights where the margin for positional error is greater than at low level.

Figure 4. The first Helikite

Figure 5. "Sophisticated" radio controlled camera

Figure 6. The new Helikite

So, what do we do with all this kit? Has it been useful? It is obvious that any pictures of Amarna from the air will be spectacular (for example Figure 7). It is an aerial photographer's dream; with the sun at a low angle the patterns of the city jump up out of the sand. We could leave it at that and only produce the obvious and the wonderful. We can "sell" Amarna to the public with pretty pictures - not only to get funding, which is necessary, but also to make Akhenaton's capital widely known and understood. It is, after all, an important milestone, both in the narrow Egyptian context and in the broader development of human culture. But there is more to be done, of course there is.

Figure 7. The Dig House as seen from above

Can our aerial pictures add to the interpretation and understanding of the archaeology itself? The answer is yes and no. The general survey work has been very useful. Two examples stand out. One is the cemetery near the south tombs, which is the current focus of excavation. This was identified with the help of field walking to pick up bone scatter in the wadi outwash, and with detailed shots of the wadi banks themselves to pinpoint areas that looked likely to be productive. The other area is on top of the cliffs at the north end of the site. Here there are quarries in the cliff edge and a scatter of surface cuts on an irregular and very small scale. Mapping these from the air seems the only practical way of dealing with them; this will be one of our next major projects.

Not so successful were two of the ideas we had in the early days of ballooning. It seemed then a good idea to get detailed images of mud brick structures from which plans could be made without the time consuming effort of doing the drawing on site. Similarly we felt that colour images of the spoil heaps that have been left from earlier excavations would show enough detail - sherd colour for example - to get a good idea of the use of the building from which the heaps were derived. Over time it has become apparent that archaeologists do indeed prefer to sit in the sun drawing bricks, and do prefer to field walk the sherd heaps to working from photographs.

You win some; you lose some.

In general photography is rarely nowadays a primary data source within archaeology. The north cliffs survey work is an exception to this, and worth pursuing. However aerial images are most useful in helping to put the dry details of plans and data sets into a landscape perspective. A broad view of the archaeology - an intuitive understanding of the site if you will - is a valuable counterpoint to "hard" facts. Our images are aimed at specialists, general scholars and the greater public. I hope we do satisfy all three groups.

As a postscript I would like to point out that Amarna runs - and has run for many years - in no small measure due to the generosity of individual donors and groups such as The Amarna Research Foundation (TARF). TARF in particular has now paid for two of our helium balloons. Not only does this add another valuable dimension to our research, but it allows me to go and play in the sunshine every year. Thank you all.

Some of our more spectacular aerial photos follow:

Figure 8. Grave pits in the north cemetery

Figure 9. Southern tomb entrances - the unfinished court is evidently used as a quarry for stone blocks used elsewhere in the city

Figure 10. Part of the south suburb of Akhetaten - on the right is the house of Thutmose the sculptor in which was found the famous head of Nefertiti

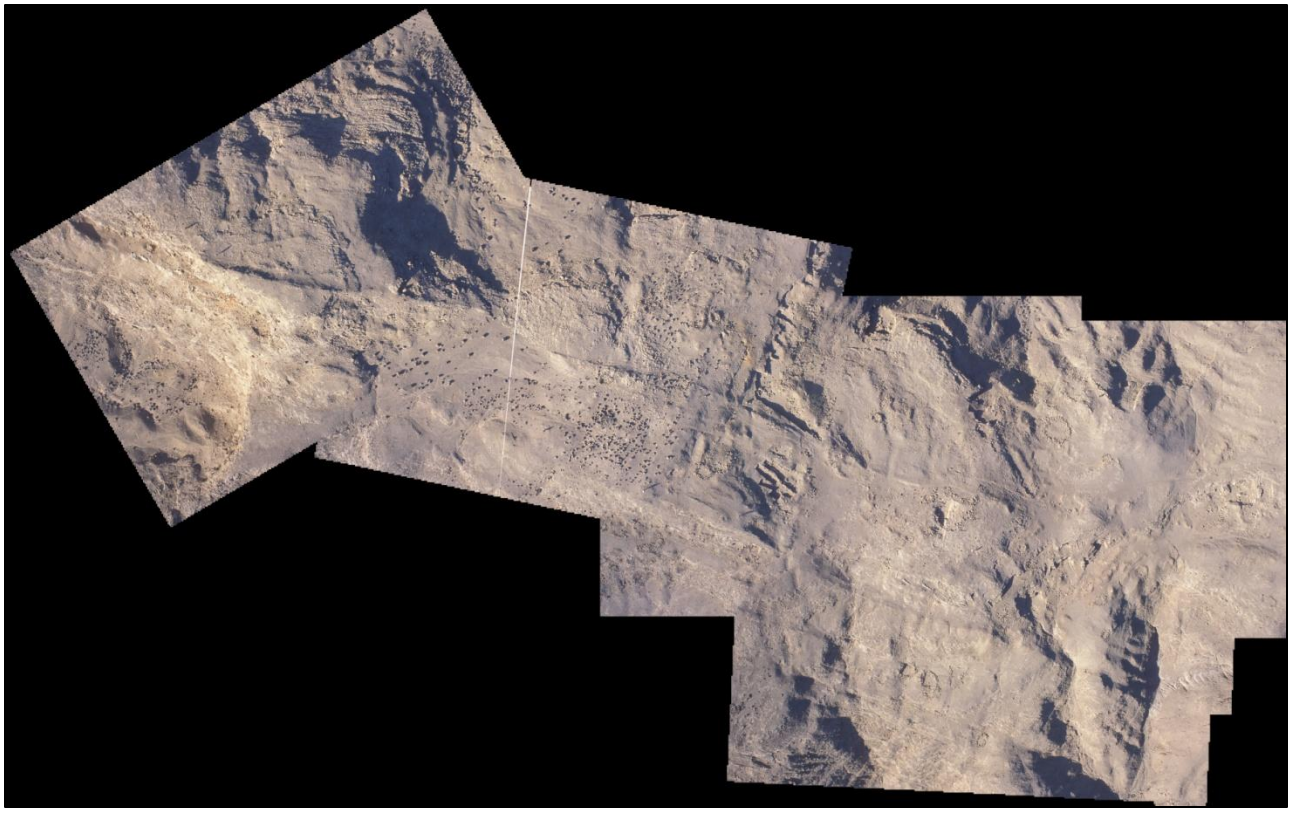


Figure 11. The plateau above the north cliffs - showing linear features left from surface quarrying and small stone circles from huts or encampments

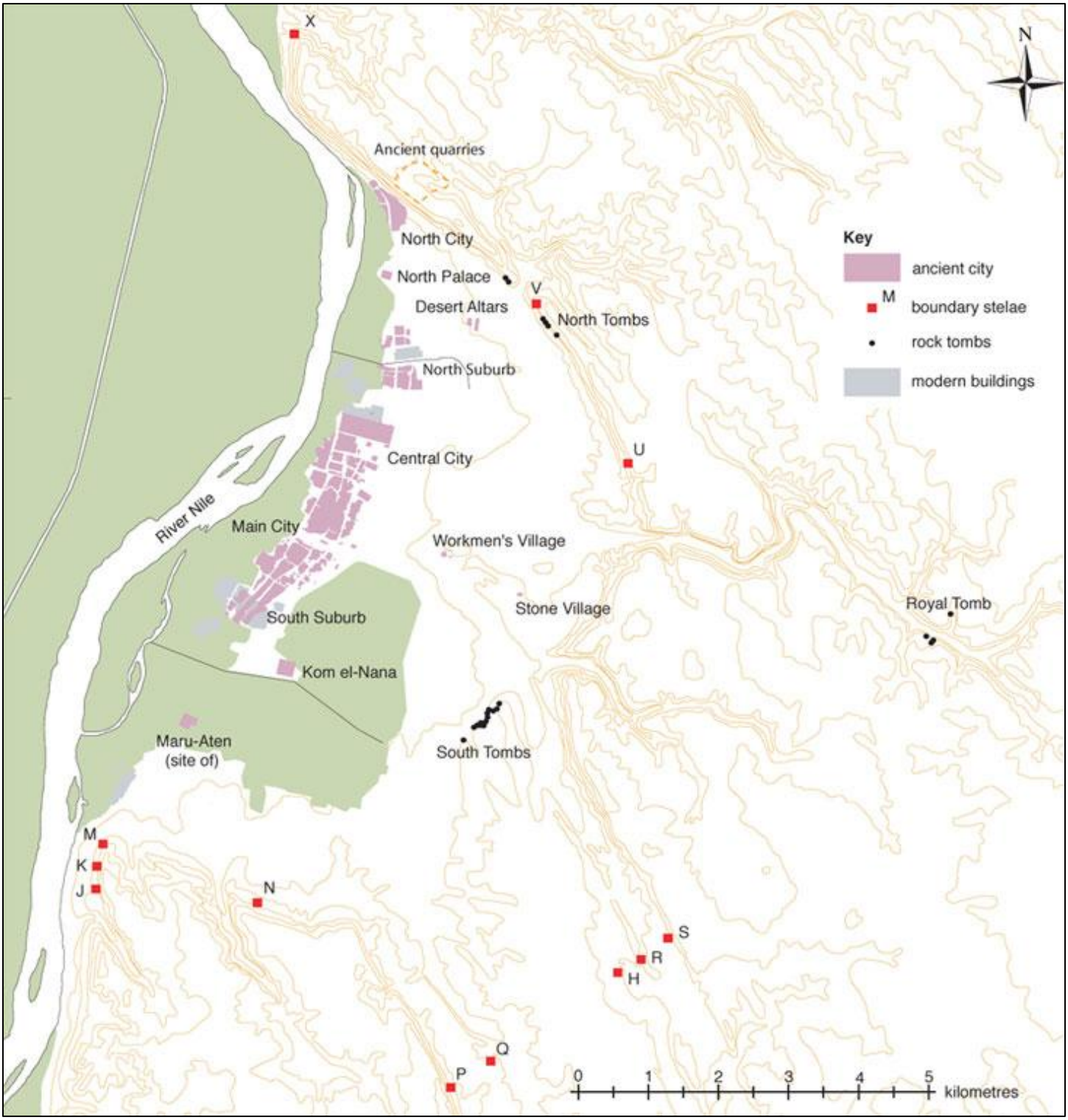
Figure 12. A composite image of the North Palace

Figure 13. Remains of administrative buildings and a house at the far north end of the city

Figure 14. Details of the excavations of the house of Ra Nefer

Figure 15. The Small Aten temple

Figure 16. The Small Aten Temple as seen from the ground (photo by Jill Taylor Pepper)



Map of Amarna, Egypt.
Courtesy of the Amarna Project, www.amarnaproject.com

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