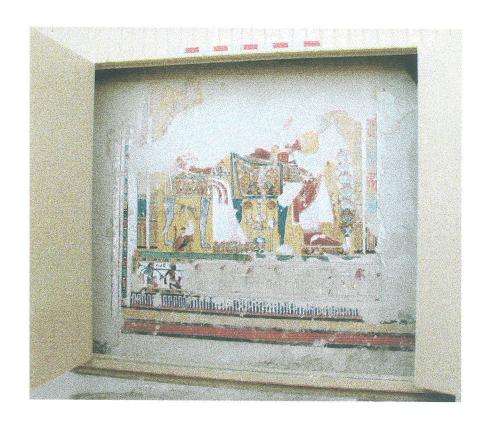
### Tomb of Anen Protection

TT 120, Sheikh 'Abd el-Qurna, West Bank, Luxor Lyla Pinch-Brock, Director Final Submission, January, 2003



This report was prepared for
The Egyptian Antiquities Project of the American Research Centre in Egypt, Inc. (ARCE)

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under USAID Grant No. 263-G-00-93-00089-00 (formerly 263-0000-G-00-3089-00)

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Cover photo: Completed protection for the paintings in the tomb of Anen, showing the doors open on the Amenhotep III and Tiy scene (photo: E.C. Brock no.6 S 253 02).

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#### **Abstract**

This submission represents the final report of the project "Tomb of Anen Protection," funded by USAID Grant No. 263-G-00-93-00089-00 (formerly 263-0000-G-00-308900), operating under the aegis of the Egyptian Antiquities Project of the American Research Centre in Egypt, Inc. (ARCE) in co-operation with the Supreme Council of Antiquities. The Director of the project is Lyla Pinch-Brock, Co-director of the Royal Ontario Theban Tombs Project based in Toronto, Canada; the conservator was Ewa Paradonwska and the architect Nicholas Warner. Photographs were taken by Edwin C. Brock and Francis Dzikowski.

The tomb of Anen is numbered TT 120 in the Theban necropolis system and is located in the Sheikh 'Abd el-Qurna area on the West Bank opposite Luxor. The work was carried out from October 2nd, 2002 to November 28th, 2002. It involved 1) excavating and conserving two paintings on the west wall of the Hall of the tomb, one of Amunhotep III and Tiy enthroned, and the remains of another just south of it, mainly a *rekhyt* frieze, and 2) installing protection for these two paintings. Additional measures were also taken to secure and protect the tomb itself from both environmental and human depredation.

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### Acknowledgements

For supporting this project, I would like to thank Dr. Zahi Hawass, Secretary General, Supreme Council of Antiquities, Magdi el-Ghandour, General Director, Foreign and Egyptian Missions Affairs for the Supreme Council of Antiquities, and Sabri 'Abd el-Aziz Khater, Director of Pharaonic Antiquities. Special thanks are due to the inspector appointed to our project, Hassan Aly Ahmed, who worked long hours, assisted us with supervising workmen and *ghaffirs*, and offered us unstinting co-operation throughout every phase of this project.

I would also like to thank the staff of the Egyptian Antiquities Project at the American Research Center in Egypt - Chip Vincent, Michael Jones, Jarek Dobrowolski, Janie Abdul-Aziz and Amira Khattab - for their assistance in carrying out the project, and to Charles Dibble for his rigorous proofreading of this report. Thanks are especially due to my paintings conservator, Ewa Parandowska, who faced an unexpected conservation challenge when we discovered that a large part of the bottom of the Amenhotep III and Tiy painting had been hacked-out, and met the challenge resourcefully. I would also like to acknowledge the efforts of architect Nicholas Warner for devising a creative solution to the problem of protecting the paintings. Finally, I would like to thank Ted Brock for his assistance in excavating the south end of the tomb and my local conservator, Mohammed 'Abd el-Warris, for his help in conserving and fortifying various parts of the tomb.

A great number of people have helped me by providing advice and consultation. Dr. James Harrell, kindly took the time to come up to the tomb and look at the geology. I would like to express my appreciation to Dr. Peter Piccione for his advice and assistance in the planning stage of this project and for giving me information about the geological context of TT 120. Our tomb is situated above TT 121 where he presently works. I owe a considerable debt of thanks to Dorothea Arnold, Lila Acheson Wallace Curator in Charge of the Department of Egyptian Art at the Metropolitan Museum of Art, and Curator James Allen, who quickly responded to our request for digital photographs of the Amenhotep III and Tiy facsimile in the MMA collections. I would like to thank Dr. Jaromir Malek and his staff for access to the Griffith Institute notes by Norman de Garis Davies and for permission to include them in this report. Finally, I would like to thank the Director of Chicago House, Dr. Raymond Johnson, and his staff for their hospitality, use of their library, the loan of a drafting board, and for allowing me to consult two Chicago House conservators, Lamia el-Hadidi and Lotfi Khaled as we struggled with the final conservation of the Amenhotep III and Tiy painting.

#### Introduction

### Part I: Background to the Project

According to Dr. Hawass, only 10% of the monuments of Egypt have been recorded and conserved. Unfortunately, changing world weather patterns, the press of tourism, recent earthquakes and the flood of 1994 have imperiled them as never before. A case in point is the destroyed tomb of Anen, (TT 120) located at the highest level of the Sheikh 'Abd el-Qurna necropolis on the West Bank opposite Luxor (see figs. 1 and 2). Despite its great historical importance, this tomb has been virtually ignored over the years because of its poor condition. It is located close to the top of the hill, where the rock is least stable. This factor has probably been instrumental in the collapse of the roof. As a result, tomb was choked with rubble, and was only partially cleared by Nina and Norman de Garis Davies in 1929 for the purpose of copying the scene of King Amenhotep III and Queen Tiy on the north wall of the Hall for the Egyptian Expedition of the Metropolitan Museum of Art. After that the painting was re-buried and no further work done until I took an interest in it in 1994. Subsequently it became part of the Royal Ontario Museum's Theban Tombs project.

The "Tomb of Anen Protection" project sponsored by USAID through the Egyptian Antiquities Project of the American Research Center in Cairo is a good example of what can be done to restore a tomb apparently beyond help. Restorations such as the one described in this report can open up otherwise inaccessible tombs to scholars.

#### Anen and His Time

The tomb listed in Porter and Moss (1985) as belonging to Anen is numbered TT 120 and is located in the Sheikh 'Abd el-Qurna area on the West Bank opposite Luxor. Little is known about Anen himself, also called Onen or Mahu (Gardiner and Weigall 1913). He was a member of the cadet branch of the family of Amenhotep III, a brother of Queen Tiy and King Ay, and the son of Yuyaa and Thuiu. His name is known from only a few monuments; an elaborate wooden *shabti* housed in the Rijksmuseum Meermanno-Westreenianum (Boddens Hosang 1990)<sup>1</sup> in the Hague, possibly a stone *shabti* in the

January, 2003, page 2

<sup>&</sup>lt;sup>1</sup>The provenance of the *shabti* is not well-documented, but it appears to have come to the museum through auctions or intermediaries in the earlier part of the twentieth century. By the author's description of the back of the figure, it seems to have once been attached to something, perhaps a box such as the figure on the "Osiris cenotaph" from the tomb of Yuya and Thuiu in the Egyptian Museum, Cairo (CG 5117, [Quibell 1908 pl. XXVII]). However, the author classifies it as a VD W14 H30 A3 (*ba*-bird) TpIb type of *shabti*.

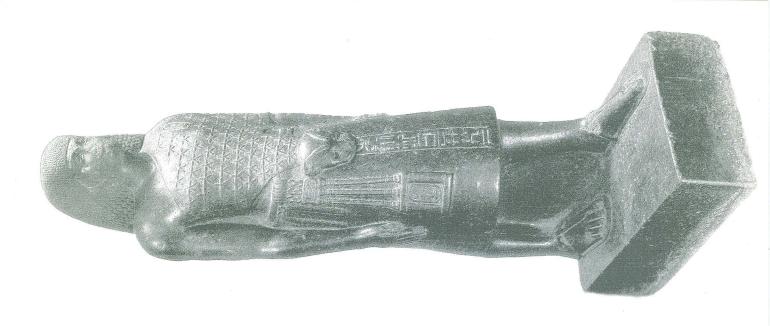






Plate 1: Images of Anen: (l to r); *shabtis* in the Rijksmuseum Meermanno-Westreenianum and Ashmolean Museum (photo courtesy Ashmolean Museum); granodiorite statue in the Turin Museum (digital photos).

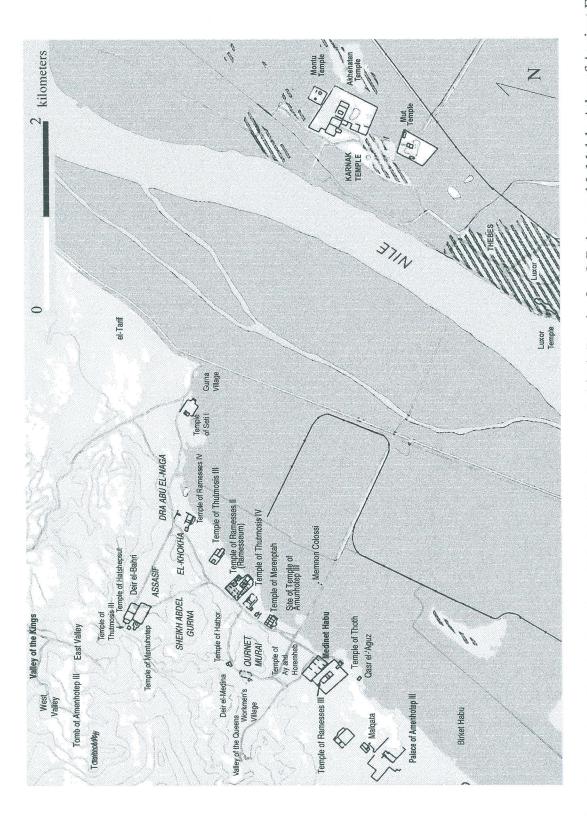


Figure 1: Map of Luxor Area showing location of Sheikh 'Abd el-Qurna. L. Pinch-Brock after J. Baines and J. Malek, Atlas of Ancient Egypt, p. 85.

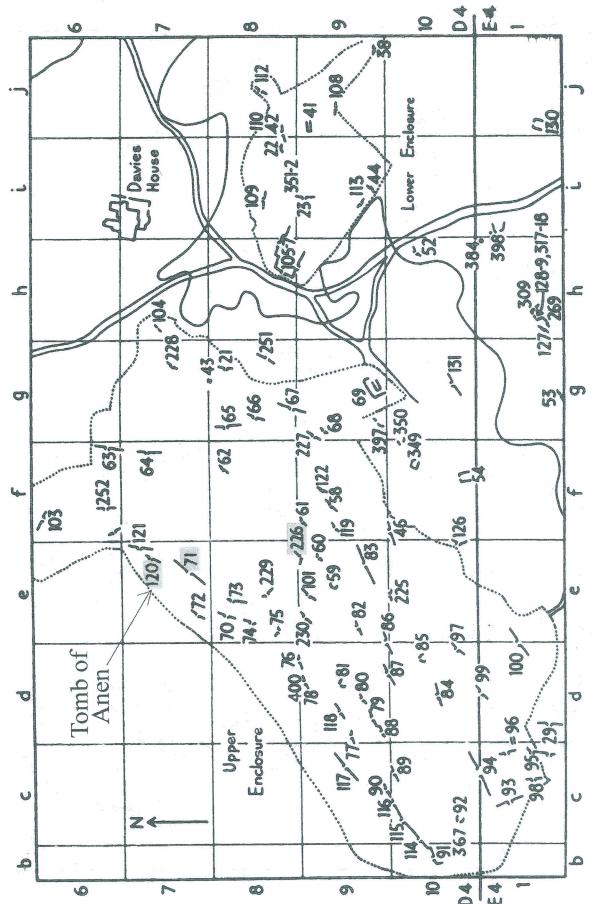


Figure 2: The tombs of the Sheikh 'Abd-el Qurna area, north part. L. Pinch-Brock after B. Porter and R.L.B. Moss, Topographic Bibliography of Ancient Egyptian Hieroglyphic Texts, Reliefs and Paintings I, The Theban Necropolis, Part I. Private Tombs, p. 447.

Ashmolean Museum, Oxford,<sup>2</sup> a large granodiorite statue in the Turin Museum, (Kozloff *et al.* 1993) (pl. 1) a dedicatory inscription on the coffin of his mother, Thuiu, (Quibell 1908) and in his tomb in Sheikh 'Abd el-Qurna, numbered TT 120 in the Theban Necropolis system (Pinch-Brock 1999b). It was here, during our work in October and November of this year, where we found another mention of his name, on a fragment of a large pink granite false door probably once installed in the south-west corner of the Hall above the burial chamber.

The titles listed on these monuments are "fan-bearer," "Sem-Priest," "Guardian of the Palanquin," "Second of the Four Prophets of Amun" and "Greatest of Seers," or "High Priest in the temple of Re-Atum," and possibly "High Priest of Heliopolis," (Kees 1917) According to Cyril Aldred (1965), Anen left a military career to serve in the priesthood, and probably died before Amenhotep III's jubilee in his regnal year 30. However, there remains no solid evidence for the date of his death. He does appear to have been married; there were depictions of his wife in TT 120 (fig. 3) and the banquet scene discovered on the north wall in 2000 may show his family (four females and one male, seated facing, presumably, Anen and his wife (Pinch-Brock 2001).

TT 120 must have been built before the court moved to Amarna because in the scene of Amenhotep III and Tiy enthroned on the west wall of the Hall, Tiy wears the vulture crown, symbol of the goddess Mut, wife of Amun (pl. 2A), which became anathematized after the Aten gained supremacy. Fragments of painted plaster with a *shebyu* collar have been found in the debris of the Hall about a meter from the painting of the king. Peter Brand, who is studying the *shebyu* collar believes the use of the collar by Amenhotep III can be dated to the later part of his reign (Brand 2002); examples in several Theban tombs show the king wearing the collar, and fragments of painted plaster depicting a *shebyu* collar were found in the debris of the Hall about a meter from the painting of the king. This information seems to indicate that Anen was buried before Amenhotep III passed away. However, the style of this painting, with its lively depiction of animals, clearly presages the change that would subsequently come to characterize the art of the Amarna Period.

Anen's close ties with Amenhotep III are indicated by a cartouche on the Turin statue with the king's *prenomen* on the left shoulder. The king's *nomen* and *prenomen* appear on an unusual ornament hanging from his waist. Anen wears a leopard-skin spangled with stars, representing his connection with the science of astronomy and perhaps reflecting his Heliopolitan title. Several parts of a red quartzite lintel bearing Amenhotep's name and titles were found by Davies in the courtyard of TT 120 in 1929 (pl. 2B) and were in the Inner Room when I began work in the tomb in 1995. I recovered a few more fragments of the lintel in the October-

<sup>&</sup>lt;sup>2</sup>Acc. no. 1879–266. Permission to publish this *shabti* has been granted me by the Ashmolean Museum. The *shabti* owner has no title, but since the name Anen is so rare, it must be assumed to belong to the Amarna clan member.



A: Queen Tiy's vulture crown as depicted in the Amenhotep III and Tiy scene (photo: Edwin C. Brock, no. EG 13 S 252 02).



B: Fragments of red quartzite lintel found in the Inner Room (photo: Edwin C. Brock, no. EG 4 S 254 02).

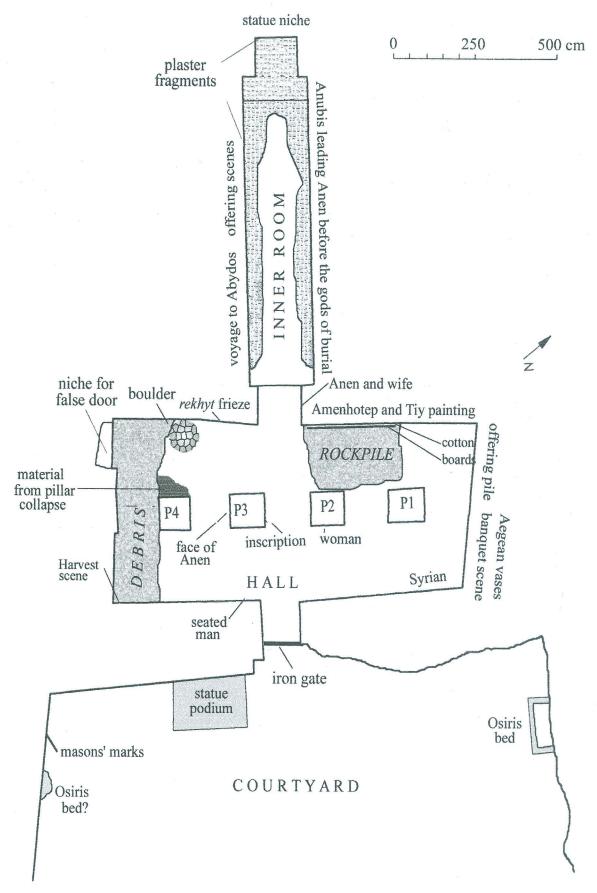


Figure 3: Tomb of Anen as of October 2nd, 2002, showing location of known paintings. (L. Pinch-Brock after plan by N. Warner, 2003)

November season in 2002. Although cut into the most friable part of the *gebel*, Anen's tomb is blessed with a spectacular view of the funerary temple of Amenhotep III and Karnak Temple.

Many of the inscriptions and depictions of Anen in this tomb have been hacked-out. Obliteration of the owner and his or her name is by no means rare throughout Egyptian history, and can be attributed to many factors, including later habitation of tombs and temples. But perhaps in this case it was because Anen was involved in the burgeoning cult of the Aten, in which Amenhotep III was so instrumental. Whomever did the desecration, they were careful to only remove the glyphs or figure and nothing around it. The careful excision of Anen's figure is visible on the north reveal and the north wall of the Inner Room, and doubtless it was removed from other paintings in the tomb that are no longer extant.

#### The Tombs of Anen

### KV 44

Elizabeth Thomas (1966) "--on the basis of topography and the possibility of a Kings' Valley burial for him too," and the fact that by this date no burial chamber had yet been found in TT 120, believed KV 44 belonged to Anen. KV 44 is one of a number of small tombs of relatives of Amenhotep III – Akhenaten (KV 55); Yuyaa and Thuiu (KV 46); Tutankhamun (KV 62) – grouped relatively close and located in the east part of the Valley of the Kings. These are clustered around the hillock covering the tomb of the sons of Ramesses II (KV 5). Just behind this mound is the deep shaft leading to a single-chambered tomb discovered by Howard Carter in 1901 and numbered KV 44 (Carter 1901). When Carter entered the tomb he saw three intrusive burials. When Donald Ryan (Ryan 1992) undertook a clearance from 1990-1991 he found one of the mummies and yet more burial equipment, but none of it could be dated to later than the mid-18th Dynasty (Reeves and Wilkinson 1996). The KV 44 tomb-plan differs substantially from the comparative Amarna Period group, all of which are the corridor type. Thus there is a lack of any hard evidence to connect Anen with this tomb.

### Tomb Construction and Plans

Plans of the tomb were drawn up by Davies in his notebook which is now in the Griffith Institute, Oxford (Davies 1929a). These were only sketch-plans and probably formed the basis for the plan in Porter and Moss. Other plans were done by Kiyohiko Sakurai, Sakuji Yoshimura and Jiro Kondo (1988), Freiderike Kampp (1996) and myself (Pinch-Brock 199b). The Sakurai *et al.* plan does not include the false door niche and the pillars in the Hall or the walls of the courtyard and its features. However, because it was made with a theodolyte (Kondo 2002) it is doubtless the most accurate. The Kampp sketch seems to be based on the Porter and Moss model and omits the brick structure in the south end of the courtyard. It also has the Inner Room at a greater angle to the Hall than is actually the case.

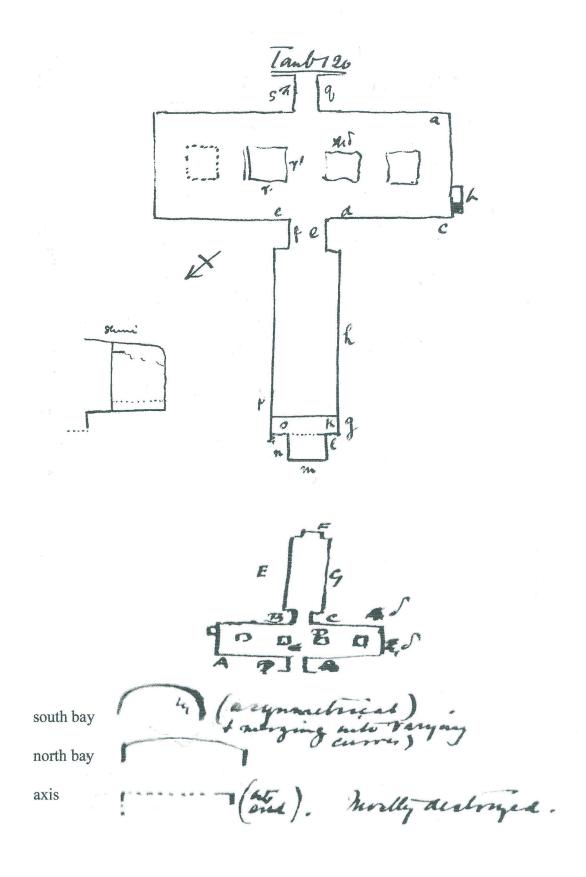


Figure 4: Davies' tomb plans showing (above) cross-section of niche, and (below) shape of ceilings in Hall. Courtesy of Griffith Institute, Oxford.

A new plan has been drawn up by Nicholas Warner based on field checks and corrections to the Sakurai *et al.* plan. Recent clearance of the tomb has allowed the architectural features to be accurately measured and the burial chamber entrance to be included on the plan.

TT 120 was perhaps the last to be cut into the unstable rock of the *gebel* at this level. Its plan is typical of 18th Dynasty tombs, and includes a courtyard, Hall and Inner Room with a niche at the west end of the latter for a statue of the owner. The courtyard is bounded on the north and south by two walls made of large slices of stone layered and covered with mud-plaster, apparently to separate it from the adjacent tombs. Two small rectangular mud brick structures only a few bricks high abut these walls in the courtyard and may be "Osiris beds." The one at the south end is almost completely destroyed. Abutting the west wall of the courtyard south of the entrance is a platform, perhaps made for a statue of the owner, or to hold offerings. There are a few masons' marks (red strokes) on the south wall of the courtyard, probably indications for cutting this wall. These were once covered with masonry, but are now exposed.

Excavation of the threshold of the Inner Room revealed a very shallow step. The whole floor of the tomb itself is very well finished, smoothed with a layer of *hib*.<sup>3</sup> The free-standing east wall of the Hall is made of mud-brick faced on its east side with slices of limestone set into a thick layer of mud and chaff and finished with a thick coat of *hib*. Some brick was added at the base of the south wall in the Hall to make it approximately straight. The other walls, all cut into the rock, were finished with brick, stone, and mud mixed with chaff. Then three more layers of clay and gypsum plaster were smoothed on top to form a base for the paintings.<sup>4</sup>

When the tomb was built, a false door would have been set into the niche at the south west end of the Hall (fragments of a red granite false door have been found these past two seasons). An inscribed lintel was probably installed over the door to the Inner Room. Fragments of such a lintel made of red quartzite were discovered in 1929 by Davies (1929a) and recovered by us from various parts of the tomb during clearance.

Above the tomb is a pyramid-shaped rock with an emplacement for a stele which has never been found. Judging by the fallen sections, the roof of the tomb was quite thick (at least a meter), but since it was made of *tafl*, it did not survive. A similar type of construction, with more of the roof intact, can be seen in TT 226 below and to the south.

<sup>&</sup>lt;sup>3</sup>*Hib* is a naturally-occurring limestone and clay powder which we dug out of the hill not far from the tomb. It has been used since Pharaonic times as a component of mortars.

<sup>&</sup>lt;sup>4</sup>As described by Ewa Parandowska in Appendix I.

#### TT 120: Its History from the Earliest Times to the Present

The first mention of TT 120 is in Alan Gardiner and Arthur Weigall's Topographical Catalogue of the Private Tombs of Thebes published in 1913. It was probably investigated by Weigall when he was Chief Inspector, perhaps around 1908 when he built the low walls enclosing the Nobles area for the Antiquities Service. There are no records of TT 120 being explored by early travellers, but the adjacent tomb of Senenmut (TT 71), was visited by John Gardiner Wilkinson, Robert Hay, James Wild and Richard Lepsius from the early to mid-1800's (Dorman 1991), and one would think that TT 120 must have at least warranted a look. Gardiner and Weigall dated TT 120 to the early 18th Dynasty, (temp. Thutmosis III, Hatshepsut), and indeed there are some features of the tomb which suggest it was built at the same time as TT 71, perhaps to house members of Senenmut's family: The north wall of TT 120 was completely plastered and painted with block borders at the east and west ends, and then re-plastered, including an undercoat of mud plaster. The style of painting of a seated figure on the south-east wall of the Hall is suspiciously unlike anything else in the tomb, as are a few glyphs that we recovered from the debris. Do these indicate an earlier decorative scheme? Unfortunately, the painting is so poorly preserved that it is difficult to tell. However, the burial of Senenmut's mother, Hatnefer, was found crammed into a small cave directly below TT 71, and when the MMA photo of TT 71 was taken in 1935, the stones lining the entrance to Hatnefer's tomb were still intact; E.C. Brock believes that the stones found on the threshold of TT 120 in November of 2002 were taken from there.

Norman de Garis Davies' article in the MMA Bulletin and his notes in the Griffith Institute have been useful in reconstructing the appearance of TT 120 in the early part of the last century. In 1929 he reported in the *Bulletin*, of entering the tomb the previous year and finding it, "..open on the hillside. Its rock roof has fallen in and the masses of stone have half buried the two chambers." According to his notes, much more of the plaster must have adhered to the walls in the Inner Room and the ceiling at the south end of the Hall was still intact when he worked in the tomb. His drawing gives an approximation of the shape of the latter - "...cambered ceiling (cf. t. 71)" (fig. 4).

Davies' mandate for the Metropolitan Museum of Art was to record as many interesting tomb scenes as possible for display and publication by the Museum. Nina de Garis Davies' painting of the Amenhotep III and Tiy scene is now in the MMA collection of facsimiles (Wilkinson and Hill 1983). A line drawing of the same scene was done by the couple and published in 1929. The harvest scene was recorded in line only. Black and white photographs of both scenes were taken by Harry Burton in 1930 towards the end of the season (Allen 2002) (see pl. 4, for the photo of Amenhotep III and Tiy).

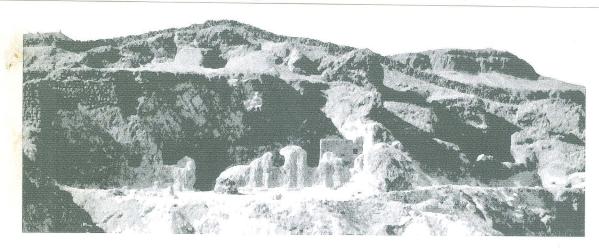
6 Davies 1929a, p. 84

<sup>&</sup>lt;sup>5</sup> Davies 1929b, p. 35.

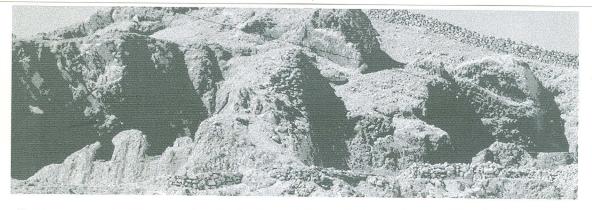
<sup>&</sup>lt;sup>7</sup> Davies 1929b Figs.1,2.



A: MMA excavations 1930 showing tombs of Anen and Senenmut (MMA photo 12/19/30).



B: Tombs of Senenmut and Anen in 1935-1936: by now the south part of the roof has fallen in. (Photo: Dorman, Tombs of Senenmut, Pl. 1a).



C: View of tomb of Anen taken in 1995 (L.P. Brock). Some more of the doorway seems to have fallen away.

Plate 3: Deterioration of the tomb of Anen from 1930-1995.

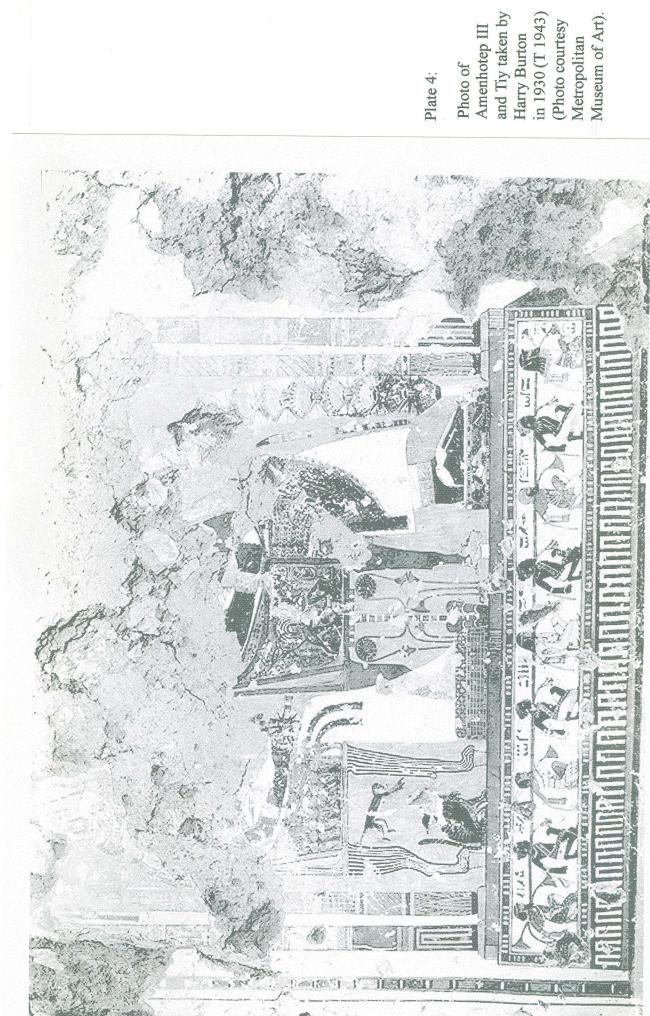


Plate 4:

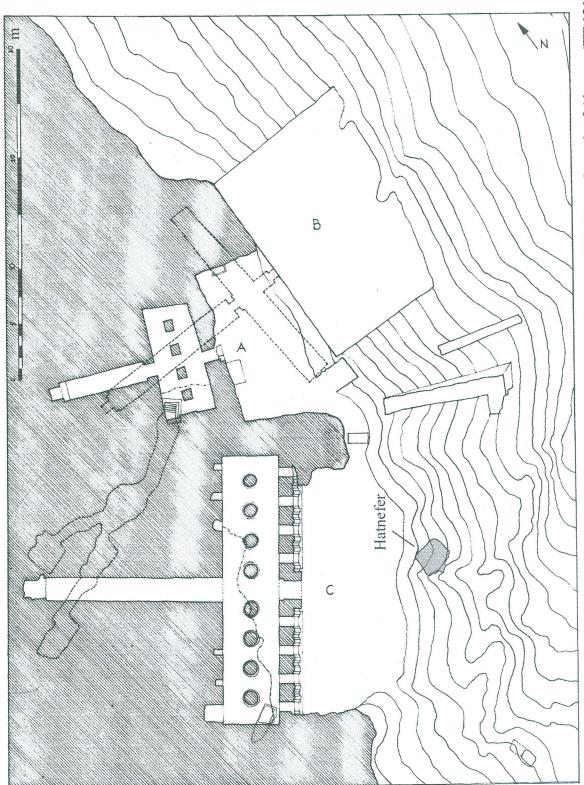


Figure 5: Location plan of hillside of Sheikh 'Abd el-Qurna showing tomb of Anen (TT 120) [A], tomb of Ahmose (TT 121) [B] and tomb of Senenmut (TT 120) [C]. N. Warner after P. Dorman, The Tombs of Senenmut, pl. 3b.

By 1935, Winlock's investigations of TT 71 and TT 121 must have caused the rock in TT 120 to shift, because the 1935 MMA photo (pl. 3B) shows the roof over the south end of the tomb was no longer extant. It may have been in a perilous state in 1930, when the MMA photos published by Dorman were taken, because entry to the tomb seems have been over the wall, if the ladder in the photo is any evidence.

No one seems to have paid any more attention to the tomb until 1969, when Dr. Ali Radwan (Radwan 1969) of Cairo University included TT 120 in his study of tombs of nobles associated with 18th Dynasty monarchs. In 1988 a Mission from Waseda University in Japan excavating at Malkata investigated private tombs from the reign of Amenhotep III to try to replicate the original designs of the mural paintings at Malkata. They published a number of photos of the Inner Room of TT 120 (Sakurai *et al.* 1988)). In 1996 Kampp published a description of the tomb (Kampp 1996) as part of her survey of the architecture of 18th Dynasty tombs.

In 1994, with the permission of the SCA Inspectorate on the West Bank, I investigated the tomb of Anen. There was no metal door and the entrance was half-blocked with stone slabs, among which was an inscribed doorjamb with a hacked-out offering formula. Some of the mud-brick over the main entrance visible in 1935 had disappeared, perhaps taken, as Peter Piccione suggested to me (Piccione 2002), by the villagers to rebuild the tomb of Sheikh 'Abd el-Qurna above. All of the four pillars in the Hall were broken off at about the half-way point and the room was filled to within a half-meter of the original ceiling height with boulders and debris (pl. 5). A number of paintings in the Inner Room had escaped notice, so when Roberta Shaw, Associate Curator with the Royal Ontario Museum, expressed interest in an epigraphic project, I suggested this tomb become part of it. Eventually the Museum was conceded the tomb of Amenmosi (TT 89) and the tomb of Anen (TT 120), by the Supreme Council of Antiquities, making up the ROM's Theban Tombs Project. Roberta L. Shaw and L. Pinch-Brock are Co-directors, with myself solely responsible for Anen.

In 1995 I began work on the Inner Room, copying the extant scenes and visible remains of the decoration. The room was practically paved with plaster fragments. Probably some, like parts of the inscribed lintel and a few important painted fragments from the *rekhyt* scene, were left there by Davies to preserve them; others had clearly fallen from the wall since his work. These were being trampled by itinerant visitors, so my first job was to pick up as many of them as possible and place them in the niche at the west end of the room. It appears that parts of the north wall and ceiling of the Inner Room had fallen in since Davies' work, because his notes indicate more of it was extant at the time. At some time in the past, perhaps during the Davies visit, quite a bit of material must have been taken out of the tomb and dumped because the plaster fragments were not present in Hall in the quantity expected, at least

<sup>&</sup>lt;sup>8</sup>A photo of this was published in Brock 1999, fig. 7 p. 78.

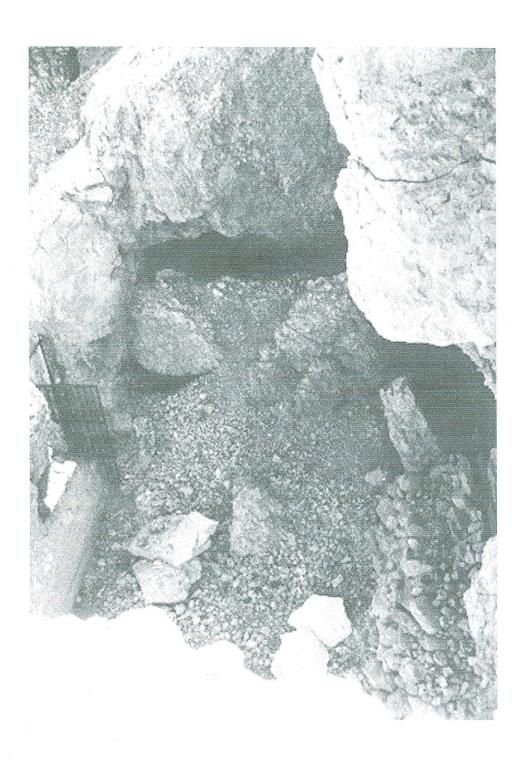


Plate 5: Photo of the interior of the tomb of Anen Taken by Lyla Pinch-Brock in 1994.



A: East wall of Hall looking east showing debris levels in 1994. (Photo, L. Pinch-Brock)



B: West wall of Hall looking north; boulder blocks entrance to Inner Room and the Amenhotep III and Tiy painting is almost completely covered with rocks. (Photo: L. Pinch-Brock, 1994).

judging by the amount missing from the walls. Unfortunately, Davies' tracings of the paintings in the tomb – done on oiled paper, (fragments of which were found in many parts of the tomb) - and now held in the Griffith Institute, are in such poor condition that they cannot be unrolled.

Our excavation of the Hall from 2000-2002 provided some information about the construction of the tomb. The walls, curiously, contained broken furniture used to strengthen them: Around the entrance to the Inner Room were installed parts of a bed of 18th Dynasty type, and in the wall immediately behind Pillar 4 we found fragments of a black and white painted box. The impression is that this was destroyed funerary furniture, used in a hasty restoration. Parts of three different types of coffin – cartonnage, painted mud and black-painted wood - were found in debris, indicating at least three burials had been made here. Gauging from the type of coffin, these all appear to be 19th Dynasty or later. 10 The tomb also seems to have been a repository for less elaborate burials: One, consisting of human remains only, was placed behind the broken wall in the south end of the Hall; another, a receptacle formed of mud brick to hold some human remains, was made in front of the Amenhotep III and Tiy painting. 11 Evidence I uncovered over the past three seasons - burning at floor level, artefacts scattered around the entrance to the burial chamber in the south-west corner of the Hall, and the general destruction of the burial equipment, indicate the tomb was robbed time and again. So far there is no clear indication that Anen's body was ever placed in this tomb, however at least one burial contained very high-quality equipment, including alabaster vessels.

Over this period of time<sup>12</sup> I cleared the whole tomb of debris. At the commencement of my work, the south end of the Hall was completely encumbered by the fallen roof in the form of hunks of *tafl* and huge boulders. One of these almost completely prohibited entry to the Inner Room (pl. 6B). During the clearance of the Inner Room we found a fragment of Nina Davies' art paper mixed in with the plaster fragments (pl. 7A). On it was written,

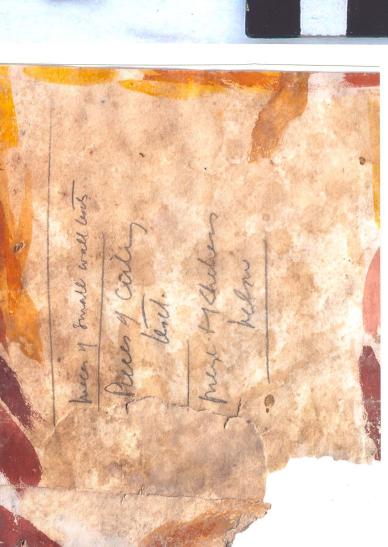
"pieces of small wall texts
Pieces of ceiling
text
frieze of Kheckers
below"

<sup>&</sup>lt;sup>9</sup>Similar to nos CG 5115 and 5116 from the tomb of Yuya and Thuiu now in the Egyptian Museum, Cairo; (Quibell 1908, pl. XLIV).

<sup>&</sup>lt;sup>10</sup>See Ikram and Dodson (1998, p. 243; fig. 293, p. 227).

<sup>&</sup>lt;sup>11</sup>Davies mentions this in his 1929b report on p. 41.

<sup>&</sup>lt;sup>12</sup>The 2000 season and the January-February season of 2002 were sponsored by the Institute for Aegean Prehistory.





n, B: Face of Anen? Fragments found in Hall. (Photo: L. Pinch-Brock, digital image).

A: Note by Nina de Garis Davies found in the Inner Room, apparently listing plaster fragments left there. (Photo: L.Pinch-Brock digital image).

Plate 7: Objects and a portrait from Anen.

This seems to indicate that all these fragments were once stored here. The straw we found in the Inner Room and the goat dung in the Hall at floor level are evidence that the tomb was used as a byre before 1935.

The debris in the north end of the Hall was heaped against the west wall, sloping dramatically towards the east, where part of the floor was visible. Work there in 2000 produced an inscription naming a "Chantress of Amun," and the remains of a banqueting scene along the base of the wall. An offering pile had been painted at the west end. A great deal of painted plaster coated with brilliant clear varnish or shellac was also found in the debris in this area.

The Davies had left the Amenhotep III and Tiy scene on the west wall boarded-up and these boards barely protruded through the top of the debris (pl. 6B). We removed some of the stones covering the painting and found wads of cotton and a couple of mud bricks. Later we would come to realise this was evidence the antiquities thieves had disturbed the area to get at the painting.

In January and February of 2002 we proceeded southwards in the Hall, tackling the removal of the huge boulder blocking the entrance to the Inner Room. Below this we found the remains of ceiling plaster and the wooden bed used to repair the doorway. The area around Pillar 3 was cleared, revealing some human bones, many fragments of plaster and a portrait of a man who may be Anen (pl. 7b) Most interesting was the discovery of the remains of a scene on the west wall, mainly a frieze of *rekhyt* birds (pl. 8A), but with enough of the part above preserved to indicate that it complimented the scene of the royal couple on the opposite side of the doorway. The frieze was in exceedingly poor condition when discovered, virtually falling off the wall, but was stabilized by our local conservator, Mohammed Abd-el Warris.

Finally, in October and November of 2002, it was possible to excavate the debris in the south end of the Hall. Two large boulders had to be removed, one on either side of Pillar 4, and a stonemason was brought in for this purpose. The excavated material – a combination of ancient *tafl* roof, crushed mud-brick walls and pillars and rocks rolled down from the gebel above – seems to have been turned over by tomb robbers to get at the burials beneath. It contained a large quantity of cloth, wood, human remains, beads and *shabtis* plus many fragments of the aforementioned false door, which was smashed into small pieces. Only about 5% has been recovered but it is evident that it had a cavetto cornice, human figures and an inscription mentioning Anen, and was made of red granite and painted red, blue and black.

When we got within about a half a meter from floor level in the south-west corner, we came upon the entrance to the burial chamber, as expected. When Peter Dorman was working

<sup>&</sup>lt;sup>13</sup>Thuiu held this title, and possibly Anen's wife. Anen and his wife were depicted on the north reveal of the entrance to the Inner Room.

next door in TT 71, he discovered some chambers below the tomb oriented E-W which he believed belonged to the tomb of Anen. His assertion proved to be true; the burial chamber connects with these passages (see fig. 5). They were cut into the fissure running E-W obliquely through the tomb. In ancient times, such fissures were often used as the basis for passages, since they facilitated cutting. The entrance to the burial chamber was a square cut in the floor with a set of steps leading downwards. We excavated it to a depth of a meter and found some scarabs, beads and human remains. The area is still full of debris but seems to be mainly a corridor. Probably two meters of debris still remain to be cleared from the bottom.

### Part II: The EAP "Anen Protection Project"

#### **Project Staff**

Lyla Pinch-Brock is an archaeologist specializing in epigraphy and is Director of the Anen Project. From 1993 to 1996 she directed the clearance and conservation of KV55 in the Valley of the Kings. In 1995 she received an ARCE/EAP grant to conserve the plaster and do general conservation work. She has been co-director of the Theban Tombs Project of the Royal Ontario Museum since 1995.

Nicholas Warner is project architect. He has had considerable experience with architectural conservation in Cairo, particularly those in the Old City. Warner oversaw the work of installing the protection for the paintings in Anen and repairing and securing various parts of the tomb.

Eva Parandowska has had over 20 years experience in conserving wall paintings in Naqlun (Fayyum), Old Dongola and Cyprus and has worked with many missions in Egypt preserving archaeological materials from excavations. Her most recent accomplishment is restoring the mosaic floors in the "Villa of the Birds," from the excavations of the Polish Mission in Alexandria.

Photographer and field assistant Edwin C. Brock is an archaeologist employed by the Theban Mapping Project. He has his own ARCE/EAP project, the reconstruction of the sarcophagus of Ramesses VI.

Our other photographer was Francis Dzikowski who also works for the Theban Mapping Project.

### Goals of the Project

The preliminary proposal to protect the tomb of Anen called for a roof to be constructed over the Hall to prevent water and loose shale from entering the tomb and in general to protect all the paintings. After inspection of the site by Nicholas Warner, this was considered not feasible because the rock was too weak to hold the beams. Much of the limestone of the hill has, with time, disintegrated on its surface into a loose shale that would not sustain additional structural loading. The configuration of the rock above and around the Hall is extremely irregular, and is subject to continuing change through minor local collapse. Since the last inspection of the tomb in February 2002, Pillar 4 has suffered further collapse (pl. 8B). This was probably the result of removing debris from the tomb during the two previous months, causing the rock to adjust. The pillar is located close to the aforementioned fissure.

Installation of a roof would have called for introducing supporting structural members (posts or columns) within the Hall which would have detracted from the appearance of this space, and furthermore would have damaged the original floor. A series of small-scale interventions were considered to be more appropriate responses to the different aspects of the conservation problem presented by the tomb. These were discussed with the Director of West Bank Antiquities, Mohammed el-Bialy, and cleared with the Director of Pharaonic Antiquities, Sabri 'Abd el-Aziz Khater. The issue of floodwater cascading into the tomb was to be addressed by the construction of a series of low-level rubble walls on the hill above the tomb. These would utilise the existing topography to channel rainwater away from the entrance area of the tomb. The amount of rainwater is unlikely to be major owing to the tomb's position close to the top of the hill. However the important wall-paintings would be protected from possible water damage by the introduction of a localized cover. The report of Dr. James Harrell (see Appendix II) highlighted a possible structural collapse of two large rocks within the interior of the tomb and it was proposed that these be shored-up with a steel-framed brace.

The original proposal included a number of items that had to be reconsidered. Although the most important wall-paintings face north, and are therefore not exposed to direct sunlight, they would experience color loss if left unprotected. A localized cover, designed as a piece of cabinet joinery with doors that can be opened to reveal the paintings to occasional visitors, was therefore proposed. The cabinet would be made of treated and painted softwood or hardwood, with good quality stainless steel hinges and locks. To prevent the use of the interior of the tomb as a roost for bats and birds, screening was included in the construction of the cabinet. The doors protecting the wall-paintings would be locked, with the keys held at the SCA Inspectorate on the West Bank.

It was proposed that the west wall enclosing the entrance to the tomb be built up in order to make it more difficult for illegal access to be gained. This would be done in mud brick, or a combination of stone chips in lime mortar and mud brick, as appropriate.

The *rekhyt* painting was to be consolidated and any fragments found in the Inner Room and during the excavation of the area in front of it re-inserted. The Amenhotep III and Tiy painting was to be exposed, conserved and covered by a protective barrier. We had proposed an alternative to the SCA - removing the painting from the wall and exhibiting it in the Luxor Museum instead of attempting to preserve it *in situ*. This would be the most foolproof way of permanently safeguarding this valuable piece of art. However the cabinet alternative was considered less risky.

One incidental goal of this project was to give some training to local conservators. Parandowska was to discuss and demonstrate methods for cleaning the paintings with Warris, who was to continue his work with us, and his son, Hammad.

#### Plan of Work

Our plan of work, which was to conserve the *rekhyt* and Amenhotep III and Tiy paintings during the month of October, and in November install the protection for the paintings, had to be altered for a number of reasons. Due to the lack or availability of good materials and well-trained carpenters in Luxor, it was decided to prefabricate the "cabinet" in Cairo and ship it to Luxor. Local workmen were hired to complete the rest of the structural work in the tomb. In addition, when we discovered the state of the Amenhotep III and Tiy painting, it was necessary to retain the services of Parandowska for a further three weeks. As a result, a request to the EAP for an amendment to the contract was considered and duly granted.

On October 2nd the seal on the door of TT 120 was broken by Inspector Hassan and we entered the tomb. After our inspection I photographed it in its current state. There was only one change in the environment since February of 2002; the collapse of Pillar 4.

### **A:** The Paintings

I asked Ewa Parandowska to prepare a condition report on the paintings in the tomb (see Appendix I). Before starting work, she test cleaned a painted area on the east wall of the Hall north of the main entrance, to try out various methods of removing dirt. A test of fixative was also made on the red dado on the west side of Pillar 2. The surface was sprayed with a Paraloid B.72 solution in acetone (1:20), to consolidate the powdery surface. This caused the color to deepen slightly.

The second order of business was to repair Pillar 4. A small (approximately 30 cm) area was cleared immediately west of the pillar in order to facilitate work. Warris, gathered up the fallen fragments to see what could be replaced. This pillar is the only one of the four in the Hall not yet consolidated, since it was still enveloped by debris. From October 3rd to October 8th, Warris rebuilt and consolidated the north and west sides of the pillar, reinstalling any fragments he could, using a of three parts hib to one part slaked lime mixture, with a small addition of Primal AC 33 (about 1:10) to provide elasticity. 14 The body of the pillar was strengthened by interleaving the mortar with slices of limestone, a technique used in ancient times, and still visible elsewhere in the tomb.

### 1) The Rekhyt Painting

### Discovery of the Rekhyt Painting

At the time of this painting's discovery, I had Warris affix the edges to the exposed rock with a thick band of white cement mortar as a stop-gap measure. On October 2nd, the temporary mud-brick wall we had erected around it for protection the previous season was removed. I arranged for scaffolding to be erected over the scene for the protection of the conservators while they were working. The plan was that, once the work was completed, the scaffolding would be moved to the Amenhotep III and Tiy painting. The rekhyt frieze was still not completely clear of debris at the south end because the way was blocked by a huge tafl boulder, so on October 6th, we brought in a local stonemason to remove it. Eventually the rekhyt frieze was found not to extend any further than what had been exposed in February, 2002, and no more fragments belonging to it were recovered from the debris to the south.

In preparation for the conservation work, I collected the fragments I thought matched the rekhyt scene from the boxes containing material retrieved from the south end of the Hall during previous seasons, mainly from excavating directly in front of the west wall south of the entrance to the Inner Room. Norman de Garis Davies mentioned in his notes that he had recovered one large fragment from the south-east corner, although he did not know of the scene it had come from: "A loose fragment of adoring rekhyt birds on baskets within a later block border..." The fragment that Davies referred to – the only large one found – was in the Inner Room when I entered in 1994. It had glue on it, apparently an attempt by Davies to replace some of the broken-off pieces lying nearby.





A. Discovery of the *rekhyt* frieze in January, 2002 (digital photo, L. Pinch-Brock).

B. Pillar 4 collapsed after the end of the season in February, 2002. (Photo: E.C. Brock, no. EG S 251 02).

Plate 8

### Description of the Rekhyt Painting

The *rekhyt* bird, based on the crested plover or lapwing, as been identified as representing the common people – perhaps Northerners or even Canaanites – and has been known from the earliest dynastic to the Late Period. The *rekhyt* bird with its arms raised in adoration is a New Kingdom phenomenon (Nibbi 1987). The birds are shown with their wings pinioned, rendering them helpless. As such they have come to represent bound captives, the enemies of Egypt, the Nine Bows. In the tomb of Kheruef (TT 192), on the left side of the door leading into the courtyard, the king and his consort are shown with a frieze of *rekhyt* birds beneath their thrones, and on the right side, bound captives take up the same space. It appears we have the same sort of plan of decoration in Anen.

The remains of our scene consists of a row of five anthropomorphised *rekhyt* birds; their arms are raised in adoration, and they sit on blue baskets (nests) separated by yellow stars outlined in red. The birds are painted white, red, black and a greenish-blue; the background is white. There were probably originally nine birds. We do not have a complete picture of any one of them because in each case the face is missing, but we do have the feather tuft at the back of the head, so characteristic of this type of bird. Below the baskets is a black and white serekh frieze above a dado of red, yellow and black bands. At the north end of the painting are the remains of supports for two pavilions bounded by and a block border which would have framed the picture. Nothing is left above the birds except the exposed rock; however a great many painted plaster fragments providing evidence for the rest of the scene were found during excavations of the south end of the Hall in January and February, 2002. Its composition seems to be very similar to the one of Amenhotep III and Tiy on the opposite side of the doorway: Above the rekhyt frieze the king and perhaps Queen Tiy appear to have been seated within a double pavilion and faced north. He is sitting on a lion-legged chair. On the top of one of the pavilions was a frieze of cobras. In front of the king was a bouquet of papyrus-buds. The background of the upper part of the painting was white.

#### Conservation of the Rekhyt Scene

Since the frieze was a repetitive one, Parandowska prepared a drawing of a more or less complete creature to use as a model for replacing fragments. The fragments were then cleaned, and those that could be glued together were joined using a 30% solution of Primal AC 33 in water, and relocated on the wall. The "lacunae" of the missing plaster were filled with a mortar made of three parts sifted *hib* to one part slaked lime. 1/20 part of Primal AC33 was added to improve the elasticity of the mortar and promote better adhesion of the small and very thin fragments (pl. 9B). The same mortar was applied along the edges of the painting to fix it to the background and prevent further deterioration. It should be noted here that the plaster fragments were easier to handle than those from the Amenhotep III and Tiy painting because the layers of gypsum on the surface were thicker.

The raw rock above the painting was extremely friable, and Warris reinforced it, using a mud and chaff mortar interleaved with slices of limestone (pl. 10A). Once the masonry work on this wall was completed, Parandowska cleaned the surface of the painting mechanically with the help of soft and hard brushes (including fibreglass where necessary), scalpels and *Wishab* sponges to remove the dust, dirt and mud deposits. For purposes of photography, a testimony of uncleaned surface was left in the right upper corner of the painting to show its pre-conserved state (pl.10B).

Warris finished the upper part of this area with lime-*hib* mortar to match the infill of the fragments. The conservation of the *rekhyt* scene was completed on October 30th (pl.11).

### 2) The Amenhotep III and Tiy Painting

### Excavation of the Amenhotep III and Tiy Painting

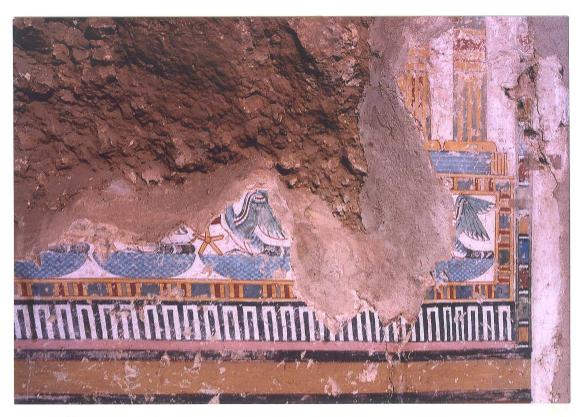
The Davies' epigraphic interest in the tomb of Anen seems to have been confined to the scene of Amenhotep III blessing the harvest in the south-east corner of the Hall, and the Amenhotep III and Tiy scene on the west wall. The maximum size of the latter painting is 203 cm wide x 180 cm high. Previous to our excavations, nothing was known about the area immediately below it.

It is quite frustrating that Norman de Garis Davies made so little mention of the state of the tomb while he was working there, as it appears from the photographs that the southern part of the Hall and the ceiling of the Inner Room were much more complete at the time. He describes removing some rocks from in front of the Amenhotep III and Tiy painting, and, "Eventually the bottom was reached, but, as the tomb could not be thoroughly cleared this year, a tracing and the painting of a detail had to suffice." From our work in October and November, it appears that what Davies meant by "bottom," was the bottom of the painting, not floor level, since material was found at floor level which must be original to the tomb (pl.13B).

Before we removed the boards covering the painting, (pl. 12B, 13A) Warris finished consolidating the upper part of the mud-plaster backing of the painting and fixing it to the raw rock wall, using lime-*hib* mortar. The composition was as follows:

hib	3 parts
chaff	2 parts
slaked lime	1 part
plain gypsum	1/10 part

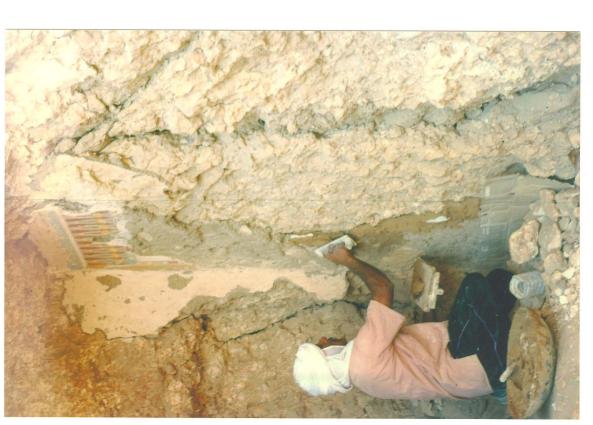
<sup>&</sup>lt;sup>15</sup>Davies 1929b, p. 35.



A: Rekhyt scene before conservation (photo: E.C. Brock no. EG 2 S 251 02).



B: *Rekhyt* scene in last stages of conservation with many fragments replaced (photo: F. Dzikowski, no. EG 19 S 252 02).



A: Mohammed 'Abd el-Warris applying mud mortar to rough rock surface of *rekhyt* area. (photo: L. Pinch-Brock no. EG 18 S 252 02).



B: Ewa Parandowska cleaning surface of *rekhyt* area. Note difference between cleaned and uncleaned surface (photo: F. Dzikowski EG 7 S 252 02).



Plate 11: Complete *rekhyt* scene after conservation. Note consolidation of rough rock surface above (photo: F. Dzikowski no. EG 8 S 252 02).

The gypsum was added after mixing the other components with water, in order to accelerate the hardening of the mortar.

The debris pile in front of the painting was 1.75 m high x 3.50 m wide x 1.75 m deep (pl. 13A). This consisted mostly of large stones piled in front of the boards to keep them in place; the actual original archaeological layer below this was only 34 cm deep. The boards were three parts of a MMA packing case hammered together, with a thick sheet of cotton wadding affixed to the back (pl.12B). When enough stones were taken away so that we could look behind the boards at the north end, we saw the cotton wadding had been torn away and a large area of plaster was missing from the bottom of the painting. This situation was brought to the attention of Inspector Hassan.

On October 8th, when all the boards were finally exposed, the workmen got together and lifted them away from the painting It was immediately apparent that seven out of the Nine Bows in the frieze below the throne had been carefully cut out. There was a huge gap in the bottom of the painting and chisel marks were evident all around it (pl.15A,B).

Since the last record we have of the painting's intact state is late 1930 (photo taken by Harry Burton pl. 4) the theft must have occurred sometime between then and 1994, when I first entered the tomb, and saw it deeply buried in debris (see pl.5). Reports written by Ahmed Fakhry in the 1940's detail the extensive damaged done by antiquities thieves to tombs in the Theban necropolis between 1937 and 1942: He wrote; "The thieves were always very careful to conceal the places in the protected tombs from which pieces had been removed. They profited to a great extent from the previous consolidation and restoration done in the necropolis and when they took away part of a wall they put in its place a material similar to one used by the restorers....the pieces which were taken away were always the well-preserved heads or figures, especially those of ladies" (Fakhry 1942: Pinch-Brock 1999a). As it turned out, I found a piece of newspaper in the Inner Room splashed with white plaster dated 1936. This is possible evidence for the date of the theft, since the stolen fragments would have been set into plaster in order for them to exit intact.<sup>16</sup> The arrangement of the debris covering the boards indicated that enough stone had been removed to allow someone to slip behind and hack out the plaster pieces. Partial excavation of this material in 2000 produced some wads of cotton, apparently from the backing, however we did not pay much attention to this discovery, believing the cotton to be discards from the installation process.

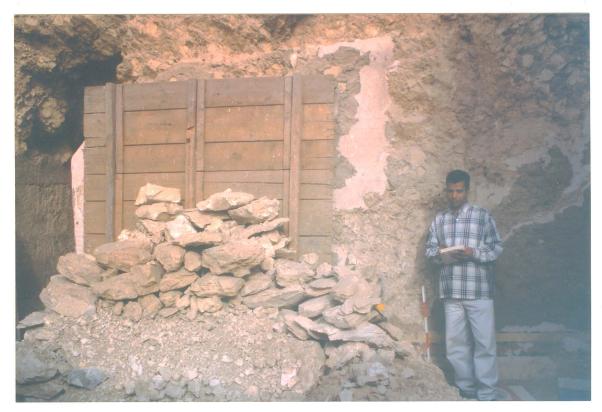
<sup>&</sup>lt;sup>16</sup>Nigel Strudwick recently reported on a fragment of a "Nine Bows" scene from TT 226 which turned up for auction at Christie's in 1999. The piece had been set into plaster (Strudwick 2001).



Plate 12

A: Layer of cotton, wood, rocks and debris against the painting, viewed from the south end (photo: E.C. Brock no. EG16S 252 02).

B: Inspector Hassan beside boarded-up painting. The wood was a MMA packing crate. (Photo: E.C. Brock no. EG 12 S 252 02).



It had become evident from our clearance of the south end of the tomb in the fall of 2000 that thieves had been at work in the tomb in the past century. This was confirmed by our discovery of a "robbers' bag" containing parts a lapis scarab.<sup>17</sup> In addition, below the east wall of the Hall north of the main entrance Parandowska found two pieces of cloth with glue on one side which she said is used to remove plaster, even a very thin layer. The cloth would be glued to the painted plaster to strengthen it, then the whole cut out.

Clearly, the first order of business was to try and recover any fallen fragments. To this end the workmen cleared a strip 30 cm wide by 3.50 m long immediately below the painting. We searched this by hand, sieving all the debris. In this way we were able to recover over 200 fragments of the painting, most extremely thin and fragile, and some no more than a few millimetres in size. These came from not only the hacked-out area, but also areas shown missing in the Davies' MMA facsimile. Since the collected fragments began to dry out rapidly, they were consolidated from the back using a pipette filled with a 20% solution of Primal AC 33 in water.

On October 9th our inspector apprised Mohammed el-Bialy in Luxor and the ADP advised Sabri 'Abd el-Aziz Khater in Cairo, of the damage to the painting. Sabri asked that a report be made to the SCA and it was duly done, vetted by Chip Vincent and distributed by myself (see Appendix III).

Parandowska returned to work on the *rekhyt* scene while I excavated the material remaining in front of the Amenhotep III and Tiy painting. Since the material was loose and of a relatively shallow depth, I divided it into two arbitrary levels (pl. 14A, B). The top level contained numerous plaster fragments, some from the Amenhotep III and Tiy scene, but most were thick ceiling fragments painted with a yellow and grey chequerboard design. Many of them joined. These were concentrated at the south end of the debris. Mixed in with this material were palm wood and a few mud-bricks. This probably represents the collapse of the area around the doorway; wood and painted plaster were discovered during the excavations of January and February, 2002. Some of the wood was parts of a bed. This was used to frame the doorway and form a foundation for the plaster. The lowest level of archaeological material - thin, silty soil, contained almost nothing except for some worn painted plaster fragments of no discernible pattern.

#### Description of the Amenhotep III and Tiy Painting

This scene has been much-discussed and is notable for its exquisite detail (see Davies 1929b, Smith 1983 and Robins 2000) No doubt it represents an event which would have actually occurred in the Palace at Malkata or other royal residences, that of the king receiving foreign

<sup>&</sup>lt;sup>17</sup>The scarab was pierced for attachment, probably to mummy wrappings. A beaded wing found in October, 2002, was probably part of the arrangement.



A: View looking north of debris levels in front of painting. (Photo: L.P. Brock no. EG 20 S 251 02).

B: Similar view showing rocks cleared and remaining archaeological material (Photo: L.P. Brock no. EG 6 S 2 2 02).



A: Excavating upper level of area which included mud brick and plaster (photo: L. Pinch-Brock no. EG 10 S 252 02).



B: Lower level of area showing composition of mostly silt and plaster fragments (photo: L. Pinch-Brock no. EG 14 S 252 02).

tribute. Fragments of a throne very similar to the one pictured in TT 120 were found in the tomb of Thutmose IV during excavations by Carter and Newberry (1904). Probably Anen was depicted in front of the royal pair making some sort of offering (as in TT 226; Davies 1933; Habachi 1967). Behind him (on the north wall) is an offering table. Above this, at the opposite end, was a row of Aegean-style vases. On the east wall there was a scene of foreigners bringing tribute, but only a Syrian is distinguishable. Aegeans and Aegean themes are frequently associated with Amenhotep III, hence the rare depiction of the "Minoan" (Keftiu) as one of the "Bows" beneath the thrones. The other Bows represent Babylonia, Mittani, Libya, Beduin, Kush, Irem, Iuntiu-seti and Mentu-nu-setet.18 The royal couple, facing north, sit primly on their thrones in the cool shade of a pavilion within a pavilion. The background in the second kiosk is yellow. Their elaborate clothing and thrones dazzle with color; in fact, every object in the scene vies for the viewer's attention. It is full of miniature dramas, like the monkey leaping over the cat clutching a duck under the queen's chair, and the foreigners on the king's foot cushion being flattened under the weight of his feet. An actual example of such a cushion was found in the tomb of Tutankhamun (KV 62)(Reeves 1990).

Scenes of Amenhotep III and Tiy in Theban tombs are by no means uncommon, and invariably represent an audience given to the tomb-owner. Davies has compared our scene with the fragmentary composition from TT 226, now in the Luxor Museum (Davies 1933). This is a mural painted sometime between year 10 or 15 of the King's reign and found in fragments in the tomb. However, close examination of the adoring "Bows" in TT 226 suggests to me it was accomplished, not by the same artist, but by one of considerable, but lesser, skill. The costumes of the TT 226 "Bows" are less elaborate and the faces of the blacks not as well done. The faces of the king and queen in TT 226 are also different; the rendering not as cursory as those in TT 120, if we can count on those painted plaster fragments showing faces found in the south part of the Hall belonging to the figures above the *rekhyt* frieze.

With the exception of Davies' article, all of the descriptions of this scene listed in Porter and Moss [and now Robins (2000)], have been based on the MMA photos and facsimile, none of which prepare the viewer for the effect of the varnish nor the blaze of color on the original. In ancient Egypt, resin was commonly applied as a varnish to wooden objects, but its use is less common on wall paintings (James 1994). Resin varnish was described by Lucas (1962) as being colorless and imported from India or Ceylon, and not in evidence before the 18th

<sup>&</sup>lt;sup>18</sup>The names of the Aegean isles are carved on a statue base at Kom el-Hettan, the funerary temple of Amenhotep III, now being excavated by a joint Swiss-Egyptian Mission.

<sup>&</sup>lt;sup>19</sup> Luxor Museum Acc J. 134.

<sup>&</sup>lt;sup>20</sup>To cover certain parts of the painting, or in some cases, whole walls (Maniche 1987). Its use on wall paintings has been documented by Lucas (1962) and McKay (1920).



A: The Amunhotep III and Tiy painting revealed: (photo; E.C. Brock no, EG 5 S 252 02). B: Close -up of area showing cushion and chisel marks: (photo: E.C. Brock no. EG 17 S 252 02).

Plate 15

Dynasty. More recent information from Serpico and White (2000) suggests the yellow resin used was originally colorless, turning yellow with time, was probably *pistacia* resin (from the eastern Mediterranean region) and used as early as the reign of Hatshepsut/Tuthmosis III. In the Amenhotep III and Tiy painting, a varnish has been applied to the skin of the king, parts of the throne painted yellow (gold?) and the hair of the animals. As such, it appears this finish was meant to duplicate the shine of real objects, including the King, as "the exemplar of Ra." (Robins 2000, 136). Serpico has also commented on the religious significance of the use of varnish. As for the varnish used in TT 120, resin is soluble in alcohol, but a test on ours proved it was not. Sampling would establish the true nature of this material.

The heads of the two royal figures are both missing, although Tiy's crown survives. This may simply be a case of differential preservation, or the faces were deliberately erased. This superstitious practice was common during the post-pharaonic era, especially when the tombs were occupied. In support of this idea is the fact that the cat's face has also been hacked-out. As for Tiy's crown, more of it is visible than the Davies saw fit to copy (pl. 2A). She wears the same tall double plumes, modius and vulture cap as she does on the back of Sitamun's chair from the tomb of Yuyaa and Thuiu, although in the low relief of the gilded wood it is difficult to discern. In this scene a cat also sits under her chair (Green 1987).

In summary, it is astonishing that such elaborate wall paintings and stone carving commemorating the reign of Amenhotep III should have been executed in the tomb of a non-royal personage. We must attribute this to the fact that not only was Anen a close relative of Amenhotep III's influential and beloved spouse, but also to his association with solar cults perhaps related to the ascendancy of the Aten promoted by Amenhotep III. This could also suggest that the thorough and wilful destruction of most of the paintings in the tomb was carried out by anti-Atenist factions.

#### Conservation of the Amenhotep III and Tiy Painting

Parandowska inspected the exposed painting for loose and missing plaster. We had Burton's photo and a photograph of the MMA facsimile to work with, and on this basis, could see that the only fragments missing from the upper part of the painting were parts of the supports for the baldachin on the upper left side (pl. 16). Parandowska lightly brushed away dirt and cotton debris using soft brushes. Any loose plaster was injected with a 50% ethanol-water solution followed by injections of 15-30% Primal AC 33 in water. Once the plaster was considered secure, large and deep areas of damage were first filled with the same lime, mud and chaff mortar that was used above the painting to fix it to the rock. After this layer was completely dry, the second, fine coat of mud and lime mixture was applied.

<sup>&</sup>lt;sup>21</sup> Cairo Museum Acc. CG 5113.



Plate 16: Ewa parandowska re-installing fragments belonging to the baldachin (photo: F. Dzikowski no. EG 3 S 252 02).

Composition of white mortar (fine mortar) was as follows:

sifted hib
 slaked lime
 Primal AC-33
 3 parts
 1 part
 1/20 part

This fine, light-colored mortar was applied along the edges and in the missing parts of the painted surface and to fill the gaps and small lacunae between the edges of reinstalled fragments.

Most of the fragments we recovered belonged to the green mat under the royal chairs or the serekh frieze below the foreigners. Apparently the robbers had used these as guidelines for excising the figures, cutting each one out individually. There were also a number of fragments of the seven Bows recovered which we had to deal with. These would look isolated when replaced if not in some sort of context, so when Chip Vincent, Jarek Dobrowolski and Michael Jones, along with ARCE Director Irene Berman came to visit on October 23rd, I suggested that a red "draftsman's outline" of each of the missing foreigners be added to the scene. This technique was used in ancient times to plan a painting. Outlines would be based on Nina Davies' line drawings from his 1929 publication. There is a precedent for this kind of work: The same red line treatment was used by the Deutches Archaeologisches Institut expedition working on the Island of Elephantine to show the probable original context of their relief fragments from the Temple of Satet. A mock-up photo of what our proposed approach would look like was emailed to the EAP and shortly thereafter it was agreed that we should proceed along certain guidelines.<sup>22</sup> We were greatly assisted in this process by the close-up photos of the MMA facsimile emailed to me by Jim Allen, courtesy of Dorothea Arnold and the Metropolitan Museum of Art in New York.

As it turned out, the Davies' illustrations were not clear enough to copy from (with the exception of the Minoan and the Libyan figures), so it was necessary to resort to the MMA facsimile for additional information, and to examples from the tomb of Horemheb (Hornung 1971) for the work of an "outline scribe." These showed that all but the final details of a relief or painting were provided at this initial stage.

The original location of many of the fragments – especially those belonging to the Nine Bows- was established using the computer. Digital photos of the collected fragments were superimposed on the MMA photos at 59% opacity using PhotoShop. When it was established where they fit, the images were printed out for reference on site. This speeded

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<sup>&</sup>lt;sup>22</sup> We were to limit ourselves to the red outline figures of the missing prisoners, their hieroglyphic names, the lotus/papyrus binding them together and adjacent with original elements of the decorative borders, the small dislodged fragments reintroduced to the repaired plaster.

up the process of installing the fragments substantially, since this matching could be done at home in the evening.

On October 24th we were visited by twenty-five SCA conservators and officials from Cairo and Luxor, and enjoyed an exchange of information. Sabri 'Abd el-Aziz Khater asked us to add some texture to the background of the consolidated areas in the Amenhotep III and Tiy painting, in order to differentiate them from the original, and we were happy to comply. This group were very interested in the varnish coating the painting, but were very doubtful about its ancient origin, believing it rather to be Paraloid, which has little acceptance among SCA conservators. This was of course understandable, considering that the use of varnish is not uncommon but seldom so bright and used so lavishly. Although the MMA facsimile shows this varnish, Davies unfortunately neglected to mention it in his article in the *Bulletin*. In fact, the use of varnish in paintings is rarely commented upon. However, due to the mistaken impression that the visiting SCA conservators had about this substance being modern Paraloid, it was decided to forgo the use of Paraloid anywhere in the tomb other than on the small inscription on the lower part of Pillar 3, which was in a very vulnerable state and location.

### Painting in the Missing Figures

From November 2nd until November 14th, the conservation of the Amenhotep III and Tiy painting was concentrated on replacing fragments. On November 11th, the work of recreating the images of the Seven Bows began. Warris had filled the vacant area with a smooth layer of mortar, similar to that used to conserve the other areas of the painting,<sup>23</sup> and slightly darker than the original. Parandowska had kept a quantity of this mortar aside to insure perfect color-matching when re-inserting the recovered fragments.

I enlarged the illustrations from the Davies publication to match the size of the two extant figures at the south end of the painting, then used a 2B pencil to trace the enlargements on the reverse for transfer to the new wall surface (pl. 17B). Parandowska inserted the relevant fragments using the penciled—in figures as guides. (pl. 17A). Once this was done, I painted in the outlines using a 0 paintbrush and a mixture of one part raw red ochre, one part Arabic gum (*samgh baladi*) and one part Primal (without Primal the mixture tended to smear) (16c). The red outline of the decorative border (color block border) and the stems of the lotus and papyrus plants were accomplished by masking the line with masking tape, and then daubing the unmasked area with a sponge coated with the red paint. This was done to give the impression of a string line, which is how the ancient artist would have laid down a line. In our case, actually using a string dipped in red paint was found to be too messy and

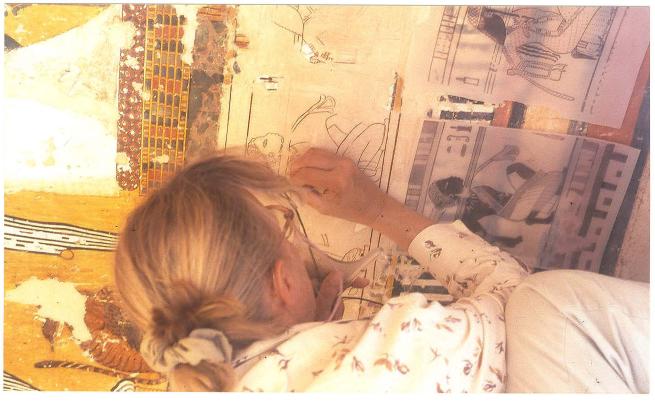
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<sup>&</sup>lt;sup>23</sup>As described in my report to the EAP of October 31st, 2002, p. 3: "..first filled with lime, mud and chaff mortar. After this layer was completely dry, the second, fine coat of mud and lime mixture (6 parts mud, 3 parts slaked lime) was applied."



A: Insertion of fragments was based on the preliminary pencil sketch (photo: E.C. Brock no. EG 15 S 252 02).





B: L. Pinch-Brock sketching in the figures using the de Garis Davies facsimile (photo: E.C. Brock no. EG 15 S 252 02).

imprecise, especially since the wall surface appears to have bulged over the millennia, making it impossible to achieve a straight line.

Some of the fragments Parandowska replaced, like the hand of the most southerly figure, and the end of the rope on the fourth figure north of it, were not extant at the time the Davies worked in the tomb. By reinserting them we were able to provide additional information about the original composition of the scene. At the end of our work, we estimate that we had been able to replace about 80% of the fragments found in the debris.

The last stage of conserving this painting was the mechanical cleaning of the surface of the painting with brushes and Wishab<sup>24</sup> sponges, followed by chemical removal of dirt with cotton swabs moistened with a 50% ethanol in water solution.

### Completing the Conservation of the Amunhotep and Tiy Painting

On November 16th, the sections of the protective covering for the *rekhyt* scene and the Amenhotep III and Tiy scene arrived, and the work of installing them began. Parandowska had left on November 14th for Alexandria. However, one problem remained to be solved; the installation of the fragments connected with the "green mat" under the royal thrones had not been satisfactory. This was entirely due to the fact that they were coated with green frit paint, 25 which is so heavy that it tends to spall easily. They now appeared patchy and inconsistent with the other elements. It was felt that this part of the painting, as it stood, would not be acceptable to the SCA, nor was it to us. This problem was mainly the result of our decision not to use Paraloid: Conservators usually consolidate plaster fragments from the front with Paraloid before re-installation to keep any paint on them intact. But since we had not done this, when the fragments came in contact with the wet mortar used to install them, the frit paint tended to spall.

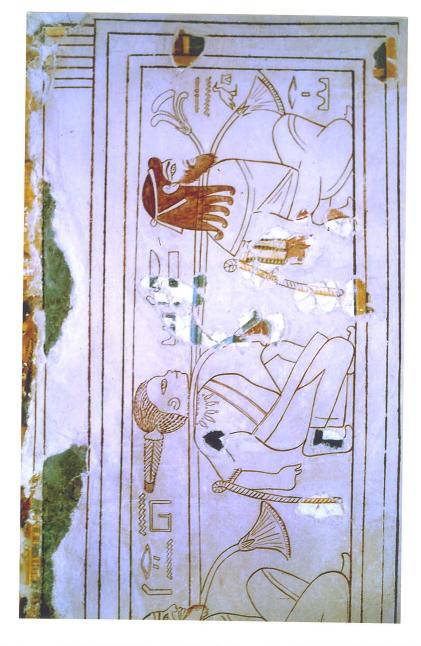
While Parandowska was away, and Warner was installing the protection for the paintings, I consulted with two conservators at Chicago House – Lamia el-Hadidi and Lotfy Khaled – for their advice on this problem. They advised re-installing the green fragments to make them as flat as possible, then use judicious retouching to blend them in with their surroundings.

During original discussions with the EAP concerning the restoration of the Amenhotep III and Tiy painting, we were all emphatic about not including any retouching in our program, and certainly none was needed in the *rekhyt* painting nor elsewhere. However, none of us were prepared for the special problems we would face when we uncovered this painting.

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<sup>&</sup>lt;sup>24</sup> Dirt-removing sponges manufactured by Kremer Pigments, Aichstetten, Germany.

<sup>&</sup>lt;sup>25</sup>According to Lucas, this is a crystalline compound of silica, copper and calcium. This makes a blue frit; green is made by adding yellow ochre. (Lucas 1962; 340, 345).



B: Red outlines of the figures were painted after the fragments were re-installed (photo E.C. Brock no. EG 8 \$ 252 02).

Iwa Parandowska retouching the green frit fragments. Photo: E.C. Brock no. EG 1 S 253 02).

Plate 18

On November 22nd, I contacted Parandowska in Alexandria and asked her to come back and try and bring the green mat area up to the standards of the rest of the painting. The intervention was restricted to this area only and was concentrated at the northern end, particularly under the "footstool." She removed and re-inserted a number of fragments which resulted in a flatter surface overall, but the difference in color between the surface of the spalled plaster and the green frit did not present a good appearance. Only judicious color retouching of the spalled surface could achieve this, so after discussions with Chip Vincent, Michael Jones and Jarek Dobrowolski, we agreed on the procedure. Parandowska prepared a mixture of Windsor and Newton Forest Green and Yellow Ochre water colors with a small addition of Primal AC33 (to promote adhesion) and applied the paint to the spalled surface in minute dots (Pl. 18A). The process was completed on November 28th (pl. 18B,C), and the results considered satisfactory to all concerned.

### **Conserving Other Paintings in the Tomb**

The group of SCA conservators who visited the tomb on October 24th had asked about our plans to conserve the rest of the paintings in the tomb. I had responded that our scope of work only included the paintings specified in our contract with EAP/ARCE. However, we had enough resources to secure two areas of paintings in the tomb which were no longer firmly attached to the wall - the area in the south east corner of the Hall where the Harvest scene once stood, and the painting on the North Wall of the Inner Room showing the deceased before the Gods of Burial. Warris fixed the latter to the stone matrix with a cuff of mud plaster mixed with chaff. The Harvest scene itself, photographed intact by Harry Burton for the Metropolitan Museum of Art in 1930, had since been hacked out by antiquities' thieves (chisel marks can be seen around the upper edges of the area where the scene existed). However, their efforts were apparently in vain, since it seems to have fallen apart during the process. Almost all of the fragments were recovered in the debris in the south part of the Hall during this year's excavations. A bit of modern plaster was found on one piece; apparently someone had tried to repair it.

On October 5th we had finished collecting the painted plaster fragments which had lain on the floor of the Inner Room since the Davies had worked there. They were in one layer, covered with a thin coating of dirt, but were otherwise undisturbed. They were photographed, their locations recorded and they were placed between layers of thick cotton batten in cartons for later processing. These were ceiling fragments and sections of (mainly the north) wall covered with a very thin layer of decorated plaster. During this process we found about twenty pieces of newspaper dating from 1924 onwards, and also the note written by Nina Davies listing the fragments left there. The collection was completed by October 6th.

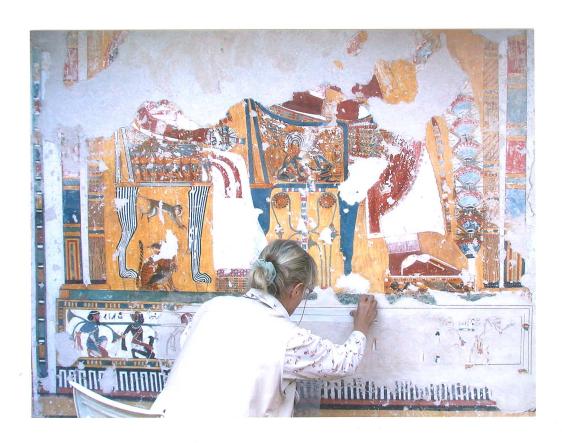


Plate 18 C: Two views of the fully-concerved painting: Above; Lyla Pinch-Brock putting finishing touches on the red outlines of the "Nine Bows" (photo: E.C. Brock no. EG 16 25102), and below, the painting framed and protected by the new cabinet (photo: E.C. Brock no. EG 6 S 253 02).



I asked Parandowska to clean the inscription on the lower north side of Pillar 3 because it is in a vulnerable position, on the path of visitors to the paintings. This inscription appears to be the outline draftsman's instructions for painting the hieroglyphs above. The inscription was fixed with a 30% solution of Paraloid in alcohol.

Mohammed 'Abd el-Warris repaired the upper parts of the reveals at the entrance to the Inner Room, employing the same technique and materials he had used on the pillars. Parandowska cleaned the lower parts using a scalpel, Wishab sponge and Plexiglas brushes, finally consolidating the very thin and fragile plaster with a solution of 30% OK glue in water. One goal of this project was to give some training to local conservators. To this end, she demonstrated to Warris and his son, Hammad, how to clean painted surfaces without resorting to chemicals, using the reveals as a demonstration area (pl 19A,B).

### **B:** Protecting the Tomb and Its Paintings<sup>26</sup>

1) Installing the Protection for the Paintings

### **Description**

Following the conservation of the existing wall-paintings on the west wall of the Hall of the tomb, the architectural conservation interventions proposed in the report of May 25, 2002 (see Appendix IV) and detailed in the specification of 15th of September 2002, were carried out from 16-25 November 2002. The scope of work was increased by the necessity to remove all fill/collapsed rubble at the southern end of the pillared hall in order to install the protection for the *rekhyt* painting, thus revealing the entrance to the burial chamber, and necessitating the installation of a protective grid (pl. 20A).

#### **Materials and Workmanship**

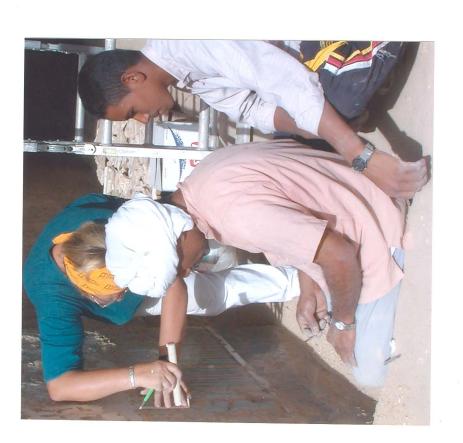
#### Mud Bricks

Mud bricks with chaff temper were made locally in two sizes:  $25 \times 12 \times 4$ cm and  $26 \times 13 \times 7$ cm (the smaller and lighter vaulting bricks being used in the infill over the entrance to the inner chamber of the tomb). These sizes are considerably smaller than the original mud bricks used in the construction of various parts of the tomb which average  $32 \times 14 \times 9$  cm.

#### **Mortars**

Mud mortar was made from *tafl* obtained from the plateau above the tomb. Hydrated lime was manufactured on site in barrels and washed sand was locally sourced. All components

<sup>&</sup>lt;sup>26</sup>Written by Nicolas J. Warner



A: Ewa Parandowska showing Mohammed 'Abd el-Warris and his son Hammad how to clean a painting using a Plexiglass brush (digital photo by L. P. Brock).





B: South reveal after repairs and cleaning by Parandowska and Warris (photo: F. Dzikowski no. EG 2 S 254 02).

were sieved through a 3 mm sieve prior to mixing. Mortar mixes were in the proportion 3:1 sand to lime, and 4/5:1 *tafl* to lime with chaff.

#### **Limestone Flakes**

Used in building out wall surfaces, these were taken from rocks cleared from the tomb.

#### Timber/Steel

The protective cupboard enclosing the wall paintings was prefabricated and transported from Cairo. Locally made steel elements were 1) the security gate to the burial chamber, 2) the support posts for the interior of the tomb, and 3) the brackets. All steelwork was primed and painted in a two-coat application. All woodwork was treated with Woodserve preservative and external surfaces painted in a three-coat application.

#### **Interventions**

#### 1. Environmental damage

#### Rainwater

The issue of floodwater cascading into the tomb has been addressed by the construction of a series of low-level rubble walls on the *gebel* above the tomb (fig.6; pl. 25). These have utilised the existing topography to channel rainwater away from the entrance area of the tomb. The important wall paintings have been protected from possible water damage by the introduction of a localized cover in the form of a cabinet on the west wall (see below), and a removable board and galvanized steel flashing on the north wall (pl. 24B).

### Rockfall

The surface of the hill immediately above the Pillared Hall proved to be too friable and dangerous to work on. It is likely that small rock falls will continue over time, and these should simply be cleared as and when they occur by the *ghaffirs*. The report of Dr. James T. Harrell has highlighted a possible danger posed by two large rocks in the Inner Room. These have been shored up with two mild steel braces (fig.17), primed and painted, of locally available sections (8 x 6 cm channel), but this is unlikely to prevent any serious movement of the rocks. To do so would require an engineering solution beyond the scope of the current project.

In front of the important wall paintings a localized cover, designed as a piece of cabinet joinery with doors that can be opened to reveal the paintings to visitors (figs. 11,12, 13, 14, 15), has been installed (fig. 8). This item was made off-site and assembled in position. This January, 2003, page 25

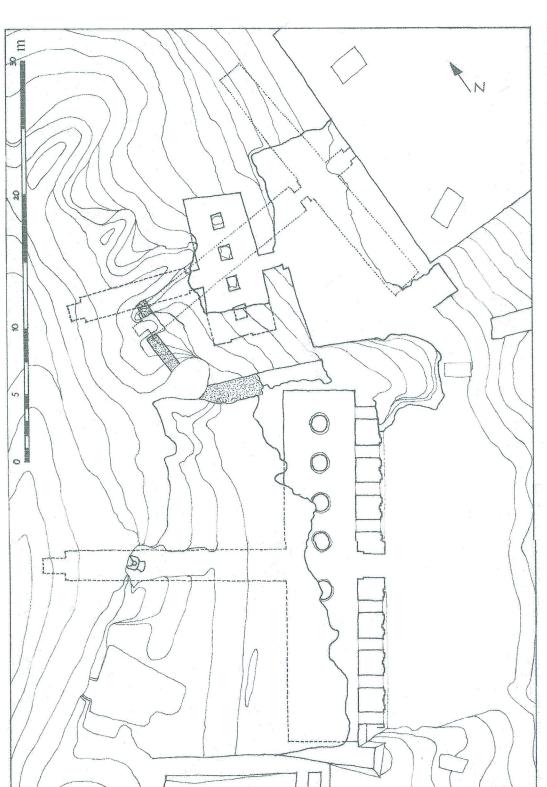


Figure 6: Location plan of new rubble walls (shown dotted) above tomb. of Anen (TT 120) on hillside of Sheikh Abdul-Gurna N. Warner after P. Dorman, *The Tombs of Senemnut*, pl. 3b.



A: Grid installed over burial chamber (photo E.C. Brock no. EG 18 S 252 02).



B: Constructing the frame for the cabinet (digital photo by L.P. Brock).

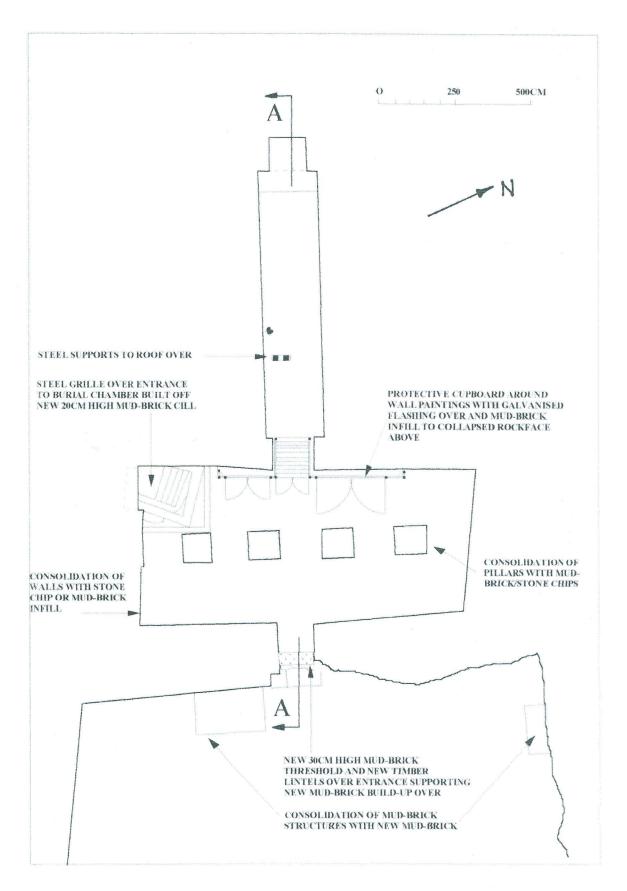


Figure 7: General plan at ground level

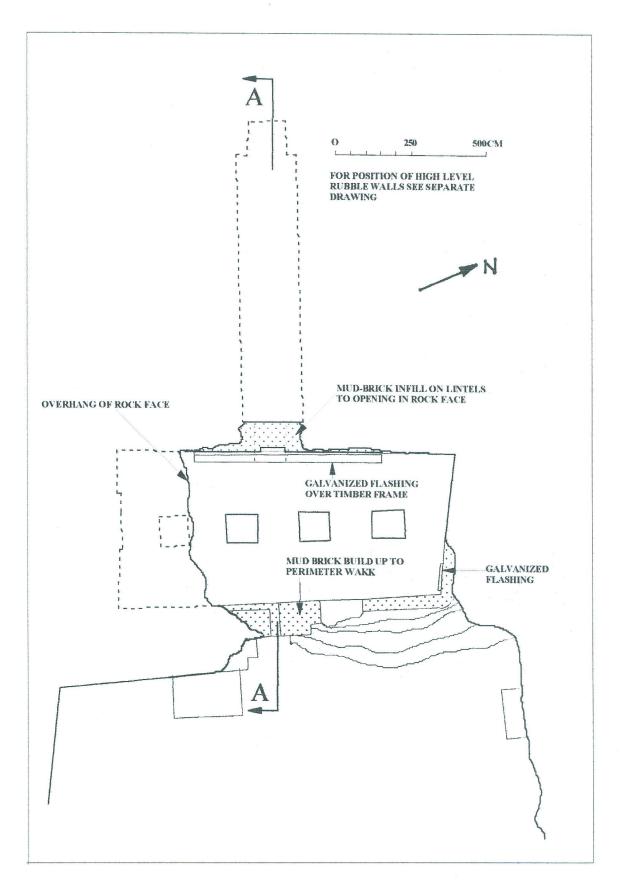
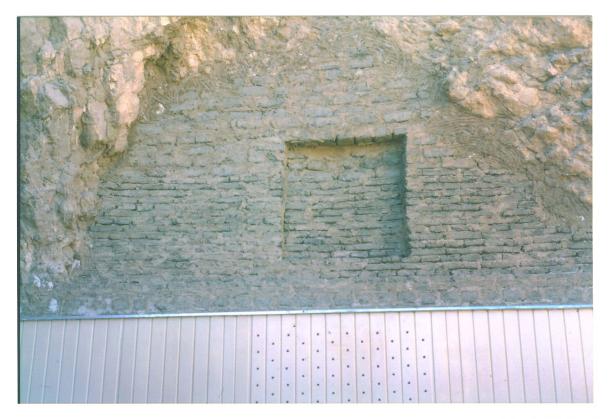


Figure 8: General plan upper level



- A: Niche above cabinet built to contain Amunhotep relief (photo, E.C. Brock, EG 13 S 253 02).
- B: Completed cabinet with two openings for paintings and doorway to Inner Room (photo, E.C. Brock, no. EG 9 S 252 02).



Plate 21: Cabinet enclosing paintings in Hall.



B: Doors open into the Inner Room, now our storage area (photo, E.C. Brock no. EG 17 S 253 02).

Plate 22

A: Doors of cabinet open to display rekhyt scene (photo, E.C. Brock,

no. EG 2 S 253 02).

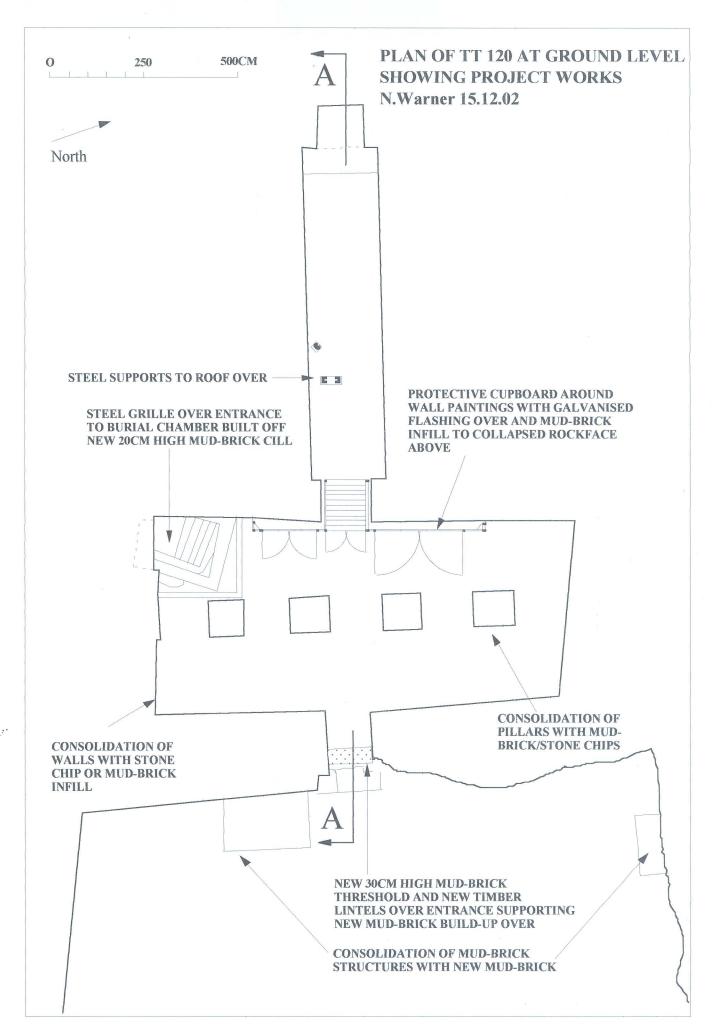


Fig. 7: Plan of TT120 at ground level showing project works.

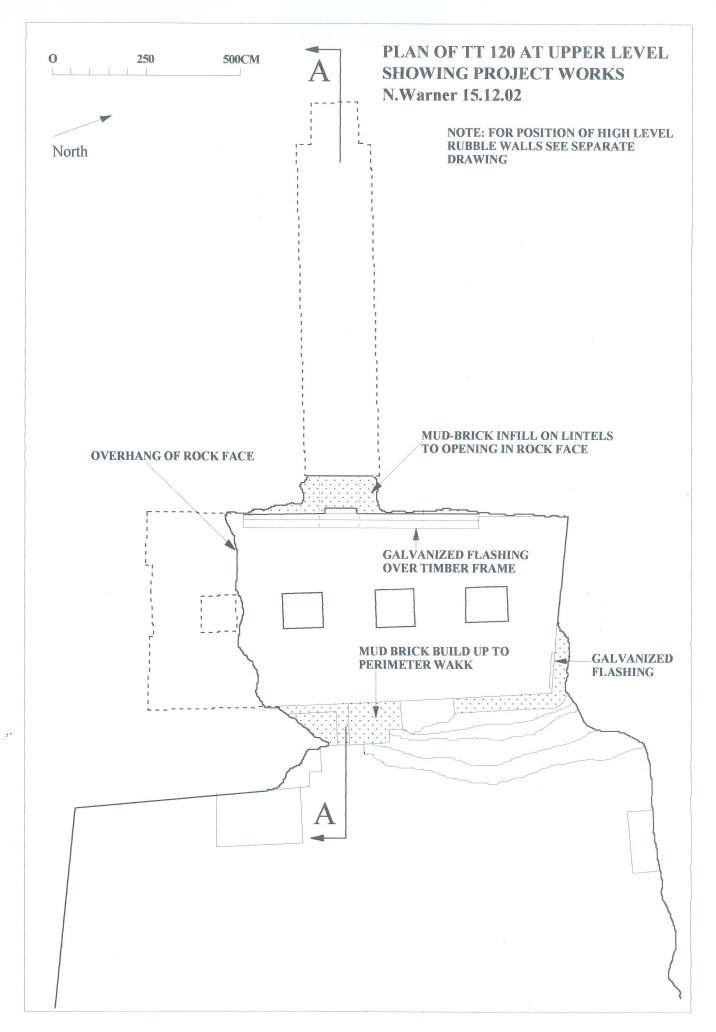


Fig. **%**: Plan of TT120 at upper level showing project works.

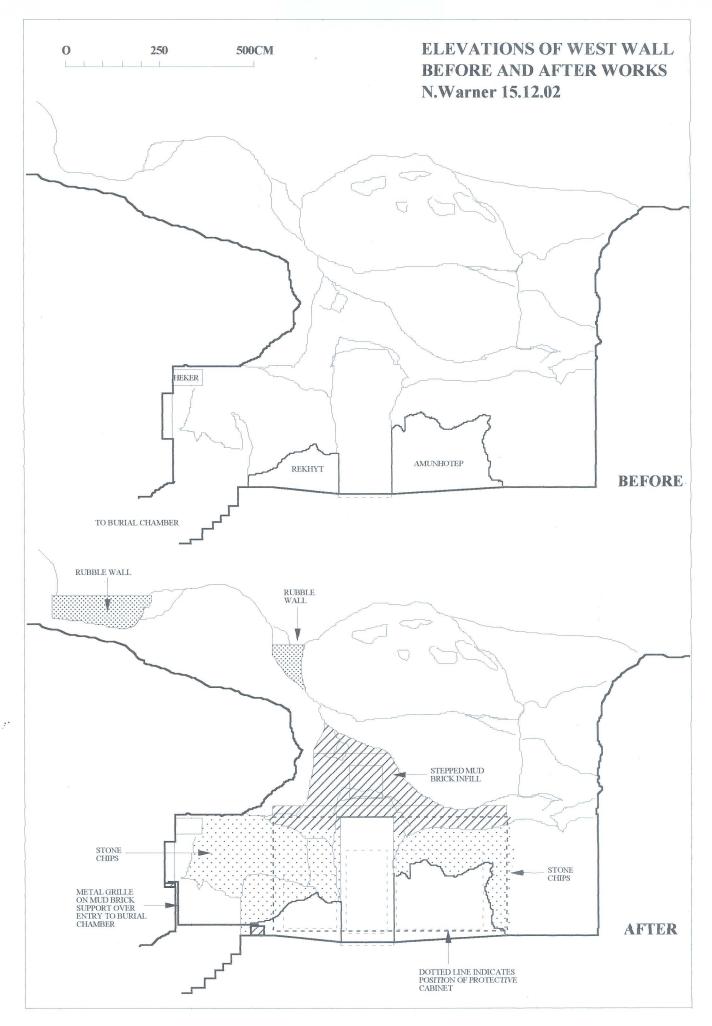


Fig. 9: Elevations of West Wall before and after works.

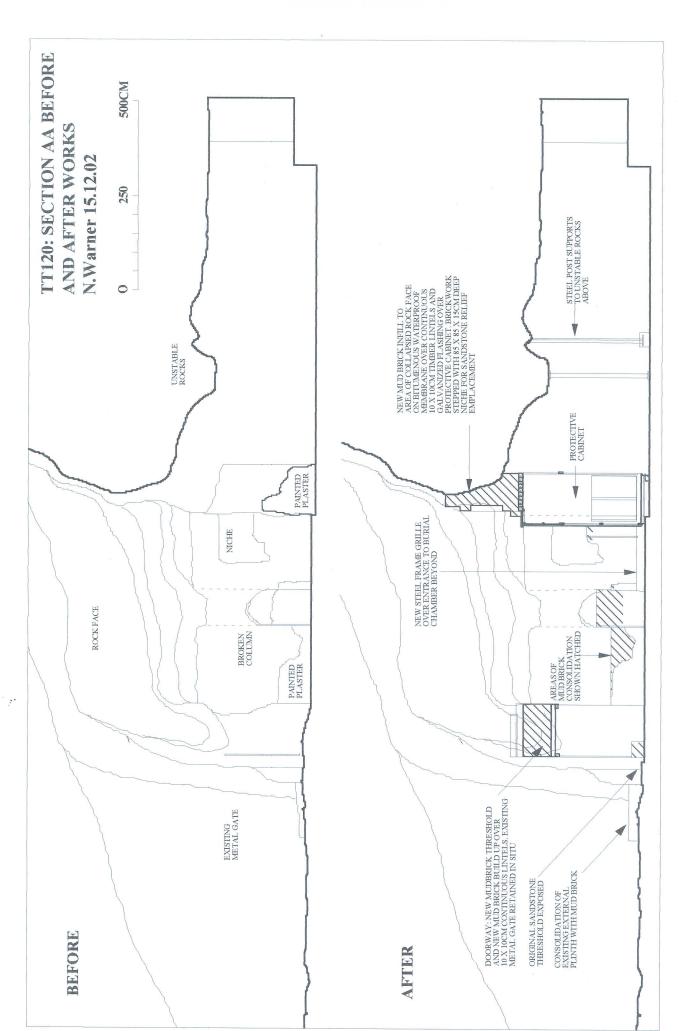


Fig. 10: Section AA before and after works.

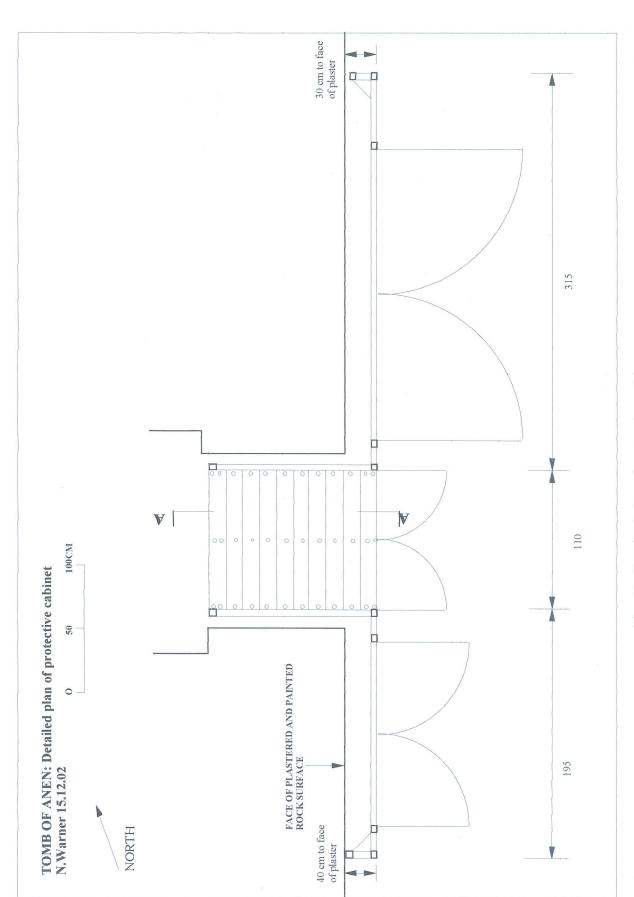


Fig. 11: Detailed plan of protective cabinet

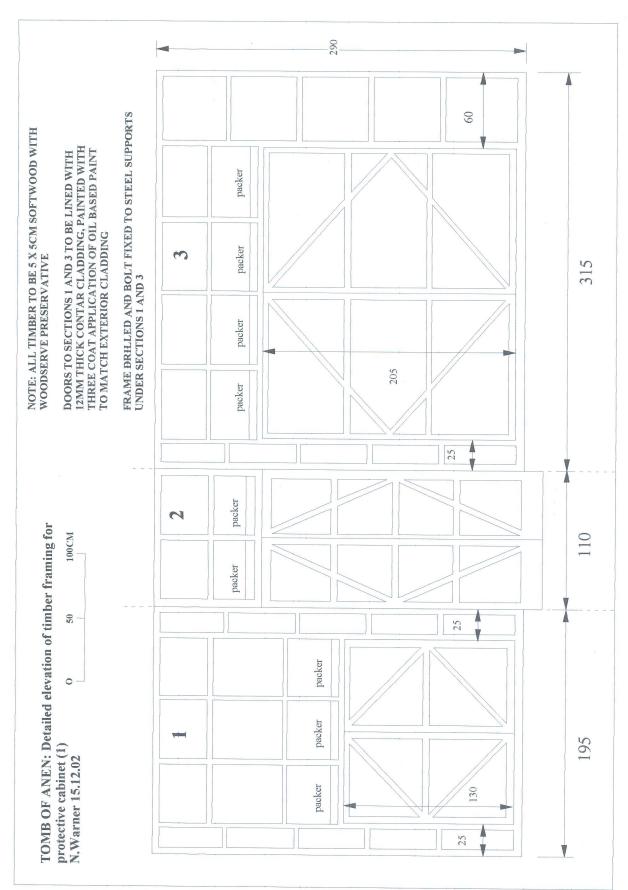


Fig. 12: Detailed elevation of timber framing for protective cabinet (1)

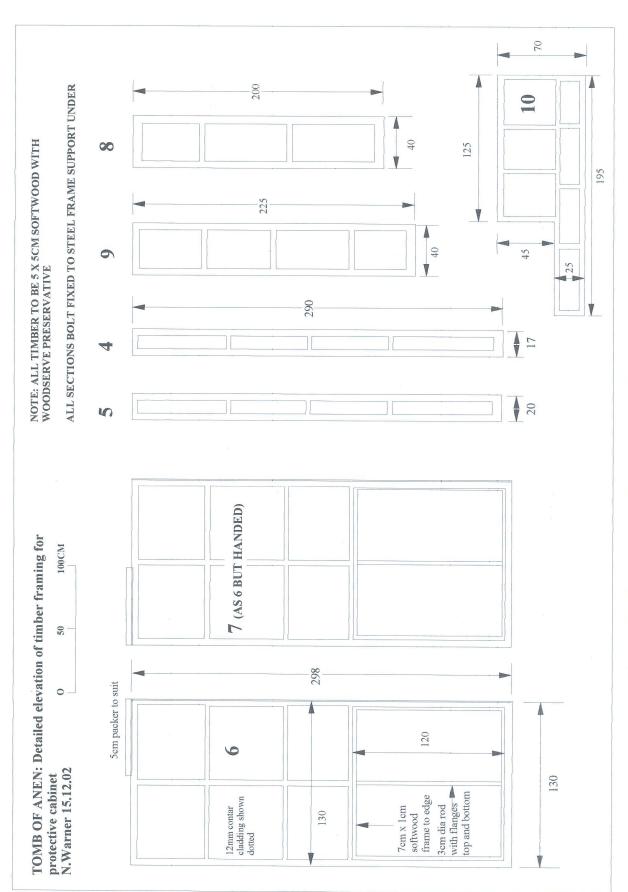


Fig. 13: Detailed elevation of timber framing for protective cabinet (2)

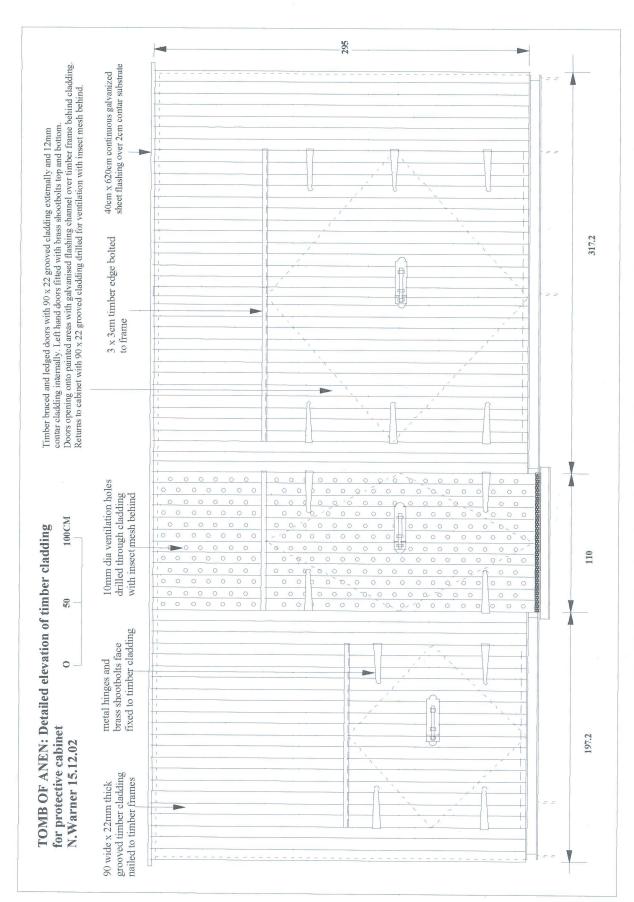


Fig. 14: Detailed elevation of timber cladding for protective cabinet

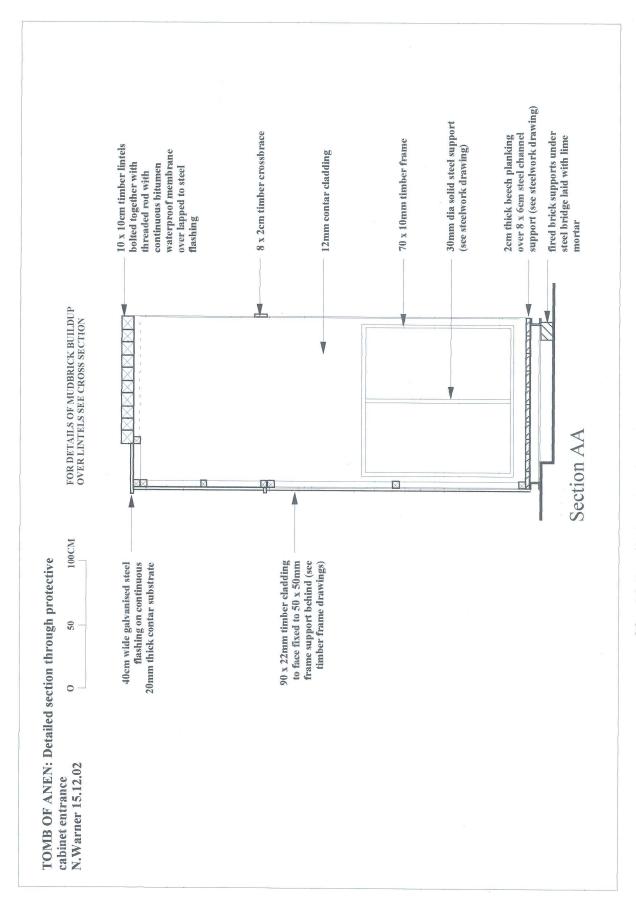


Fig. 15: Detailed section through protective cabinet entrance

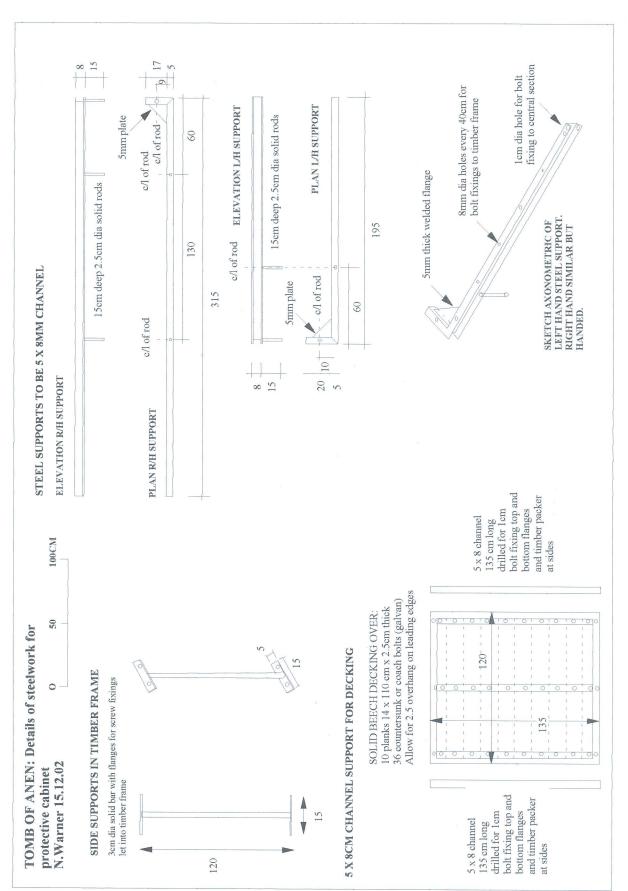


Fig. 16: Details of steelwork for protective cabinet

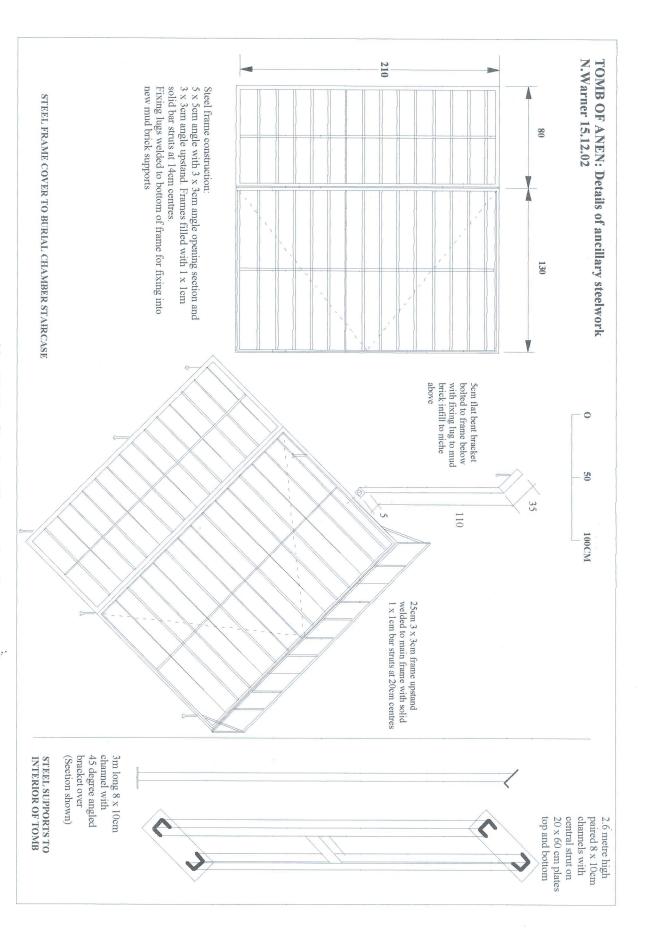


Fig. 17: Details of ancillary steelwork

has provided a satisfactory solution to the problem of light degradation of the paintings, as well as the threat posed by rockfall or rainwater penetration (pl. 21B; 22A,B and cover). The cabinet was made of pine, which was treated with preservative and painted with a three-coat application. A galvanized steel drip flashing was installed above the cabinet, as well as a series of wooden lintels (with bitumen waterproofing sheet over) that provide support for the mud-brick infill which extends to the face of the rock above (pl. 21A).

#### Bats and birds

To prevent the use of the interior of the tomb as a roost for bats and birds, screen doors have been introduced as part of the cabinet for the wall paintings. These doors are drilled for ventilation, and fitted with a metal insect mesh to prevent the possibility of insect infestation. The doors also allow for the use of the interior of the tomb as a lockable storeroom for artefacts.

#### 2. Taking Measures to Secure the Tomb

The entrance wall of the tomb has been built up in two areas in order to make it more difficult for illegal access to be gained (pl. 23A,B). One area is immediately above the door, and the other is at the northern end of the wall. This was carried out in mud brick (constructed over new treated timber lintels above the doorway) or a combination of stone chips in lime mortar and mud brick. The doors protecting the wall paintings and Inner Room are locked, with keys held at the local SCA Inspectorate.

The broken limestone threshold of the tomb entrance appears to have been re-used from another tomb. This was removed for storage, and clearance revealed the existence of the original sandstone threshold below. A new mud-brick threshold was built which leaves the existing threshold untouched pending further archaeological investigation. Parts of the area around the entrance to the burial chamber in the south-west corner of the tomb have been consolidated in mud-brick, and a mild steel security grill and door installed to prevent entry and for the safety of visitors. The mud brick statue platform south of the entrance of the Hall has been consolidated using original bricks where possible, as has the "Osiris Bed" to the north in the courtyard.

A high-level square niche was created in the mud-brick infill wall above the cabinet to allow for the installation of a fragmented red quartzite lintel with the names and titles of Amenhotep III found on site (pl. 21A). It is suggested that once all the pieces of this have been recovered by further excavation in the burial chamber, they should be conserved and set in a block of lime/sand render which can be then inserted into the niche.

The inside of the doors of the cabinet protecting the wall paintings can also be used for the display of visitor information concerning the tomb and its history.

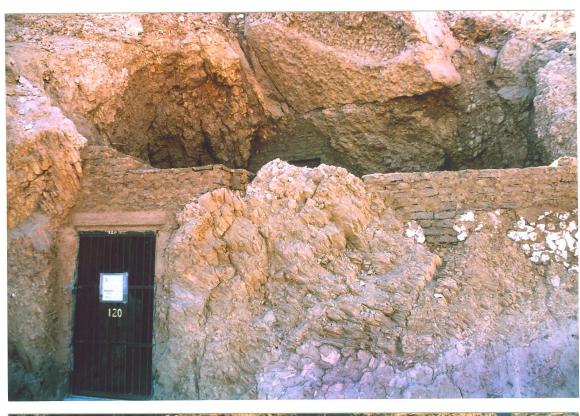




Plate 23: East wall of Inner Room, exterior, before and (above) after conservation. Photos, E.C. Brock, nos. EG 15 S 253 02, EG 1 S 252 02.



A: View of new lintel made of mud brick looking east (photo, E.C. Brock, no. EG 19 S 253 02.



B: Inner Hall, north end, showing installation of flashing to prevent entry of rainwater. Photo: E.C. Brock, no. EG 4 S 253 02)







### **Conclusion of the Project**

On November 28th, and with the assistance of Edwin C. Brock, the tomb was packed up, the floors swept and garbage removed from the site. All objects and equipment were put inside the Inner Room at the request of Inspector Hassan, and this now becomes our storeroom. All the objects and plaster collected from the excavation have been labeled according to type and area and are stored in wooden boxes. In future it may be possible to reconstruct some scenes, such as the Harvest scene, and either replace them on the walls or make them into museum displays. Many of these collections have been photographed and/or drawn and can be matched-up or reconstructed on the computer. There is certainly enough material now available to get a good indication of the overall decorative scheme of the Hall and the Inner Room, including the ceiling patterns and the paintings on the pillars.

It is hoped that in future seasons the red quartzite inscription with Amenhotep III's names and titles can be cleaned, consolidated and placed in the new niche in the mud brick above the Inner Room.

It is important to mention here that since the *gebel* is constantly shifting and environmental factors such as moisture, wind, high temperatures and any alterations to the area, such as removal of debris, may cause rock movement. Hence, we expect the newly-laid mortar on the *rekhyt* and Amenhotep III and Tiy paintings will not remain unflawed, but will become riddled with small cracks over time. Some monitoring is advisable.

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#### **Appendix I:**

Observations Concerning the Condition of the Paintings in the Tomb by Ewa Parandowska, Conservator

- layers of decorated plaster can be observed on every wall of the tomb, both in the Hall and the Inner Room.
- the technique of execution of the painting in the Hall differs from that in the Inner Room: The scenes in the Hall are painted on three preparatory layers of plaster as follows:
- 1) the roughly-cut surface of the poor rock was filled-in with
- 2) a clay, silt and chaff mixture with more limestone chips set in it, forming a layer 15-50 cm thick.
- 3) the third layer consisted of clay and coarse plaster mixed with powdered limestone and chaff. This layer had a brownish-yellow color and was 3 4 cm thick
- 4) clay, powdered limestone and gyps; fine 0.2 0.8 cm coating of yellow or white-pink colored paint.
- 5) very fine, 0.05 cm thin bright white layer of gypsum background for the colored decoration.

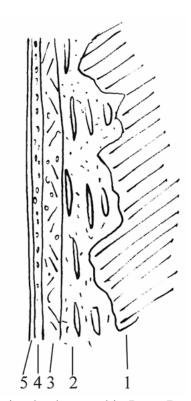


Figure 18: Sketch of painting background in Inner Room (Ewa Parandowska).

# Stratigraphy of Painting Background

- 1. roughly-cut rock
- 2. stone chips and mud/chaff mixture
- 3. *hib* mixed with chaff and water (creamy, grey and pink)
- 4. clay, mixed with limestone powder and gypsum (creamy white)
- 5. gypsum and colors (white, bright)

The decoration in the Inner Room was painted on a very thin white coating over the dark mud and chaff plaster layer beneath. There are no laboratory tests to identify pigments and underlying media.

These two stages of decoration – different in technique – result in the state of preservation and the present condition of the paintings. The remains of the murals in the Hall were damaged mechanically, partially due to the Atenist destruction and thereafter by flying rocks when the ceiling collapsed, and wear and erosion due to subsequent exposure. Some paintings in the Hall – like the Amenhotep III and Tiy painting on the west wall, and the "harvest scene" in the south-east corner, seem to have been damaged in an attempt to remove them.

The very poor condition of paintings in the Inner Room is the result of wilful destruction by late inhabitants and depredation due to bats and insects/ wasps' nests.

### State of Preservation – Condition of the Two Paintings

### a) A fragment with rekhyt birds:

The composition of the whole, original scene is unknown, but extant fragments indicate it was probably similar to the one on the opposite side of the entrance to the Inner Room. The area preserved must represent only about 5% of the whole composition (plus or minus 20% of the frieze). Many of the small pieces of the painting were collected from the debris during excavation in January and February of 2002. As the motif of the *rekhyt* frieze is repeated it was possible to insert the found fragments in their original place by comparing their position with others still *in situ*.

### b) The Amenhotep III and Tiy scene:

About 50% of the original of the Amenhotep III and Tiy scene remains on the north side of the doorway. The upper part is damaged and mostly absent, due to the very poor condition of the rock support. The ceiling collapsed and then long exposure to rain, wind, sand and deterioration of the rock resulted in the heavy erosion of the upper edge of the painted plaster, detachment of plaster layers and discoloration. The lower part of the mural, relatively very well preserved when de Garis Davies copied it, was cut out and removed by

antiquities thieves; the chisel marks and the dozens of very small fragments of the painted plaster found in the debris providing proof of the degradation.

### Recommended Conservation Program

- 1) documentation before conservation
  - a) photography
  - b) description
  - c) tracing and imaging
- 2) protection of the decorated fragments of painting found during excavation.
- 3) examination of the condition of the upper edges of the Amenhotep III and Tiy scene
- 4) removal of the protective construction from the painting surface (stone, wooden boards, cotton wool)
- 5) consolidation of the edges of the painting, filling of voids and cracks and blisters between support and preparatory layers.
- 6) documentation of the present condition of the painting.
- 7) Preliminary cleaning of the painting surface and plaster edges removal of the dust and dirt
- 8) reinforcement of the painting's edges with a band of new mortar (if necessary)
- 9) consolidation of the painting injections in the voids, blisters and cracks
- 10) filling of deep holes and lacunae in layers 2,3 and 4 with new mortars similar to the original.
- 11) Final cleaning of the painted surface mechanical and chemical.
- 12 Protective coating on the dado (powdered surface of the red and black color).
- 13) Color unification or integration of the surface of the newly-applied mortars if necessary. (Not presently advised).

### **Appendix II:**

Report of Dr. James Harrell on the Geology of the Tomb by Lyla Pinch-Brock

After a visit to the tomb of Anen in February, 2002, Dr. James Harrell of the University of Toledo was able to reassure us on a number of points, including that the tomb is built in much better rock than most of those in the area, that the rock forming what is left of the roof is firmly rooted in the gebel, that the rock overhanging the painting seems secure, and that there are no signs of any recent rock falls (all the rock shows signs of long exposure to the elements). However, he pointed out that two of the large rocks in the ceiling of the Inner Room are not secure. Shoring them up would prevent their falling and any residual effects of a ceiling collapse. Harrell noticed that another boulder above the tomb outside was shifting downwards, but not necessarily towards Anen. He felt the only threat to the tomb would be prolonged exposure to moisture, which would cause both the rock and the mud between it to swell and shift.

Dr. Harrell's informed opinion seems to indicate preservation of the painting *in situ* is an appropriate course of action.

# Appendix III: Report to the SCA on the condition of the Amunhotep III and Tiy painting as found on October 8th, 2002

# Report on the Condition of the Amunhotep III and Tiy Painting Uncovered in TT 120 (Tomb of Anen) on October 7th, 2002

The tomb of Anen is part of the Royal Ontario Museum's Theban Tombs Project and has been the subject of epigraphic and conservation work under the aegis of this institution since 1995. The current Tomb of Anen (TT120) Protection Project, to conserve and protect the paintings, ongoing from October 1st until November 30, 2002, has been sponsored by ARCE's USAID-funded Restoration and Preservation of Egyptian Antiquities Project Grant.

This tomb, beside that of Senenmut at the highest level of the Sheikh 'Abd el-Qurna *gebel*, contains a number of important paintings. In 1929, artists Nina and Norman de Garis Davies copied the lovely painting of Amenhotep III and Queen Tiy on the west wall of the Hall on behalf of the Metropolitan Museum of Art. It was also photographed at about the same time by Harry Burton of the same institution. After this the painting was covered with a layer of cotton wool, and thick wooden boards and large rocks were piled against it to protect it. Thus secured, the painting was left in this state and considered to have remained in good condition up until the present day.

When the tomb was entered in 1995 by Pinch-Brock and Project Co-Director Roberta Shaw of the Royal Ontario Museum, the tomb was seen to be encumbered by about three meters of debris and many huge boulders and all the wall paintings were completely hidden from view.

On October 6th, 2002, Brock, conservator Ewa Parandowska of Warsaw and SCA Inspector Hassan Aly Ahmed, in the final process of clearing the Hall, removed enough rocks and debris to be able to peek behind the boards at the north end of the Amenhotep III and Tiy painting. It was observed that there appeared to be some damage to the lower part. On October 7th, the barrier was finally removed and the painting uncovered, revealing that seven of the nine "peoples of the bow" had been cut out from the lower part of the painting. Chisel marks were clearly visible. It appears that sometime in the distant past, the boards were pulled out at the north end only enough to effect the removal, as the figures at the south end remain intact. Careful excavation of the area in front of the painting by Brock and her team indicated that the boards were put back and the debris re-inserted to hide the fact that part of the painting was now missing.

From October 7th to 12th, the team sought to retrieve as many fragments of this painting as possible from the surrounding debris in order to provide a comprehensive report on what may be reconstructed. This thorough search resulted in the discovery hundreds of fragments, composing about 10% of the original scene, wedged in the debris directly below the painting. This appears to include most of one of the men from the South (either the second, fourth or sixth from the right) and about 25% of the Minoan (Keftiu) figure (fifth from the right). Parandowska is presently engaged in re-installing the missing fragments.

The bare rock exposed by the removal of the boards was covered with dust, indicating the frieze was not removed recently. This observation was supported by the discovery this season during clearance of the Inner Room, of a newspaper dated 1936 covered with splashes of plaster. According to Parandowska, extraction of fragile plaster fragments would have required an application of a plaster backing in order for them to exit intact. In another part of the tomb, pieces of a type of cloth which would have been applied to the surface of the painting in order to expedite detachment, were also found. These bits of evidence indicate that this was not the work of casual souvenir hunters.

The Davies' painting was published in 1929, and the revelation of this work of art probably promoted interest in its acquisition, and the theft probably occurred not too long thereafter. During the 1940's many painted plaster fragments were stolen from tombs in the Theban necropolis, and this incident was probably part of this unfortunate situation.

Respectfully submitted, Lyla Pinch-Brock Director, Tomb of Anen Protection (TT120) Project

#### **Appendix IV:**

### Recommendations of N.J. Warner after Site Visit of May 25th 2002

An inspection visit was made to the tomb of Anen on 25.05.02 in the company of the Project Director, Lyla Brock, and representatives of the local West Bank Inspectorate. Discussions were also held with Mohamed el-Bialy before and after the site visit. The reason for the visit was to assess the condition of the tomb and the feasibility of building a shelter over the pillared hall to protect important surviving wall paintings.

#### **Description**

The tomb is sited close to the apex of the *gebel* in an area of rock that has serious faults running through it. Much of the limestone has, with time, disintegrated on its surface into a loose shale that will not sustain additional structural loading. The configuration of the rock above and around the pillared hall is extremely irregular, and is subject to continuing change through minor local collapse. Since the last inspection of the tomb made by the Project Director in February 2002, the easternmost limestone pillar in the pillared hall has suffered further collapse. The major reason for conservation of the tomb is the presence of polychrome wall-paintings on mud plaster on the inner wall of the pillared hall facing North. These are covered with a temporary protection of wood and/or brick.

### **Proposed Intervention**

The preliminary conservation proposal called for a roof to be constructed over the pillared hall to prevent the ingress of water and loose shale. Inspection of the site has revealed that this would be impossible to achieve without the introduction of supporting structural members (posts or columns) within the pillared hall. This would considerably detract from the architectural appearance of this space, and would furthermore damage the original mud plaster floor of the hall.

An alternative series of small scale interventions are therefore proposed below which are considered to be more appropriate responses to the different aspects of the conservation problem presented by the tomb.

#### 1 Environmental damage

*Rainwater:* The issue of floodwater cascading into the tomb is best addressed by the construction of a series of low-level rubble walls on the *gebel* above the tomb. These should utilise the existing topography to channel rainwater away from the entrance area of the tomb. The exact position of these walls is to be determined on site by the architect in consultation with the Project Director. The amount of rainwater is unlikely to be major owing to the tomb's position close to the top of the hill. However, if it is felt to be

necessary, an overflow channel for rainwater can be created under the existing threshold to the tomb running downhill. The important wall-paintings can be protected from possible water damage by the introduction of a localized cover (see below).

Rockfall: At the same time as constructing the low-level rubble walls above the tomb, all loose shale and rocks should be removed from within the line of these walls to prevent their falling into the tomb in the near future. It is likely that small rock falls will occur over time, and these should simply be cleared as and when they occur. The report of Dr. James Harrell has highlighted a possible structural collapse of two large rocks within the interior of the tomb. These should be shored up with a steel-framed brace.

*Ultra-violet deterioration:* Although the most important wall-paintings face North, and are therefore not exposed to direct sunlight, they will experience color-loss if left unprotected. A localized cover, designed as a piece of cabinet joinery with doors that can be opened to reveal the paintings to occasional visitors, is therefore proposed (see attached sketch). This avoids the issue of protecting the paintings with a glass screen of imported UV glass, and its subsequent maintenance. The cabinet should be made of treated and painted softwood or hardwood, with good quality stainless steel hinges and locks.

*Bats and birds:* To prevent the use of the interior of the tomb as a roost for bats and birds, screen doors can be introduced as part of the cabinet for the wall paintings (see sketch).

# 2 Anthropogenic damage

It is proposed to build up the entrance wall of the tomb on its western flank in order to make it more difficult for illegal access to be gained. This will be carried out in mud brick, or a combination of stone chips in lime mortar and mud brick, as appropriate. The doors protecting the wall-paintings will be locked, with keys in the possession of the *ghaffir* or held at the *taftish*.

To prevent further inadvertent damage occurring to the limestone threshold to the tomb, it is recommended that this be consolidated at an early stage of the works.

### **3 Visitor information**

The inside of the doors which protect the wall-paintings can also be used for the display of visitor information concerning the tomb and its history. These panels will only be seen when the cupboard doors are opened, and should be in English and Arabic.

#### **Conclusions**

The following recommendations are made:

- 1 Construction of low-level rubble walls above tomb on surrounding *gebel* to divert rainwater, and clearance of loose debris from this area.
- 2 Shoring up blocks at risk of collapse in interior of tomb with steelwork.
- Building up entrance wall as appropriate to prevent unauthorised access.
- 4 Construction of a wooden cabinet around vulnerable wall paintings and door to Inner Room.

Nicholas Warner Luxor 25.05.2002

#### **Glossary of Ancient Egyptian Words and Terms**

shebyu collar (necklace) made up of disc-shaped beads either of gold or faience.

Known from paintings and reliefs as an "award." Many actual examples

are known.

*shabti* Funerary statuette meant to serve as a servant or workman for the deceased.

Each usually carried a basket and hoe. Every ten figures were often

accompanied by an overseer shabti.

rekhyt bird Crested Plover or Lapwing with pinioned wings, representing the enemies

of Egypt. Interchangeable with the "Nine Bows."

Nine Bows The subdued enemies of Egypt, frequently shown beneath the king's feet,

either as a frieze, on a footstool or cushion, or on steps.

Osiris bed Surface, box or wooden form representing Osiris. Usually filled with earth and

seeds to sprout when watered, thus representing the

regeneration of the deceased.

Masons' marks

Marks made by masons in red, yellow and black paint on unfinished walls

to indicate work to be done or completed.

### **Glossary of Arabic Words and Phrases**

ghaffir Usually the term used for a guard, particularly in antiquities areas.

samgh baladi Type of Arabic gum, used as a binder in paints.

taftish Office, usually concerning antiquities areas.

tafl Unstable geological strata, due to its clay base and ability to absorb water.

hib Natural limestone and clay powder found locally, used since Pharaonic times

as a component of mortars.