

# ***THEBAN TOMBS PUBLICATION PROJECT***

Serapis Research Institute and University of Charleston, S.C.

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## **THEBAN TOMBS PUBLICATION PROJECT: TOMBS NO. 72 (RÂY) AND 121 (AHMOSE)**

**A REPORT TO THE PERMANENT COMMITTEE  
OF THE SUPREME COUNCIL FOR  
EGYPTIAN ANTIQUITIES  
2001 FIELD SEASON**

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### *Description of the Project*

The year 2001 marked the sixth field season of the Theban Tombs Publication Project, sponsored by the University of Charleston, South Carolina, and the Serapis Research Institute. The purpose of this project is to copy the inscriptions and document the architecture, as well as to clean and conserve the structure and wall decorations of Theban Tombs 121 and 72. Tomb 121 belonged to Ahmose, Second Prophet of Amun at Karnak temple, while Theban Tomb 72 belonged to Ahmose's son, Rây, First Prophet of Amun and Menkheperre in the Eighteenth Dynasty. Their tombs are situated in Western Thebes on the northeastern slopes of Gebel el-Sheikh abd el-Qurna, near the top if the hill and inside the Upper Enclosure. Here they directly overlook the districts of el-Khokha and el-Assasif and the village of Qurna.

While the tombs date to the reigns of King Thutmose III and Amenhotep II, specifically Tomb 121 was begun in the sole reign of Thutmose III and completed thereafter by Râÿ in the coregency of the two kings. Râÿ began his tomb during the coregency and apparently completed it early in the sole reign of Amenhotep II.

### *Work Schedule and Staff of the 2001 Season*

#### *Plan and Goals of the 2001 Season*

In planning the field campaign of the 2001 season, our goals were:

- (1) complete the next phase in the conservation of the tombs, which was the geological survey of the structure and interior of Tomb 72 and Tomb 121, as well as a close inspection and mapping of the surrounding rock;
- (2) continue copying and drawing wall and ceiling inscriptions of Tomb 72;
- (3) continue copying and drawing inscriptions in Tomb 121 and finale the key plan of that tomb;
- (4) complete necessary reshoots of first-phase epigraphic photography of the wall and ceiling decorations in Tomb 121;
- (5) continue the architectural survey of Tomb 121; enter the deep vertical shaft in the courtyard of the tomb and burial chambers below, and prepare a preliminary plan of it.

The field staff for the 2001 season consisted of Dr. Peter A. Piccione, as field director and epigrapher, Dr. A. Kem Fronabarger, as geologist and climbing master, Mr. Daniel E. Lanka as photographer and second climbing master, Miss Kristin Halvorson, as student epigrapher and data recorder, and Mr. Ramadan Ahmed Aly, as inspector of antiquities. Although Mr. Stephen J. Rickerby, the chief conservator of record, did not *officially* take part in the season, he did visit Luxor for three days to consult with the project team and Mr. Muhammed el-Bialy at the Qurna Inspectorate to discuss the geological survey and our future conservation goals and objectives.

Field work for the project began on 14 February and ended 6 March 2001. Despite the unexpectedly short field season, we accomplished much of what we planned, and we made some significant discoveries in Tomb 121—especially in its relation to the tombs around it, as we continued to survey and map its burial chambers and secondary tomb pits.

In the 2001 season, the Theban Tombs Publication Project continued conservation-related activities in the form of a geological survey that grew out of the 1998 conservation condition study. This geological survey of the tombs was one of the greatest accomplishments of the field season, and it provided valuable information and resources necessary to the conservation and repair of the wall surfaces inside the tombs. A copy of the geologist's report is attached herewith.<sup>1</sup>

### *The Conservation of the Tombs in 2001*

#### *The Geological Survey of the Tombs*

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<sup>1</sup>A. Kem Fronabarger, "Preliminary Report on the Geology and Structural Stability of Three Theban Tombs, TT-72, TT-121, and MMA-850," in "Conservation Report 2001: Geological Survey and Structural Stability of TT 72, TT121 and MMA 858, Theban Tombs Publication Project: Tombs No. 72 (Râÿ) and 121 (Ahmose)" (Charleston, June 2001).

**Background.** The conservation program in Tombs 121 and 72 began in the 1998 season, when chief conservator Stephen J. Rickerby undertook the formal condition survey and study as a first step in understanding the physical issues affecting the structures. We included his detailed and well-documented report in our report to the Permanent Committee on the 1998 field season,<sup>2</sup> and it is the very model of a modern and professional condition study report. However, it became apparent to him and to us that while the conservators might comprehend issues about the surface of the decorated plaster, as well as the stability of paints and pigments, the methods and sequence of decorating the walls, etc., they were still unable to understand or appreciate completely factors in the rock below that could affect decorated surfaces above. Indeed, chemical and physical factors in the underlying rock (e.g., salinization, acidification, fracturing, etc.) might be exerting some uncertain effect on the tombs' decorated wall surfaces and features.

The native limestone at the top of Gebel Sheikh abd el-Qurna is of a type that is coarse and heavily indurated with cherty boulders and nodules (e.g., flint) and many intrusions of sedimentary gravels, often of a loose constitution. The rocky hillside of Qurna is riddled with fractures and fissures, and the stone is weak and friable in places. In general, the stone of the hill is quite poor and of a quality inferior for general building purposes. Given these conditions, the conservators needed to know if the rock of Tombs 72 and 121 was chemically inert and not causing some chemical change to the decorated surfaces in the tombs, as well as physically stable and not subject to any predictable movement in modern times.

At the end of our 1998 report to the Permanent Committee, we noted the need to add a geological study of the rock to aid the conservators in understanding issues affecting the conservation of the tombs:

Mr. Rickerby's expertise extends primarily to the interface between the surface of the wall painting and the rock strata below, as well as the many environmental factors that can affect wall surfaces. However, his expertise does not include a complete understanding of the rock itself. Therefore, . . . we need to engage the services of a geologist to study the native rock of the two tombs and their environs. . . . Adding a geologist in future seasons will provide us with the technical and scientific information necessary to expedite the conservation of the wall paintings.<sup>3</sup>

**Geological Study and Findings.** In the 2001 season, to answer our questions about the rock, we initiated a geological survey of the tombs as part of their conservation condition study. Just as a conservator could assess the composition and stability of the wall surfaces, a geologist could assess the composition and stability of the rock matrix, as well as its geological history. A proper geological survey of the tombs would include planning and mapping their architecture in relation to the surrounding rock strata, as well as describing and mapping the rock itself, its chemical and physical composition, and the many fractures running through it, all of which could affect the integrity and stability of the tombs' structures and/or their decorated surfaces.

To conduct this geological survey, we chose Dr. A. Kem Fronabarger of the University of Charleston, S.C. He was ideally suited to this task because he specializes in mining geology, geochemistry, and tectonics (the study of rock fracturing and movement). Added to that was his previous geological study in Western Africa. He is also an expert rock climber and rope master, and we would require this specialized skill, since we planned to descend the vertical burial shaft in the courtyard of Tomb 121 during the 2001 season with a rope ladder and by rappelling down (see below).

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<sup>2</sup>Stephen Rickerby, "Report on the Condition of the Wall Paintings and Conservation Proposals (March 1999)," in Peter A. Piccione, "Theban Tombs Publication Project: Tombs No. 72 (Râÿ) and 121 (Ahmose). A Report to the Permanent Committee of the Supreme Council for Egyptian Antiquities, 1998 Field Season" (Charleston, 1999), hereinafter "Theban Tombs Project, 1998 Season."

<sup>3</sup>"Theban Tombs Project, 1998 Season," 9.

Professor Fronabarger spent the 2001 field season studying and recording the composition of the rock and its characteristics in and around Tombs 72 and 121. He expertly planned and mapped the tombs and executed their profiles *specifically in relation to the surrounding geological features*. He also mapped the locations and extent of fractures and other features in the rock in order to determine if they were still moving and to assess their overall potential impact on the tombs' structures. Later in the season, when we discovered that the vertical shaft of Tomb 121 intersected Tomb MMA 850, with which it appeared to share subterranean chambers (see below), Professor Fronabarger added the geology of the latter structure to his study. Thereafter, he executed a broader walking survey of the geology of Sheikh abd el-Qurna to understand the larger context in which the tombs' geology functions. Here he made some interesting discoveries about the geohistory of Sheikh abd el-Qurna and Deir el-Bahari that could impact on our understanding of many of the tombs and temples currently undergoing clearance in the district.

Professor Fronabarger's expertise in mining geology and mining techniques was also informative to our on-going architectural survey of the tombs. He has reasonably suggested that in certain cases, the Egyptian builders designed or located the rock-hewn chambers not due to some cultural reason or religious symbolism, but because they were following, avoiding, or taking advantage of specific geological features or patterns in the rock (e.g., cutting sloping shafts through fractures to save time and labor etc.). The implication is that the ancient Egyptians themselves possessed a sophisticated understanding of mining geology. However, Professor Fronabarger's greatest contribution—for the purposes of this project—was his determination that the faults and fractures in and around Tombs 72 and 121 are very ancient (some predating the building of the tombs), and most appear not to have moved in several thousand years (even after more modern earthquakes and tremors). Hence, they are likely to remain geologically stable.

As noted above, we have attached to this report a *preliminary* draft of Professor Fronabarger's detailed geological study of the rock of Tombs 72 and 121. Our conservators are already using it to plan their first steps in the conservation and treatment of the structures, which we expect to begin in the next field season. However, one point that we all stress, including geologist and conservators, is that even before any conservation can begin; before any debris is cleaned away from the tops of the tombs, a structural engineer must examine and inspect the tombs—especially their fractured ceilings—in order to ensure that they can safely endure the new physical stresses that conservation and cleaning will impose on them. This structural engineer must have a particular specialty in rock mechanics and experience in stone-built construction.

### *Stability and Condition of Tombs 121 and 72*

According to our standard practice, at the start of the 2001 field season, prior to resuming documentation and study inside the tombs, we conducted an initial close inspection of the physical conditions inside and out of the tombs to determine if any changes had occurred since the previous 1998 field season. Here we looked for any structural deterioration, the presence of water, wind and water damage, the impact of human activity outside the tombs, and even the activities of bats, wasps, and burrowing animals.

#### Tomb 72 (Rây)

When we opened Tomb 72 for the 2001 season, we found that the plastic sheeting which we left clean on the floor in 1998 indicated that *very little, if any* new debris had fallen from the ceiling and walls, a fact that our geologist had deemed significant regarding the stability of the fractures in the ceiling. On the exterior of the tomb, the main ramp revealed little change in its eroded condition, despite that between 1991 and 1993, vandals had ripped from it seven courses of mud brick. However, as long as the villagers of Qurna continue to walk regularly on the limestone ramp to approach the shrine of Sheikh abd-Qurna immediately above the tomb, the friable stone—which was once the core of a

protective mudbrick stairway—will continue to decay and erode at an accelerated rate, and the ramp could experience severe damage.

### Tomb 121 (Ahmose)

As in Tomb 72, previously in 1998 in Tomb 121, we covered the floor of the axial corridor and the north extension of the Transverse Hall with plastic sheeting. Our purpose was to provide a clean work area while we were active inside the tomb, and in off-seasons, to act as an indicator or alarm of fresh materials that might fall from the walls or ceilings. Happily, we detected no appreciable change in its condition from 1998. However, the very large hole in the thick ceiling of the south extension of the Transverse Hall is still responsible for the large amounts of airborne dust and trash that settle on the floor and walls of the tomb, as well as permits free passage to bats. We did detect a slightly increased level of bat activity in Tomb 121 in 2001 than previously, hence closing the hole entirely will be a significant future goal in the conservation and repair of the tomb. On this issue, however, the geologist informs us that to choose the proper method and materials for this endeavor, we should first consult a structural engineer to determine how much weight the ceiling can bear in closing the hole.

What remains clear is that between 1998 and 2001, no measurable change or deterioration has occurred in the structures or conditions of Tombs 72 and 121 that we are able to detect.

## *Architectural Survey of the Tombs*

### *Survey of Tomb 72 (Rây)*

#### Lower Court and Terrace

In the 2001 field season, the project surveyed the area directly to the east and in front of Tomb 72. Close study of the ground around the main ramp of the tomb of Rây reveals two adjoining level surfaces. The surface north and south of the ramp is hewn from the native rock out of the slope of the hill, while the surface east of the ramp is an artificial terrace constructed against the slope of the hill (Fig. 2, F). Together they form a flat and broad surface that originally functioned as an approach to the tomb, as well as a lower courtyard for the stairway, colonnade, and pylons. It is built of limestone rubble, flakes, and chips that are packed in horizontal courses, and which are infilled with a combination of soil, limestone dust, and fine sand. The profile of this construction is clearly evident on the northwest of the terrace in two sections where they are cut through by two modern paths that ascend from the tomb of Senenmut (no. 71) below and on the north (Fig. 2, G).

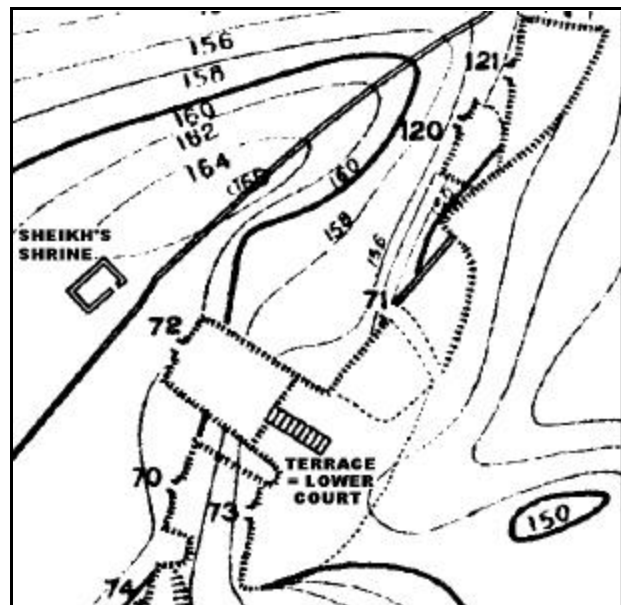


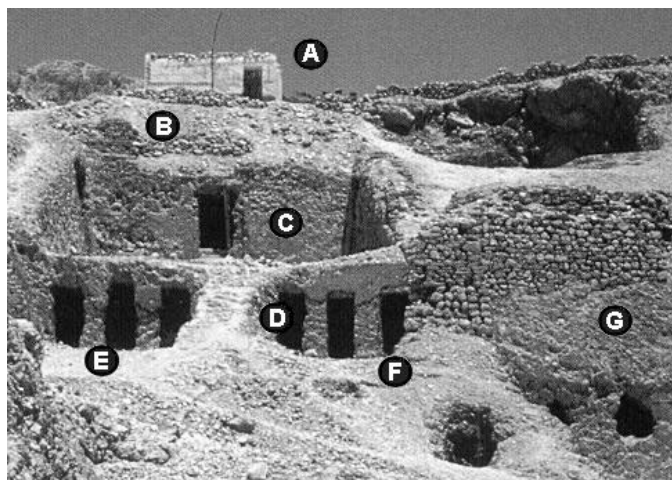
Fig. 1. Sheikh Abd el-Qurna: Tombs 72, 71, & 121 from the *Survey of Egypt Map Series*

Geological examination clearly reveals that these courses were purposefully laid by the ancient builders and are not water-laid deposits washed down from above. The material appears to derive from the original excavation of the hillside, out of which the builders had hewn the colonnade, ramp and upper terrace of the tomb.

Previously, the constructed nature of this terrace had not been obvious because it was camouflaged by windblown surface deposits and debris. However, it started to become evident this season due to the deepening erosion of the surface caused by continued use of the modern paths by more and more people passing through the area, including villagers regularly coming to visit the shrine of Sheikh abd el-Qurna above the tomb (Fig. 2, A).

### Ceiling and Roof of the Transverse Hall

**Ceiling.** In surveying the ceiling of the Transverse Hall of Tomb 72, the geologist has confirmed findings which the project made in previous seasons. The great splintering fracture that cuts diagonally across the ceiling from the northeast to the southwest corners existed before the tomb was built, and when the builders encountered it, they filled it with thick mud plaster (*muna*), limestone chips and even donkey dung. However, one section has dropped 1-2 cm. since construction, although when is uncertain, and a structural engineer must examine it to determine if that section of the ceiling might need restoration support.



#### Photo Legend:

- A. Shrine of Sheikh abd el-Qurna
- B. Remains of mud-brick retaining wall
- C. Upper Terrace and Court
- D. Main Ramp (core of stairway)
- E. Lower Terrace and Court
- F. Section of Constructed Terrace
- G. Tomb of Senenmut, Tomb 71

Fig. 2. Tomb of Râÿ, Tomb 72, looking west

**Roof.** The sloping hillside above the upper terrace of Tomb 72 forms part of the roof of the Transverse Hall. In ancient times a thick and high mud brick retaining wall was built along the roof to prevent stone and debris from falling into the Upper Terrace (Fig. 2, C). Most of the wall is gone today, and only a small section on the south side still exists (Fig. 2, B). As we noted in our 1998 report, we examined this area at the request of and in conjunction with the Qurna Inspectorate of Antiquities, and as we reported, it is likely that the shrine of Sheikh abd el-Qurna above the tomb is built on the foundations of an ancient sandstone superstructure that was part of Râÿ's tomb. In 2001 the project continued to survey this part of the tomb and the area around the modern shrine. We found that the retaining wall of Tomb 72 apparently provided the footings for this superstructure, which probably was a pyramid in form.

As part of our conservation of Tomb 72, we hope to rebuild the retaining wall to protect the Upper Terrace and courtyard. Even before that, we must clean off the slope and remove the stone and debris that now overlies it. After the slope is bare, the conservators will examine the bedrock and, if necessary, repair and consolidate it. However, before we rebuild the mud brick wall, a structural engineer must first examine the roof and ceiling below to ensure that they can safely support the weight of that new wall.

## Ceiling of the Axial Corridor

Similarly, the geologist concurs with our findings in previous reports, that the irregular vaulting in the ceiling at the rear of the Axial Corridor in Tomb 72 probably resulted from ceiling collapse in that area during construction. Hence, the builders were forced to regularize the surface by smoothing it as much as possible into the vaulted shape. The stone at the rear of the tomb is of poor quality formed by a thick and sometimes weak conglomerate of pebbles and gravel laid down in a geological deposit when this section of the hilltop formed the riverbed of the ancient Palaeo-Nile River.

## *Survey of Tomb 121 (Ahmose)*

In 2001 the project resumed the architectural survey of Tomb 121, which it had begun in 1998 as part of the conservation condition study and to support the epigraphic survey of the tomb. Working with the geologist, the project sought to plan the interior chambers of the tomb in relation to the large fractures running through it (see Fig. 3, Plan of the Tomb of Ahmose). The entrance to the main burial chamber inside the tomb is located in the floor and west wall of the Transverse Hall, southern extension, which is not a common location. Survey indicates that three of five of the burial chambers in the tomb are actually located along a single significant fracture (or fissure) that cuts through the tomb at different levels and which predates the building of the structure. Even the main burial chamber is cut into this fracture. This pattern suggests that the builders purposefully built these burial chambers in the fractures, probably to save time and effort in the hewing and removal of rock.

## Courtyard Southern Shaft

In mapping the courtyard for geological purposes, we discovered that the builders had begun to hew a burial shaft on the south side of the court directly opposite the present northern shaft. However, after proceeding only as far as roughing out the floor for the emplacement of this shaft, the builders abandoned the effort, probably because the native rock in the southern area is heavily fractured. Feasibly, the southern shaft was the original of the two and was then relocated to the opposite northern side of the court where it was completed.

## Courtyard Northern Shaft and Chambers

One objective of the 2001 season was to document the interior of the deep vertical burial shaft in the northwest corner of the courtyard. Previously in 1998 the project plumbed the depth of this northern burial shaft, recorded its external dimensions, and described as far as possible the features at the bottom that were evident from the surface.<sup>4</sup>

As a result of these preliminary investigations, the project planned to descend the shaft in 2001 and enter the burial chambers below in order to survey and plan their architecture. Since we understood that the chambers were previously cleared by the Metropolitan Museum of Art in 1930, and objects were taken from here, we did not plan to recover any objects of burial goods, and, indeed, we did not.

**Rope Ladder and Rappelling.** Because the vertical shaft was 10.58 meters deep, we planned to use a rope ladder to descend to the bottom. *Caution and the safety of all the staff members was our overriding concern at all times*, and for that reason we took almost two years to carefully plan the descent. Because of the inherent instability of rope ladders over a great depth, we determined that the descenders should be properly secured in climbing harnesses to a belaying rope operated by the staff photographer who was a strong and experienced rock climber. The descenders would include: the project director, the antiquities inspector, and the graduate student. The staff geologist, who was

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<sup>4</sup>Ibid., 6.

**THEBAN TOMBS  
PUBLICATION PROJECT**

**Tomb of Ahmose  
(no. 121)  
Preliminary Plan**

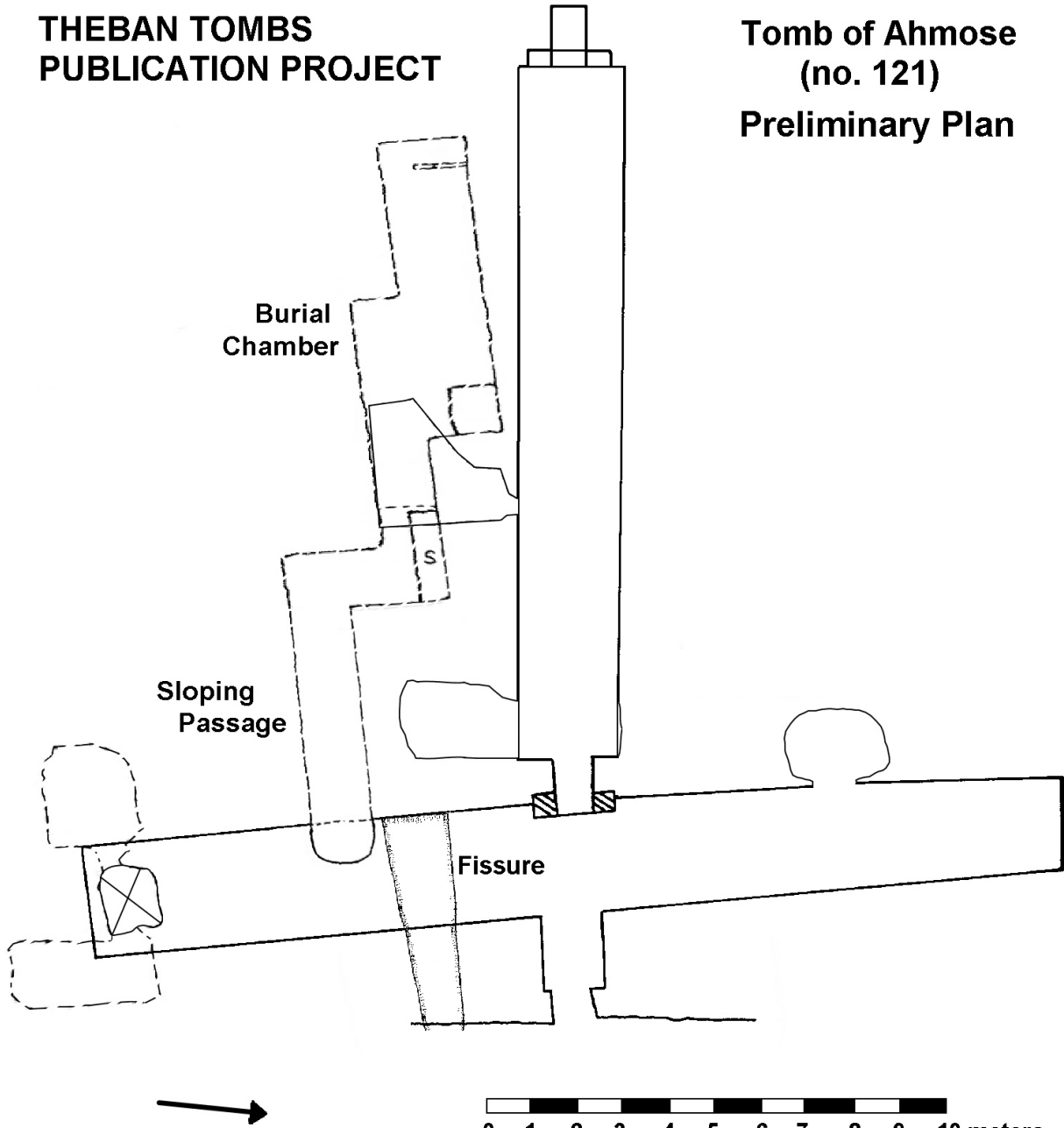


Fig. 3



also a highly experienced climber and a master of climbing ropes, would first rappel down the shaft to secure the bottom of the ladder and provide additional safety support for the descenders.

**Climbing Down the Shaft.** On Thursday, March 1, the seventeenth day of our field season, we painstakingly and laboriously laid out and prepared all the ropes, harnesses, rope ladder, and other equipment for the descent down the shaft. However, after two-hours of meticulous preparation—and just as the geologist was leaning backward to jump off and rappel downward, the antiquities inspector, Ramadan Ahmed Aly, with a stout heart, seized the opposite end of the climbing rope, tied it to himself, and proceeded to scamper down the rope ladder to the bottom of the shaft! There the project made a remarkable discovery. The bottom of the shaft broke into a Middle Kingdom tomb below it. Impetuous but brave was our inspector, and we lauded him for his discovery as part of our team.

**Tomb 121 Burial Chamber.** When the builders of the shaft broke into the Middle Kingdom tomb passage below, they shifted their digging into the northwest wall of the shaft, where they cut an entrance to a low passage that penetrates laterally into the rock from east to west. Then it spirals in a clockwise fashion (from the south to north). It ends in a plain rectangular burial chamber that is completely empty of any objects. Presumably, this chamber was the source of objects recovered by the Metropolitan Museum of Art in 1930.

#### *Tomb MMA 850*

Metropolitan Museum of Art Tomb 850 is an uninscribed Middle Kingdom *shaft*-tomb in the MMA 800-series of tombs on Gebel Sheikh abd el-Qurna. It was cleared and excavated by that museum in 1930's, although the Middle and New Kingdom finds from there still remain unpublished. When the Theban Tombs Publication Project discovered that the vertical shaft of Tomb 121 intersected that of MMA 850, with the permission of the Qurna Inspectorate, we began to survey the architecture of that tomb where it contacted Tomb 121.

MMA 850 is located on the slope of Gebel Sheikh abd el-Qurna just below Tomb 121. It is fronted by a portico of eight rectangular rock-cut pillars that lead to a single axial corridor oriented east to west. At the rear of the corridor is an offering-chamber, on the west wall of which is a rock-cut shrine. The entire tomb is undecorated, although the walls are often covered with a thick mud plaster (*muna*).

In the northeast corner of the cult chamber, the floor slopes down to the north leading to a sloping passage in the north wall. This passage accesses the main rectangular burial chamber of the tomb on the north. After the tomb was completed, a smaller secondary sloping passage was cut low into the eastern wall of the cult chamber. To access this secondary passage, the north wall of the cult chamber was recut and angled to the northeast, and the east wall was lengthened. The floor of the chamber along the new northeast wall was sloped downward toward the new passage intersecting the old passage. The tomb is entirely empty, except for some modern trash that has blown down from the shaft of Tomb 121 above.

Thereafter, in the Eighteenth Dynasty, the builders of Tomb 121 dug their vertical shaft downward, until the bottom of the shaft broke through the ceiling of MMA 850's main sloping passage. At that point, they turned westward into the rock and cut the spiraling burial chamber.

It has never been published that Tombs 121 and MMA 850 are connected in their interiors, nor is it general knowledge to scholars. Previously, while Egyptologists were aware that objects from Tomb 121 did derive from MMA 850,<sup>5</sup> how they came to be there was never explained in publication. However, unpublished object cards in the Metropolitan Museum of Art from the 1930 excavations

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<sup>5</sup>E.g., *PM* 2<sup>2</sup>, 677.

do record without explanation that the two tombs transect each other. Therefore, the findings of the Theban Tombs Publication Project in 2001 represent a rediscovery and dissemination of this fact.

Because we made this rediscovery about Tomb 121 and MMA 850 only in the last three days of our field season, we were unable to complete our architectural survey of the structures and their photographic documentation. Therefore, it is our intention to finish this survey in our next field season and to request that MMA 850 be added to our concession at that time.

### *Photographic Survey of the Tombs*

#### *Background and Previous Work*

Since the beginning of the project, the chief photographer has been Daniel E. Lanka. The objective of this season was to complete the principle photographic documentation in both tombs; to execute some necessary reshoots of photos taken in the 1998 season, and to take views of Tomb 121.

Prior to the 2001 field season, the Theban Tombs Publication Project had executed more than 455 photographic images of Tombs 72 and 12 as part of phase-one photography in those structures. These images include black-and-white prints and color transparencies in formats of 120 mm. and 4x5 inch. They document the walls and their condition, decorations, texts, and architecture. Additional transparencies in the 35 mm. format record general views of the tombs, and they document the actual field work itself. In 2001, the Theban Tombs Publication Project completed a total of 176 new photographic setups, including 161 images of the walls in 4x5-inch format, both color and black and white. These represent the last of the phase-one epigraphic documentation of both tombs. The remaining 75 photo-setups were 120 mm. black and white images documenting architectural details and general views. Of the photographs taken in 2001, only two will need to be reshot in the next field season. Therefore, with the total of 631 epigraphical and documentation photographs taken inside and around the two tombs to date, the principle phase-one *epigraphical* photography in Tombs 72 and 121 has been completed.

**Future Photography.** Remaining photography includes some general views of the burial chambers below Tomb 121 and in MMA 850. Phase-two photography, to start next season will document the conservation and cleaning activities in the tombs, and Phase-three photography in the future would include those wall scenes that might require reshooting after the completion of conservation and cleaning. In this way the project will have a record of before and after the cleaning.

#### *Photography of Tomb 72 (Rây)*

In 2001, the photographic goal of the project inside the tomb of Rây was to make a very small number of reshoots (eight only!) in 4 x 5 inch format inside Tomb 72. Here we rephotographed scenes of the Opening of the Mouth Ceremony depicted on the north wall of the Axial Corridor with a wider lens to improve our coverage of the scene. Pre-conservation epigraphic photography inside the tomb of Rây is now complete.

#### *Photography of Tomb 121 (Ahmose)*

In Tomb 121, the goals of the project in 2001 were to complete first-phase epigraphic photography of the wall and ceiling decorations; to take exterior views of the tomb and adjacent hillside; and to reshoot some previous epigraphic photos and architectural views. We also planned to document the descent into the vertical shaft of the courtyard and the architecture of the burial chambers below. Despite the short duration of the season, the project accomplished all of its objectives, except for some minor architectural views under the vertical shaft.

We completed all the Phase-one epigraphic photography of the walls and ceilings, including remaining photos in the Transverse Hall, southern extension. The major problem that prevented completion of the photography here last season were the wide holes in the floor, including the openings to two burial chambers and a wide fracture in the rock. Here we were able to span the floor either simply with a sheet of sturdy plywood, or by building a solid wood platform on which to place the camera and light stands.

As part of our architectural documentation of the burial chamber below the vertical shaft of Tomb 121, we also photographed surrounding architecture inside MMA 850. We did this after the geologist determined that the Egyptians might have recut and replastered certain walls of MMA 850's cult chamber, perhaps after Tomb 121's vertical shaft broke into the earlier tomb.

As a result of work in the 2001 season, pre-conservation epigraphic photography inside the tomb of Ahmose is now complete, except for some minor reshoots of the walls (two only!).

### *Epigraphic Survey of the Tombs*

#### *Tomb 72 (Rây)*

In 2001 the epigraphic goal of Theban Tombs Publication Project in the tomb of Rây was to resume making controlled epigraphic hand copies of the texts on the walls, especially those of the Transverse Hall, northern extension. Here the texts and scenes are quite clear without cleaning and conservation. We made a start of the scenes on the north and east walls there.

#### *Tomb 121 (Ahmose)*

During the 2001 season, the Theban Tombs Publication Project resumed work on the key plan that was begun in 1998 of the wall decoration inside Tomb 121. However, we were not able to complete this effort, as we had, otherwise, intended. Due to the unanticipated discovery of the connection between the burial chambers of Tomb 121 and MMA 850, in the final days of the season, we shifted our efforts to documenting that relationship.