

*University of Basel Kings' Valley Project***Report on work carried out during the field season 2015–2016**

Director Prof. Dr. Susanne Bickel  
Field-Director lic. phil. Elina Paulin-Grothe

**Abstract**

Work in the concession area of the side valley leading to the tomb of Thutmose III started on October 31, 2015 and continued until March 10, 2016 (with an interruption in December). The main effort this season concentrated on conservation work and on the analysis of the abundant fragmentary remains from KV 40: fragments from wooden objects, cartonnage, textiles, pottery, and jar inscriptions. The anthropological assessment of the fragmented human remains was continued. The clearing of an area between KV 40 and KV 26 was begun. The study of fragments of wall decoration from the tomb of Seti I<sup>st</sup>, KV 17, was continued.

We would like to express our sincere gratitude to the Ministers of Antiquities HE Khaled El-Enany and Mamdouh El-Damati and the Permanent Committee of the Supreme Council of Antiquities in Cairo and the Director of the Department of Foreign Missions, Mr. Hany Ahmed Abu Elazm, and to its branch in Luxor, to Mr. Sultan Eid, General Director of the Antiquities of Upper Egypt, Dr. Mustafa El-Waziri, General Director of Luxor, Mr. Talaat Abdel Aziz, General Director of Western Thebes, Mr. Mohamed Yahya Aweda, Director of Western Thebes, Mr. Adel Erfan, Director of the Missions Office Qurna, Mr. Ayman Ibrahim, Director of Valley of the Kings as well as to the representatives of the SCA office of Western Thebes, Chief-Inspector Mr. Hussein Fawzi Zaki and Inspectors Mr. Ahmed Rifai and Mr. Mohamed Wahbi Abu el-Haggag, for their kind and helpful support of our work in the Valley of the Kings.

We would equally like to thank Mr. Yahya Abd El-Alim, General Director of the SCA 'Carter Magazine' in Qurna, Mr. Ahmed Hassan, Director of the SCA Magazine, as well as Mr. Abd El-Ghany Abd El-Rahman, who kindly assisted our studies and documentation.

Participants during this season were: Susanne Bickel: Project Director, Egyptologist; Elina Paulin-Grothe: Field-Director, Egyptologist; Tanja Alsheimer: Archaeologist; Agnieszka Wos-Jucker: Textile Conservator; Erico Peintner: Conservator; Matjaz Kacicnik: Photographer; Faried Adrom, David Aston, Charlotte Hunkeler, Florence Mauric-Barberio, Nadine Meier, Yasmin Müller, Hans-Hubertus Münch: Egyptologists; Frank Ruehli: Medical Doctor and Palaeopathologist; Roger Seiler: Palaeodentistry, Radiology, Liliane Seiler; Nakita Frater and Sabrina Meyer: Anthropologists.

## 1. Documentation of finds from KV 40

Antique and modern looting and a heavy fire have caused severe damage to the burials and burial goods in KV 40. This fragile state of preservation poses an important challenge to the conservation and the assessment of the remains. The conservation and documentation work from the preceding seasons was resumed in preparation of the final publication of the archaeology and archaeological remains from KV 40 and KV 64.

Conservation work mainly concentrated on the fragments of cartonnage, wood, and textiles.

### Cartonnage

A great number of fragments of cartonnage (Fig. 1) from both Eighteenth Dynasty mummy masks and Twenty-Second Dynasty body containers were cleaned from soot, consolidated, and reassembled. The detailed observation of construction techniques of linen cartonnage was continued in order to distinguish production processes and possibly workshops. All the fragments were inventoried, classified and photographed.

Fig. 1. Restored fragment of linen cartonnage. ©UBKVP, M. Kacicnik.



### Textile

The consolidation and conservation of an Eighteenth Dynasty linen sock from KV 40 was completed (Fig. 2). The object is now brought back to its original shape, fixed on a soft support and stored in a special box.

A large quantity of textile fragments from the same tomb was analysed, categorised according to different qualities of fabric, and placed into storage containers. Next to ordinary linen

bandages of several qualities, textiles with coloured bands were identified as well as textiles with fringes or seams, pieces with traces of repair, and a large number of small linen bags filled with natron, sometimes connected with a string.



Fig. 2. Linen sock after restoration. ©UBKVP, M. Kacicnik.

### Wooden fragments

Classification and documentation of the large quantity of wooden fragments from coffins of both the Eighteenth and Twenty-Second Dynasties continued (Fig. 3). Complex pieces were documented in 3D in order to facilitate their visualisation and placement into their original position within a coffin structure. The analysis of the fragments aims at assessing the number and typology of coffins from both periods. Only a few fragments of wooden furniture are preserved.



Fig. 3. Fragment footboard of a 22<sup>nd</sup> Dynasty coffin. ©UBKVP, M. Kacienik.

### Pottery

The assemblage of pottery was continued. Some 150 large storage jars were documented and preliminarily classified according to nine types (fig. 4). The study of the inscriptions apposed on the shoulders of the jars in black and/or yellow hieratic script was continued. It confirmed the mention of the names of some thirty individuals from the personal entourage of Amenhotep III.: “king’s daughters”, “king’s sons”, and a number of women without title. Much attention was given to the subsequent stages of coating, inscription and super-inscription of the jars, as they reflect complex processes of use of the containers.



Fig. 4. Reconstructed storage jar with inscription of royal son Mertaui. ©UBKVP, M. Kacienik.

All the remaining jar stoppers from KV 40 (Fig. 5) were analysed and documented. Some 120 stoppers were preserved in relatively good shape. They consist of multiple layers of mud and linen straps. According to their size and diameter they were classified in eight groups. The correspondence between these groups and the different types of jars is a matter of future research.



Fig. 5. Jar stopper. ©UBKVP, M. Kacienik.

## 2. The study of human remains from KV 40

The anthropological assessment of all human remains was continued. All major fragments, and all the long bones were registered in a specifically developed database. Several skulls and long bones were reconstructed from numerous fragments. Based on the inventory of long bones and skulls, the number of buried individuals can now be posited as 84. A detailed appraisal of the sex and age distribution was also carried out. A clear predominance of female burials could be ascertained. The age distribution covers all segments from perinatal to late adulthood.

Skulls and jaws were systematically x-rayed in situ with a high quality portable x-ray generator. Numerous other fragments with visible pathologies or specific traits were also x-rayed. In addition, a complete photographic inventory was established of the several hundreds x-rayed fragments.

Subsequently, all the fragments were stored appropriately in special acid-free boxes and the boxes labelled accordingly.

Future research will focus on the detailed assessment of pathologies and mummification techniques.

### 3. Documentation of finds from KV 64

The objects from KV 64 stored in the SCA magazine were reassessed in order to take additional x-ray images from the coffin of Nehemesbastet from KV 64 and observe details of the coffin construction. The visible textiles of the mummy and its coverage with a bituminous substance (Fig. 6) were investigated. The documentation of the painted coffin decoration was collated and details of the painting checked with infrared light.



Fig. 6. Bituminous substance applied with fingers on the mummy of Nehemesbastet from KV 64. ©UBKVP

A complete 3D documentation of the coffin of Nehemesbastet and of the two Eighteenth Dynasty heads of canopic jars from the same tomb was carried out (Fig. 7). This documentation allows an excellent visualisation and detailed study of the construction and decoration of the pieces.



Fig. 7. Foto 3D Scan of head of canopic jar. ©UBKVP.

### 4. Preliminary investigation of KV 29

The shaft of KV 29 was opened and cleared in 2011. This year work resumed with a detailed documentation of the profile between

and



the shaft and the opening of a large room that turns from the shaft to the West. This room is entirely filled with debris brought in by rain floods. With the help of flashlights and of a telescopic camera, the extent of the room could be visualised.<sup>1</sup> The floods filled the room to the height of its original ceiling, which flaked off due to the humidity. This fill also covers possible passages to side chambers so that the architectural layout of the tomb cannot yet be assessed.

### **5. Mapping of the tombs**

After a check-up of the survey points and coordinates in the concession area, final checks on the plans and sections of KV 40 and KV 30 were undertaken. Parts of the surroundings of the tombs were surveyed and the area of the clearing between KV 40 and KV 26 was surveyed at regular intervals.

### **6. Photographic documentation**

An extensive photographic documentation of the newly reassembled jars and of a number of fragments from KV 40 was carried out.

In addition, a complete photographic coverage of KV 30 was prepared.



Fig. 8. KV 30, view from the central room C. ©UBKVP, M. Kacicnik.

### **7. Area in between KV 40 and KV 26 on the eastern slope of the wadi leading to KV 34**

---

<sup>1</sup> Work was carried out by Gérald Gafner, mandated by the Swiss Television.

The only excavation work carried out this season was located directly on the western hill slope, between KV 40 and KV 26 and the path leading to KV 34 (Fig. 9-10). The extension of the area measured 5,5m East-West and 11m South-North.

The bottom of the wadi was not yet reached at approximately 2.5m below the modern surface. The lowest excavated layer was covered with large limestone boulders and a hard *dakka*-floor with ashes and 18<sup>th</sup> Dynasty pottery sherds.



Fig. 9. Area between KV 40 – KV 26 and the path leading to KV 34, before clearing. ©UBKVP.

The western and southern profiles in Trench I showed no clear structures of modern or pharaonic levelling of the area. One layer of debris consisted of remains of sugarcane with some stripes of dark blue cotton clothes and a modern tobacco tin from the early 20<sup>th</sup> century. The same situation was encountered in last year's (2015) excavation trench in front of KV 64. The remains possibly stem from the team of H. Carter who worked in the area in 1921.



Fig. 10. Area between KV 40 – KV 26 and the path leading to KV 34, Trench II. ©UBKVP.

Between Trench I and Trench II was a huge limestone boulder, probably coming from the opposite side of the wadi, the area between KV 30 and KV 31. This boulder was probably carried away by floods and stopped on the lower hill slope. It divided the area into a zone without remains of flood, showing only loose debris of limestone and sand (Trench I) and a zone with a *dakka*-floor with ashes, 18<sup>th</sup> Dynasty pottery and big stone boulders accumulated in the path leading to KV 34 (Trench II). These boulders kept the flood away from the nearby tombs KV 64 and KV 40 and directed the water towards the middle of the valley.

In the higher levels of debris the pottery comes from the Ramesside tomb-builders, consisting of sherds of Nile silt plates, some of them used as lamps, and beer jars. Some funerary pottery of the New Kingdom was mixed among the remains. No sherds belonging to the missing parts

of storage jars from KV 40 or KV 64 seem to be among the pottery excavated until now outside the tombs.

The finds from the pharaonic period consisted, beside New Kingdom pottery, of few fragments of limestone ostraca, mainly written with red ink. Since this area has been already excavated by Belzoni, Loret, Davis and Carter, and the debris been shifted several times from place to place, it is not yet possible to identify the original resting places for the pharaonic workmen, who produced the ostraca, or their huts.

This year's excavation was not enlarged over the entire width of the path toward the West and the complete topographical situation in this area could therefore not yet be observed. The path could not be closed for excavation due to the visitors in KV 34.

In the end of the season the two excavation trenches were refilled and the eastern wall of the modern path built again on its original place.

The clearing of the area directly in front of KV 26 remains for the next season. We intend to study the entire topography of this side valley in the future in order to model its original shape and to better understand the layout of this group of 18<sup>th</sup> Dynasty tombs.

### **8. Study of the remaining pottery in KV 38**

In order to complete the documentation of pottery from the Kings' Valley, all remaining pottery fragments from KV 38 (ascribed to Thutmose I) were temporarily removed, cleaned and prepared for future documentation and analysis. Only a small amount of sherds subsists (mainly marl clay) that does probably not reflect the entire inventory of shapes of the original tomb equipment.

### **9. Fragments from the tomb of Seti I<sup>st</sup>, KV 17**

Research on wall-fragments from the tomb of Seti I<sup>st</sup> focused on joining pieces among those inventoried in the last years.

These fragments have various sizes and find spots. The small fragments were mostly discovered during the excavations of the University of Basel during the years 1998-2006. Some of them were also found at the same time in the wider area by Edwin Brock and Otto Schaden. The bigger fragments were found in the tomb itself. In 2015, about 300 pieces located in the side-room Jc were documented. This year several joining pieces and matches with smaller fragments could be identified (Fig. 11-12). Most of these assemblages belong to the pillars of the sarcophagus chamber or to the side-room Jb (sideboard and pillars). In March 2016 further decorated fragments were collected from the debris in room Jc. Some of them originate from room Jb and will be documented and studied in the following season. Room Jc still contains a large amount of modern debris mixed with wall-fragments; its clearance is planned for the next season.





Fig. 11. Fragments from the tomb of Seti I<sup>st</sup>, KV 17: lintel of passage between rooms H and I. ©UBKVP.



Fig. 12. Fragments from the tomb of Seti I<sup>st</sup>, KV 17: Room Jb, pillar Ba, offering of textiles, drawing by Giovanni Belzoni (Bristol City Museum and Art Gallery H 4481H) and fragments reassembling part of the scene. ©UBKVP.



## Photo legends

- Fig. 1. Restored fragment of linen cartonnage. ©UBKVP, M. Kacicnik.
- Fig. 2. Linen sock after restoration. ©UBKVP, M. Kacicnik.
- Fig. 3. Fragment footboard of a 22<sup>nd</sup> Dynasty coffin. ©UBKVP, M. Kacicnik.
- Fig. 4. Reconstructed storage jar with inscription of royal son Mertai. ©UBKVP, M. Kacicnik.
- Fig. 5. Jar stopper. ©UBKVP, M. Kacicnik.
- Fig. 6. Bituminous substance applied with fingers on the mummy of Nehemesbastet from KV 64. ©UBKVP
- Fig. 7. Foto 3D Scan of head of canopic jar. ©UBKVP.
- Fig. 8. KV 30, view from the central room C. ©UBKVP, M. Kacicnik.
- Fig. 9. Area between KV 40 – KV 26 and the path leading to KV 34, before clearing. ©UBKVP.
- Fig. 10. Area between KV 40 – KV 26 and the path leading to KV 34, Trench II. ©UBKVP.
- Fig. 11. Fragments from the tomb of Seti I<sup>st</sup>, KV 17: lintel of passage between rooms H and I. ©UBKVP.
- Fig. 12. Fragments from the tomb of Seti I<sup>st</sup>, KV 17: Room Jb, pillar Ba, offering of textiles, drawing by Giovanni Belzoni (Bristol H 4481H) and fragments reassembling part of the scene. ©UBKVP.