

University of Basel Kings' Valley Project
Report on work carried out during the field season 2017–2018

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Abstract:

The season 2017–2018 was mainly occupied with documentation and conservation work on the numerous fragmented remains from KV 40 and KV 64. The Egyptological and anthropological analyses of these undecorated tombs in the side valley leading to the tomb of Thutmosis III has led to significant new scientific insights on the period and social entourage of Amenhotep III, and on the phase of reoccupation of the tombs during the Third Intermediate Period. The main archaeological activity was dedicated during this season to the clearing of KV 61 and its surroundings. In the tomb of Seti Ist, KV 17, clearing and analysis of decorated wall fragments were continued. A showcase with all the major finds from the work of the last 10 seasons in the Kings' Valley was inaugurated at Luxor Museum.

Key-words: Valley of the Kings, tomb architecture, tomb decoration, conservation, anthropology, pottery, textile, cartonnage, royal family, Amenhotep III, Seti Ist, Third Intermediate Period.

Work in the concession area of the side valley leading to the tomb of Thutmosis III started on November 12, 2017 and continued until April 07, 2018.

The main effort this season concentrated on the completion of conservation work and analysis of the abundant fragmented remains from KV 40 and KV 64: textiles, fragments of cartonnage, pottery and jar inscriptions, and wooden objects.

The opening and clearing of KV 61 were carried out.

The clearing of room Jc in the tomb of Seti Ist, KV 17, was completed and the study of fragments of wall decoration from the tomb of Seti Ist was resumed. Small objects found in room Jc were analysed and the clearing of the area above KV 17 on its south side was started.

An exhibition vitrine was conceived for the Luxor Museum in order to present to the public the most important objects found by the University of Basel Kings' Valley Project during the last seasons.

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Participants during this season were: Susanne Bickel (S.B.), Project Director, Egyptologist; Elina Paulin-Grothe (E.P.G.), Field-Director, Egyptologist; Faried Adrom, Egyptologist; David Aston (D.A.), Egyptologist; Emanuele Casini (E.C.), Egyptologist; Andreas Dorn (A.D.), Egyptologist; Marina Estermann, Egyptologist; Sandra Gubler, student; Charlotte Hunkeler (C.H.), Egyptologist; Salima Ikram, Egyptologist; Christiane Jacquat, archaeobotanist; Matjaz Kačičnik, photographer; Mahmoud Ibrahim, project agent; Florence Mauric-Barberio (F.B.M.), Egyptologist; Yasmine Müller, Egyptologist; Erico Peintner, conservator; Daniel Reber, archaeologist; Lukas Richner (L.R.), archaeologist; Agnieszka Wos-Jucker (A.W.J.), textile conservator.



Fig. 1. The team of the University of Kings' Valley Project, January 2018. (Photo UBKVP, M. Kačičnik)

- 1. Conservation and documentation of objects from KV 40 and KV 64**
 - a. Textiles
 - b. Cartonnage fragments from the Eighteenth Dynasty
 - c. Cartonnage fragments from the Third Intermediate Period
 - d. Jar inscriptions and seals
 - e. Fire analysis in KV 40
- 2. Clearing of KV 61**
- 3. Clearing of room Jc in KV 17**
- 4. Clearing in the area above and south of KV 17**
- 5. Study of decorated wall fragments from KV 17**
- 6. Study of small objects from KV 17**
- 7. Study of pottery from KV 17**
- 8. Study of pottery from KV 37**
- 9. The area between KV 26 and KV 59 on the eastern slope of the wadi leading to KV 34**
- 10. Samples for analyses of materials**
- 11. Exhibition at the Luxor Museum**

1. Conservation and documentation of objects from KV 40 and KV 64

1a. Textiles

A large quantity of textile fragments from KV 40 was analysed, categorised according to different qualities of fabric, and placed into appropriate 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.

The analysis of the large quantity of textiles concentrated on specimen with specific features such as seams or hems indicating a previous use, as well as textiles with special decoration in the form of fringes or coloured stripes (Fig. 2). About 50 pieces with particularities were identified, some of them were vacuum cleaned for better conservation and photographed for the publication.

The large number of linen textiles from KV 40 could be documented and categorised in this season. All the textiles are now stored in KV 40, from where they originally come, except the very rare sock, restored in the previous seasons, which is now exhibited in the Luxor Museum. (A.W.J.)



Fig. 2. KV 40. Textile fragment with coloured stripes. (Photo UBKVP, M. Kačičnik)

1b. Cartonnage fragments from the Eighteenth Dynasty

The season was dedicated to the re-analysis of the cartonnage fragments that have been found within KV 40 and KV 64 and belong to Eighteenth Dynasty mummy masks. Most fragments were already checked during the last seasons, but needed re-examination, measurements and some new pictures. The previous arrangement of the cartonnage fragments into mask groups was augmented by an in-depth study of the framework of the cartonnage layering. Microscope photos of the cross-section of some fragments were taken. Moreover, samples of pigments, stucco and black substances were taken in order to analyse their composition. In particular, it will be interesting to know the exact components of the black substances, which are often (and probably wrongly) designed as 'bitumen' or 'pitch' within the scientific literature. Together with the help of conservator Erico Painter, fragments could be attributed to their respective groups and sometimes joined (Fig. 3). At the end of this season the picture of the situation was clearer, with a minimal number of 14 mummy masks having been detected in KV 40. (E.C.)



Fig. 3. Fragments of cartonnage mask. (Photo UBKVP, M. Kačičnik)

1c. Cartonnage fragments from the Third Intermediate Period

An intensive study of the Twenty-second Dynasty cartonnage fragments had already been conducted in the previous two seasons in fall 2016 and spring 2017. The aim of this past season was threefold: to gain additional information about manufacturing techniques and materials used, to study the epigraphy of the inscriptions, and to reconstruct the original sizes of the cartonnage cases as far as possible.

The analysis of manufacturing techniques and materials used was done in collaboration with Erico Peintner, the project's conservator. The results of these investigations enabled us to add further fragments to the already existing groups and thus to gain a more complete picture of the eight to ten cartonnage cases once entombed in KV 40. Of the eight frontal decoration schemes that could be reconstructed, it becomes clear that all decoration types and sub-types according to Taylor¹ are present. While the rear of most of the cartonnages was left blank, at least three were decorated. Interestingly, they all show images of demons with knives (Fig. 4), and none of them shows the otherwise very common *dd*-pillar.² Although a clear picture of the individuals buried within the cartonnages cannot be given, the two yellow and blue striped wigs suggest the burials of at least two men, and the three vulture headdresses indicate that of at least three women. Two other wigs are plain blue and frame a pink face. They might belong to either sex. The decoration style as well as some specific elements, such as the unguent cone indicate a dating to the second half of the Twenty-second Dynasty.

Since also the epigraphy forms an important factor in dating the cartonnage cases, the study of the inscriptions was a second aim. Besides supporting a dating to the second half of the Twenty-second Dynasty and in one case even to the end of the Twenty-second or early Twenty-fifth Dynasty, the epigraphy added the information of a possible number of hands responsible for the inscriptions and showed the complexity of the texts of each group.

A third major aim was to estimate the dimensions of the original cartonnage cases, as far as these could be constructed from the fragments. The best-preserved group allows a quite exact reconstruction of a height of 140 cm from feet to shoulder, and thus an approximate 160 cm original height. All the measurements will be compared to complete cartonnage cases from museums. Furthermore, the measurements were used to build a mummy-dummy for an easier taking of pictures of the groups of related fragments (Fig. 5). (C.H.)



Fig. 4. Decoration of the rear with knife-holding demons. (Photo UBKVP, M. Kačičnik)

Fig. 5. Matjaz Kačičnik taking pictures of cartonnage fragments laid out on a mummy-dummy. (Photo UBKVP)

1d. Jar inscriptions and seals

The systematic analysis of large quantities of textiles, which often formed big bundles, also revealed a number of small objects. Three small pieces of inscribed pottery were found, two of which completing already known jar inscriptions. Over 150 large storage jars from KV 40 could be reconstructed during previous seasons. Probably most of them were originally inscribed with a short hieratic text, writing the name and title of the deceased person for whom they were deposited in the tomb. One individual could have several large storage jars which seem to have contained the remains of funerary rituals. Some 100 jar inscriptions survive entirely or in part; they reveal the names of 28 different individuals, 24 of them being female.

Several entire or fragmentary seal impressions in clay also appeared within the textiles, sometimes attached to bands of linen which were used to close pottery containers (Fig. 6). Some impressions carry the necropolis seal, others the coronation name of Amenhotep III, Nebmaatre. (S.B.)



Fig. 6. Linen bands with clay seal. (Photo UBKVP, M. Kačičnik)

1e. Fire analysis in KV 40

All the walls and ceilings of KV 40 are marked by traces of heavy fire that coloured most parts of the limestone surface. An analysis of all the traces of coloration on the stone surface was carried out and correlated with the photographic documentation of the original situation of the floor. A number of selected heavily or partially burnt objects and bone fragments was reassessed in order to determine the degree of calcination and the presence of melted resinous substance. The flow of air within the tomb and possible developments of the fire were modelled. The situation turns out to be extremely complex and allows the reconstruction of several possible scenarios. The analysis of stalactites that formed after the fire, as well as of samples of the resinous substance will hopefully allow to determine the *terminus post quem* and clarify questions concerning the development of the fire. (L.R.)

2. Clearing of KV 61

The already known tomb KV 61, which was last entered by the Theban Mapping Project, was cleared from all the modern debris and rubbish which was thrown inside the tomb structure since the 1980ies. Harold Jones, who discovered the tomb working for Theodor Davis in 1910, mentions that not even a pottery sherd was found in KV 61,³ the last tomb found before Tutankhamun. Our aim was to protect the tomb and its entrance from further decay. The tomb's shaft opening lies deeper than the nearby modern path leading to the South and West. KV 61 is therefore in great danger to be flooded one day (Fig. 7). The tomb has a short shaft (Fig. 8) and its small single room is clearly unfinished; the ceiling is low and in bad condition.

In the Nineteenth Dynasty, the tomb entrance was covered by workmen's huts that were built in this area. Only a few stones of the walls of the huts are still existing. The entire

area was covered in the Nineteenth-Twentieth centuries with modern limestone heaps which surrounded KV 61 on all sides.

After clearance, the surface around the shaft was prepared for the iron cover. Due to the wide and irregular size of the shaft mouth and its situation on a slope, this cover had to be built on small modern walls.

Some fragments of ostraca were found around KV 61, most of them are affected by humidity which caused their surfaces to flake and their hieratic texts to be only partially readable. No indications for an owner of KV 61 nor even traces of a burial were found; as already the discoverers suggested, this unfinished tomb was probably never used.

The ostraca and pottery from this area will be studied in the next seasons. (E.P.G.)



Fig. 7. Area around KV 61. (Photo UBKVP)



Fig. 8. Shaft of KV 61. (Photo UBKVP)



Fig. 9. Protective structure over KV 61 and remains of workmen's huts. (Photo UBKVP)

3. Clearing of room Jc in KV 17

During this season, work continued in the undecorated room Jc of the tomb of Seti Ist, KV 17, which is situated behind the burial chamber and has four pillars. The aim was to clear the entire room from the debris that was deposited here since the discovery of the tomb by Belzoni in 1817. The walls of this room Jc show numerous graffiti. Big fractures run on its walls and ceiling and the pillar opposite the entrance has collapsed. Large limestone fragments from the ceiling were lying over and inside the debris, which reached in average of about 1 meter over the floor. The reason for the bad condition in this room is the *taffla* layer of Esna shale, which begins 1 meter above the floor level of the room.

The pillars and the ceiling are partly supported by wooden beams (Fig. 10), probably since the 1960ies. In this time Sheikh Ali Abd Elrasoul was excavating in the tunnel underneath the room Jc. The stability markers and gipsum on the walls are also from the 1960ies and indicate no structural movements since that time.

The oldest deposited debris, mainly fine *taffla* dust, was in the western end of the room and the debris in the eastern end consisted of many large wall fragments with decoration, mainly from the pillars of room Jb. The fragments seem to have been collected and deposited in room Jc during the last 200 years since the discovery by Belzoni.

In the middle of room Jc, the debris seemed to be very recent, deposited just in front of the entrance, which was rebuilt and consolidated by Howard Carter.

The clearing of room Jc was completed during this season, the room and the floor were cleared from dust, and room Jc now shows the entire floor of *taffla* with many cracks, some ancient chisel marks and the lower parts of the four walls with the change of limestone to *taffla*. Numerous fragments of small objects of faience and wood from the original burial equipment were found in the cracks of the floor or the lowermost sections of the debris (Fig. 11). The biggest boulders, mainly from the ceiling of the room, and many large sandstone fragments, probably originating from room J, where they probably have been lying under the alabaster sarcophagus over the tunnel, remain in room Jc. One decorated fragment with yellow painting still remains in Jc beside pillar 3, as it is too heavy to be transported outside. It was photographed and drawn for documentation together with the other decorated fragments. Its original location in the tomb is known to be on the south wall of room J. The fragment was probably brought into Jc during the building of the modern entrance. The documentation of the thousands of wall fragments and the identification of their original location in the tomb shall continue in the coming seasons. All the fragments are now stored in the tomb of Ramses X, KV 18, beside the tomb of Seti Ist. (E.P.G.)



Fig. 10. View of KV 17, room Jc, after clearing. (Photo UBKVP, M. Kačičnik)



Fig. 11. Cracks in the floor of room Jc with remains of faience objects from the burial equipment of Seti Ist. (Photo UBKVP, M. Kačičnik)

4. Clearing in the area above and south of KV 17

The clearing of the area on the southside of KV 17, above the tomb, was started. The debris clearly comes from the tomb of Seti Ist and consists of limestone chips in different sizes, and pottery, mainly sherds of beerjars, which the workers have used during their work in the tomb. No remains of funerary objects were found.

The aim of the work is to complete the collection of wall fragments of Seti Ist in the Valley of the Kings and to get possible further indications of the ancient work processes. The task will be continued in the following season. (E.P.G.)

5. Study of the decorated wall fragments from KV 17

The inventory of the decorated wall fragments found in the undecorated side-room Jc in KV 17 was continued. Between 2015 and 2017, 868 decorated fragments (SI-115 to SI-982) belonging to the damaged walls or pillars of the tomb were found there.⁴ In 2018 more than 1000 new decorated fragments were listed (SI-983 to SI-2067) and 585 of them were photographed. Most of them are of a small size, only some pieces are larger. Two newly recorded pieces complete the reconstruction of the lower part of the scene, showing the king running with an oar in his hand (Fig. 12). This scene belongs to a face of pillar A opposite to the entrance of chamber Jb, which was cut during the Nineteenth century. Other inscribed fragments belong to different faces of the second pillar (B) of this room. A bench, decorated with a cornice, runs along the walls of the side-room Jb: a large number of fragments belong to this feature and to the representations of tomb furniture (like beds and shrines put on sledges) figured below the cornice. Two joining fragments show the remains of a standard, so far only known from the drawings made by Belzoni at the time of the discovery of the tomb (Fig. 13). The doorway leading from the burial chamber J to the side-room Jb was decorated on both sides with the depiction of the goddess Hathor. Fragments belonging to the representation of the goddess depicted on the left-hand side were identified. Two joining pieces show the harmonious form of her face (Fig. 14). Other fragments with yellow background belong to the burial chamber: most of them belong to the damaged pillars. Two joining pieces show the interlaced hands of the king and the god depicted on the pillar E now entirely destroyed. (F.M.B.)



Fig. 12. Reconstruction of the scene of the running king from pillar A in side-room Jb of KV 17. (Photo UBKVP, M. Kačičnik)



Fig. 13. Fragments of a standard from room Jb of KV 17. (Photo UBKVP)



Fig. 14. Fragments from the face of Hathor from the doorway leading to room Jb. (Photo UBKVP)

6. Study of small objects from KV 17

The study of material belonging to the burial equipment of Seti Ist, found during the clearing of the side chamber Jc of KV 17 between fall 2017 and January 2018 was begun. The material is extremely fractured and no intact object remains. It consists mainly of parts of shabtis made of wood, faience or alabaster. Other finds are miniature faience vessels, inscribed with the names of Seti Ist, small faience objects like beads and shabti tools, different wooden objects, as well as pieces of alabaster belonging to the king's canopic box and vessels.

Over 700 diagnostic parts of feet of wooden shabtis of Seti Ist were counted, as well as over 600 small, non-diagnostic feet fragments. More than ten diagnostic alabaster pieces of the canopic box of Seti Ist were documented. They will be further studied together with the fragments of the canopic box, which were found by the University of Basel "MISR Project" between 1998-2005 outside of KV 17, and which are currently stored at the SCA 'Carter Magazine'. This ensemble of fragments will allow to reconstruct the layout of the decoration of the canopic box, a central piece of the burial equipment of Seti Ist, only partly known until now. (A.D.)

7. Study of pottery from KV 17

Part of the season was devoted to the study of the sherds recovered from the tomb of Seti I, KV 17, room Jc. Not surprisingly, this material can be dated to the early Nineteenth Dynasty, and, with one exception (a Marl D amphora base), consisted entirely of Nile clay sherds deriving mostly from bowls. Of interest is the fact that some of these bowls had been used as paint pots, whilst sherds from other vessels had been used for mixing plaster. We seem, therefore, to have here the remains of vessels actually used by the workmen who were decorating the tomb. (D.A.)

8. Study of pottery from KV 37

Work this season continued with the recording of the pottery from KV 37 found last year, which consisted entirely of early to mid-Eighteenth Dynasty storage jars, many of which had been badly water eroded. Altogether there were the remains of 29 jars. (D.A.)

9. The area between KV 26 and KV 59 on the eastern slope of the wadi leading to KV 34

Investigations in the area on the eastern hill slope between KV 26 and KV 59 and the path leading to KV 34 continued this season (Fig. 15). The extensions of the investigated area measured 5,5m east-west and 11m south-north.

The eastern profiles in Trench IV-V showed no clear structures or layers of modern or pharaonic levelling of the area. The pottery sherds, which were found in this area, mainly date to the Eighteenth Dynasty like the pottery from the neighbouring tombs KV 26 and KV 59. Some sherds join vessels from KV 26. All the debris probably comes from modern shifting along the path leading to KV 34. Parts of this area have been excavated already by former archaeologists like Belzoni, Loret, Carter, Davis, etc.

This year's excavation reached the surface level of the tomb KV 59, which is built at the foot of the cliff on the east side of the path. The complete topographical situation in this area could not yet be assessed; the floor of the wadi still lies under the modern path. Numerous big stone boulders were found in this area, which have been moved by ancient rain floods. 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 and exterior aspects of this group of Eighteenth Dynasty tombs. This intervention will also have a positive effect for the protection of the tombs in the lower slopes of the area, specially KV 32, 37, 59, 61, 40, and 64 which all are in danger of being reached by future floods. All the tombs in the project's concession are now covered with iron doors, as a first step of protection. (E.P.G.)



Fig. 15. Area in front of KV 59 and KV 26. (Photo UBKVP)

10. Samples for analyses of materials

In order to better understand certain production processes, a number of samples were taken from materials used for the fabrication of cartonnage and funerary masks. Some organic materials were also sampled for analysis at Cairo University and the French Archaeological Institute. We would like to thank Dr. Dalia Meligy for taking care of the transport of the samples to Cairo.

11. Exhibition at the Museum of Luxor

Six objects were transported from the Valley of the Kings to the SCA 'Carter Magazine' in Qurna and registered there on the 3rd of December 2017. Four objects were already registered there in earlier seasons. On the next day, all 10 objects were officially transported to Luxor Museum, escorted by police. We would like to thank all the authorities in Qurna for supporting this transfer. These objects are now shown in Luxor Museum in a new showcase, which was constructed according to the project's plans by Sameh el-Masry and his team from Cairo. The exhibition was inaugurated on the 25th of January 2018 in the presence of Mrs Elham Salah El Din, Head of Museums' Sector, Mrs Sanaa Ali, Head of Museums of Upper Egypt, Mrs Samya Abd el-Aziz, General Director of Luxor Museum, Dr. Mohamed Abd el-Aziz, General Director of the Antiquities of Upper Egypt, and Mrs Salwa el-Sheikh, cultural affairs officer at the Embassy of Switzerland.

The following 10 objects are now at the Luxor Museum (Photos UBKVP, M. Kačičnik):



Coffin of Nehemesbastet



Stela of Nehemesbastet, KV 64



Two Storage jars, KV 40



Linen sock, KV 40



Tapestry with the name of Ramses III, KV 31



Two Canopic heads, KV 64



Glass vase, KV 64



Sun dial, outside KV 29

¹ J. H. Taylor Taylor, J. H. 2003. 'Theban Coffins from the Twenty-second to the Twenty-sixth Dynasty: Dating and Synthesis of Development'. In N. Strudwick and J. H. Taylor (eds.) *The Theban Necropolis. Past, Present and Future*: 95–121. London: British Museum Press, 105-106.

² J. H. Taylor Taylor, J. H. 2003. 'Theban Coffins from the Twenty-second to the Twenty-sixth Dynasty: Dating and Synthesis of Development'. In N. Strudwick and J. H. Taylor (eds.) *The Theban Necropolis. Past, Present and Future*: 95–121. London: British Museum Press, 107.

³ N. Reeves, *Valley of the Kings: The Decline of a Royal Necropolis*, London, 1990, 171–172.

⁴ Numbers SI-001 to SI-114 were previously given to the fragments found in the side-room Jd.