# Documentation and Conservation study of S.S 37 Wooden Coffin and Mummy Cartonnage, Egyptian Museum in Cairo\*

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#### **Abstract:**

Late period coffin set, consists of an anthropoid wooden coffin, cartonnage with an intact mummy. The set were found at the basement of the EMC during the work season in 2004. The current study aims at creating records of S.S 37 through research its archeological context as far as possible and to study its materials, layers, pigments and techniques of manufacturing using non destructive investigation and analysis techniques. The conservation approach aims to preserve and stabilize the wooden coffin and the mummy cartonnage (fig. 1&2) to be exhibited in the Egyptian Museum.



Fig.1: Wooden coffin S.S 37



Fig.2: Mummy cartoonage S.S 37

# Archaeological Background and Iconography:

The study case has only a single document of information, a report written by Maspero in 1901, indicating that the object entered the museum collection in 1900. It was left unregistered since then. In Maspero's report (Fig. 3), he addressed that, it was discovered by Petrie excavating in Lahon, Fayoum. The set were found at the basement of the EMC during the work season in 2004 (Fig. 4).

The type of the coffin and cartonnage suggests a middle Egypt type of third intermediate and late period. The broad collar, pendants, rosettes and other decorative elements suggesting belonging to the late period stylistic motifs. The central inscription, which is repeated on both the coffin and the cartonnage representing the offering formula addressing the god Osiris. The name of the owner is demolished in both, since the lower part is damaged.



Fig3: black and white photograph shows the object by the time of discovery, Maspero's report in 1901



Fig. 4: photo of the dismantled wooden coffin, storage of the Egyptian Museum in 2004.





Fig. 5&6: Inscription, offering formula addressing the god Osiris on S.S 37 wooden coffin and mummy cartonnage

### Wooden coffin: Typology of layers and condition:

The wooden coffin is 1.93 m long (Fig 7). It consists of multi-layers: wood, gesso layer, additives-mud and straw- and painted layer. There are different pigments that used in the decoration of the coffin: white background covered with blue, red, black and yellow for inscription and decorations.



Fig.7: Dimensions of Wooden coffin S.S 37

The state of the wood is very poor (Fig. 8), the coffin is dismantled into many pieces (lid, base, 2 sides and fragments), and some pieces are still joined together by wooden dowels and ropes (Fig 9). The head block has areas of loss, cracks, breaks and disjoints.







Fig.8: Decayed wood and dowels hole in the side wood board

Fig.9: Areas of losses, joints and dowels in the head block and lid board

#### Mummy cartonnage: Typology of layers and condition:

The mummy cartonnage is 1,80 m long, the pigment and painting palette is quite similar to the one in the wooden coffin. Its state of preservation appears to be moderately stable except the lower part (Fig. 10) that suffer some losses, cracks. The lower part -foot area-has a severe damage (Fig 10, A). It suffers a severe damage, textile bandages are directly exposed and the gesso layer and the painted layer were almost lost except in small part that is Powderly loose. The cartonnage has areas of loss (Fig 10, B), crumble, distortion and covered heavily with dust, some black greasy stains was located in the right side. It has irregular surface, slightly push-up areas (Fig 10, C) that possibly resulted from the positioning of the mummy beneath, there are some areas of abrasion, micro cracks (Fig. 10, D), and scratches in the painted layer. The pigments are vanished in some parts of the cartonnage.









Fig.10: Condition and deterioration: cracks, losses and stain

It is noticed that the crack in the head block (Fig. 11) has a space beneath and the mummy (nearly 24 cm) could be located in the collar area of the cartonnage. It was also noticed that the proportion of the face is considered to be small comparing to the rest of the body. By investigating the lower part, the instep bones are missing in both legs . According to insights and measurements the skull is dislocated and the instep bones are missing —as shown in virtual structure of the mummy— (Fig. 12). The mummy will be examined by radiography to allocate the mummy and determine the skull location, give us more information about age, gender, cause of death and possible diseases.





Fig.11: Crack in head block

Fig.12: Virtual structure of the mummy's position inside the cartonnage

The exterior textile wrapping consists of three pieces of linen (90cm × 91 cm, 36cm × 29 cm, 100cm x 56 cm) possibly reused, the textile structure of the pieces is plain weave 1/1. Macro photos taken by Dino-Lite 2.0 USB digital microscope shows different pieces of linen dyed with blue, traces of resin was found between wrapping. Evidence of microbiological infection is widely found (Fig. 12).









Fig.13: Condition of textile, traces of resin and microbiological infection

# Conservation approach (ongoing):

#### Wooden coffin:

The wooden pieces is reassembled together using replicated wooden dowels to retain its original shape (Fig. 14), filling materials is used to fill in the gaps between wood. Disjoints reattached using paraloid B72 and fragile pieces is consolidated using Klucel G 15% in alcohol.

# Mummy Cartonnage:

Mechanical cleaning to remove accumulated dust using soft sponges, wetting the folded areas to flatten the cartonnage (Fig. 15), specially in the face, head and left side. Preliminarily Consolidation for the damaged lower part of cartonnage using klucel G 15% in alcohol before working on textile wrapping to preserve the painted detachments and avoid future loss.

#### Textile:

Prior to any cleaning action each textile was supported temporarily between two layers of plotting papers for cleaning and flattening using soft brushes and puffer (Fig. 16). For areas covered by heavy accumulation and dust, conducted by deionized water and alcohol spray 70%.







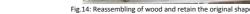


Fig. 15: Flattening cartonnage original shape

Fig. 16: cleaning, re-wrapping textile wrapping