

RESEARCH ARTICLE

# The Petrie Museum's Collection of Funerary Wooden Models: Investigating Chronology and Provenance

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The Petrie Museum of Egyptian Archaeology at UCL houses a diverse collection of funerary wooden models. These objects, deposited in the tombs of the Egyptian elites between the end of the Old Kingdom and the Middle Kingdom to guarantee the deceased a wholesome rebirth, come from excavations carried out or purchased by W.M F. Petrie in Egypt. Complete or fragmentary, with an often unclear archaeological context, these objects constitute a particularly interesting source of information on wood craftsmanship. The comparative study of this material will shed new light on this form of artisanal production by specifying its chronology and origins, but also on the archaeological works and the acquisitions of Petrie in Egypt from the end of the 19<sup>th</sup> century.

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The Petrie Museum of Egyptian Archaeology at UCL (PMEA) houses an abundant collection of funerary wooden models, comprising about 350 inventoried objects. Some of the inventory numbers correspond to groups of fragments (e.g. Lahun UC6670), while the provenance and dating of several have remained uncertain or unknown until now. In addition, the precise identification of certain pieces in the collection has long awaited revision. The study of the wood collection of the Petrie Museum is part of the TRACER Project ("*Tree Roots: an analytical culture' of economy and religion – case-study Egypt 2050–1550 BC*"), a Marie Skłodowska Curie Fellowship running at the Institute of Archaeology (UCL) until November 2018, and whose main objective is to study woodcraft as a societal

tracer in Middle Bronze Age Egypt. The study of this vast corpus from a novel technical and stylistic point of view sheds a new light on the collections of the Petrie Museum, thus highlighting the archaeological value of these artefacts collected by the Egyptologist W. M. F. Petrie at the end of the 19<sup>th</sup> century (Bierbrier 1995).

Wooden funerary models representing people or everyday scenes of life were used by the Egyptian elite as funerary equipment between the end of the Old Kingdom and the Twelfth Dynasty (c. 2350–1850 BC) (see Breasted 1948; Eschenbrenner-Diemer 2017; Tooley 1989). These objects, which generally represent the production of food (brewery, bakery and butchery), granaries, boats, agricultural scenes and sometimes craft scenes, were placed near the deceased so that the latter would not lack anything in the afterlife. During the Middle Kingdom a new type of model was introduced, while

other types fell out of use: the representation of the transport of the deceased to the holy city of the god Osiris in Abydos. Faced with changes in religious thought during the Twelfth dynasty, and with the introduction of new needs of the dead to guarantee rebirth, wooden models disappeared from the funerary equipment after the reign of Sesotris III (around 1850 BC). The examination of wooden models reflects important political and religious changes, ignited by new funerary customs and beliefs between the Sixth and the Twelfth dynasty, and highlights the geographical, historic and social context associated with their manufacture.

The funerary models preserved at the PMEAs come mainly from the archaeological site of Sedment excavated by Petrie between 1920 and 1921 (Petrie and Brunton 1924). Contrary to Petrie's conclusions,

the examination of the themes, style and techniques used in this local corpus shows that they are all dated to between the end of the 11<sup>th</sup> and the beginning of the 12<sup>th</sup> dynasty. Indeed, they can be compared with other models discovered in situ, in particular in Asyut, Meir and Saqqâra, which are clearly dated from this period.

The Sedment corpus contains 227 objects. Of these, 52 have a specific context, with a tomb number associated with the object. However, stylistic examination of the fragments preserved at the PMEAs, compared to the furniture found in situ, identified 176 additional fragments and figurines as coming from the Sedment site (see **Figure 1**). The second set of wooden models whose archaeological context is known (52 fragments) is the one from the N17 tomb discovered at El-Lahun (West Hill) to which must probably



**Figure 1:** Localisation of wooden models provenances. (©GED).

be added six additional fragments (UC6683–4; UC7402; UC7431; UC7436; UC7467). Indeed, since the N17 tomb is the only one to have delivered funeral models (cf. Petrie and Brunton 1923: 33–34), these six fragments discovered in Lahun most probably come from the N17. Finally, the last set of wooden models preserved in the PMEA collections, a total of 42 objects, mainly human and animal figures, correspond to artefacts of unknown or erroneous provenance. We will only deal here with models coming from Sedment or identified as originating from there, and the 14 models of unknown provenance which could be attached to the workshop of Meir in Middle Egypt (see **Figure 1**). The models from the tomb N17 will be the subject of a separate article.

### **The Funerary Wooden Models from Sedment**

Sedment is located south of Fayoum about 150 km from Cairo and is now attached to neighbouring villages on the edge of the desert (Seidlmayer 1990). It has long been considered the necropolis of the city of Herakleopolis, capital of the Northern Kingdom in the First Intermediate Period, during which time Egypt divided into two kingdoms (Willems 2010). The necropolis of Sedment probably houses the graves of the local elites of the early Middle Kingdom, a hypothesis that has been confirmed by the work of H. Willems and S. Seidlmayer, who date most of these graves to the early 12<sup>th</sup> dynasty. Sedment's necropolis revealed a significant concentration of small, modest tombs dated by Petrie to the First Intermediate Period, according to his theory of "degeneration" applied to the pottery discovered on site: *"About the end of the 9th dynasty, period 4, the work is not so good, but is not degraded... On reaching the 10th dynasty, period 5, the work is clearly poorer... Later and more degraded figures probably belong to the 11th dynasty"* (Petrie and Brunton 1924: 7). Many funerary wooden models were discovered there and are today divided between different museum collections (PMEA;

Manchester Museum; National Museum of Scotland, Edinburgh; NY Carlsberg Glyptotek and the National Museum of Denmark, Copenhagen).

The wooden models discovered at Sedment present workmanship of stark simplicity and crudeness, mainly using a wood with fibrous grain and light colour, close to the characteristics of the *Ficus sycomorus* sp. In order to specify the type of species used, analyses were carried out in the framework of the TRACER project. Figurines, filiform with stick arms, are roughly cut just like the bases on which they are fixed. The legs of the figurines are inserted into the base, the feet simply shaped in stucco at the base of the leg. These have often disappeared because of their fragility, leaving only an imprint. The bases are stuccoed and painted. The themes treated conform to the general corpus of early Middle Kingdom models: food production, grain storage, navigation and transportation characterise the majority of the corpus. No model of crafts or agricultural scenes were discovered at Sedment. One of the funerary models from the site shows the rare scene of the deceased on a sedan chair. The only other example known of this type is one that shows the deceased seated on a sedan chair listening to music with his wife (Saqqara, Cairo JE 39130).

The style of the Sedment models is simple. The figurines have a rather coarse face with white eyes surrounded by black, are enhanced with polychromy. Their wigs are round and tall in an immediately identifiable style. The loincloths, painted white and covered with a rarely-preserved piece of linen, cover the legs up to mid-calf. The food preparation scenes combine bakery, brewery and butchery, a reliable archaeological marker for the identification of scenes belonging to the first half of the Middle Kingdom. Moreover, the local craftsmen do not seem to have attached much importance to the question of proportions, the figurines being generally oversized. This regional production is characterised by its abundance, with the same characteristics being found in



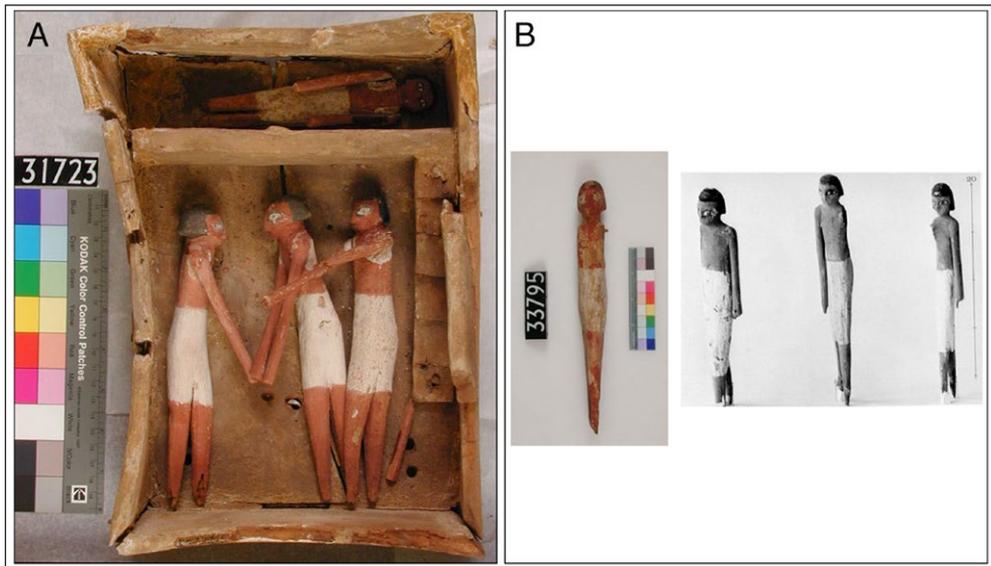
**Figure 2:** UC33638 (Courtesy of the Petrie Museum of Egyptian Archaeology, UCL) compared with a boat from tomb 2127 (National Museum of Denmark 7546) (cf. Jorgensen et al. 2002: 56–57).

several contemporary graves discovered by Petrie. Several craftsmen's hands seem to be responsible for the models produced in the Sedment region, the period of production and use of which extends between the end of the 11<sup>th</sup> dynasty and the beginning of the 12<sup>th</sup> dynasty.

The examples from Sedment preserved at PME have been compared with other sets of funerary models discovered at Sedment, now in museums throughout the world. These comparisons made it possible to link some fragments in the PME to archaeological assemblages discovered in context. For example, among the many models identified as coming from Sedment, the UC33636–9 figurines, of unknown provenance, are identical to those of three contemporary tombs, well dated to the end of the 11<sup>th</sup> dynasty (see **Figure 2**). The first one is the tomb 2127 of Nekhet-Kawi. These models (offering bearer National Museum of Denmark 7545; granary National Museum of Denmark 7549; food production National Museum of Denmark 7548; two boats National Museum of Denmark 7546–7) were discovered with the rest of Nekhet-Kawi's funeral equipment,

which contained among others the wooden statue of the deceased (National Museum of Denmark 7531) and his two coffins (Carlsberg Glyptotek Copenhagen AEIN 1585–6) (Jorgensen et al. 2002: 47–67). The second tomb is the tomb 1525 from which the sedan chair (Manchester Museum 6596a–e) and a granary (Manchester Museum 6601) originate. The last tomb is the tomb 374, in which four wooden models were discovered depicting: food production (Bruxelles MRAH E5798d); an offering bearer (Bruxelles MRAH E5798e); a boat (Bruxelles MRAH E5798a) and a granary (Bruxelles MRAH E5798b) (cf. Petrie and Brunton 1924).

Similarly, the UC31813–4, UC33621–25 and UC33795–33800 figures, of unknown provenance, are similar to the models found in tombs 2105 and 2112. Tomb 2105 housed two boats (Chicago OI 11492–3), offering bearers (Chicago OI 11496), a granary (Chicago OI 11494) and a food production scene (Chicago OI 11495). Tomb 2112 housed a food production scene (no number) and two boats (Edinburgh NMS a.1921.1658-9). These two graves also have identical pieces of furniture (jars, grain



**Figure 3:** **A)** Granary UC31723 Courtesy of the Petrie Museum of Egyptian Archaeology, UCL compared with **B)** figures found in the temple of Mentuhotep II at Deir el-Bahari (late 11<sup>th</sup> Dynasty) (cf. Arnold 1981: plate 17a).

wheels, tubs, quivers, sails) with different models of unknown provenance preserved in the Petrie Museum (Quiver UC33883; jars UC31763–4; small beer jars UC31766; rolled sail UC33831; tall container UC31743; grinding wheel UC33807). Finally, the granary UC31723 is similar to the one discovered in tomb 2105 (Chicago OI 11494). All these elements can also be compared with the numerous fragments of models dated to the end of the 11<sup>th</sup> dynasty (see **Figure 3**), which were discovered by D. Arnold in the funerary temple of Mentuhotep II at Deir el-Bahari, both in terms of style and manufacturing techniques used (Arnold 1981). If these chronological indices confirm the proposed dating of these objects discovered at Sedment, they raise the question of the origin of the craftsmen whose work was discovered in the necropolis. The sending of wood craftsmen from the Theban region to Middle Egypt has already been demonstrated (Eschenbrenner-Diemer 2017). The examination of Sedment's models could, therefore, shed new light on this phenomenon which is still poorly understood for wood craftsmanship.

Various fragments attached to the Sedment site and preserved at the PMEA were able to be compared with material from a second production site that we were able to date from the beginning of the 12<sup>th</sup> century. These include seven figures of sailors (UC31880–6), several bucket models (UC31721; UC31743) and oars (UC31840–8; UC33862–9), all of which have been compared to the funeral models found in the tomb of Wadjehotep (Petrie and Brunton 1924: 10–11). Like the other graves discovered by Petrie at Sedment, tomb 2016 is erroneously dated to the First Intermediate Period. Wadjehotep's burial furniture, in particular his coffin, was compared to that found in Gemniemhat's grave (Jorgensen et al. 2002) whose dating has recently been revised and corresponds to the first half of the 12<sup>th</sup> dynasty, more particularly under the reign of Amenemhat I (Eschenbrenner-Diemer and Russo 2015).

If complete scenes are practically absent from the corpus of Sedment models preserved at the Petrie Museum, the abundance of fragments gives some indication of the diversity and profusion of the scenes that originally existed, giving a better idea of the

typology of wooden models from Sedment: offering bearers, boats, granaries and food production constitute the major part of this production. The numerous birds (UC31774–81; UC31783) and baskets (UC31767–72; UC31784; UC31803; UC45827) found as isolated elements make it possible to estimate the number of lost offering carriers, that is to say at least nine offering bearers lost. In addition, the majority of the figures in the PMEA are seated, with some sets using the same technical and stylistic features. They correspond to members of boat crews, such as three groups of figures: UC31864–86; UC33624–35 and UC33640–51. The presence of mast rests confirms the importance of boats in Sedment's corpus, in accordance with the contemporary production of funeral models. Examples include UC31796, UC31834 and UC33666. Several model fragments have been identified as gangplanks from boats, but these are actually granary stairs (UC33836–7), as ancient Egyptian boats never used this type of equipment. Despite their particularly rough and untidy character, the Sedment models show a real vivacity in their modelling, the figurines being generally oversized compared to the elements of the furniture or the structure in which they are installed. Once again, these are mainly granary models (e.g. Manchester Museum 6601; Chicago OI 11494; Copenhagen NM 7549). This dynamism is also found in other contemporary necropolises, in Beni Hassan (tomb 116) and Deir el-Bersheh (tomb 10A) (cf. Freed and Doxy 2009: 151–177; Garstang 1907: 70).

### **Restoring a Lost Provenance: The Case of the Funerary Wooden Models from Meir**

A group of 15 funerary models, of unknown provenance or supposedly originating from Sedment were also examined. These are two boats (UC16402; UC75868), one cow (UC45819) and 12 male figures (UC31727e; UC31750–2; UC31829; UC31850–1; UC31870, UC31872–3; UC33614–15; UC75616). The male figures, isolated on the

boats, possess all the following characteristics: the woodworking is of good quality and executed in a neat style. The musculature is detailed, faces are sculpted and painted, wigs of specific 'ball form' are cut carefully. The loincloth is incised in the waist and the calves and the backbone of some figures is also incised. The feet are generally made from the same piece of wood and, when the figure is standing, pegged in the base. Seated figures do not usually have feet. All of these technical and stylistic characteristics correspond precisely to the production of models at the Meir workshop which reached its peak in the first half of the 12<sup>th</sup> dynasty. These fourteen models and figurines were compared to the general corpus of the Meir site (see **Figure 4**). They are similar in all respects to different scenes whose provenance is attested, particularly the boat UC16402 which is very similar to the boat preserved at the British Museum (EA25360) discovered in Meir. The second boat UC75868 is comparable to the boats kept in Chicago (Natural History Museum 184582) and Cairo (CG4798). Finally, the cow (UC45819) uses the same manufacturing technique and stylistic features as the two milking scenes from Meir (Lyon MFA 1969.401; Hildesheim Nr. 1690) (Asensi-Amoros et al. 2012).

Meir, located in Middle Egypt sheltered one of the most prolific wood workshops of the Middle Kingdom, producing models for the local necropolis, but also sending its productions to other localities in Egypt. Petrie never excavated Meir's necropolis. On the other hand, he mentions having acquired various objects in the auction room of the Egyptian Museum in Cairo, particularly the boat UC16402 (Petrie 1937). The other 13 models from Meir are probably the result of purchases made by Petrie.

The study of the collection of wooden funerary models housed in the Petrie Museum of Egyptian Archaeology highlights the various research questions that can be drawn out from this corpus of objects. Working comparatively with museum collections valuably demonstrates the fruitfulness



**Figure 4:** **a)** Boat UC16402 (Courtesy of the Petrie Museum of Egyptian Archaeology, UCL) of unknown provenance compared with **b)** a boat from Meir © British Museum EA 25360. **c)** Figure UC31727 (© GED) of unknown provenance compared with **d)** the crew members of the boat from Meir (b) (cf. Glanville 1972: 10).

of this approach, which gives a better understanding of the history, formation and relationships of collections. Long considered as being of little archaeological interest, often badly dated and poorly identified from both a geographical and typological point of view, wooden funerary models are in reality a particularly relevant corpus for the study of woodcraft production in the Middle Bronze Age. Their global analysis, combining material, technical, stylistic compared with other woodcraft productions (statues, coffins), is one of the keys to a better understanding of regional craft identities and trade networks. All of these components reveal the evolution of the material and funerary needs of the ancient Egyptians, highlighting how woodcraft may act as a tangible societal tracer.

### Competing Interests

The author has no competing interests to declare.

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