



RESEARCH ARTICLE

(Re)assembling a boat

Exploring different body worlds of funerary models

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Abstract

'Yet in that dry, still, dark little chamber those boats and statues had stood indifferent to all that went on in the outer world' (WINLOCK, 1955: 7–8). This quote is part of an introductory narrative capturing the 1920 find of the chief royal steward Meketre's tomb models, where Winlock describes the 'spirits of these little servants' working 'eternally' for Meketre, demonstrating an interpretation of these models as being enlivened to serve their deceased owner, and these models having a lack of relations with the outside world (WINLOCK, 1955: 5–6). Both aspects—being enlivened to serve their owner and a lack of relations to the outside world—remain common to Egyptological thought. By tracking the changes of relations with and within a single object of a similar type and date to Meketre's models, *Model Solar Boat* (Michael C. Carlos Museum 2018.010.415), the potential of relational approaches to tomb models, in particular, body worlds (ROBB & HARRIS, 2013) and assemblage theory (HARRIS, 2021) to generate new questions and a more nuanced understanding of an object with a complex biography is exemplified. *Model Solar Boat* is made from at least three ancient tomb models, held together with modern pins and plaster. This case study focuses on two snapshots of time: the Middle Kingdom, when the ancient models were placed in burials, and the late 19th and early 20th when those models were modified into the object before us today. The different aims of the model are viewed in relation to the deceased's body, the ancient living community, and the encounters with 19th and 20th century bodies of knowledge.

Keywords: tomb models, solar boat model, body worlds, assemblage theory

إعادة تجميع مركب: استكشاف عوالم الجسد المختلفة في النماذج الجنائزية

الملخص

«ومع ذلك، في تلك الغرفة الجافة والمظلمة إلى حد ما، ظلت تلك القوارب والتماثيل واقفة غير مبالية بكل ما يحدث في العالم الخارجي» (WINLOCK, 1955: 7–8). هذا الاقتباس هو جزء من وصف تمهيدي يعرض اكتشاف مجموعة من النماذج الجنائزية في مقبرة كبير الخدم الملكي مكت-رع في عام 1920، حيث يصف وينلوك هذه النماذج ويُفسّر "أرواح هؤلاء الخدم الصغار" بأنها وجدت لتعمل "بشكل أبدي" من أجل مكت-رع، إذ يساهم هذا الوصف في تقديم تفسير لدور هذه النماذج الجنائزية باعتبارها نابضة بالحياة لخدمة صاحبها المتوفى، مع توضيح افتقارها لأي روابط تربطها بالعالم الخارجي (WINLOCK, 1955: 5–6). نجد أن كلا الوصفين، سواء أن هذه النماذج نابضة بالحياة لخدمة صاحبها أو أنها تفتقر لأي صلات بالعالم الخارجي، لا يزالان سمتين شائعتين لهذه النماذج في دراسات علم المصريات. يتتبع هذا البحث التغيرات التي طرأت على الصلات المرتبطة بقطعة واحدة من نوع وتاريخ مشابه لنماذج مكت-رع، وهي نموذج المركب الشمسي (متحف مايكل سي. كارلوس 2018.010.415). حيث يتيح هذا التتبع إمكانية دراسة النماذج الجنائزية من خلال نهج ترابطي، مع التركيز على عوالم الجسد (ROBB & HARRIS, 2013) ونظرية التجميع الفلسفية (HARRIS, 2021). يفتح هذا النهج آفاقاً جديدة لطرح أسئلة مبتكرة ويساهم في فهم القطع ذات التاريخ المعقد بدقة أكبر. تم صنع نموذج المركب الشمسي من ثلاث نماذج مقابر قديمة

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على الأقل، جُمعت معاً باستخدام دبابيس وجص حديث. تركز هذه الدراسة على لحظتين محددتين من التاريخ: الأولى تعود إلى عصر الدولة الوسطى، عندما وُضعت هذه النماذج القديمة في الدفنات، والثانية إلى أواخر القرن التاسع عشر وأوائل القرن العشرين، حين أُجريت تعديلات على تلك النماذج لتصبح بالشكل الذي نراه اليوم. تستعرض هذه الورقة البحثية الأهداف المختلفة لصناعة هذا النموذج، وتبحث في الصلات التي قد تربطه بجسد المتوفى، والمجتمع الحي في العصور القديمة، إلى جانب علاقته بمنظومات المعرفة التي تطورت في القرنين التاسع عشر والعشرين.

الكلمات الدالة: النماذج الجنائزية، نموذج المركب الشمسي، عوالم الجسد، نظرية التجمي

1 Introduction

Model Solar Boat (Figure 1) arrived in the Michael C. Carlos Museum in 2018 as a gift of the George Ricard Foundation, among over 1,500 objects of predominantly Egyptian origin. As an ancient object, *Model Solar Boat* falls into the category of grave goods known as tomb models. Tomb models, as a term, is generally used in Egyptology for three-dimensional painted scenes of agriculture, food and craft production, transport, and the bearing of offerings, but can also refer to miniature tools, weapons, food, and vessels that were placed in tombs and burial shafts across Egypt from the late Old Kingdom to the late Middle Kingdom (TOOLEY, 1989).¹ During the reign of Pepi II (c. 2246–2152 BCE), limestone statues of figures undertaking solo activities such as grain milling and attending a bread oven were superseded by predominantly wooden images of groups of figures undertaking similar activities (TOOLEY, 2001). These figured scenes continued to be deposited in burials and tomb shafts until the end of the reign of King Senwosret III (c.1840 BCE) (BOURRIAU, 1991: 11; TOOLEY, 1989: 63–68). The traditional interpretation of these tomb models was that they were enlivened in the afterlife to work on behalf of the deceased with whom they were entombed (eg. TOOLEY, 2001; FREED & DOXEY, 2009: 151).



Fig. 1: *Model Solar Boat*. Gift of the Georges Ricard Foundation. Michael C. Carlos Museum, Atlanta, GA, 2018.010.415 © Michael C. Carlos Museum, Emory University.

¹For recent discussions of the definition of tomb models and the distinction between miniatures and models, see DI BIASE-DYSON (2023), ESCHENBRENNER-DIEMER (2021), and NYORD (forthcoming-b).

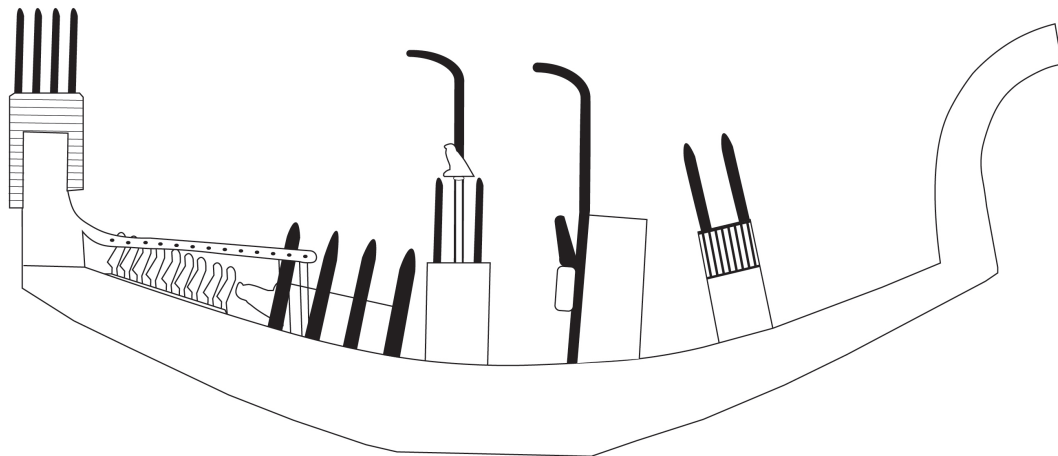


Fig. 2: A model solar boat, based on Egyptian Museum, Cairo, CG 4949. Line drawing by author.

Perhaps the most numerous of these models, and certainly the most studied, were boats, including sailing and rowing boats, funerary boats carrying a coffin or the mummiform deceased, kitchen, and fishing and fowling boats, among others (FREED & DOXEY, 2009: 166; MERRIMAN, 2011; REISNER, 1913; TOOLEY, 2001). On close inspection, *Model Solar Boat* is not identifiable with any single subcategory of ancient Egyptian tomb models. Through its title at the Michael C. Carlos Museum, *Model Solar Boat*,² it has been identified as a solar boat model. Solar boat models are identified by their unique furniture and bow and stern finials (Figure 2). Some of this unique furniture is found on *Model Solar Boat*, namely the striped bow finial, the falcon, and the box with four posts, which identify it, at least in part, as a solar boat model. However, solar boat models lack a crew, unlike the deck crowded with human figures that we see on *Model Solar Boat* (REISNER, 1913: 101–103). Thus, the figures and the furniture did not belong on the same ancient hull.

A series of technical examinations in 2020 and 2021 confirmed that the human figures and mast had been added using modern construction techniques to an ancient solar boat hull and that the striped rectangular box on the stern had been moved from its original position towards the centre of the deck (for further discussion, see WHITEHEAD, 2023b; WHITEHEAD, 2023a; WRIGHT & WHITEHEAD, forthcoming). A Computer Tomography (CT) scan showed dowel holes in the hull that had been filled with plaster and square profile drill holes for the mast and figures' legs (Figure 3). The latter is not in keeping with what we consider to be ancient Egyptian construction techniques. The dowel holes matched the expected locations of solar boat furniture (Figure 4). Therefore, *Model Solar Boat* was a solar boat model hull with some of the expected furniture, twelve figures and a mast attached in more modern times. The twelve human figures—ten standing and two crouching—and a mast were identifiable as having a place on a sailing model or funerary barque, based on comparisons to contemporaneous models from recorded archaeological contexts.

2 Theoretical Framework

Despite its strong connections to anthropology, Egyptological discourse is noted for privileging cultural historical approaches rather than engaging in broader theoretical discussions in anthropology and archaeology (HOWLEY & NYORD, 2018: vi). While there has been a recent trend to engage with frameworks from other

²It was known as 'Funeral Boat' and 'Model of a Funeral Boat' prior to its arrival in the Michael C. Carlos Museum's collection in 2018.

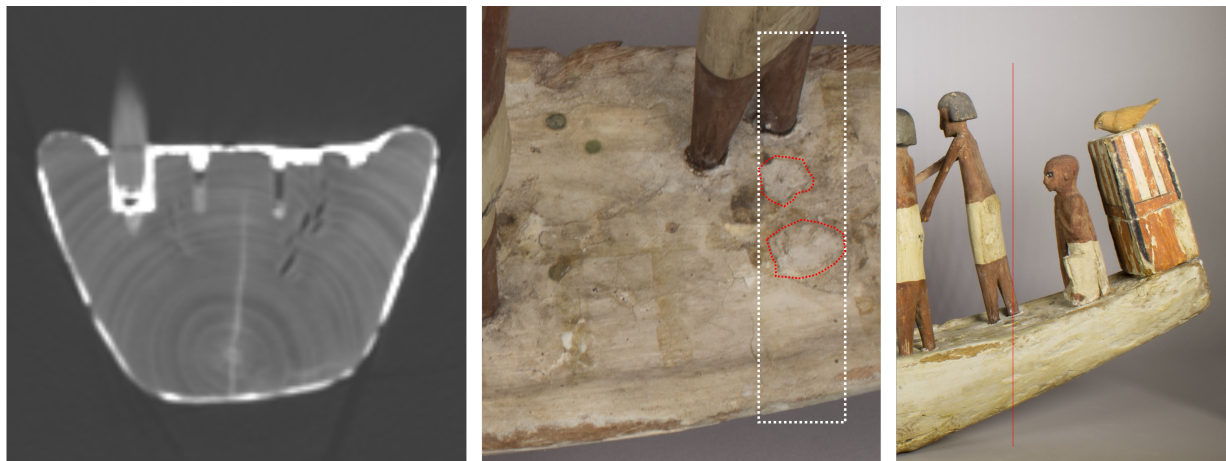


Fig. 3: Computer Tomography (CT) scan slice of *Model Solar Boat* (left) showing the thin covered-over dowel holes where the rectangular striped box was previously placed, the fill material on the deck covering the two holes (centre) and the location of the scan slice (right) © Michael C. Carlos Museum, Emory University.

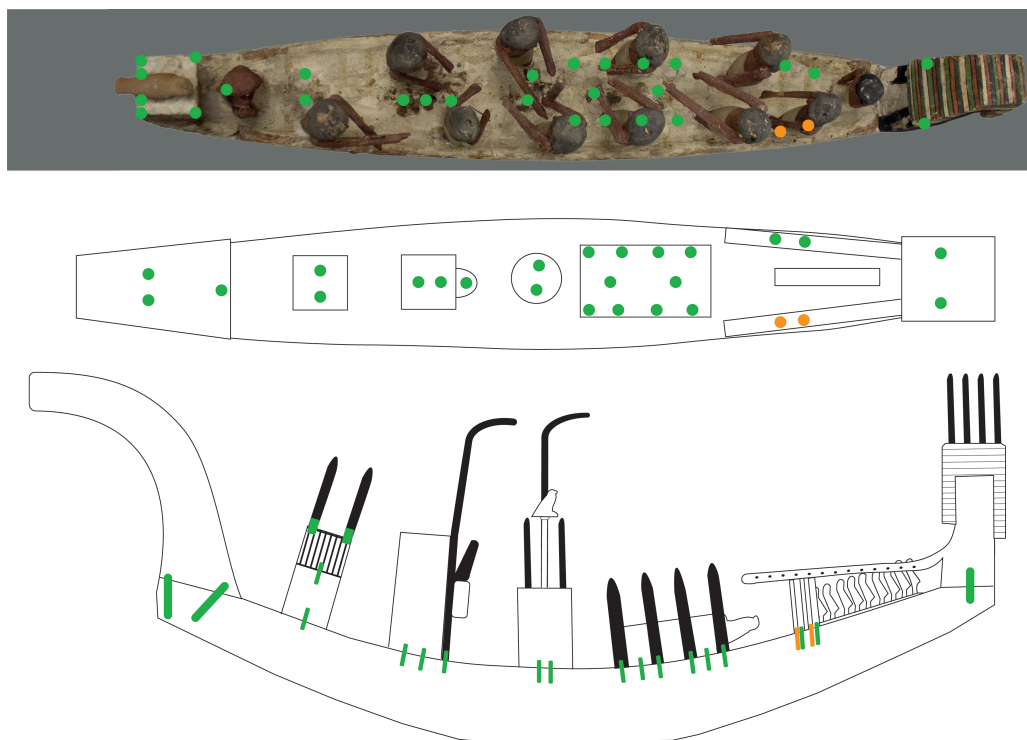


Fig. 4: Annotated birds eye view of *Model Solar Boat* with a map of the covered-over dowel holes (green) and two holes made for legs over where ancient dowel holes would have been (orange) identified from the CT scan. Line drawings by author; Photograph: © Michael C. Carlos Museum, Emory University.

disciplines and to take interdisciplinary approaches to answer Egyptological questions, this has often been a one-way street rather than an interdisciplinary dialogue. *Model Solar Boat* provides a case study to exemplify the usefulness of relational thinking, particularly the concept of body worlds, when examining an ancient Egyptian funerary object with a varied and extensive biography.

Body worlds, as defined by Robb and Harris, encompass ‘the totality of bodily experiences, practices and representations in a specific place and time’ and are ‘at the heart of how we understand the world’ (ROBB & HARRIS, 2013: 3). They argue that the body ‘is not a universally shared physical object whose historical continuity comes from its unchanging biological structure, but rather something emergent through history’ (ROBB & HARRIS, 2013: 4). This framework allows for an exploration of the complexity of the multiple ways of being human. It also allows for analysing ‘contact between different groups and change through time in new ways’ by avoiding presenting ontologies as singular and bounded (HARRIS & ROBB, 2012: 669). ROBB and HARRIS (2013: 26ff) show that body worlds allow for analysis at multiple scales and not just as a description but also by providing a framework to address time and causation. However, this framework is fundamentally anthropocentric, centring human bodies within its analysis, with non-human objects as part of these body worlds. In this case study, which centres on an object, *Model Solar Boat*, there is a need for the concept of a body world to expand to consider non-human bodies as being at the centre of an analysis. In doing so, this paper expands on the framework of body worlds using the terminology presented in the more recent discussion of Deleuzian assemblage theory by HARRIS (2018) and HARRIS (2021) and considers the interrelatedness of the terms of assemblage and body. Like a body within a body world, an assemblage turns our attention away from the final product—the body or assemblage as a final, unchanging product—to the process of becoming (HARRIS, 2018: 89). An assemblage ‘can be as simple as a molecule of water, composed of oxygen and hydrogen atoms, or as complex as a whole planet with the teeming forms of life that make it up’ (HARRIS, 2018: 89). They have two axes—machinic/enunciative and territorialisation/deterritorialisation—and assemblages are always both machinic, made of material elements, enunciative, made of immaterial elements, and constantly in the process of coming together and breaking apart (HARRIS, 2021: 62). Alongside the process of territorialisation and deterritorialisation, assemblages are also coded and decoded—as HARRIS (2021: 63) defines it, ‘if territorialisation refers to the gathering of different things together...then coding is their organisation,’ the order in which the elements are brought together. Deleuzian assemblage theory goes further than body worlds, as it no longer assumes that humans are the only or central players in the past HARRIS (2018) and HARRIS (2021). Both frameworks are fundamentally relational, and the latter recognises the agency of non-human beings, materials, and matter in these relationships, providing an effective post-anthropocentric vocabulary.

A relational, more-than-representational approach has only recently been suggested for tomb models (see NYORD, forthcoming-b), with tomb models as non-relational entities being central to the traditional interpretation of these objects for the last century. Therefore, taking this approach allows for different questions to be asked of *Model Solar Boat* and tomb models more widely. Pastiche tomb models, that is tomb models that have had elements added, taken away, or modified, after their disinterment, while common to museum and private collections alike, are often ignored or excluded from Egyptological scholarship or focused on solely for what they might be able to tell us about the ‘original’ ancient model. Taking *Model Solar Boat* as a case study to exemplify the usefulness of these frameworks and ways of thinking through this object allows for the examination of *Model Solar Boat* at several scales and at two snapshots in time in its process of becoming through time. This provides an opportunity to take seriously the understanding, function, and purpose of *Model Solar Boat* in its ancient context—at the time of its creation and deposition—and when it was (re)assembled into *Model Solar Boat*, which likely took place in the late 19th and early 20th century, rather than focusing on it as a static final product (HARRIS, 2018: 89; HARRIS, 2021: 65).³

³While the (re)assembly of *Model Solar Boat* may have been a process itself, the findings from the technical studies of *Model Solar Boat*, particularly the CT scan showing near identical drill holes for each of the figures legs and the same fill material being used to cover over the ancient dowel holes and to secure the legs into these new drill holes, suggest the (re)assembly of *Model Solar Boat*

3 Discussion

3.1 *Model Solar Boat* in the ancient context

The present-day *Model Solar Boat* consists of elements of what was in the ancient context at least three distinct objects, which were, most likely, a solar boat model and two or more sailing or funerary boat models. Each will be examined as assemblages within body worlds at different scales. Multiscalarity, afforded by viewing *Model Solar Boat* as an assemblage, ‘allows us to consider how different assemblages relate to one another, becoming part of larger assemblages, or breaking down into separate elements’ (HARRIS, 2021: 63). By seeing the ancient boats that now make the *Model Solar Boat* as assemblages at these various scales, we can explore the relationships that they have, are building, or maintaining within the tomb or burial chamber immediately following their deposition. Through this exploration, we can also posit alternative interpretations and shed light on the construction of the traditional Egyptological discourses for their purpose and function.

3.1.1 The ancient solar boat model

In the lead-up to the end of the reign of King Senwosret III, there were several changes in funerary practice, including a cessation of the production of wooden tomb models (BOURRIAU, 1991: 11). In this process, there was a move to burials with either a highly variable selection of objects, most of which were used in life, or the so-called court type burials (MINIACI & QUIRKE, 2009: 358). Court type burials typically consisted of anthropoid coffins encased in two rectangular coffins, one gilded, alongside burial goods, including royal insignia (GRAJETZKI, 2003: 54). The royal insignia, including staffs and weapons, are frequently referred to as Osirification regalia as they are found in later depictions of the hourly vigil (*Stundenwachen*) for Osiris (e.g. King Sheshonq III as Osiris on a funerary bed; GRAJETZKI, 2003: 51). Several staffs were broken at the time of deposition, so it has been concluded that they were likely used as part of the rituals before burial (GRAJETZKI, 2014: 10). Together, these objects transformed the burial into a funerary ritual chamber in a state of the perpetual hourly ritual that was performed using them during the funeral. Surrounding the deceased with these objects endowed them with an Osirian aspect (NYORD, 2014: 41; SMITH, 2017; SMITH, 2008). Right at the point of transition in burial goods, during the reigns of Kings Senwosret II and III, several objects, later found in the court type burials, were first found with burials containing earlier Middle Kingdom-style rectangular coffins and tomb models. Solar boat models appeared at the same time. However, unlike the Osirification regalia first appearing at this time, solar boat models, as three-dimensional objects, did not continue into the court type burials. They also did not appear in depictions of the ritual implements for the hourly vigil on the night before the burial nor in earlier Middle Kingdom coffin object friezes of this regalia.

A solar boat model was a rare form of tomb model, with four solar boat models with archaeological records. Two solar boat models from Dayr al-Barshā, that are now in the Egyptian Museum, Cairo, were found during Georges Daressy’s excavations in 1897 of burial shafts of Sepi II (CG 4953) and Sepi III (CG 4949) (DARESSY, 1900: 31–38; DE MEYER, 2016: 92–94).⁴ These two vessels have been dated to the reigns of Senwosret II–III (DE MEYER, 2016: 92–94). The other two were excavated from the area of the tomb of Imhotep at Lisht and are now in the Metropolitan Museum of Art, New York (14.3.21 and 14.3.22) (DE MEYER, 2016: 92–94; HAYES, 1953: 272; LYTHGOE, 1915: 147–148). Solar boat models (Reisner’s Type VI) share a particular set of boat furniture, as can be seen in the exemplar from the burial of Sepi III at Dayr al-Barshā (Figure 2; REISNER, 1913: xxv–xxvii). Based on the solar boats found at Dayr al-Barshā, along with

took place at one time (see WRIGHT and WHITEHEAD, forthcoming).

⁴There was a third boat described by DARESSY (1900: 26–28) as like a solar boat in the chamber of Sepi I and its current location is unknown: ‘une troisième barque ressemblant à celle du soleil été brisée lorsque le puits ayant été comblé après son ouverture par les voleurs’.

disassociated furniture found in the surrounding burials,⁵ Reisner described solar boat models as having ‘two distinct forms,—one with recurved uprising ends, and one with curtained bow,’ and the hull largely resembles that of ‘the funeral bark except in the form of the bow and stern-pieces’ (REISNER, 1913: xxv). A bow finial has either a striped top or has a striped cover and two chair armrest-like railings extending out. The bow occasionally has a beaded patterned wood panel or holes in the railings that may indicate such an object’s presence. The boat furniture from the bow to stern includes a board with several *ma’at*-feathers, which is found between the bow railings, a cuboid ‘object lying on the side with four finger-like black posts on each side’ with two falcons on the end facing upward, a cylindrical object with several black sticks, including one that is longer and curved like a *šms*-sign and a falcons or several falcons on top of a stick, a rectangular block with a *šms*-sign on the front facing towards to the bow, a cuboid object with four black posts on each corner, and, lastly, the stern is upturned and painted white and black (BARKER, 2022: 90; REISNER, 1913: xxv–xxvii; MERRIMAN, 2011: 102–103). In addition to the four solar boats with archaeological records, there has been some furniture found including two rectangular boxes found in recent excavations at Dayr al-Barshā (DE MEYER, 2016: 92–93), and two small falcons were found at Naga ed-Deir and Tebtunis (Hearst Museum PAHMA 6-20848) (KROENKE, 2010: 152). The falcons may have come from a vessel like Louvre Museum, Paris, E 17111, where two kites sit atop a canopy, albeit on a pastiche funerary boat—rather than a solar boat model (ESCHENBRENNER-DIEMER, 2014: 217). Like *Model Solar Boat*, there are several parts of solar boats that are now found on Rosicrucian Egyptian Museum, San José, RC 485, and Egyptian Museum, Cairo, CG 4860. There are also several vessels that have been erroneously identified as having solar boat model hulls. For example, Towneley Hall Art Gallery and Museum, Burnley, Eg 5, has been suggested to be a pastiche solar boat model (MERRIMAN, 2011: 196). However, it does not have the corresponding holes in the exposed wood of the deck for solar boat furniture. Similarly, Manchester Museum, MM 5883, was suggested by both ENGELBACH et al. (1915: 8) and MERRIMAN (2011: 102–103) to be a solar boat. The el-Riqqa excavation report detailed that the boat appeared ‘to have had a crew of hawk- and animal-headed gods’ (ENGELBACH et al., 1915: 8). It is clear from viewing the extant hull that it was probably a funerary boat as the holes for furniture are in keeping with a canopy and steering oar posts. The latter likely had falcon-headed terminals that were mistaken for hawk-headed gods and solar boat falcons.

Given the rarity of solar boat models, turning to other mediums with the same image is essential for further contextualisation of solar boat models. The closest contemporary two-dimensional depiction of solar boats is that of the Pyramidion of the Dynasty 13 king, Khendjer (Figure 5). The Pyramidion was found during the 1929–1931 excavations led by Gustave Jéquier of the small north chapel of the Pyramid complex of Khendjer at Saqqara (JÉQUIER, 1933: 19). As a royal funerary object, the Pyramidion provides a strong indicator of a royal context for the solar boat models. This connection to royal images and, therefore, the later royal insignia, Osirification regalia, might suggest that solar boat models had a function in developing and maintaining similar relationships to the Osirification regalia. However, the royal insignia did not just create a relationship with Osiris and his transformation. They also established relationships with other deities that wear or are associated with royal insignia, such as Re. Relationships with deities other than Osiris through royal regalia has similarly been argued for the beaded apron found in court-type burials, such as the burial of Senebtisi (Figure 6). This beaded apron, part of the Lower Egyptian costume of the king, was found depicted in the relief of King Senwosret I from his barque shrine at Karnak and was, by definition, royal regalia (PATCH, 1995: 95). Patch notes that the same beaded pattern was depicted draped over the railings of the solar boat. As shown in the Pyramidion of Khendjer, there was also a tendency of one of the two solar boats having a swallow depicted on the top of the bow (PATCH, 1995: 114). Within the solar boat model as an assemblage, the beading and the swallow are both machinic, in their media, and enunciative, with their meanings and associations. The machinic and enunciative elements of the beading and the swallow ‘work through both

⁵This furniture includes Egyptian Museum, Cairo, CG 4954 and CG 4957 (bow covers), CG 4958 (rectangular striped box), CG 4959 (*šms*-sign), CG 4961 (cylindrical object), CG 4962 (rectangular box with two falcons), CG 4963 (falcon), CG 4964 (squatting child figure), CG 4965 (board with *ma’at* feathers), CG 4966 (railings).



Fig. 5: Reconstruction of the Pyramidion of King Khendjer. Line drawing by author, after JÉQUIER, 1933: 21.

territorialisation and coding’ (HARRIS, 2021: 62). In the territorialisation of the swallow and the beading in close proximity, they were coded to have an association with the Lower Egyptian costume. The Lower Egyptian costume, as Patch argues, symbolises Re’s daily rebirth. Therefore, through this association, the solar boat models likewise created relationships between the deceased and Re and the solar cycle, in a similar way to the other royal regalia situating the deceased in the place of Osiris.

The Pyramidion of King Khendjer shows two solar boats—the day and the night barque—bow to bow. Through this image, the two boats in this position are representing and maintaining relationships with the solar cycle in its entirety (THOMAS, 1956: 79). The image is further reinforced by the depiction of two forms of the sun god, Re-Harakhty and Atum, standing above the solar boats facing each other. While there is limited archaeological evidence to conclude that solar boat models were deposited in pairs, the two solar boat models found together at Lisht (HAYES, 1953: 271–272; LYTHGOE, 1915: 147–148) the frequent occurrence in texts of the day and night barques together (e.g. CT I 184g [CT 44], CT III 75h [CT 181]), and their presence bow to bow in images such as the Pyramidion of King Khendjer (THOMAS, 1956) make a foundation for a strong argument that they were intended as paired objects. The concept of ancient solar boat models occurring in pairs suggests that they had the potential to encapsulate the perpetual cyclical relationship with the sun in its entirety. They, therefore, had the capacity to establish and maintain the relationships with all aspects of the sun god, the cycle of solar rebirth, and the king’s role in this journey.

In locating the deceased’s body as part of an assemblage with a solar boat model, or a pair of solar boat models, the deceased is placed in the position of the king as he is depicted in the Pyramidion of King Khendjer. With the strong royal connections both through the connection to the Lower Egyptian costume, and their



Fig. 6: Beadwork apron of Senebtisi. Tomb of Senwosret (758), Pit 763, burial of Senebtisi, MMA excavations, 1906–07. Rogers Fund, 1908. Metropolitan Museum of Art, New York, 08.200.29a.

presence on the Pyramidion of King Khendjer, solar boat models in the context of that larger burial assemblage create a situation, a body world, where the deceased is in the place of the king, specifically in his role as solar priest. The king, who is made present on the Pyramidion of King Khendjer as a *serekh* crowned with a Horus falcon passed between Re-Harakhty and Atum, is allowed to, as the accompanying text (CT 788) reads, ‘see the Lord of the Horizon as he crosses the sky’, which implies observing the sun from a more subordinate position. This imagery essentially places the king in the position of the sun being transferred between two solar boats—the day and the night barque. Through this image and CT 788, therefore, we have the king represented not only as the sun crossing the sky, but also observing it, ensuring its ongoing cycle. Drawing from Assmann’s concept of *unio liturgica*, with the language, knowledge, action, and ritual performance of the solar cult, the deceased was able to enter and join the liturgy and draw from the transformative power from the cult of the sun god (ASSMANN, 2005: 396–402). The deceased King Khendjer in the Pyramidion text and images is acting in the role of priest of the solar cult, ensuring the ongoing worship and maintenance of the solar cycle, and effectively merges with the sun god through his worship and cultic role. BORGHOUTS (1984), in discussing the Pyramidion of King Khendjer together with a Middle Kingdom text found on a stone box (Louvre Museum, Paris, E 25485), further demonstrated the ambiguity between worshipping and being the sun, and the roles that the deceased king is acting in. The end of the text on the stone box has several lines presumed to be spoken by Isis, in which she says that she has transferred the eyes from the morning barque to the night barque (BORGHOUTS, 1984: 714). BORGHOUTS (1984) pointed to the two *wedjat* eyes sitting in line with the two bows of the solar boats and below the *serekh* depicted on the Pyramidion of Khendjer as indicating this transfer. In this one image, we have the transfer of the king represented in the form of the *serekh*, the transfer of the eyes and the observation of the solar cycle at once. By conceptualising the solar boat as part of an assemblage with the deceased, the solar boat models in non-royal burials cast the deceased in the role of king in these ambiguous roles discussed by BORGHOUTS (1984), which include that of the king as a solar priest. Within this assemblage with a solar boat model, the deceased was placed at the centre of a body world which includes the network of relationships with the adorants speaking and enacting the solar

cult in the land of the living, and the ‘netherworldly congregations of adorants’ (ASSMANN, 2005: 395).

Using the framework offered by HARRIS (2021) that characterises assemblages as multiscalar and stepping back to see a pair of solar boat models as small assemblages within a burial assemblage and then zooming out further to see these burial assemblages within a series of contemporaneous ones across the country, the relationship to the king can be seen in a different light to that found in the existing Egyptological discourse. We can observe model solar boats as an innovation in grave goods, only appearing briefly from the reigns of King Senwosret II to King Senwosret III. Drawing on the limited archaeological evidence of solar boat models, in the first instance, they look to have been adopted at the royal necropolis, where non-royals used royal insignia, including the solar boat, to establish a relationship in which the deceased took the ritual roles of the king, as evidenced by two vessels found at the necropolis at Lisht (HAYES, 1953: 271–272; LYTHGOE, 1915: 147–148). This practice was adopted in the provinces, and the deceased individuals outside the royal necropolis take on these relationships with the king, as has been discussed in relation to the adoption of other royal roles and iconography, for example, in the adoption of the royal object ritual (WILLEMS, 2014: 138–140). By exploring the ancient solar boat model through these lenses, we move away from the previous representational interpretations of them as ritual objects that simply symbolised the deceased’s wish to join with the sun god, Re, on his celestial journey and instead see the range of relationships that are made manifest with the solar boat in this specific spatial and temporal context.

3.1.2 The ancient figured boats

The ten standing, two crouching human figures, and mast that are now a part of *Model Solar Boat* came from at least two other tomb models. Through comparison to a range of tomb models, they were identified as most likely coming from, in the case of the standing figures and mast, a sailing vessel, and the crouching figures, a sailing or funerary boat of some kind with an image of the deceased. There are too many figures to be from one boat alone. While there are vessels with a great number of figures (e.g. Figure 8 and Figure 9), figures of the size and style on *Model Solar Boat*, are generally only found on vessels with 3–6 standing figures. For example, the sailing vessel from the burial of Khety, Beni Hassan, that has figures of a similar size and craftsmanship to *Model Solar Boat* has only four standing figures—three working the rigging and one standing at the bow as look out (Fitzwilliam Museum, Cambridge, E.71a.1903). Therefore, the figures likely came from at least two vessels, which are assumed for this discussion to be one sailing boat and one funerary boat with propulsion in the form of a sail (e.g. Figure 7).

There is an extensive tradition of turning to contemporaneous tomb wall scenes to contextualise the purpose of Middle Kingdom tomb models with human figures. In the case of boats, tomb wall scenes generally depict sailing or rowing vessels on a journey to an important cult site, usually Abydos or Busiris. Sailing boat models, such as those that the standing figures were from, were found in pairs with rowing vessels, indicating a return journey on the Nile, which is most easily traversed under sail southwards and by rowing northwards (e.g. Figure 8 and Figure 9) (FREED & DOXEY, 2009: 173; TOOLEY, 2001). The boat models, therefore, have been interpreted to be three-dimensional representations of the same scenes of pilgrimage. Funerary boats are rarely depicted during the Middle Kingdom in two-dimensional wall scenes. When they occur in wall scenes or tomb models, they can include both male and female mourners, priests, and female mourners in the position of Isis and Nephthys, on a vessel transporting the deceased in their coffin on the day of burial (e.g. Figure 7) (BARKER, 2022: 85).

By viewing the sailing and funerary boat as multiscalar assemblages within body worlds, the range of relationships and connections it builds can be explored in depth. In starting within the figured models as assemblages, one can explore the relationships that the figures build within the burial assemblage and the body worlds of the living community. The predominant notion of these figured models is that the ‘anthropomorphic figures do not represent individual personalities, but depict prototypical human beings performing selected activities’ (ZÖLLER-ENGELHARDT, 2023: 622). ZÖLLER-ENGELHARDT (2023) contrasted the largely



Fig. 7: *Model Sailing Boat Transporting a Mummy*. Tomb B (Djehuty), Lisht South, MMA excavations, 1930–31. Rogers Fund, 1932. Metropolitan Museum of Art, New York, 32.1.124a.



Fig. 8: *Model Paddling Boat*. Tomb of Meketre (TT 280, MMA 1101), Southern Asasif, Thebes MMA excavations, 1920. Rogers Fund and Edward S. Harkness Gift, 1920. Metropolitan Museum of Art, New York, 20.3.5.



Fig. 9: *Model Sailboat*. Tomb of Meketre (TT 280, MMA 1101), Southern Asasif, Thebes MMA excavations, 1920. Rogers Fund and Edward S. Harkness Gift, 1920. Metropolitan Museum of Art, New York, 20.3.4.

uninscribed human figures on figured tomb models to Roth's discussion of the limestone 'serving statues' that frequently bore names of members of the deceased's household, as evidence for these figures not representing individual personalities (ROTH, 2002). However, NYORD (forthcoming-b) demonstrated that figured models have the capacity to represent specific duties in the deceased's funeral, and later mortuary cult, and can materially anchor relationships with individuals undertaking these activities occurring in the mortuary domain on behalf of the deceased. In the case of the sailing boat, the figures in their roles on the boat models had the potential to form relationships with living individuals that took part in the pilgrimage to Abydos or Busiris on behalf of the deceased in their mortuary cult. This, in turn, created a relationship between the deceased, his living descendants, and the god Osiris. By providing the connection between the activity in the world outside of the burial assemblage, going to and from the cult place of Osiris, the sailing vessel through its proximity to the deceased provided that connection to the deceased's body, to ongoing cultic activity on their behalf. This connection further aids in the deceased's transformation into an Osiris-like divine ancestor. In the wider burial assemblage, the sailing vessel's relationship to another rowing vessel within the burial chamber allows for the encapsulation of the whole journey, its cyclical repetition, and the connection to the experience of the living.

When viewing the figured sailing vessel and figured funerary vessel as assemblages at the time of their creation and deposition in a tomb, several relationships between the anthropoid figures within the models can be identified and explored. BARKER (2022), in her comparison of the tomb models and contemporaneous two-dimensional scenes, noted that the tomb owner rarely appears depicted in tomb models, with sailing and rowing vessels being the only theme where the deceased appears in the corpus from Meir, Dayr al-Barshā, and Beni Hassan (BARKER, 2022: 84). She commented that 'the physical presence of [the tomb owner's] body in the burial chamber presumably did not necessitate the representation of his figure in models. Rather, the repertoire concentrated on the activities of servants who would provision him in the afterlife. It is therefore quite surprising to find him at all represented on model boats' (BARKER, 2022: 84). In the case of the figures from *Model Solar Boat*, the two crouching figures, with one arm across their bodies, indicate that at least one of the two vessels had an image of the deceased on board (Figure 10). This gesture has been interpreted as a gesture of adoration in two-dimensional representations (DOMINICUS, 1994: 5–6). The gesture, the way that their bodies are put together, is enunciative, an immaterial element of the assemblage, as it is associated with



Fig. 10: Details of two crouching figures at the stern (left) and bow (right) of *Model Solar Boat* © Michael C. Carlos Museum, Emory University.

adoration and respect. At the same time, the gesture codes, organises, the assemblage. Like Harris' example of making a cup of tea as an assemblage, where the ordering of the milk, water and tea bag is coded with strong social links (HARRIS, 2021: 61), the gesture indicates that these figures being placed near the image of the deceased or facing the deceased. The gesture codes their placement in association with other images and beings on the boat, or their placement in association with other images and beings codes the organisation of the figure's body into this gesture. These two figures are significant to aid in reconstructing the elements of the ancient, figured models, as well as demonstrating the relationships within the human figures on the figured boats.

By approaching the vessels as assemblages, we do not have to assume that the deceased's image's inclusion was 'a subsidiary measure to ensure that the boat successfully served [the tomb owner] for eternity' (BARKER, 2022: 85). When comparing two-dimensional scenes of pilgrimage by boat, to those depicting agriculture, for example, the deceased's involvement is markedly different. In scenes of agriculture, the deceased is generally standing or seated, overlooking the activities, not taking an active role. In the case of boats on pilgrimages, such as the journey to Abydos depicted in TT60, the two decedents, Senet and Intefiqer, are shown onboard a ship that is being towed to Abydos—seemingly taking an active part in the journey (Figure 11). Looking closely at this scene from an iconographic perspective, the presence of the block beneath their feet and their bodies being entirely in profile suggests that the decedents are depicted here as statues, not living human bodies (EATON-KRAUSS, 1984: 13–20). This is similarly reflected in the figure of Meketre on the model sailboat (Figure 12), where he is shown as lifeless, static, and blocklike in comparison to those figures around him (YAMAMOTO, 2015: 255). Therefore, these models and scenes are not to be interpreted as a scene from Meketre's nor Senet and Intefiqer's lives but rather an activity that is taking place on their behalf in the mortuary cult where an image of them is being transported to the cult place of Osiris at Abydos or Busiris, either in actuality or symbolically. In the tomb of Neferhotep (TT50), descriptions of boat processions as part of the Wag Festival are understood to be 'a ritual enactment involving model boats' (NYORD, forthcoming-b: 15). While this is a source from the New Kingdom, NYORD (forthcoming-b: 15) argues that this evidence is suggestive of the 'possibility that models had a role to play in ritual prior to deposition.' In both cases, the actual or the symbolic pilgrimage, within this boat, we can see the relationship between an-

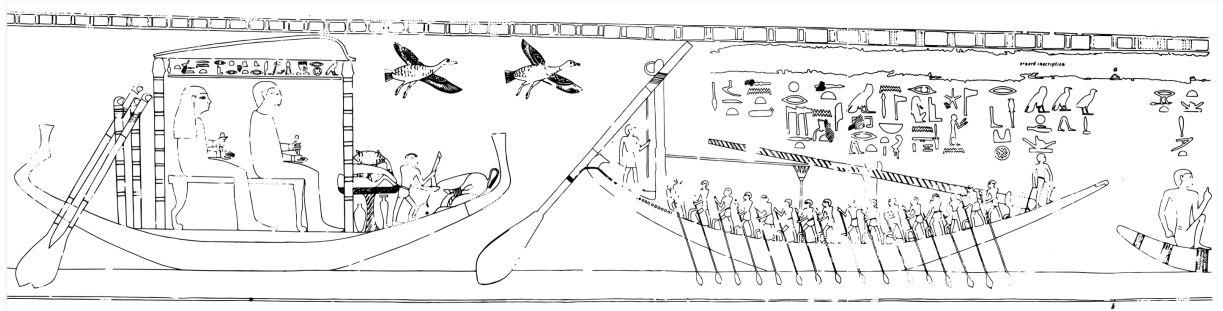


Fig. 11: Journey to Abydos (TT60) line drawing from [DAVIES](#) et al., 1920: pls XVII–XVIII. Courtesy of the Egypt Exploration Society.

other object—a statue of the deceased—and the figures taking it to Abydos or Busiris and comment on the roles and responsibilities of the different figures in this activity. In the case of the standing figures, they have a role in adjusting rigging and acting as lookouts, whereas the crouching figures are likely closer to the image of the deceased and are either acting in a ritual role, steering, or acting as lookouts. When viewing all the figures in relation to the body world outside of the boat, both the image of the statue and the human figures are referential to the roles and activities taking place in the land of the living. This is in opposition to the previously largely representationalist analyses of tomb models, that consider the image of the deceased as insurance and do not consider the figures as having a relationship to the activities in the world of the living. By focusing closely on the individual figures within the boat, the presence of such an image of the deceased on the sailing or funerary vessel can be identified, and, in turn, focusing on the type of body that is being used to represent the deceased allows for the questioning of the established interpretations of these images.

A similar set of relationships can be observed within funerary vessels. The crouching figures may suggest that an image of the deceased was present on a funerary bier rather than seated as a statue, like the cloaked figures with one arm free on a model sailing funerary boat from the tomb of Djehuty at Lisht (Figure 7). Within the boat, the relationship between the figures and the deceased being transported for burial can be seen. The figures are enacting rituals and, in the case of Djehuty's funerary boat, standing in place of Isis and Nephthys, placing the deceased in the position of Osiris at the time of his own burial. As a whole, the boat is a material replication of part of the rituals undertaken on the day of burial. In its relationships with other objects within the burial chamber, for example, the coffin which surrounds the deceased as Osiris was surrounded during the hourly vigil on the night of burial ([NYORD](#), 2014). The funerary boat as a part of the burial assemblage transforms the burial chamber into a perpetual ritual cycle performed in the funeral, to transform the deceased's body, at the centre of this body world, into a divine ancestor. By viewing the funerary boat through the more-than-representational lenses of body worlds and assemblage theory, the view of the boat as ritually efficacious is highlighted in comparison to the symbolic meaning that is stressed in the representational view.

3.2 Late 19th and early 20th century body worlds of *Model Solar Boat*

Model Solar Boat, when it encountered the late 19th or early 20th century body world in the form of three or more ancient boats, ancient assemblages, they were (re)assembled into the assemblage that is *Model Solar Boat*. Through the terminology of assemblage theory, the ancient assemblages were deterritorialised, whether through deterioration of the wood, insect activity, human intervention, or other means, or most likely a combination of all. Some of the elements were then (re)territorialised into a single assemblage. Assemblages were always engaged in these two competing flows of territorialisation, the process of an assemblage coming together, and deterritorialisation, the process of the assemblage breaking apart ([HARRIS](#), 2021: 61). Deterritorialisation is not secondary to territorialisation; rather, they occur simultaneously as a process, and



Fig. 12: Detail of *Model Sailboat*. Tomb of Meketre (TT 280, MMA 1101), Southern Asasif, Thebes MMA excavations, 1920. Rogers Fund and Edward S. Harkness Gift, 1920. Metropolitan Museum of Art, New York, 20.3.4.

‘deterritorialisation almost always leads to reterritorialisation’ (HARRIS, 2021: 98). While there is a constant process of territorialisation and deterritorialisation, there are moments of ‘radical deterritorialisation’ such as this point in the late 19th or early 20th century for the three ancient boats as assemblages, which as moments ‘mark phase transitions’ (HARRIS, 2021: 98). Alongside this process is the process of coding and decoding. With the passage of time, the components of the ancient assemblages were going through a process of decoding and (re)coding in the new body worlds that they were experiencing in the late nineteenth and early twentieth century (HARRIS, 2021: 61–62). Like the Western body HARRIS and ROBB (2012) explored, there was more than one body world—ontological vision—that a tomb model was experiencing within this new spatial and temporal context.

There is no known written material about *Model Solar Boat* from the late nineteenth and early twentieth century. Thus, turning to a contemporaneous find of the models of Meketre, a royal chief steward, whose tomb in Thebes was excavated by a team from the Metropolitan Museum of Art, alongside letters between the Director of the Ipswich Museum, Guy Maynard, and William Flinders Petrie regarding the museum’s subscription to excavations at Sedment, serve to demonstrate elements of possible body worlds, that the three ancient boats encountered in the late nineteenth or early twentieth century. These two texts will act as a point of departure to explore several possible body worlds of *Model Solar Boat*. In the introduction of Herbert Winlock’s posthumously published volume on the Meketre models, Ambrose Lansing, curator of Egyptian art at the Metropolitan Museum of Art, relayed Winlock’s story of the finding of these models. Lansing’s introduction captured several ideas that were part of the context that the three or more boat models that contributed to the *Model Solar Boat* encountered, and also continue to be pervasive in Egyptological scholarship. Lansing and Winlock stated clearly that the figures within the models are without reference or relationship to the world outside the chamber after deposition, declaring: ‘Yet in that dry, still, dark little chamber those boats and statues had stood indifferent to all that went on in the outer world, as ancient in the days of Caesar as Caesar is to us, but so little changed that even the finger-prints of the men who put them there were still fresh upon them’ (WINLOCK, 1955: 7–8). Lansing and Winlock went on to suggest that these fingerprints of masons closing this chamber were evidence of the final time, until the excavation team in 1920 opened the doorway, that these objects had any relationship with the outside world. Their relationship in the intervening epochs was only with the statues and images of Meketre that could be inhabited by him, which acted as an extension of his body. This contrasts with the relational approach suggested for the ancient body worlds of the boat models.

A series of letters between the Director of the Ipswich Museum, Guy Maynard, and William Flinders Petrie, with regards to the museum’s subscription to excavations at Sedment, demonstrates the value placed on models for museum collections and also the treatment of those models from archaeological excavations at this time (SERPICO, 2008: 110). Maynard communicates to Petrie that not receiving models may lead to the withdrawal of the museum’s subscription (SERPICO, 2008: 110). Petrie, in his response to Maynard, states: ‘I am happy to say that I find we have been able to repair a boat, granary and group so that they are better than many that we have distributed...I may say that all the boats and groups had to be packed in separate pieces and built up again in London, except those which were dispatched as they arrived packed from Egypt’ (SERPICO, 2008: 110). The disbursement and repairs discussed in this letter have been shown to lead to models with figures in different positions to those they were found in, and elements added to other models and models split across multiple collections (SERPICO, 2008: 109–112). In addition to models from excavations like Petrie’s, there was also a substantial number without a recorded archaeological context sold into private and museum collections (e.g. Petrie Museum of Egyptian Archaeology, London, UC75621, UC75868; Rosicrucian Egyptian Museum, San José, RC 480; North Carolina Museum of Art, Raleigh, 82.12; see MERRIMAN, 2011 for further examples). *Model Solar Boat* likely came via the latter method, where there was a further separation from its find condition and context. The ancient solar boat and two figured boat models were deterritorialised from within the ancient burial assemblages they were a part of. Components of each of the boats as smaller assemblages were also deterritorialised and (re)territorialised together as the assemblage of *Model Solar Boat*. Each of these components is also decoded and (re)coded. For example, the striped rectangular box with the

falcon on top was decoded from being a piece of furniture, likely a shrine, on a solar boat when it was moved and (re)coded to be a finial on the stern of *Model Solar Boat*. It became an extension of the hull. The box and falcon were decoded from its association with the nearby solar boat furniture. This decoding included the loss of the association between the *šms*-sign and the falcon, which has been discussed to represent the followers of Horus (see [BOREUX](#), 1925: 86ff). The rectangular box and the falcon were then (re)coded in its new position as decorative, adding symmetry and balance to the bow finial.

The human figures are likewise deterritorialised and decoded from their figured model assemblages and (re)territorialised and (re)coded within *Model Solar Boat*. A central element to the interpretations that the models encountered in the late 19th and early 20th century, and one that is continued into Egyptological scholarship today, was the importance of human figures in the models. In the letters between Maynard and Flinders Petrie, there was also an emphasis on the models having human figures with them referred to as ‘figure-groups’ by Maynard ([SERPICO](#), 2008: 110). Lansing and Winlock described Meketre as unable to ‘conceive of an existence in which he would not require food and drink, clothing and housing, such as he was used to in this life, and being a rich man, naturally he wanted an estate in eternity like that which he had owned on earth’ ([WINLOCK](#), 1955: 5–6). Thus, instead of human beings being killed to serve him as they did in life, they stated that Meketre ‘attained the same end by putting in his tomb a host of little wooden servants, carved and painted, at their daily tasks, working before little portraits of himself’ ([WINLOCK](#), 1955: 5–6). Winlock then described the ‘spirits of these little servants’ working ‘eternally’ with Meketre’s ‘soul’ entering his images to ‘reap the harvest of their labors’. Thus, the associations with human beings enacting the deceased’s ancestor cult in the world of the living were decoded from the human figures. They were (re)coded, even in models where elements are not removed or modified, to be images enlivened in an afterlife to provide for the deceased’s needs. Particularly in the case of boats, they encountered a worldview where their ancient purpose was to provide the deceased with transport in an afterlife context or to ensure the ongoing provision of food. Thus, at a minimum, some means of propulsion in the form of a mast and rigging or oars, along with those anonymous figures to sail or row the vessels, were required for them to function and to be in agreement with the context in which the boats now found themselves. The ancient solar boat would not have fitted with the new context; it would have been incomplete.

We can see *Model Solar Boat* as the material result of these new body worlds and ontological visions it found itself within ([HARRIS & ROBB](#), 2012: 676). It is specifically boat models from an ancient Egyptian context that required figures for them to function and to be complete in the body world that the crewless solar boat model was entering. As demonstrated by an early 20th century display of water transportation from the Americas and Europe at the United States National Museum (Figure 13 and Figure 14), figures were not required of the boat models as a category cross-culturally. There are no figures visible on any of the model vessels (Figure 14), and ship models generally were not made with figures on board. They, instead, were made to accurately render the construction of the vessel to scale. Therefore, it was a specific requirement of an ancient Egyptian boat model in this context, where figures were required to be enlivened to perform duties for the deceased. We owe the idea of images being able to come to life to the work of Gaston Maspero in the 1870s through to the 1890s, where Maspero argued that all things and beings possessed an immaterial *ka* and, by virtue of this immaterial entity, images, could come to life ([NYORD](#), forthcoming-a: 3–7). This idea has continued into current scholarship of ancient Egyptian images including tomb models. It was a predominant view of models in the late nineteenth and early twentieth century that it was by virtue of spirits that these figured tomb models could be enlivened to work in the afterlife. The Carlos Museum’s *Model Solar Boat* and other similar models sold during this time, did not closely mimic ancient boats nor the typical activities taking place on board. Rather, it seems for this context, these body worlds in which the boats were now in, the mere presence of the figures was key to fitting this context and being complete, functioning objects. This finding pulls in the same direction with the interpretation of these figures as servants for the deceased and the purpose of these models being to ensure the existence of the deceased with the appropriate food, drink, clothing, and housing. The ancient solar boat without a crew somewhat contradicted this interpretation and, coming into body worlds where this understanding was central, would have seemed incomplete. As discussed by [BARKER](#)



Fig. 13: Water transportation exhibits, North East Range, United States National Museum, c. 1900s, Smithsonian Institution Archives, Record Unit 95, Box 43, Folder 10, Image No. SIA_000095_B43_F10_002.

(2022: 8) and evidence in the interchange between Petrie and Maynard, there was immense value placed on complete models, figure-groups, for both museum and presumably private collections.

At a similar time to the Carlos Museum *Model Solar Boat*, *Boat Model*, now in the Rosicrucian Egyptian Museum (Figure 15), was (re)territorialised from an ancient solar boat, a funerary boat, and a granary. A comparison of the Rosicrucian Egyptian Museum *Boat Model* and the Carlos Museum *Model Solar Boat* highlights the symmetry and balance of each composition. The box-shrine in both cases was moved to the stern and there are two figures at each end of the vessel, looking inward. The mast is central on the Carlos Museum *Model Solar Boat*, with equal numbers of figures on each side engaging with the non-existent rigging. Rosicrucian Egyptian Museum *Boat Model* has the mast off-centre, central to the composition is the canopy and box beneath with four figures surrounding it. On the bow-ward side of the mast, gesturing towards it, are two standing figures. The activity around the mast is balanced by five figures, two of which are hauling grain on the stern side of the canopy. The hauling of grain is an image that is specific to granary models and to contemporaneous tomb wall scenes (BARKER, 2022: 21–30). As with the number of figures found working the rigging of Carlos Museum *Model Solar Boat*, Rosicrucian Egyptian Museum *Boat Model* is not mimicking known types of model boats in its composition. The number of human figures and activities taking place emulating those expected and known from ancient boat models was clearly not essential to its function in these late 19th and early 20th century body worlds. Instead, it was the symmetry common to ancient Egyptian compositions and the presence of human figures to be enlivened to serve the deceased that were valued. Together, the symmetry and human figures completed these compositions.

4 Implications of this case study

By thinking of *Model Solar Boat* as an assemblage, elements of which have played different roles in several body worlds, new lines of enquiry are opened not just for *Model Solar Boat*, but objects with extensive modifications and complex biographies more generally. The viewing of the boats as assemblages allows for a more nuanced view of the various boat models in their ancient deposition—both at different scales and in relation



Fig. 14: Water transportation exhibits, North East Range, United States National Museum, c. 1900s, Smithsonian Institution Archives, Record Unit 95, Box 43, Folder 10, Image No. SIA_000095_B43_F10_007.



Fig. 15: *Boat Model*, Rosicrucian Egyptian Museum, Object Number RC-485, © Rosicrucian Egyptian Museum, San José, California.

to other objects, humans, and supernatural beings. Assemblage theory highlights assumptions made of the objects, particularly the interpretation of them as objects that enliven to provide for the deceased in the afterlife or as symbolic of Re's journey across the sky. It instead offers a broad array of relationships the boats were establishing and maintaining at different scales, including relationships with the gods, roles of the king taken on by non-royals, ongoing activities in the ancestor cult, and roles that the deceased took on in association with the models. In the late 19th and early 20th century context, combining assemblage theory with the concept of body worlds allows for the (re)assemblage of *Model Solar Boat* to be taken seriously as an act with intention, within new body worlds and ontological visions. Assemblage theory provides the vocabulary and sheds light on the decoding and (re)coding of the rectangular box and falcon from furniture in association with the other furniture on the vessel to a stern finial, an extension of the boat's hull, with a decorative and symmetrical function. Likewise, the human figures' roles are decoded, losing their association with actions within the ancestor cult, and are (re)coded with their place in working as enlivened images in the afterlife, also providing symmetry and balance to the composition.

This case study provides a point of departure for examining the frequently ignored pastiche models that are prevalent across museum and private collections globally, emphasising what these models can tell us about both their ancient construction and purpose, and their more modern (re)construction. It emphasises the non-relational interpretation that was central to the understanding and reception of the vessels at the time of *Model Solar Boat*'s recrafting into what it stands as today and the continuation of that interpretation into current scholarship on tomb models. By identifying these interpretations and their impact, the concepts of body worlds and assemblage theory provide a framework and vocabulary to examine their material and immaterial impact and offer alternatives

There does remain a question as to what the concept of body worlds and assemblage each bring to this case study. Assemblage theory as a post-anthropocentric, relational framework allows for the encapsulation of both the material and immaterial and recognises the agency of non-human beings, materials, and matter in these relationships, whereas body worlds are fundamentally anthropocentric. They both offer multiscalarity and the ability to explore historical change and continuity. In this case study, body worlds particularly served to analyse the relationship between the ancient assemblages and the lived experience—body worlds of the living community—and the contact between the ancient models and the new context in which they were (re)territorialised and (re)coded. In the latter case, body worlds provide a useful lens that avoids posing ontologies as singular and bounded, but rather looks at the multiple ways of interacting with and experiencing the (re)assemblage of *Model Solar Boat*. Assemblage theory as a post-anthropocentric framework allows for non-human entities to be the centre, the focus of analysis. Therefore, the two frameworks together provide a toolkit to centralise *Model Solar Boat* and seriously analyse its function, purpose, and relationships through its complex and varied past.

5 Conclusion

By looking at *Model Solar Boat* as an assemblage within several body worlds, we can place emphasis on the ongoing process of becoming, rather than some static form. In the snapshot of the multiscalar assemblages of three or more vessels when they were deposited in tombs in the Middle Kingdom, the relations with and within these boats clearly embedded the deceased in rituals connecting them to the cosmos, kingship, and not least to their living descendants, those enacting their funeral and mortuary cult. When viewing *Model Solar Boat* again when it entered a late nineteenth or early twentieth century body worlds, we can see that, in this context, the deceased needed to be sustained in his tomb chamber for eternity through models with human figures possessed by spirits, fundamentally contrasting with the relational function in the ancient context. The use of both assemblage theory and the concept of body worlds allows for *Model Solar Boat* not to be seen as a static, final product but for the examination of *Model Solar Boat*'s ongoing process of becoming. As a case study, *Model Solar Boat* and this paper call for the serious consideration of tomb models and similar objects

with complex biographies for not only their ancient and recent pasts but their present and future engagements and interpretations.

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