

What was the true purpose of Solar Ships in Bronze Age Egypt, and what evidence could be used to help decide this?

In Ancient Egyptian culture a ‘solar ship’ or ‘solar barque’ was the theory of a mythological boat that would have been used by the god Ra to venture across the sky during the day, and through the underworld during the night, in order to depict the image of the sun flying across the sky. Despite this idea being apparent in mythology as opposed to the real world, there are still various examples of physical ships from Ancient Egypt that have been theorised as being examples or ‘proof’ of these solar ships. However, the purpose of these physical ships is unknown, but has opened up a discussion of whether these ships were merely used symbolically- in order to represent the boat that would have been used by Ra- or whether they serve a real purpose that still separates archaeologists and egyptologists alike to this day.

As previously mentioned, it is apparent that there are a few possible reasons for these physical solar ships being made. For example, the main theorised purpose for these ships is that they were built in order to symbolise Ra’s sun boat from Egyptian mythology, and these ships serve little purpose in the real world. There is clear evidence from Egyptian artistic sources that the god Ra had a barque that he used to portray the sun travelling through the sky in the day and through the underworld in the night. An example of these depictions can be seen on the outer coffin of Isetemkheb D from Deri el-Bahari that can now be found in the Egyptian museum. From these depictions, it is clear that the Ancient Egyptians had a clear idea of what the barque of Ra would look like, so there is a good reason to believe that they would build physical copies of these depictions in order to appease or symbolise the gods. However, it is apparent that solar ships were not the only type of barques that were prominent throughout Ancient Egyptian culture. For example, ‘the Barque of Osiris’ is also prominently featured across many contemporary Egyptian sources, including the ceiling artwork from a temple situated in the Dendera Temple complex. This well-preserved piece of artwork clearly depicts the god Osiris- accompanied with his sisters Nepthys and Isis and the personification of order in Ancient Egypt, Ma’at- sat in a similar looking barque to that of Ra. However, the barque of Osiris is different to Ra’s barque in many ways. Firstly, it is clear that Osiris’ barque was built “by human hands” (Mark, 2017), as opposed to Ra’s being mythological. The reason that Osiris’ barque was built was to transport a statue of the god himself “from his temple to his tomb” (Mark, 2017) during the Festival of Osiris at Abydos. Despite the clear differences between the tomb Egyptian barques, it is quite apparent that they both have a relatively similar appearance to one another. This appearance is also similar to many of the physical solar ships that have been discovered across Ancient Egypt (most notably the Khufu ship, which is the oldest intact ship in the world). The fact that there are many clear similarities between these physical ships and their mythological counterparts would highly suggest that these ships were built in order to symbolise

or represent the barques used by the gods themselves. Another prime example of this depiction is the Niuserre Solar ship found at Abu Gorab.

As previously mentioned, the idea of these physical solar ships being built to symbolise holy barques is just one potential purpose for these ships being built. Another potential purpose could be to be used as a barge that would have been used practically, to transport beings or produce along the Nile or potentially even further. Although there is not as much evidence to support this idea in comparison to other potential purposes, it is quite clear that some solar ships found in Egypt do in fact bear signs of being used on water. It is also clear that, from the excavation and investigation of ships found at the site of Mersa Gawasis, it was discovered that the Egyptians that constructed these boats were aware of construction techniques that would allow for such boats to be able to sail on water. During this further investigation, it was also discovered that Mersa Gawasis acted as a port for Egyptian trade with other cultures, including Punt. This would also further back up the idea of Egyptian people knowing how to construct ships that would be able to sail on water efficiently and effectively. Despite this discovery, it is unclear whether this idea could be applied to the physical solar ships found at various Egyptian tombs, as it is highly likely that these trading ships would look completely different to the solar ships we have both artistic and physical evidence of.

The final potential purpose for these physical solar ships that I will be discussing in this essay is the possibility that these were built to be buried with the ruler at the time, as a form of funerary or grave good. This would also then suggest that the design of the ships were made in order to merely symbolise a funerary barge that was rather common throughout Ancient Egyptian culture, as opposed to being used practically as one. It is quite apparent that there are various pieces of evidence depicting funerary barges throughout Ancient Egyptian history. Arguably the most well known of these depictions is Tutankhamun's funerary barge. Although this depiction is made of alabaster as opposed to wood, and is rather intricate in its design, many similarities can be made between features of this boat figure and the physical solar ships that have been discovered, most notably the shape of the ship. It is also clear that there are various other examples of funerary barge figurines found buried in graves, most made of wood that therefore are more similar to the solar ships being discussed in this essay. The purpose of these funerary barges would have been to help transport the owner of the grave through the underworld during their journey into the afterlife (Mark, 2017). This therefore would suggest that the boats would not have needed to be able to be used in a practical way, meaning the size and dimensions of the boats would not have needed to be practical or proportionally accurate in any way. This can somewhat be seen in the main Khufu ship, as this ship also features some disproportionate features, suggesting that it may not have needed to be used practically in the ruler's lifetime.

As previously mentioned, there is a whole variety of physical solar ships that have been discovered across Egypt, that date back to the Bronze Age. The most well-known of these discoveries is that of the Giza Necropolis ships. Split into 2 subsections (Khufu Solar Ships and Khafre Solar Ships), the Giza Necropolis provides us with the best evidence of Egyptian solar ships to this day. Firstly, seven 'boat pits' were discovered around the Great Pyramid itself, which was the burial place of Khufu, the pharaoh who ordered the construction of the Great Pyramid in the first place. The most well known of these ships are simply known as the 'Khufu First Solar Ship' and the 'Khufu Second Solar Ship'. The first of these ships has been identified as 'the oldest intact ship in the world' and is roughly 43.6 metres in length. After further investigation, it has also been concluded that this ship would probably be able to sail in water today, yet there is no evidence or usage markings that would suggest that it would have been built in order to sail when it was built. This is also backed up by the point that it is disproportionate in size to be able to sail, as there was no room to paddle or no mechanical evidence or features that would have allowed it to sail (Carlson, 2015). This would further back up the idea of the purpose of solar ships being simply used as funerary barges, as the context of where the ship was found would suggest that it was buried at the same time that Khufu was buried (although it was in a boat-pit outside the tomb as opposed to inside, which may simply be due to the size of the ship), and the dimensions of the ship would also suggest it had no practical use other than to be used as a funerary good. Furthermore, as previously mentioned, this was not the only ship that was buried near Khufu's tomb. Khufu's Second Solar Ship was found near to where the first ship was discovered, yet one major difference between the two ships was apparent upon discovery- Khufu's second solar ship was found in carefully dismantled pieces (Brand, 2017) as opposed to being intact. Despite this immediate downside, it is rather likely that both of the ships were built to look similar in size and proportion, meaning that there is little chance that the second solar ship would have had any purpose other than being built for funerary purposes.

Following on from the above points, it is apparent that the Khufu ships were not the only solar ships that were found buried in the Giza Necropolis. The Khafre pyramid complex also features five boat pits, each with their own solar ships found within. Although these ships are not as famous or well-known as those of the Khufu pyramid complex, it is apparent that they may help support the idea that the reason for these solar ships being built was to simply accompany the ruler throughout their afterlife. This is because these boats were also found in boat pits- which were graves that were dug alongside the pyramid or temple of the deceased, in order to house the boats once the owner had died. This is clear evidence that these boats served no other purpose other than to be used in the afterlife, as previously mentioned. It is also clear that there are many other ship burials found across Egypt from a similar time period that would also back up the points made here. These burials include those found at Dahshur, Saqqara, Tarkhan, Helwan and Lisht. The fact that there is such a high quantity of similar boats suggests that there

is a high chance that the purpose of these solar ships was purely to act as funerary boats. However, there is evidence for some boats which may prove otherwise.

Firstly, the place where the Neferirkare Solar Ships were originally buried was at Abusir, where the pyramid was the standout feature of the Abusir landscape. When it came to its discovery, archaeologists were made aware of the boat pits after they were found to have been referenced to on a piece of papyrus found within the pyramid itself. However, when it came to the uncovering of the boat pit, it was found that the boats had decayed and only remnants of the boat were left where it was buried. The fact that the papyrus referencing the boats was found in the mortuary temple would suggest that the boats themselves had a mortuary use, such as the other solar ships previously mentioned. However, due to the fact that the ship itself has not survived, this conclusion cannot be guaranteed, as there is a chance that the ship at Abusir may have been constructed differently and therefore may have been built for a different purpose than those at Giza and other parts of Egypt.

On the other hand, there is one final group of solar ships from Ancient Egypt that show evidence that strongly suggests the ship had a practical purpose in the real world. These were the Hor-Aha Solar Ships found at Abydos. The main feature that is apparent with these ships that cannot be found with any of the other solar ships previously mentioned is the fact that this ship clearly features aspects that would be found within practical ships in Egypt, these features including anchors, hulls and woven straps. Another interesting aspect of these ships that is unique to the Hor-Aha ships is the fact that the ships themselves are large enough to fit around 30 rowers. This is completely unique whilst comparing to other solar ships from this time period, and would therefore highly suggest that these ships in particular did in fact have some real world purposes, including potentially being used to sail and maybe even trade, with other local cultures, although there is no explicit evidence that supports this idea.

Overall, it is quite apparent that, despite the fact that there are many possible purposes for these solar ships, there is a large amount of evidence that would suggest that these ships were built merely to act as funerary barges- used for the owner of the ships to travel through the afterlife- therefore meaning they had no real world practicality to them. However, it is also apparent that many similarities could be made between the style and design of these solar ships (especially that of Khufu's First Solar Ship) and the artistic depictions of the god Ra and his solar barge. Therefore, there is a high chance that the purpose of these solar ships was to accompany the ruler in the afterlife, but their design was based off of the divine solar barges. This would therefore allow the owners- who were commonly the rulers of Egypt at the time- to connect and relate themselves to the Egyptian gods, which was a common goal for Egyptian rulers to aspire to reach following their progression into the afterlife.

Reference List

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