



ESSEX EGYPTOLOGY GROUP - REVIEW

May 2019 Meeting

by Margaret Patterson

"Shalfak: A Middle Kingdom Fortress in Lake Nubia"

Claudia Näser

At our May meeting Claudia Näser came to talk to us about her work excavating at the fortress Shalfak in Lake Nubia. Shalfak is an ancient Egyptian fortress, part of a chain built along the Nile during the Middle Kingdom in Nubia. These forts were once thought to have all been drowned in the lake that was formed when the High Dam was built in the 1960s. The name of this lake is Lake Nasser for the portion inside Egyptian borders, and Lake Nubia for the portion inside Sudanese borders - Shalfak is 50km south of the Egypt/Sudan border and thus is in Lake Nubia. In the early 21st Century Google maps images showed that two of the drowned forts were actually above the water level of the lake and projects were begun to re-excavate them with modern techniques. It took a while to get everything organised to do so, and Näser's project only started in 2016.

Shalfak was originally excavated by George Reisner's team in 4 weeks in 1931. Reisner was interested in the chronology of Egypt's presence in Nubia, but by the time he got to Shalfak his interest was waning and he felt he'd done what needed done. So he delegated this excavation to Noel F. Wheeler. Wheeler and Reisner subsequently fell out and so the work wasn't published very quickly - it was eventually published in 1967 based only on the written notes that were available. As a result it's a rather slight publication, only 22 pages to cover the whole site. Wheeler also excavated at high speed covering 60m² per day which means he covered a lot of ground in his four weeks, but must have missed an awful lot as well. The fort is part of a chain of forts that stretch for 400km along the Nile down into Nubia. The part of the chain at the second cataract is particularly densely packed, and Shalfak is one of these forts. The forts are documented in Ancient Egyptian sources, and so we know the Egyptian names for each fortress. Shalfak was called w'f-h3s.wt which means "Which forces down foreign lands". It was built on top of a rocky hill, which is why it is still visible above the lake today. There were other sites around - a couple of associated cemeteries and some other structures - but these have all been covered by water except a small cluster of huts. Näser showed us on a diagram how far the water level rose as a result of the dam, and even though I know the lake is enormous and drowned all these sites it was still quite startling to see.

Näser's project started work in 2016 and she told us a bit about the state of the site when they turned up and what it's like to work there. It's astonishingly well preserved - there aren't many visitors of any kind, certainly no tourists but not even very many locals; just a few goat herders and their goats. The climate is hyper arid, it never rains, so there's very good preservation of organic remains like timbers in the mudbrick. As the site is in Sudan it's not subject to the Egyptian government's ban on removal of

material from the country, and so they were able to export samples for lab analysis in London and Berlin (where there is better equipment and the turnaround for analysis is much quicker). This means that they have C14 dates for some of their finds as well as other analysis. But in other ways the site is less than ideal - Wheeler's excavation speed and methods mean that everything is disturbed and nothing is in its original place. He cleared the whole site down to the original floor level so anything he missed ended up in spoil heaps that have subsequently dispersed across the site. As a result they have no secure contexts for any of their finds - for instance there are pottery sherds all over the site which tell them something about what eras the fort was occupied for but there's no way to tell which part of the site any given piece came from.

Shalfak is very remote; it was in ancient times and is now. There are no modern settlements nearby, the lake level varies quite a lot and so there's no secure and convenient place to put a village. As a result the only people around are temporary migrant farm workers, who are all male. She described it as being a bit "Wild West" in feeling. No settlements, few people and no shops means that they have to bring everything they might need with them as a trek back to anywhere civilised would take some time. It would be prohibitively expensive to keep a boat at the island full time during their dig season so the first stage of getting anywhere would be to summon their boat. Then after getting back to the mainland it's still a 2 hour drive to Khartoum.

Due to the fluctuation of the lake level sometimes the island is very small with just the rocky outcrop and the fortress, and sometimes there is a larger swampy area next to them. There's always wildlife around, and it didn't sound like somewhere I would like to spend any time! The wildlife includes crocodiles, hyenas, camel spiders and scorpions. She said the most scorpions they've found in a single night was 95! Their water supply is either the lake, or a pump and pipeline bringing water to nearby fields. When the pump is working they can fill up a trough that she referred to as their "swimming pool" and use that for washing. But otherwise they need to bathe in the lake, which as health and safety person she insists people do in pairs - one to watch for crocodiles while the other washes!

The climate can also be rather unwelcoming. She told us about a sandstorm in 2018 where they nearly lost her tent - containing everyone's passports, all the project money and other necessities - which would have been a disaster. She'd pitched her tent high up on the island near the fortress and it sounds like she probably won't do that again - a good view, but when the sandstorm blew in she had a long way to run to try to get to the tent. It was nearly blowing away when one of her colleagues managed to catch it, and then she and her colleague spent a couple of hours in the sandstorm lying on top of it making sure it didn't blow away. After a while they and the rest of the team managed to retreat behind the walls of the fortress which gave them some protection but they still needed to pin down the tents with their own bodies to keep them safe. A lot of their stuff did get blown around the island but they were very lucky and managed to find and retrieve almost everything.

Näser said this experience brought home to her how difficult life must have been for the Ancient Egyptian soldiers stationed there. And this indicates how important these forts must have been to the Egyptian state - it was difficult to live there, difficult and expensive to supply and support, so it must have been seen as a necessity.

Having set the scene Näser now moved on to telling us about their work over the last few years. They began by mapping the site using modern technology, which is much

more efficient and accurate than the methods Wheeler would have used over 80 years ago. The interior of the fort is 1800m². The walls stand to over 1m tall even now, and are 8m thick in places. Compared to Wheeler's map the outer walls appear to have eroded significantly over the last 80 years. But this comparison needs to be approached with caution - as with many other archaeologist's maps of the era it isn't clear how much of his map is an accurate representation of what's on the ground and how much is drawing how it "should be".

Based on their own map and the publication of Wheeler's work they chose two areas to begin their excavations. The first of these (Area 1) might have been less excavated by Wheeler and is outside the North Gate of the fort. Wheeler's notes had indicated that there was an interesting basin. These basins are found in a lot of similar sites but their function isn't known so it was a promising place to reinvestigate. Area 2 was the granary which they wanted to re-excavate with modern technology. Granaries can tell you a lot of things about potential population size and the economic situation with respect to the other forts and the surrounding locals. There is also the chance to find out what foods were being stored if you're lucky enough to find remains, so it seemed a place with a lot of potential to learn about the fort.

Näser told us that the stratigraphy for Area 1 was very shallow - this means that the bedrock was very close to the surface. So they had to be very careful not to brush too enthusiastically as they might remove the last traces of mudbrick remaining. They uncovered a 200m² area of mudbrick floor surrounding the basin. This is something found in workshop areas where you need a clean and solid floor.

Next to the basin and floor were three rooms attached to the exterior wall of the fort and with access to the North Gate. These are drawn on Wheeler's map but Näser and her team have been able to discover more about the alterations these rooms went through over time. In the first phase they were as Wheeler's maps show - three storerooms just outside the fortress (an arrangement seen at other forts as well, Näser gave Askut as an example). There are remains of plaster on both walls and floor, some of which goes continuously round the corner onto the exterior wall of the fort showing it was constructed as a single phase. During the second phase there were internal walls added in the rooms, making them smaller with a corridor along the back. The entrance in the north wall was also blocked up. Like the first phase this was done during the Middle Kingdom occupation. There is also a much later phase with the addition of small fireplaces - this is probably Medieval Christian reoccupation of the site in the 10th Century CE.

Returning to the basin Näser discussed possible interpretations for these features. One possibility is that they are libation basins, but there is no sign in the architecture surrounding it of anything that looks like a temple. There wasn't anything left inside it which could be used to tell what its contents were, either. Näser thinks it's unlikely to be for washing or purification, because there's no easy way to drain the basin to replace it with clean water. She also thinks that makes it unlikely that it's storing a liquid that's intended as food or drink. Her idea is that it might have been a water tank to store fish which were to be eaten, so that they would be as fresh as possible.

Behind the three rooms in Area 1 was a large structure running the whole length of them. In Phase 1 there was no entrance to this room, although in a later phase it is given access to the outside. Inside the walls they found Middle Kingdom building rubble, and so she thinks this was a platform that a building was built on. It's possible that this is

where the temple for the Middle Kingdom fortress stood although there is no evidence of it any more.



Tomb Model of a Granary with Scribes from the Middle Kingdom Tomb of Meketre, now in the Met Museum. Photo by John Patterson.

After a break for coffee and cake Näser continued her talk by telling us about what they found in the second area they excavated - the granary. On Wheeler's map this is shown as several storage rooms in two rows, plus a large room running across one end of these rows - there was a possibility that this room was a chapel so that was another reason to re-excavate this area. Wheeler had cleared this area down to the floor level, but even so after 80 years there was sand in all of the rooms again drifting up to 1m deep in the corners. Näser compared the layout of this area with a tomb model of a granary found in the Middle Kingdom tomb of Meketre which is now in the Met Museum, see above for a photo John took when we visited New York a few years ago. By comparison with this model it seems that the putative chapel is much more likely to be the administrative office for the granary. The storage chambers have no entrances visible, so like the model were only accessible from the roof (which is long since gone).

Wheeler's rapid excavation means that a lot of potential data has been lost - particularly evidence that he would not have realised existed. So it was very exciting to learn that Näser and her team had discovered there was still some organic material in the corners of the rooms - including bits of grains. They flooded all these out of the sand they were mixed with using a jury-rigged contraption made from waste bins (and did this down near the river so also had someone watching for crocodiles as part of the operation!). Once they had got rid of the sand they had 16 bags of grain bits, which she took to Khartoum and then flew over to Europe for analysis. They found that they

contained barley, emmer wheat, Nabak berries (which were eaten during the Middle Kingdom and New Kingdom) and watermelon seeds. As well as being able to tell what the various foodstuffs were they could also use some of the samples to get C14 dates. The wheat, the barley and some samples of the timbers in the wall dated to the second half of the 12th Dynasty (i.e. the time of the Pharaoh Sesostris III* who is supposed to have built it). The watermelon seeds dated to the later 18th Dynasty re-occupation. Näser pointed out that although the image of the soldiers bringing along cartloads of juicy watermelons to this desert fortress is amusing it's also false. Watermelons of the time were bitter, and not juicy and sweet like they are now. People actually ate the seeds, and so the seed fragments found are probably all that was brought and stored in the granary.

*Näser used "Sesostris" throughout her talk so I have followed this in my write up, but the name is more often given as Senwosret or Senusret in modern books.

Näser summarised this part of her talk by telling us her proposed chronology for the site. It was initially built in the reign of Sesostris III and was used extensively during the Middle Kingdom. This included remodelling the fortress as the alterations to Area 1 were done in this period. There is no Second Intermediate pottery on the site so after the collapse of the Middle Kingdom the soldiers pulled out and went home. This is unlike the situation in the northern fortresses in the chain where the soldiers remained and went native in the Second Intermediate Period. Shalfak was then re-occupied in the early New Kingdom during the re-occupation of Nubia at this point. They reused the granary at this time.

There is no sign of a temple during the New Kingdom occupation, just like the Middle Kingdom occupation, however they have indirect evidence that some sort of ritual activity was taking place at the site. Part of this evidence is a document from the time of Thutmose III, and part of it is a basin discovered at Shalfak with a dedicatory inscription around the rim. The same (possibly) fictitious wife of Sesostris III is named in both cases.

Näser now moved on to tell us a bit about what they have found out about the materials and technology used by the builders when they built Shalfak in the Middle Kingdom. The outer walls of the fortress were painted - but not just white (as they expected). They also had colours (I think she said yellow and red). As well as evidence on the walls themselves they found an area just outside the walls where pigments had been prepared.

The mudbrick walls are reinforced with timber and with matting - in an analogous way that reinforced concrete has iron in it. The wood remains are petrified due to the hyper-aridity which made it difficult to get samples, but they did succeed and were able to have those (and samples of the matting) analysed. Both the wood and the grasses used in the mats were local to Shalfak rather than having been transported from Egypt with the soldiers. The mudbricks come in two types - the regular ones are used in most of the fortress and higher quality "white" bricks are only used in the commander's office (and some other special places). Näser said they were analysing samples of these to see what the differences were.

Despite Wheeler's excavation having disturbed the whole site Näser's team have still been able to find a few items that he missed. One thing they found is a weight - they had someone in Khartoum weigh it accurately for them and found it was 11.8g. This is

the weight of 1 unit of gold in Ancient Egypt, so that tells us that the people in the fortress were weighing and processing gold. It was also made locally with local stone rather than having been brought from Egypt.

They've only found one seal so far, in Area 1 - it has some of the titles of the vizier on it. Including Wheeler's finds only 30 seals have been found at Shalfak, which is a low number compared to hundreds at some other fortresses. This suggests that Shalfak was a pretty minor fortress at the time.

There is a lot of pottery still on the site, now scattered all over the place by Wheeler rather than where it was originally left. The types that they have found include 12th Dynasty Egyptian pottery that's specific to fortresses, and also some local Nubian pottery. The latter has been used to suggest that the soldiers married locals, but as Näser pointed out you don't have to marry someone to have some of their pots!

Näser finished by summarising what they know about Shalfak and talked a little about what they want to do when they next excavate. Shalfak is a small fortress compared to others (particularly the more famous Buhen fort), and was probably built to make communication between the two larger forts on either side easier. The northern forts in the chain were constructed by Sesostris I, and the ones at the 2nd Cataract (including Shalfak) were built in the reign of Sesostris III. They are later reoccupied in the 18th Dynasty, but this occupation isn't documented in contemporary documents in the same way that the 12th Dynasty buildings were, so it was perhaps on a smaller scale. In the next dig season they've identified two areas they want to work on - one is the commander's building, and the other is an area that may have been less thoroughly excavated by Wheeler (so there may be more there to discover).

In the QA session after Näser finished the talk she also told us her population estimate for the fort is a few hundred soldiers - and just men, with no wives/families whether local or brought from Egypt. These men were stationed there, not living there. She also thinks that building these forts must have taken even more resources than the building of the pyramids in the Old Kingdom. Which tells us about their priorities - military and territory; not tombs for dead kings. She thinks it was rather a miscalculation on their part too, as she doesn't think the evidence suggests Kerma (the Nubian culture of the time) was worth as much as the resources the 12th Dynasty poured into those forts.

This was a fascinating talk - not only did we hear about the exciting information that modern excavation techniques can still get from a site that has been so thoroughly excavated in the past, but we also got to hear about the practical difficulties of working in such a remote place. I don't think I'd like to spend any time at Shalfak myself, I like my creature comforts too much, but I'm glad it miraculously survived the building of the High Dam and that people are able to find out more about these forts.