ESSEX EGYPTOLOGY GROUP - REVIEW

"Flinders Petrie – from Stonehenge to Jerusalem" Lorna Oakes

Review of January 2023 Meeting
by Margaret Lucy Patterson

In the middle of January we began the 2023 programme of talks at the Essex Egyptology Group with a Zoom lecture given by Lorna Oakes. Her subject for the talk was William Matthew Flinders Petrie – she began by noting that she wasn't going to be able to cover all aspects of his career in a single talk, so she was going to concentrate on some of the main archaeological sites that he investigated. Flinders Petrie was the pioneer of modern archaeological methods in Egypt, and this was a great contrast to the work of his contemporaries. His main interest was to halt the destruction of the remains of Egyptian monuments, he'd been horrified by what he saw while he was working at Giza – at the same time Mariette was working at the Valley Temple of Khafre and Oakes quoted us something that Petrie later wrote about that excavation. This quote mentioned how "Mariette most rascally blasted to pieces all of the parts of the Valley Temple to clear them out", and talked about how there seemed to be no plan and no thought given to future investigations. Petrie also said that he was sickened to see what was being destroyed and how little attention was paid to preservation. Petrie's own work was in contrast to this – he is famous for his meticulous records and careful excavations.

Oakes told us that Petrie came from a distinguished family. His mother was Anne Flinders – the daughter of Matthew Flinders who was a well known explorer who charted the coasts of Australia and became an Australian folk hero. There are many statues of him in Australia as well as geographical features named after him – and also a statue in the UK at Euston Station. Flinders Petrie's father was William Petrie who was an engineer who devised improved surveying instruments, invented (along with another engineer) the arc lamp (the demonstration of which impressed Queen Victoria) and also equipment to refine metals. Anne and William met through a mutual improvement society which met in members houses to discuss religious, literary and scientific subjects. So Petrie Sr often visited the Flinders household, and exchanged books with Anne. An aunt of Anne's wrote to him to suggest that Anne's parents would not be opposed to a young man such as himself asking for her hand in marriage, and so he was nudged into proposing to Anne. William Matthew Flinders Petrie was born a couple of years after his parents married, in 1853, at which point his mother was 43. Unsurprisingly at her relatively advanced age (for a first time mother) the birth was a difficult one. Petrie Sr stayed with her throughout her labour, which was much commented on by their contemporaries as this was not at all the done thing (a visit or two from the father during the process was much more standard, if the mother was lucky).

Flinders Petrie was a very intelligent child, quickly understanding his parents' engineering plans and being set to measure things by his father as an instructive pursuit. He was brought up very strictly, and his father was rather austere and religious. Oakes

told us that there's a story that Flinders Petrie was sent round to the neighbours to ask that they keep their parrot quiet on a Sunday! Tho there are also stories of him setting off fireworks and firing a brass cannon in the garden to entertain his friends – so life was not all work and no play. At the age of 4 he had bronchitis and croup very badly, and whilst he pulled through he was left with a weak chest. The doctors said that he shouldn't go to school, so he was educated at home by relatives – he also wasn't supposed to play outside with his friends. Even though he was home schooled he was well (and seriously) educated. His mother was also involved in his education, even though she was often much involved with good works she still found time for this. Oakes told us that Anne bought him a book on hieroglyphs while he was a child that he was much taken with, and so Anne believed that she'd sown the seeds of his later career. Petrie was also interested in science – before the age of 10 he begged to be allowed to read his father's big chemistry book in bed for amusement! Petrie Sr did attempt to employ tutors to educate his son later in his childhood, but no-one ever met his exacting religious standards and so none were employed. This means that Petrie had no formal education, except for a course at university at the age of 24 – everything was either informally taught in the house or he taught himself.

In 1874 Flinders Petrie and his father began a project to survey and accurately measure the prehistoric monuments of Britain, as they had discovered that this had never been done. They began with Stonehenge, and after this in 1875 Flinders Petrie set out for 3 weeks on his own to measure the monuments of southern England. He undertook several trips like this surveying monuments, Oakes told us he was very frugal even then and this is a great feature of his later career in Egypt. He'd been encouraged at home to do things himself and to make his own equipment and this did come in handy in his later career. He had also been well trained in surveying by his father and was very good at it, but the simplicity of his home made equipment (which he used throughout his career) led some critics to assume he wasn't doing a good job. One such critic re-did Flinders Petrie's measurements at one site with his own more "sophisticated" techniques & apparatus and was astonished to discover that Petrie's measurements were accurate! The project was far too big a task for Petrie to finish on his own, but in 1877 he did present the British Museum with a portfolio of the monuments that he'd surveyed. This then became the kernel on which others built to complete a comprehensive survey of the monuments.

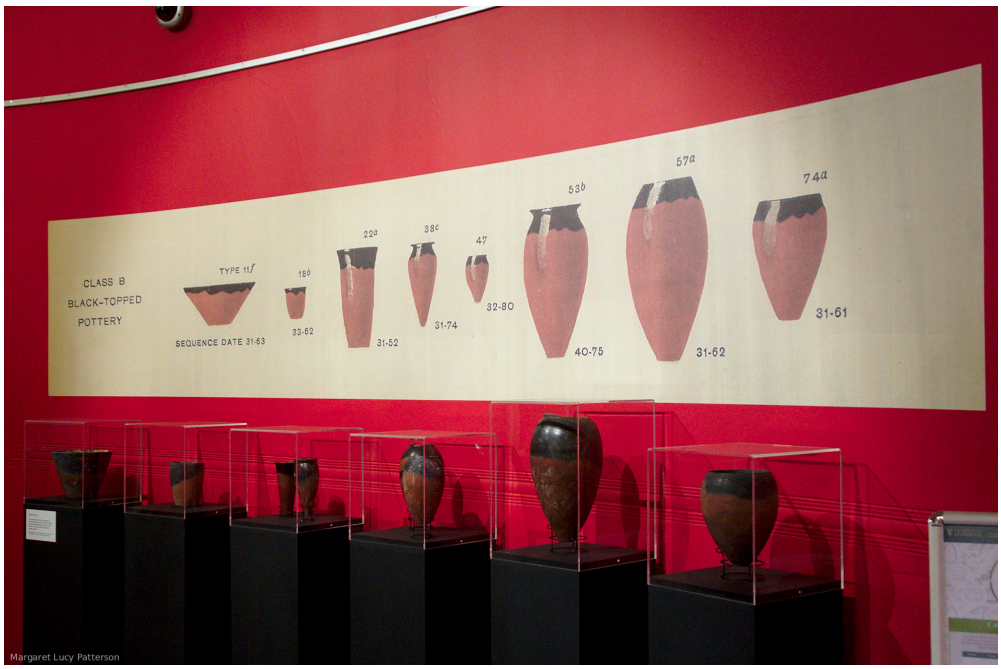
Petrie's interest in Egypt properly started with a book written by a friend of his father's – this was Charles Piazzi Smyth, Scotland's Astronomer Royal, who had based his book on the work of John Taylor. This wasn't the sort of book one might expect from Petrie's later career! There was speculation at the time about the origin of the pyramids and some (including Taylor & Smyth) thought that they were so perfectly aligned and constructed that they couldn't've been constructed by normal humans. Instead they must've been made by God, and moreover couldn't be something as mundane as a tomb. Instead they believed that the pyramids were a divine chronicle of the history of mankind with the internal passages symbolising key events with their twists and turns – for instance in the Great Pyramid the transition from the ascending passage to the grand gallery represented the beginning of the Christian era. Taylor was also the person who came up with the idea of the "Pyramid Inch" as the basis of the design (and of the cosmos), and he believed the sarcophagus inside the Great Pyramid was the same measurements as the Ark of the Covenant.

Oakes told us that at first Flinders Petrie and his father were quite taken with these ideas, but later they decided to go and measure the Great Pyramid themselves (which Taylor and Smyth had not done) and see how well these theories held up. Petrie Sr was dragging his heels, so eventually Flinders Petrie went on his own in 1880. He'd got a reputation as a good surveyor after his work on the monuments of Britain, so there was help available from people already in Cairo who had heard of his project and were able to get him started. Petrie's frugal nature showed itself from the start – he decided to live in one of the tombs (well, Oakes said that it was actually three knocked into one). He also had his boxes brought from Cairo by donkey, because that was cheaper (albeit less convenient)

than a carriage. Once his boxes arrived he made himself a scratch meal of herrings and coffee, and he ate very simply in general. Though at this point in his career he did turn up his nose at bread wrapped in a lice-ridden cloth – later he would not be so picky! After this he made himself a bed which was a hammock strung between two uprights which could be used as other furniture when necessary. And then he set to work measuring the pyramid. It wasn't terribly pleasant work, Oakes said that he had to get used to the smell of bats and found the heat intolerable. As a result he worked mostly at night, which also meant there were fewer tourists about. To keep the tourists at bay he wore (only) pink underwear which would not look like clothes from a distance!

He began his work by drilling holes in the plateau and filling them in with blue plaster to mark out the positions from which the measurements would be taken. He needed a lot of these points, and for them to be visible from many of the other points, so this took quite a long time and a lot of care to set up. Not only this but Oakes said he also had to set up the actual measuring poles fresh each day and take them away when he was done for the day as otherwise the Bedouin would steal them! Taking the measurements themselves also took a lot of time – each was repeated several times, Oakes said some angles were measured over 40 times, so that the resulting measurements would be accurate. He didn't, of course, do this entirely alone – he had an Egyptian assistant who Petrie spoke highly of but also noted that he was "rather let down by the dictates of his religion" as he wasn't happy to be interrupted 5 times a day for prayers.

Petrie didn't spend all of his time in Egypt measuring the pyramids. He had also been asked by Samuel Birch to bring back some ancient Egyptian pots because the British Museum didn't have a particularly large collection at the time. Petrie did this, and as he collected the pots he recorded exactly where they were found and what goods were found with them. Over time this would become one of the key things we remember him for – once he had a large collection of these records of pots, around 900 cards of information, he categorised and grouped the pots and was able to work out the development of the styles over time.



Display of part of Petrie's Pottery Typography

Birch also suggested that Petrie should make copies of the texts he saw – he did this for several open tombs at Giza and later also the inscriptions in the pyramid of Pepi I at Saqqara (the first known Pyramid Texts). Oakes told us this last was not quite as straightforward as it sounds. The excavator/discoverer from the Chicago Museum (I didn't catch his name) had backfilled the entrances to the pyramid to make sure that other people couldn't get in and see the new discovery. So Petrie made his way in through the roof and copied all the texts and gave these to Birch. He asked Birch not to tell anyone

who had done the work, because it might cause bother if he was known to've done it. He did, however, confess himself rather pleased at having done this – he didn't approve of people selfishly trying to keep this knowledge to themselves or to only their institutions!

Once it became too hot to continue working on his first visit Petrie returned to England and set about learning how to use photography to record excavations. This was quite new technology at the time, and Oakes told us that in his usual frugal fashion Petrie made his own camera from a large tin can. He used this, or others like it, all his life. The film he used was a very slow film specially made for him by Kodak, and some of his photos had half-hour exposures. He developed the negatives at night, but didn't print his photos until he was at home in England. Despite the DIY nature of his camera, and the fact that he was self taught, his photos are regarded as being of high quality.

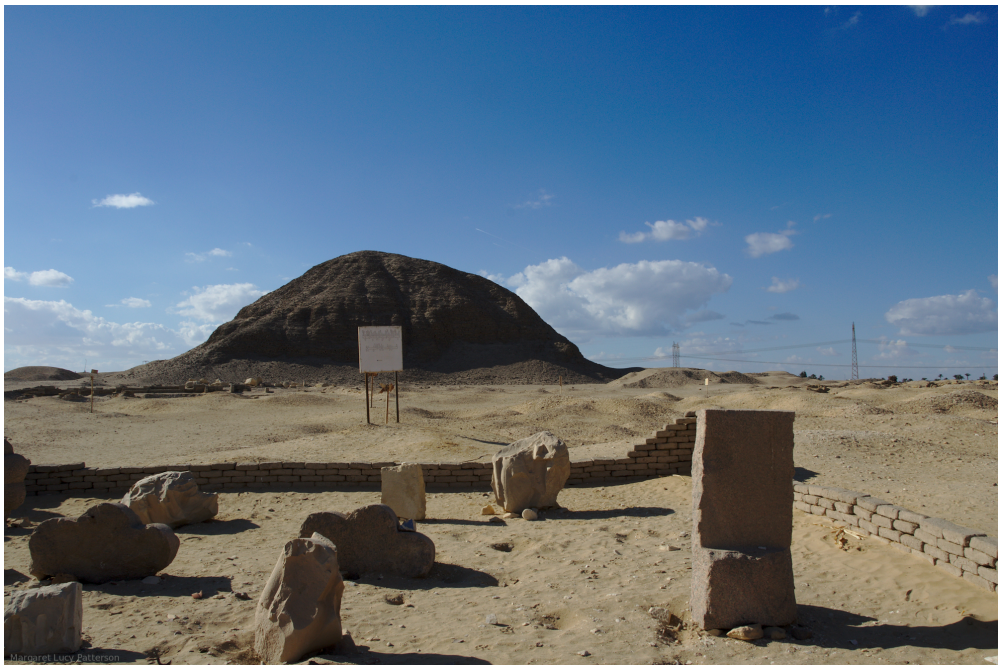
While he'd been making his measurements at Giza he'd come to the conclusion that there was no such thing as the Pyramid Inch, which rather disappointed him. He did however make discoveries of his own, which made up for this – he was the first to find that there were galleries near Khafre's pyramid, which he assumed were the accommodation for the builders of the pyramids but I think we now don't think this is the case.

Oakes told us that as part of his initial visit Petrie also went on a trip down the Nile with some companions, hiring a dahabiya so that they could visit the places they wanted rather than be on someone else's itinerary. However this didn't always mean that they got to see the things they wanted to see – for instance in Meidum the guard could not read the permission documentation that should've Petrie & co access to the site so he waved it aside as "only in Cairo". But he did travel as far as Beni Hasan, and was able to take measurements within the tombs there (including the very famous fishing and fowling scenes in them). He then travelled on to Amarna, and looked in the tombs of the officials behind the city Eventually he reached Luxor and was able to explore the Valley of the Kings – and he was especially impressed by the tomb of Seti I. From there, he went back to Cairo to finish his book on the pyramids and with his "boots and trousers in precarious condition" he thought it prudent to return to England!

Meanwhile Amelia Edwards had visited Egypt and been horrified at the destruction of the monuments. So she founded the Egypt Exploration Fund (now the Egypt Exploration Society) to protect them by more considered excavations (we had a talk from Clive Barham Carter about Amelia Edwards back in 2014). Maspero gave permission for the Fund to excavate in the Delta – Oakes told us that this area of Egypt was chosen by the Fund because it was thought to be where the Israelites were enslaved, and proving the Bible was true was the "main point" of archaeology according to popular opinion (and thus people would donate more for that purpose). Petrie was to show everything he excavated to Maspero and then he could take out of Egypt everything that wasn't needed for the Cairo Museum.

In his work there Petrie discovered the city of Naukratis – Oakes told us that he was led there by a man who sold him a vase and offered to show him the site where it had been found. There was so much pottery on the ground at this site that Petrie said it was like walking over the smashed remains of the great vase room at the British Museum! From there he went on to Tanis, where most of the architecture was in ruins on the ground. To his delight he found that there were many statues and obelisks from the reign of Ramesses II. So Petrie was convinced he'd found the city where the Hebrews were enslaved: Pi-Ramesses. And that remained the dominant theory for quite some time. Oakes told us that it wasn't until the 1960s that Manfred Bietak realised (while excavating at the site) that the architecture was much younger than the monuments which Petrie had discovered – and so these statues must've been brought by the Egyptians from another site to be re-used in the reigns of later kings. We now know that the place they had come from is modern Qantir which was the actual ancient site of Pi-Ramesses. There's not much archaeology there now – because the ancient Egyptians took all the big pieces to Tanis!

Shortly after these excavations Petrie fell out with the EEF over what he saw as their mismanagement and misuse of funds, and so he refused to work for them. And at the same time he fell out with E. A. Wallis Budge at the British Museum, as Budge had said that the smaller items Petrie found weren't interesting and had also accused Petrie of smuggling antiquities out of Egypt. So this left Petrie with a problem – he had no private income and now he had no funding for future excavations. A Manchester businessman by the name of Jesse Haworth stepped in (via, I think, a connection with Amelia Edwards) and agreed to fund Petrie's future excavations, on the basis that the money could be spent as Petrie wished so long as it was in the pursuit of science and Haworth wasn't mentioned.



The Pyramid of Amenemhat III at Hawara

Petrie next worked at Hawara and Gurob in the Faiyum. At Hawara he discovered not only the pyramid but also the Labyrinth (as the Classical writers referred to it) which had once been a massive and confusing building. There's very little to see there today, and was very little in Petrie's time – the limestone walls had been dismantled for re-use over the centuries. The granite parts of the site had been more recently looted when Petire got to the site – they were taken for use in building a railway embankment! As part of his excavations Petrie tunnelled into the pyramid – this was an arduous task as the bricks were laid in sand. So as each brick was removed the sand would shift and fill up the holes. Oakes told us that they had to re-brace the walls three times a day while working on this tunnel! Petrie did, eventually, break into the burial chamber (or rather, his workers did) and he rushed to the scene to have a look inside. At first this didn't quite work out as intended and he ended up hanging upside down and had to be rescued! But he did subsequently enter the chamber itself. The first sarcophagus they found was made from a single enormous block of stone and it wasn't the only one in there. The tomb had, however, been robbed in antiquity and the bodies that had one been in those sarophagi were burned after being stripped of their royal regalia. There were some bits & pieces left and a fragment of an alabaster vase gave Petrie the name of the pyramid's owner – Amenemhat III (of the 12th Dynasty in the Middle Kingdom).

At Gurob Petrie excavated a small cemetery containing Ptolemaic mummies. These mummies had cartonnage wrappings – this is a sort of papier-mâché that includes pieces of papyrus. Oakes explained that Petrie discovered he was able to disassemble the cartonnage by soaking it, and that the pieces of papyrus he found had texts on them. These were still readable even after their second life as a mummy wrapping! Most of the texts he found were administration documents but there were also fragments of great works of literature.

The next site that Petrie worked on was Lahun, where he excavated at the pyramid of Senwosret II – another mudbrick pyramid like that of Amenemhat III. He also explored the associated graves where members of the royal family were buried – Oakes showed us some photos of the beautiful things he found there, including a tiara with detachable plumes & streamers, and a silver mirror with a Hathor headed handle. But Oakes said the most important discovery he made at Lahun was the town where the workers on the royal tomb had been housed. This part of the site included a rocky prominence where there are the remains of a very large building that Petrie (without any sign of evidence!) declared to be a citadel and the residence of the king. Little of that building remains to be seen today. The houses in the main part of the town are made of mudbrick and are mostly small, and there was also a "posh end" where there were five larger houses built into the wall. The site is now largely covered over with sand and the archaeology isn't visible, but the objects found here were very illuminating about the life of an Egyptian worker in the Middle Kingdom. These objects included a large number of bread moulds and also some bread ovens. There were also a great collection of carpenter's tools, which are now in the Petrie Museum at UCL. As well as these very practical items there were also some small objects that were called children's toys at the time (but now some archaeologists thing they may've had ritual uses), And there's quite a lot of evidence for kohl pots and jewellery, as well as signs of spinning and weaving operating as a cottage industry in the homes of the workers.

Another important site that Petrie worked at was Amarna - ancient Akhetaten. Oakes told us that Petrie's first impression of the city was that it was rather daunting – the site takes up about 8 miles along the east bank of the Nile so rather a large area to undertake to excavate, and Petrie compared it to the idea of excavating the ruins of Brighton! So instead of tackling the whole thing he picked a few sections to explore properly. This included a palace with a painted floor, only some sections of which survive. The decorative theme of the floor was nature motifs – like birds flying up from the leaves of plants, and Oakes showed us a photo of a section of this that's in the museum in Berlin. Another place he excavated is referred to as the King's House and part of the wall decoration survived here and is now in the Ashmolean Museum in Oxford – the surviving pieces show the two youngest daughters of Akhenaten and Nefertiti as part of what would once have been a large fresco. Among the other objects Petrie excavated were a lot of fragments of glazed & decorated tiles.

Wall Painting from Amarna now in the Ashmolean Museum

While Petrie was working at Amarna Amelia Edwards passed away. She had left money to UCL to create a Professorship in Egyptology, and she stipulated in her will that no-one from the British Museum could be offered the post and that no-one over the age of 40 was to be the first appointee. This ruled out everyone except Petrie (as she'd intended) and so he became UCL's first Professor of Egyptian Archaeology. His collection of

Egyptian antiquities started the teaching collection there (which is now the Petrie Museum), and one key part of his approach to teaching was to insist that every student should have weekly lessons handling the objects in the collection. This practice continues to this day – Oakes herself did a degree at UCL later in life and had handling sessions in the museum. The beginning of Petrie's career at UCL didn't get off to a good start – he fell quite seriously ill around that time with severe haemorrhaging and ulceration of the stomach (which sounds hideous!). Nonetheless he was able to impress at a congress he gave lectures at whilst still ill and which were widely acclaimed.

Oakes told us that by the age of 43 Petrie had given up on the idea of getting married – he thought no woman would put up with his Spartan life in Egypt. But then he met Hilda Urlin – she had been a model for one of the Pre-Raphelites, and was skilled drawer herself, and was introduced to Petrie when he was looking to employ someone to draw objects for him. Once she was working for him he fell in love with her, and after some persuasion she agreed to marry him! The start to their married life was exactly what you'd expect from Petrie – they were married at 8am one morning in their travelling clothes and immediately afterwards set off for Egypt. Once they arrived there they spent a couple of weeks in Cairo and then travelled to Dendera. Oakes said that Petrie had been worried that Hilda wouldn't like it, but she took to Egypt like a duck to water! They got the train from Cairo to Dendera, but it turned out the train was only running to Nag Hammada. So they went on by boat, but were becalmed and had to unexpectedly overnight on the boat. Their breakfast the following morning was the remains of the previous night's supper, sharing one knife between the three of them that were on the boat! They then gave up on the boat, and walked the last 10 miles to Dendera. Instead of hating it, Hilda declared that she had enjoyed her adventure, and they flung themselves into their work at the site!

Eventually Petrie was given the commission to work at Abydos, which he'd wanted to do for some time. He was mostly interested in the early tombs, not the great temples we visit these days. Oakes said that because Petrie expected a lot of visitors he built a larger dig house than he usually would – she showed us some pictures of that dig house, and pointed out how it was more comfortable than usual (providing one was happy to be living in with the objects!). At first Petrie explored the tombs of the 1st Dynasty kings, including king Den – Oakes showed us a picture of how that tomb looks now, but noted that this is the result of much more recent conservation by the late Günter Dreyer's team. Petrie was the one that found the raised stelae that marked out each of these 1st Dynasty kings (and one king's mother, Merneith).

Petrie also discovered the ebony or ivory labels in these tombs which had been attached to grave goods – Oakes noted that these are particularly important because there is so little other written material from this period. She showed us a photo of one from the tomb of king Den and talked us through some of the things we could see on it – it seems to depict the *heb-sed* festival of Den, labelled with his names in *serekhs* not cartouches (because those were only used by later kings). So we see him running the *heb-sed* and also sitting on his throne being re-crowned as the King of the Two Lands. It's clear that these little labels provide a wealth of information about the society in which they were made, well beyond just what the hieroglyphs say.

One of Petrie's most spectacular finds during his excavations at Abydos was a set of beautiful bracelets, which were even found on a mummified arm with parts of the mummy wrappings still intact. This find was sent to the Cairo Museum – Oakes said that they promptly flung out the arm and the bandages because they didn't consider them interesting! This led Petrie to remark that "a museum is a dangerous place", and it does seem such an awful shame – nowadays we'd be almost more interested in the arm than the bracelets. The bracelets themselves are very beautiful and cleaned up nicely (although it's a shame the museum also "tidied up" some parts like the gold thread).

Oakes told us a bit at this point about Petrie's very good relations with his workforce, as these excavations at Abydos are a particularly good example of this. Petrie himself always mentioned them in his reports (not always the case for Western archaeologists in this time period) and noted the value of their work. Because they knew they were respected by him when the workers found the arm & bracelets they didn't dismantle it themselves instead they took it to Petrie. And in front of all of them he unwound the bracelets and weighed them against gold sovereigns so that everyone would know what the value of the piece was, and he then rewarded them for bringing the find to him by splitting the value amongst the workers. As a result of this sort of respectful treatment Petrie's workforce didn't do what other workforces did – they didn't dig things up and hide them from the excavation leader so they could sell them off. Oakes also quoted from Petrie writing about the leader of that workforce in glowing terms about his skill and his trustworthiness. She said she was emphasising this in order to redress the balance somewhat, as in recent years there has been a tendency to denigrate Petrie's views of the Egyptians.

To wrap up her discussion of Petrie's career Oakes said that his achievements were extraordinary, and that she'd only been able to touch on them here. Over his career he worked on 50 different sites in Egypt, and then more in Palestine. His greatest achievement was to leave Egyptian archaeology a science, when he had found it a treasure hunt.

His last excavation was in Palestine – he and Hilda set off to travel by bus with their team to investigate the biblical sites. By this time at the age of 84 he was very frail, and so he allowed himself a nap each afternoon (a great indulgence by his standards!). His last great finds were jewellery at the sit of Tell Ajul. He died in Jerusalem not long after that and is buried there. Well, most of him is – Hilda brought his head back (in a hat box!) to UCL to be kept and examined as the head of a genius.

This was an interesting talk about an extraordinary life – Petrie is such a foundational figure in the field of Egyptology that it's easy to forget that he began as a self-educated man who believed in some of the more nonsensical theories of the time. But as Oakes made clear, his native intelligence and attention to detail meant that when he started to actually investigate ancient Egypt he quickly changed first his own mind and then the way that Egyptology was done in practice.

Related Links

Other write ups of related talks given to the Essex Egyptology Group:

- Lorna Oakes has previously spoken to us in 2019: "Ancient Egyptian Thought in the Old Testament"
- Clive Barham Carter talked to us about the life of Amelia Edwards in 2014
- Lee Young talked to us about Howard Carter (who was mentored by Petrie) in 2016
- Chris Naunton gave us a talk on the predecessors and contemporaries of Petrie in 2020