# ESSEX EGYPTOLOGY GROUP

Newsletter 99 December 2015 / January 2016

## DATES FOR YOUR DIARY

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| **6th December** | **Reflections on the Dendara Zodiac - addressing the what, when and why: Roz Park** |
| **3rd January 2016** | **Lunch at Crofter's (details below)** |
| **7th February** | **The Falcon Necropolis at Quesna: Dr Jo Rowland** |
| **6th March** | **Living in a liminal zone: the "town" of Queen Khentkawes at Giza** |
| **3rd April** | **Tomb Robbery: Dr Nigel Strudwick** |

**In December we welcome our member Roz Park, who has been investigating the history and stars of Ancient Egypt for 29 years. Establishing the date of the Dendara Zodiac was her dissertation topic for her MA in Cultural Astronomy & Astrology (2004), and she has continued this pursuit ever since.**

**The greatest celestial icon of antiquity is a circular Zodiac now in the Louvre, with a replica *in situ* at the Temple of Hathor in Dendara. Egyptology scholars are often dismissive of any analysis of the Dendara Zodiac which suggests that it had an astrological purpose – namely the depiction of a birth horoscope – set within a planisphere of Egyptian deities. There is much evidence to suggest that astrology was popular in Egypt with Ptolemaic and Roman rulers down to the ordinary citizen. In this talk she examines the rise of Egyptian zodiac imagery from the Late Period Pharaoh who went into legend as the inventor of western astrology, to the 2nd century AD Soter family's penchant for zodiac symbols in coffin artwork. We are still perplexed by certain enigmatic constellations recorded in the Pyramid Texts and illustrated in some New Kingdom tombs. But with her identification of 41 constellations on the Dendara Zodiac, all within their Egyptian frames of reference, scholars are now better enabled to unlock earlier Egyptian astronomical secrets.**

## JANUARY LUNCH

**Alison Woollard has volunteered to take the bookings for the January lunch. It is open to members and guests and will be at 12.30 on Sunday 3rd January. The cost is similar to last years, about £25 per person. A deposit of £5 per person is needed; to be paid by the December meeting.**

**UNDERSTANDING EGYPT: LANGUAGE, LAYERS AND MEANING IN THE NILE VALLEY**
**Carl Graves**

**In October Carl Graves came to talk to us about the work he's doing for his PhD on the landscape of the Nile Valley as interacted with and perceived by the ancient Egyptians. The concept of "landscape" is a technical term in geography, and so Graves spent the first half of his talk explaining this concept and its theoretical underpinnings so that they made sense to us, before moving on to talk about ancient Egypt.**

**He began by getting us all to stand up and look around the room and to think about the space we were in: had we been there before (most of us had), who the people were that we knew in the room, had anyone been there for other non-EEG events and so on. These memories and meanings that we attach to somewhere are what turns it from a space to a place. Later on in the talk he came back to the same idea using the difference between the idea of a house (which is really just a building) and a home (which is where you live, where your life is). Graves then used his own hometown of Withernsea in East Yorkshire to illustrate how landscape and identity are always changing over time. It's easier to illustrate with a modern town as we have maps and satellite imagery to show what things used to be like as compared to now. So for instance 300 years ago Withernsea wasn't on the coast, yet by the early 20th Century and the tourism boom it was coastal, and had a pier and a railway station. Both of those are long gone now, but the street names keep their ghosts alive: Pier Road, Station Road and Railway Crescent. And these sorts of things happened in ancient Egypt too - it's just harder to discover because they didn't leave us maps.**

**Why study landscapes? Graves' answer to this is that it provides a big picture view of Egyptian society and life over time, rather than the details you get from texts, monuments and tombs. He talked about the generally accepted idea that 70% of all ancient Egyptian sites are undiscovered, largely because they are underneath the current urban landscape. One method of making further discoveries is one that the Egyptian government have tried in the past - displace the people and bulldoze their houses so that the antiquities underneath can be excavated and turned into tourist attractions. (This is the sort of thing Andrew Bednarski was talking to us about in September). But this understandably antagonises people and makes them more likely to hide things or to dig up anything valuable looking themselves and sell it anonymously. One of the Egyptian scholars who studied at the EES in London this summer who works in the Suez Canal area has taken a different approach. In a similar way to how archaeology is handled in London he and his colleagues conduct mini-excavations whenever a piece of land is cleared for building work so that what's under there is properly recorded before it's covered up again. This leads to much better relations between the locals and the archaeologists, and there is also less illicit digging in the area. How does this tie into the study of landscape? Having an idea of the big picture lets you prioritise these mini-digs when resources are limited.**

**The next obvious question is what do we mean by "landscape" as a technical term? It's quite a difficult term to define and Graves said that (particularly in Egyptology) it's a relatively recent theoretical concept. The definition he gave us was from a US geographer who says that landscape is to do with a man-made or man-modified environment to create infrastructure or background for collective existence. One of the reasons that landscape is difficult to define is that the perception of landscape is personal - everyone's meanings are different. For instance an artist or photographer will see the landscape primarily in terms of aesthetics, a farmer in terms of wealth or fertility and so on.**

**The personal, cultural and changing nature of landscape and its meaning make it difficult to discover what the ancient Egyptian landscape was like; but there are clear indications in the texts etc that nature and culture were linked in ancient Egypt. For instance deities were considered to inhabit particular features of the natural landscape (like Meretseger in the mountain above the Valley of the Kings, or a mountain at Abydos which is referred in texts as Anubis's Mountain). And if you look at the decoration of tombs (such as that of**

Nebamun) you see nature and garden scenes appearing with symbolic meanings. Graves thinks it's important to understand the ancient Egyptian landscape as it will cast more light on the everyday lives of the Egyptians. It also links together the ancient and modern uses of the Nile Valley, rather than keeping the separation between old and new.

After a break for coffee and cake Graves moved on from the theoretical underpinnings of his research to the area of Egypt he has studied. This is the 16th Nome of ancient Egypt, the Oryx Nome. The ancient Egyptian bureaucracy divided the country into Nomes, which is roughly analogous to how the UK is divided into counties. Beni Hassan is often regarded as the capital of that Nome (although as Graves pointed out there has been no urban settlement discovered at Beni Hassan only a cemetery so this can't be quite right).

Graves is particularly interested in the Middle Kingdom period in the 16th Nome, but in order to give us proper context for the physical side of the landscape of the area he started by looking at the geological history of the wider area. 7 million years ago the Nile Valley looked very like the Grand Canyon does today, only on a far larger scale. The Nile River was a local river running only through the area that would become Egypt, and had cut a channel through the rock down to a depth of 4km. At the time the Mediterranean basin was not a sea, when there was a tectonic shift that returned water to the basin it flooded into this canyon and filled it with sea water down as far as Aswan. Over time the canyon silted up, the cliffs on the banks of the Nile are the remains of the canyon walls with just a relatively little bit poking up above the surface.

The Nile as we know it, running from Ethiopia rather than just locally within Egypt, was formed during the Ice Age around 12,500 years ago. And then after the end of the Ice Age between around 10,000 years ago and 4,500 years ago was a period of wetter climate. The deserts that currently surround Egypt were fertile. The Old Kingdom period of Egyptian history is at the end of this wet period, and it's the gradual reduction of fertile land concentrating the people into the Nile area that is key in forming Egyptian culture in the pre-Dynastic era and Old Kingdom.

The Nile and the flooding of the Nile are key to the ancient Egyptian landscape. The Nile flood changes the landscape every year, and the level of flooding is different each year. So some years houses might wash away, other years not enough silt would be deposited to make all the fields fertile. The course of the Nile might also change quite quickly with the channel easily jumping from one side of an island to another when the waters go down after the flood. Longer term the course of the Nile changes by 2-9km/1000 years, which is significant in an area like the 16th Nome where the land between the two cliff faces is only 20km wide. As a result of their landscape the ancient Egyptians would have different associations with urban settlements than we do. We see the urban landscape as something permanent. But the Egyptians were more likely to see it as moveable and temporary - their mudbrick structures might be washed away with the next flood and need rebuilding. Or the course of the river altered sufficiently that they needed to build new fishing quays closer to the new route.

As Graves is interested in a particular Nome he needs to know where this is located in the physical landscape of Egypt. The Egyptians didn't leave us maps, so the evidence has to be gathered from the texts that do mention geography. One of these is a list of Nomes on the White Chapel of Senusret I (which is in Karnak Temple Open Air Museum) - these have the names of the Nomes and measurements, which are plausibly the distances along the Nile between the Nomes. Of course you can't just look at the present day Nile and measure it, because variations in the course of the Nile will alter the distance between two points – you would need to know the course the river took in Senusret I's time to be accurate. However you can still get a reasonable idea of where the Nomes are from that.

There are 60 different tel sites across the area covered by the 16th Nome - a tel is a mound that has been created by human occupation of a site. (And Arabic placenames of the type Tel el-Amarna are referring to these mounds.) If you look at their layout in a satellite image then you can see they're aligned with previous (or the current) paths of the Nile. When the Nile changed course they may have been abandoned or the settlement might have migrated closer to the Nile by stabilising the new land of the river bank with pottery and rubbish and then building on

**top of it. Obviously to discover what is under each tel and when it dates to you would need to visit and at the very least do a surface inspection if not a full excavation. However by looking at available texts, the evidence gathered by previous archaeological surveys and the evidence of the Egyptian landscape Graves has possibly identified the sites of 4 towns that were important to the inhabitants of the 16th Nome during the Middle Kingdom.**

**There are four towns mentioned in inscriptions in the tombs of Beni Hassan (which was where the elite of the 16th Nome were buried during the Middle Kingdom), three of which are also mentioned in a 21st Dynasty papyrus called the Onomasticon of Amenope. Why is one of them not mentioned in the Onomasticon? There are a few possible reasons - maybe it wasn't important to Amenope, maybe it vanished or changed name between the two sets of texts. And perhaps it also illustrates the way that the cultural differences between us and the Egyptians can trip us up when interpreting ancient texts. The Onomasticon of Amenope is a collection of lists of things, and one of the lists is at first glance a list of towns - that's where you find three of these towns listed. But closer inspection the category being listed isn't "town" as we think of it - there are sites we know had urban settlements during the 21st Dynasty that aren't mentioned, and sites listed that don't seem to have much, if any, urban settlement during this time period. Instead these are most likely to be quays. In our modern perception of landscape if we listed important places in the country we would list the major urban settlements; in the Egyptian perception of landscape it was more interesting/useful to list places you would stop at along the Nile as you travelled.**

**The four towns he talked about were Hebenn, Her-wer, Neferusi and Menat-Khufu. Hebenn was a royal foundation, which had a temple for the cult of Horus (the royal cult). Her-wer had no administrative importance, just religious significance. Neferusi was the local cult centre of Hathor, and was somehow linked to both Her-wer and to the south of the region - which links make it plausible that it's in the southern part of the Nome. It was also an unlucky town - the site of a siege during Khamose's battles against the Hyksos when Egypt was being re-unified at the start of the Middle Kingdom; and later destroyed during Piankhi's time (the Kushite founder of the 25th Dynasty). Menat-Khufu is the town that wasn't mentioned in the Onomaticon. It was the site from which the Eastern Desert was controlled, where the overseers of the desert region were based, and thus was probably on the Eastern side of the Nome.**

**Graves had no firm conclusions for the end of his talk, but he had some concluding remarks. It's clear that the Ancient Egyptians had a different perception of landscape to our own and recognised natural and cultural features in the landscape around them. They divided the landscape into categories that made sense in their own cultural context, but perhaps not in ours. By trying to understand the Egyptian perception of landscape archaeologists and historians can not only understand Egyptian culture more completely, but can also target their investigations to areas that are mostly likely to yield interesting results.**

**I've ended up writing a lot about this talk - the theoretical side of it was quite new to me, I've not thought about geography as an academic discipline since my GCSEs. And so I wanted to make sure I understood it, and remembered it, by writing it out in more detail. It was an interesting talk, although it did end up feeling like it was two separate parts - theory before coffee and Egypt after coffee.**

**Margaret Patterson**

**NEW LIGHT ON THE NARMER PALETTE WITH ADVANCED DIGITAL IMAGING**
**Kathryn E. Piquette**

**In November Kathryn Piquette came to talk to us about the work she has been doing using Reflectance Transformation Imaging (RTI) to examine the Narmer Palette (and some other ancient Egyptian objects). She started her talk by giving us context for the Narmer Palette, and then explained the imaging technique she is using. She then showed us several examples of objects she's studied before returning to the Narmer Palette to tell us about her findings so far.**

**The Narmer Palette was discovered in 1898 by Quibell & Green at Hierakonopolis, near the "Main Deposit". This was a cache of sacred objects that had been buried around the time of the 5th Dynasty when they were no longer being used. The palette dates to around 3100BC, and is a larger version of the type of palette that was used by the ancient Egyptians to grind eye makeup powders. The normal ones are quite small, and plain, but this ceremonial one is bigger (around 65cm by 40cm) and richly decorated. It's made from mudstone, and Piquette said it's surprisingly heavy so she thinks of it as a semi-portable object. The art on it depicts the first Pharaoh of a unified Egypt, Narmer, in a selection of scenes that depict his power and his kingship. This includes a smiting scene of the same type as those you see on temple pylons in Egypt right up to the end of the Ptolemaic era.**

**Most previous research on the palette hasn't been interested in the object as an actual physical artefact. In part this is because it's hard (for bureaucratic reasons) to get access to it to actually study it in the "flesh", it is on display in the Cairo Museum behind somewhat grubby glass and it can be difficult to closely inspect it. And so people study old photographs of it or line drawings of the art that have been made. This only serves to enhance the general tendency in Egyptology to study the art and the texts in isolation from the physical objects they're on. So the previous studies have concentrated on things like what the art tells us about the history of the period, how the iconography has changed or not changed over the millennia after it was made, and so on. Piquette is more interested in how the physical object was made - what it tells us about craftsmanship at the time. As well as having a much closer look at the details of the artwork.**

**She is using a technique called Reflectance Transformation Imaging to do this examination. This involves building up a composite image from several different photographs, each taken with the light source in a different place. This lets you use imaging software on a computer to play around with different lighting angles, and to use a variety of enhancement algorithms in conjunction with this. Piquette said it's like if you're looking at an old coin and trying to see the writing/picture on it - you tip it back and forth trying to get it to the point where the shadows make the inscription clearer. I also thought it's like how guidebooks for Egyptian sites often say things like "visit in the early morning as the angle of the light makes the inscriptions clearer". Obviously the beauty of RTI is that once you have done the hard work of taking all the carefully lined up photos you can then revisit the image over and over looking at what you can see with different light angles and different enhancements.**

**Piquette next showed us several examples of objects she's used RTI to examine. This was really interesting to see, as she showed us the actual images and was moving the light source around to show what showed up under different conditions. One of the objects was a 1st Dynasty stela where she showed us the tool marks that showed how it was made. On a Roman Mummy Portrait she showed how the technique could be used to distinguish the original pigment from some much later repair work - which is important information for the conservators working on the object. Another object was a Greek magical text written on a sheet of lead and placed in a water cistern around 400BC - as you can imagine it was pretty corroded. At first when she showed us the image of it, it looked like there was nothing readable at all. But by turning on one of the enchancement algorithms and altering the light angle suddenly the text popped out and was visible.**

**She talked about the difficulties of using RTI outdoors and the first object she showed us after the break was a large rock in a wadi near Aswan which has rock art on it. Stability is one of the key requirements for RTI as all the photos must be identical except for the light source - so if the only place to set up the tripod is on sand, or if the wind picks up and blows the sand around, then that can cause problems. Amount of ambient light can also be an issue, and the normal technique is to use a flash gun that's significantly brighter than the ambient light; which isn't that easy to achieve if you are outside under the Egyptian sun.**

**The last example she showed us before returning to the Narmer Palette was an inscription on a gneiss bowl. She used this to illustrate again how the tendency to divorce the art/text from the physical object can remove information. The original publication of this inscription doesn't**

**actually look much like what's on the bowl - the hieroglyphs are tidied up into standard forms, and the orientation of the text is reversed to better fit with Western conventions. So that tells you what it says but you've lost all the information about what the inscription is like. When she examined it using RTI she could see that in contrast to the beautifully made bowl the inscription is actually pretty crudely done. Each line of the hieroglyphs has taken several strokes of the carver's tools to make - and they all seem to have slipped across the surface past the line where they should have been. In one place the chisel looks like it skidded a long way round the rim. Piquette also said that she thinks it should be possible to figure out if the carver was right or left handed by the directions the tools slipped the most.**

**Piquette now returned to talking about the Narmer Palette. It had taken her several years to negotiate permission to photograph it, and then a couple of days before she was due to start work it suddenly seemed as if the permission had been granted without understanding what she needed to do! In the end she was able to persuade them that it would be safe and a good idea for her to take these photos with the palette out of the display case, and she was able to take some photographs. She only had 2 hours to work on it, in a slightly too cramped space, so she wasn't able to do as many detailed images as she'd hoped. What she succeeded in capturing were two overview images, one each of the front and back, and two detailed (i.e. zoomed in) images of the top left and top right quadrants of the Smiting Scene side of the palette. She hopes to have a chance to go back and take more detailed images of the rest of the palette and also examine the thick edges of it. But that requires renegotiating access with the new director at the museum.**

**One of the things she can see using RTI are the tool marks where chisels have slipped, or where the design was blocked out before the detailed carving started. There are places where the design seems to have been changed - so it wasn't entirely agreed upon before the carver(s) started work. Repeating elements within the design are also not standardised. For instance there are four large cow heads at the top of the palette (two on each side) and they aren't identical. One of them has a mouth that looks just like the eyes (so it looks like an open mouth). The other one on that side has a line across the mouth (like the lips are closed), but there are traces if you look closely that indicate the mouth may once have been open. The two on the other side both have closed mouths. Did the carver start with the open mouthed one and then decide it looked better the other way but never went back to alter the first one? Or did someone else do that one who had a different style?**

**RTI also lets Piquette see details in the carving that haven't been noticed before. For instance the figure of the Pharaoh wearing the Red Crown seems to have a chin strap holding the crown on. Which maybe shows something new about how the crown was actually worn (perhaps throughout history, perhaps only at this time). There is also potential information to be had about how the Egyptians displayed dead enemies at this time. On one side of the palette are nine corpses of slain enemies with their heads removed and placed between their legs. Closer inspection shows that all but one of them also had their penises removed and placed on top of their heads. That had been speculated about before from inspection of a cast of the palette but Piquette has been able to show that it looks like that's the case on the real thing too. There are also indications that some of the enemies are laid out on their bellies and some on their backs. The one who has been less mutilated than the others is on his back and Piquette wonders if the different positions have to do with different statuses of the enemies. Was the man in charge laid out in a more respectful way than his troops?**

**This was a fascinating talk, and as Piquette's results are still preliminary data there were more questions than answers in what she was telling us about the Narmer Palette. And that's quite exciting for an object that's been known of for over a 100 years - the idea that there's still a lot more we could learn from it even after all that time.**

**Margaret Patterson**

## SCANNING SOBEK

**Room 3, British Museum**
**10 December- 21 February 2016, free admission**
**CT scanning of the almost 4 metre long crocodile with 25 hatchlings on its back. The display reveals the creature's hidden secrets; plus other objects show how Sobek was represented both as a crocodile and as a man with a croc's head.**
**More information**:

http://www.britishmuseum.org/whats_on/exhibitions/scanning_sobek.aspx

## EXHIBITION: DEATH ON THE NILE

**Fitzwilliam Museum, Cambridge**
**23 February-22 May 2016, free admission**
**To celebrate its bicentenary anniversary the Fitzwilliam Museum in Cambridge, is putting on an exhibition of their collection of Egyptian coffins. The exhibition will explore the beliefs and working practices behind the coffins and reveal new information on how they were made. Objects are also on loan from the British Museum and the Louvre in Paris.**
**For more information see the Press Release:**

http://www.fitzmuseum.cam.ac.uk/documents/20151019_DeathontheNile.pdf

## EXHIBITION: TRANSFORMING THE BODY IN ANCIENT EGYPT

**30 January 2016-24 April**
**The Bulldog Trust, Two Temple Place, London WC2R 3BD**
**Free exhibition of Ancient Egyptian artefacts from the collections of smaller museums around the UK, showing how ancient Egyptians transformed their appearance, both in this life (imagery, clothing and jewellery, hair-dressing and makeup rituals) and in readiness of the next life (coffins and funerary head coverings).**
**More information:**

http://www.twotempleplace.org/exhibitions/egyptology/

**This month thanks go to Margaret Patterson**


# The Essex Egyptology Group Committee

**Rosemary Ackland - (Treasurer) – Janet Brewer BEM (Secretary/Membership) – Tilly Burton (Programme) - Dick Sellicks (Publicity/Facebook)**

**The Newsletter Editor, Janet Brewer, welcomes all articles, letters, reviews and quizzes.**

**All articles express the views and opinions of their authors**

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