



# ESSEX EGYPTOLOGY GROUP - REVIEW

## **June 2022 Meeting**

by Margaret Patterson

### **“Body Image and Structuring the Identity: An Analysis of Body Ornaments in Predynastic Egypt” Maryan Ragheb**

Our June 2022 speaker was Maryan Ragheb, who is a 6th year PhD candidate at UCLA (California), and she told us about the research she's doing that will be the subject of her dissertation. She's at the point in the process where she has quite a bit of her data and has drawn some preliminary conclusions but still has more questions than answers.

As her title says, she is interested in what can be discovered about identity expression in early Egyptian history from their body ornaments. So she began by defining "identity" for us. In essence this is how an individual demonstrates themselves to part of a broader group or community, and indicates their place within it. You can have more than one identity and most of us do. Identity expression is a performative action – it is something you choose to do, and it includes the way you present your body and the ways you modify and accessorise your body as well as actions or behaviours.

And it is something that happens in all human communities – the images Ragheb showed us here were one of Queen Elizabeth II in her full royal regalia, juxtaposed with a Hagen man from Papua New Guinea in body paint. Both of these people were using their garments and body modifications to indicate their identity within their society. It also happens within Ancient Egyptian society – a great example of this is the way that foreigners were depicted in Egyptian art, as their identity is demonstrated via their distinctive clothing, accessories and hair styles.

Ragheb is particularly looking at detachable body ornaments – the beads, hoops and bangles. Through these she's interested in looking at changes in identity expressions, and she's looking at the artifacts from two complementary perspectives: as tools for identity expression and as products of the craft economy.



Predynastic Necklaces at the British Museum (a bit earlier than Ragheb's Period)

The time frame she is interested in is from the Predynastic Period through to the Early Dynastic Period. This is a time when the Egyptian state was forming, and there are indications that there was a lot of social change as well as that political change from several power centres to a single unified government. A lot of people are now working on different aspects of this transition, and Ragheb mentioned several names including Alice Stevenson and Stan Hendricx. Alice Stevenson has done work on the cosmetic palettes of this period, and has drawn out a pattern in the changes within the period. In the Naqada II period (Predynastic) the palettes have animal designs and they are very creative and varied. From the Naqada III period and into Dynasty 1 in the Early Dynastic Period the palettes get rarer and more standardised – simpler, less creative and very plain more functional looking rectangles. Alongside that general trend are a few extremely elaborate palettes (like the Narmer Palette which Dr Kathryn Piquette told us about in our May lecture, see my write up here:

<https://writeups.talesfromthetwolands.org/2022/05/24/the-narmer-palette-again-early-egyptian-stone-carving-in-practice-kathryn-e-piquette/>). These very rare

exceptions are used by the elite to display their power and status by the juxtaposition with the simple more common ones.

Ragheb said that this prior work, of which Stevenson's work is an example, demonstrates

three social and cultural phenomena that are taking place during this transitional period. There is a simplification and standardisation of craft goods which can be seen across many types of objects including pottery. There is the increasing control of resources by the elite who increasingly restrict the access of the rest of society to raw materials. And there is a process of restructuring and reworking of images to mean something different in the new society that is evolving.

In her own work Ragheb is using these ideas to inform her thinking about the body ornaments and the identity expressions of this time period. Her hypothesis is that during the Predynastic Period there is a great variety of body ornaments and a wide variety of identity expressions that they are used for. But then as we move into the period of state formation both of these get more controlled, get more standardised, and there are more restricted types of identities that you can have – for instance only ones that explicitly indicate your place within the social hierarchy.

Ragheb now moved on to tell us about the three sites she has chosen to study and why. During the Predynastic Period there is a major divide in practices between the north and the south of what was to become Egypt and so she has chosen sites from both those regions. In the north she has looked at Tell el Farkha (which is in the Eastern Delta), and in the south she has looked at Adaima and Hierakonpolis which are quite close together but as she showed us later have different flavours of culture.

The criteria that Ragheb used to select her sites to study were as follows – they had to cover her whole date range of interest and be split between north & south. They needed to have both settlement and cemetery contexts in the archaeology. They needed to be both small and large scale sites. She needed them to have evidence

of bead making activities. And finally she wanted to work on evidence from sites that have been more recently excavated and published and where she can talk to the directors. As well as, of course, wanting to pick sites where she had access to the collections in storage.

When looking at the ornaments found at these three sites Ragheb had three components to her analysis. Firstly she is interested in the technology choices made by the artisans who created these objects – looking at the pieces as the product of a craft economy. She has done microanalysis of the tool marks on the insides of the beads, using vinyl polysiloxane impressions (casts) of the holes through the beads. She's then compared these tool marks to ones from a reference collection drawn from other people's previous work, and also to the products of the experimental work she's been doing herself. This last has involved trying to make beads herself to see how the production method works, and what sort of evidence it leaves behind in the beads.

The second component to Ragheb's analysis was to look at how control was exerted over the production of these ornaments – in particular how the raw material were selected and the spatial analysis of the production unites. She is also interested in using the contextual analysis of where these ornament were deposited in burials to look at identity expressions.

So how do we think these beads were made, how do we think the production process actually worked in the Predynastic and Early Dynastic Periods? Ragheb said that archaeologists have found microdrills with tips made of flint – caches of these have been found at Hierakonpolis for instance. At that site we don't yet know where the original working space was (which would give direct evidence of the production process) but its still possible to recreate the process using the sort of analysis she had talked about on the wear and tool marks on the beads themselves and by seeing how the tools would work via experimental archaeology.

The Hierakonpolis expedition have done experimental archaeology to look at this question. They used microdrills like the tools they found along with hammer stones. When it came to making beads from softer stones they were quite successful, but with harder stones they were less so. Using bronze tips on their microdrills improved their success rate a bit – but there's no evidence of any tools like this from the period. And even with bronze tips it would take 5 hrs carefully working with a bowdrill to make a hole through a carnelian bead. This gives an indication of just how precious these hard stone beads would be – it would take a skilled crafsperson with specialised knowledge a long time to make each bead. You need an expert working full time on producing these ornaments, rather than them being something someone can just knock out in their spare time after a day growing food.

Her own experimental work has emphasised those conclusions. She has tried to make beads from amethyst and carnelian, without any success at actually drilling right through the bead. However Ragheb said she did get a good feel for how the process might work – she had best success when she started with a hammer stone to hit the drill into the bead and create an indentation. This then stabilised the drill when she moved on to twisting the drill back and forth to begin drilling the hole. Using abrasives improved the efficacy of the process significantly – she used dry or wet crushed quartz, and wet quartz worked best (tho she emphasised that both worked). Ragheb pointed out that if you look at the tomb paintings from much later in Egyptian history or at modern ethnographic studies of bead making then you see that they use wet abrasive dust in the process – so there is evidence to back up the use of this technique. And while that evidence is from much later periods it seems plausible that the Predynastic Egyptians had already discovered this process. She also noted that water is very useful to cool the production process down – twisting a flint tipped drill in a hard stone for hours generates quite a lot of

heat, and flint contains a lot of sulphur which means that it tends to spark!! I was rather taken aback by this when she said it, but of course I shouldn't've been – after all "everyone knows" that you can make fire using flints and/or drills to generate heat and sparks. This is just a case where that's an unwanted by product.

As Ragheb said earlier in the talk one of her methods of analysing the beads is to make casts of the drill holes, which tells us quite a lot about the manufacturing technique. Most beads appear to've been made by drilling from both sides so that the hole meets in the middle and perforates the bead. This gives a distinctive biconical (hourglass) shape – the first part of the bead to be drilled ends up wider than the further in parts, because you keep grinding away at the ends as you drill through the stone. And most beads have two "first parts" that are wide, and the hole is narrowest at the middle where the two holes meet. But this is not the case for all beads – some beads have perforating holes that are straight, and so clearly there is some other manufacturing technique that was used to make these beads but she doesn't yet know what this is. Ragheb is not the first to do this sort of analysis on beads, and she told us about work by Kenover on beads from the Indus Valley. In that study they looked at the casts under a Scanning Electron Microscope and were able to see tool marks. One point she made here was that some of these beads were also made with straight holes, using this as yet unknown manufacturing technique.

At Tell el Farkha there are three main parts to the site – the Eastern Tell is a cemetery area and is where most of the body ornaments were found, Kom C may have a bead production site with raw carnelian and some beads found there, and Kom W had an administrative centre (and some pieces were found here). Many graves here show signs of standardisation – same body position, same types of grave goods. And this standardisation is also found in the beads which have been found. Ragheb showed us photos of two necklaces – one made of carnelian, one made of ostrich shell. The beads in each necklace look even and regular, they are effectively mass produced. Ostrich egg shell beads seem to appear in the context of people how have power, and carnelian as a hard, difficult to work stone is also associated with the elite. Tell el Farkha also has some of the earliest evidence of gold in non-royal body ornaments. Ragheb said that this all suggests that Tell el Farkha was an important place during the state formation period – even though there is no royal presence they could nonetheless commission expeditions to get access to gold. Cylinder seals have also been found in Tell el Farkha – which indicates that there was a significant bureaucracy there. This suggests that Tell el Farkha was part of the power struggle that eventually culminated in Narmer's unification of the country.

Another interesting point about the carnelian beads found at Tell el Farkha is that many of them had the straight perforating holes made using the unknown manufacturing technique. These beads look very similar to the beads that come from the Indus Valley that Kenover worked on – Ragheb came back to this in the Q&A session. She said that she's of the opinion that this similarity might indicate some sort of long distance contact between the two cultures – the carnelian in the beads is also better quality than the carnelian local to Tell el Farkha, so perhaps these beads actually came from the Indus Valley originally. She hopes to do some analysis on some of these beads to identify where the stone comes from – at present she can't get permission to study beads in Egypt in this way but she hopes that she might be able to use ones from a museum collection. This sort of long distance contact isn't without precedent, of course – lapis lazuli was traded across huge distances from Afghanistan during this period (including to Egypt) – and any contact between Egypt and the Indus Valley may be indirect via trade networks involving the intervening cultures in places like Anatolia.

The next of Ragheb's sites is Hierakonpolis. The majority of the beads she's investigated here came from two different cemeteries – HK43, which is a workers' cemetery, and HK6, which is an elite cemetery (and was the primary subject of Renée Friedman's talk last year, see my write up here:

<https://writeups.talesfromthewolands.org/2021/09/17/life-on-the-edge-updates-from-hierakonpolis-elite-cemetery-renee-friedman/>). Despite the distance between them HK6

has a lot in common with the Tell el Farkha cemetery. Standardised large rectangular tombs with superstructures and a lot of cultic activities above the tomb – this is also the cemetery where the animal burials are located and the flint figurines. The overall impression is of a very structured site. Ragheb said that there is also a lot of interesting experimentation in the making of ornaments at Hierakonpolis – like glazed stone beads and ivory or bone bangles, rings and beads. As well as more standard bead materials like faience, carnelian and ostrich shell.

The beads found in the HK43 cemetery at Hierakonpolis were not much like those from the HK6 cemetery – they are much more diverse, and include such non-standard materials as tortoise shell. Ragheb said that these beads are almost as diverse as those from her third site, Adaïma. At Adaïma the beads are mostly found with child burials and generally come from the western cemetery at the site (which has the highest concentration of child burials). The beads from here are the most diverse in their use of raw materials – unconventional materials are common such as tortoise shell, sea shells and many other materials. They do also have specialised beads – made in canonical materials and neatly shaped and standardised – but the emphasis is on diversity. The materials also come from a wide range of places, covering the whole of Egypt and in some cases coming from places like the Sinai or into Nubia. The necklaces Ragheb showed us looked more like collections of individual beads strung together rather than like a necklace that had been assembled as part of a production line.

So Ragheb's big question here is why? Why are these materials from such different places, why are the necklaces so diverse even within the same ornament? Ragheb said it's possible that this Adaïma population is more mobile than has been assumed – and the archaeological evidence of their houses does suggest they were not entirely a settled population. But it seems more plausible that they had a high degree of contact with a very mobile nomadic population which then linked them via trade to the various far flung regions that the beads come from. The diversity of beads within a single ornament is also striking – every ornament is different, the various beads within an ornament are made of different materials and have different wear patterns, some "beads" are just blobs of clay formed into a bead shape to go on the string. Ragheb's suggestion is that the diversity might be explained by these ornaments being made up for the burial – most are with child burials and she thinks that possibly each relative provided a bead of their own which were then strung together to make an ornament for the deceased child to take into the afterlife as a member of the community. This reminded me of our talk in April, when Sara Ahmed Abdelaziz Mostafa told us about her work on infant pot burials in this same period (and some from this same site at Adaïma) where she speculated that the use of a previously used pot as the burial container was to link the infant to the community (see my write up:

<https://writeups.talesfromthewolands.org/2022/04/15/vessels-of-innocence-child-pot-burials-in-predynastic-egypt-sara-ahmed-abdelaziz-mostafa/>).

As well as considering the three sites individually Ragheb was also looking at cross site comparisons, some of which she'd already told us about (the similarities between Tell el Farkha and HK6 at Hierakonpolis and the similarities between Adaïma and the non-elite cemetery HK43 at Hierakonpolis). There are also parallels in motifs that show up at Adaïma and Tell el Farkha – for instance a bell-shaped amulet form that is found at both of these sites, as well as the very well known

bovine amulet form. There are also wedge shaped beads at both sites – she showed us a shell example from Adaïma and a carnelian example from Tell el Farkha. So there's some cultural continuity and contact taking place between these two geographically separate sites. But there are also notable differences – there is a significant preference for hard stones at Tell el Farkha, which is a marked contrast to the anything goes attitude to materials at Adaïma. So hard stones presumably mean something to the people of Tell el Farkha, and this something has to do with power and status.



Ragheb wrapped up her talk by telling us some of the preliminary observations that she has made so far. The three sites differ in their choices of raw materials and in how they use them – Tell el Farkha and HK6 have a preference for hard stones and standard shapes & sizes for their beads, whereas at Adaïma and HK43 they are open to diversity. At those latter two sites there is a sense that ornaments are more egalitarian – you don't necessarily need a specialist who has the time and has been trained to craft perfect hard stone beads, instead you might even make some of them yourself. But in all places people went to great lengths to acquire the

materials they used to make their beads – even the non-elite populations interred at HK43 and Adaïma had beads from far away places. By the late Predynastic Period there are signs of cultural similarities between the north and the south of Egypt, with similar amulet shapes in both Tell el Farkha & Adaïma and similar standardisation in HK6 & Tell el Farkha. The ornaments found at Tell el Farkha also indicate that they used bureaucratic status markers – which along with the early use of gold for non-royal ornaments suggests that this was a key site in the Delta region at the time. And finally she has found evidence of some sort of unconventional drilling method, producing straight perforations in hard stone beads, and this need further investigation to help flesh out the bigger picture of the social changes in Egypt at this time.

One thing that came up in the Q&A session was whether we know how these ornaments were worn – the questioner (I didn't catch who) asked if any of the art of the period helps with figuring this out. Ragheb said that it does, and one thing the art shows is that the ornaments we call "necklaces" may often have been worn in the hair as something more akin to a tiara. Others might be bracelets rather than necklaces. A reminder that the names we give archaeological artifacts are not always correct!

This was a fascinating talk, we've recently had quite a few talks about craft methods and about this early period of Egyptian culture and it was interesting to have another aspect explained to us. I was particularly struck by the idea that the Adaïma people maybe buried their children with ornaments made up of keepsakes from all the family, a very movingly human insight into their culture. And quite a contrast to the picture built up of the people of Tell el Farkha prizing their difficult-to-make identical bead strings which displayed how well connected they were but not who they were as an individual.

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**Other talks we've had on similar themes include:**

- **“The Narmer Palette [Again]: Early Egyptian Stone Carving in Practice”**  
**Dr Kathryn E. Piquette**  
(<https://writeups.talesfromthewolands.org/2022/05/24/the-narmer-palette-again-early-egyptian-stone-carving-in-practice-kathryn-e-piquette/>) **which focused on how the Narmer palette was made**
  
- **“Vessels of Innocence: Child Pot Burials in Predynastic Egypt”** Sara Ahmed Abdelaziz Mostafa ( <https://writeups.talesfromthewolands.org/2022/04/15/vessels-of-innocence-child-pot-burials-in-predynastic-egypt-sara-ahmed-abdelaziz-mostafa/>) **which looked at what infant burials tell us about the child's place in society.**
  
- **“The First Pharaohs”** Professor Aidan Dodson  
( <https://writeups.talesfromthewolands.org/2022/02/15/the-first-pharaohs-aidan-dodson/>) – **an overview of the history of the Early Dynastic Period**
  
- **“The chaîne opératoire of Ancient Egyptian glass manufacture: raw materials, production and use”** Dr Anna Hodgkinson  
( <https://writeups.talesfromthewolands.org/2021/12/14/the-chaine-operatoire-of-ancient-egyptian-glass-manufacture-raw-materials-production-and-use-dr-anna-hodgkinson/>) **which looked at glass working in Ancient Egypt**
  
- **“Life on The Edge: Updates from Hierakonpolis’ Elite Cemetery”** Renée Friedman  
( <https://writeups.talesfromthewolands.org/2021/09/17/life-on-the-edge-updates-from-hierakonpolis-elite-cemetery-renee-friedman/>), **primarily focusing on the HK6 cemetery**
  
- **“Reconstructing the Mid-Second Millennium BCE Using Scarab Amulets”**  
**Stephanie Boonstra**  
(<https://writeups.talesfromthewolands.org/2019/12/01/reconstructing-the-mid-second-millennium-bce-using-scarab-amulets-stephanie-boonstra/>) **both about how scarab amulets are made and about how they can be used to illuminate their historical context**
  
- **“Ancient Egyptian and Nubian Leather Technology”** Lucy Skinner  
( <https://writeups.talesfromthewolands.org/2019/02/25/ancient-egyptian-and-nubian-leather-technology-lucy-skinner-eeeg-meeting-talk/>), **which looked at leather-making in Ancient Egypt**
  
- **“Egypt’s Origins: The View from Mesopotamia and Iran”** Paul Collins  
( <https://writeups.talesfromthewolands.org/2018/09/15/egypts-origins-the-view-from-mesopotamia-and-iran-paul-collins-eeeg-meeting-talk/>) **which discussed how Ancient Egypt was linked to the outside world during its early history**
  
- **“Ancient Egyptian Jewellery”** Carol Andrews  
( <https://writeups.talesfromthewolands.org/2017/02/20/ancient-egyptian-jewellery-carol-andrews-eeeg-meeting-talk/>) – **an overview of later Egyptian jewellery**