



The quick and the dead

The changing meaning and significance
of jewellery beyond the grave

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First symposium - ECA - Thursday, 31 March 2016, 14:00 to 18:00
Find out more and reserve tickets at www.adornedafterlife.eca.ed.ac.uk

'Adorned Afterlife- Existential Craft' is an interdisciplinary research network in partnership with National Museums Scotland consisting of experts from the fields of Jewellery Design, Archaeology, Forensic Anthropology, Classics, History and Museology.



On the outskirts of an industrial estate in Granton, Edinburgh, on the coast line of Scotland, lies an unassuming 'overspill' depository for natural, geological, industrial and cultural artefacts for the world collections held by the National Museums of Scotland (NMS).

Over ten million items reside here, out of public site, one of which is an Egyptian Mummy from the 1st Century known as the 'Rhind mummy'. Excavated in 1857 by an archaeologist Alexander Rhind, these far travelled mummified remains have slowly been revealing their identity and possessions.

While working at Edinburgh University I established the 'Adorned Afterlife' network in 2015 which brought together researchers from across Design, Archaeology, Forensic Anthropology, History, Philosophy and Museology to examine objects of adornment revealed or captured with digital technologies.

This network aims included exploring existing precedents alongside new technologies for the non-invasive examining of artefacts and paintings in museums by computerised tomography (CT) and magnetic resonance imaging (MRI) scanning. It sought to apply these practices to the harder to reach, less tangible objects in museum collections that might be considered "*Otherwise unobtainable*" (Harrod).

The network will encourage high quality speculative multidisciplinary research involving archaeological anthropological issues and engagement between disciplines that may not otherwise have an opportunity to share discourse and analysis.

Stephen Bottomley

Diego Zamora

Dr Elena Kranioti

Giovanni Corvaja

Dr Margaret Maitland

Professor Elizabeth Moignard

Dr Siobhan McLaughlin

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Consultant Jewellery Historian /Author

Birmingham City University

Classical Archaeology, UoE

Analytical scientist/ Conservation, National Museums Scotland

Vitreous enamel artist

It was the rationale of the group that museums around the world would probably contain many hidden or out of reach treasures from our past that relate directly, or in-directly, to the body as adornment.

These objects may be intangible, unwearable or even obscure to our contemporary perceptions. These types of artefacts may include physical objects in plain view, non-corporeal ones represented in paintings and carvings, or items excavated from tombs and burials or remaining undisturbed beneath the layers of ancient funereal wrappings. These items placed long ago out of sight and reach, but now made visible by non-invasive technological advances within research and analysis. These fascinating objects can have a deep symbolic significance, relating to life and death or the afterlife.

Sharing our insights and knowledge our aims were collectively to question their purpose and significance (*why were they made, by who and for whom*).



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The 'Rhind Mummy' was our first case study and came about after reading about this 2012 project between the National Museums Scotland, the University of Edinburgh and the University's Clinical Imaging Research Centre.

Partnerships between museums and institutions with a tempting range of spectral analysis technology have become relatively common place, with tales of mummies being transported in ambulances and vans at night to national hospitals for MRI scans.

The Rhind mummy was one of the first, itself a c. 300 BC Roman / Egyptian mummy brought to Scotland by the archaeologist Alexander Rhind in the 1850s and part of the collection of the National Museum Scotland.

Professor van Beek, the chair of Radiology at the University, medically scanned the Rhind mummy to gather new and more detailed digital images of its body. Using this data, Dr Kranioti, a lecturer in Forensic Anthropology was able to create biomedical imaging of the skeletal remains beneath the bandages.

These were then used to determine the mummy's age, sex, stature, health and ethnicity. These scans were used for the 2012 National Museum Scotland Exhibition, 'Fascinating mummies' with the then head of conservation and analytical research Jim Tate.



Granton Archive visit with Network members
Photo Stephen Bottomley

March 15th 2016 Edinburgh based members visited to National Museums Scotland Archive in Granton, Edinburgh to view the Rhind mummy and other stored pieces.

- March 31st First full Network meeting eca (AM)
Adorned Afterlife symposium, eca (PM)
- April 1st 2016 Network meeting eca (AM)
Network filmed interviews
Visit and handling session of artefacts at
National Museums Scotland (PM)
- July 2016 Published findings *Adorned Afterlife* website



National Museums Scotlavisit with Network members
Photo Stephen Bottomley

Dr Margaret Maitland, Curator of Ancient Mediterranean collections at National Museum organised a visit to view the Rhind mummy at the NMS Granton archive. The Rhind mummy's bandages are black due to the use of a dark tree resin that was applied to seal its surface. Amulets were embedded into this surface, the locations of some of these tallying with where organs may have been removed as part of the embalming process.

A mummy case was intended to encase the body within for an eternity enabling the spirit to travel on to the afterlife beyond.

Early background research involved archival research in of Egyptian museum collections in Edinburgh, Bristol, Cambridge, Brighton, Manchester and New York. Some of the most common, yet striking, jewellery found are collars of hammered or stamped and chased gold.

Granton Archive visit with Network members

adornment embedded in the mummy
external wrappings
Photo Stephen Bottomley



In the ancient Egyptian mythology and hierarchy, their Gods, and Goddesses, Kings and Queens had a special association with gold. The sun god Re was called “Gold of Stars”. Horus was the “child of Gold” or “Falcon of Gold” and the king, as the personification of Horus on Earth, was called “Mountain of Gold”. It may be surmised Goldsmiths have been highly respected for their knowledge of such an important and sacred metal.



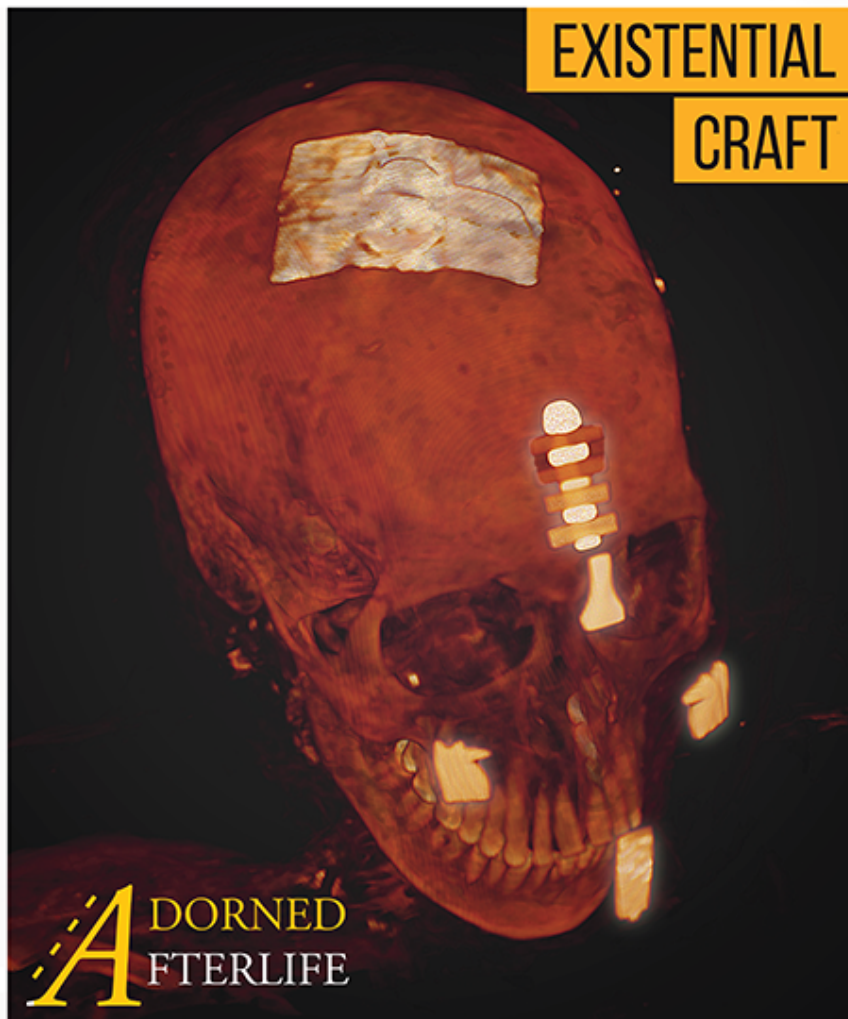
Granton Archive visit with Network members

adornment embedded in the mummy
external wrappings
Photo Stephen Bottomley

Salima Ikram in her book 'Death and Burial in Ancient Egypt' reminds us that it is too simplistic to look back on the Egyptians as a culture obsessed by death, when in reality they celebrated life and saw the stage beyond their short physical life as a transitional one onto a future existence.

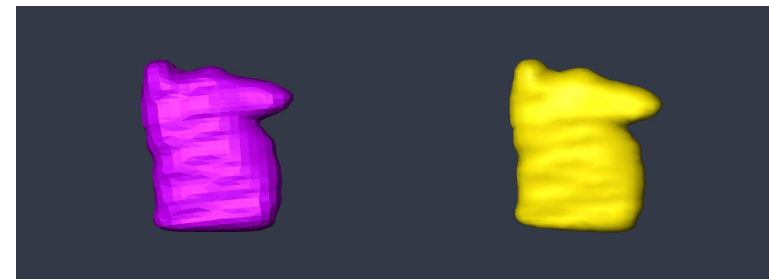
*"Death and birth are the two events universally experienced,
and it is their very commonality that helps to link cultures,
Regardless of any separation in time or place."* Ikram

As previously mentioned, it was the descriptions of the amulets and talismans attached not only to the mummy's exterior wrappings, but also, as the scans revealed- beneath the surface, attached to the body's skull that were so intriguing.



“Death and birth are the two events universally experienced, and it is their very commonality that helps to link cultures, regardless of any separation in time or place.”

Ikram.S, ‘Death and Burial in Ancient Egypt’
Aus Press, New York, 2003



Left, 2 x 3D models
2015, University of
Edinburgh / National
Museums Scotland
Photo Artist

However, the mummy was not on public display, therefore the first part of our research project was spent by my research assistant, Diego Zamora, a CAD/CAM PhD researcher, examining the original scans jointly held in Edinburgh. These scans were viewed on digital software held in the archaeology and anthropology departments in the University. Here Diego was immersed in this digital realm, without first hand reference or sight of the actual physical object. He became confused as to which objects were 'beneath' or 'above' the bandages that wrapped the body. The scans themselves were quite crude passes, as the amulets themselves were 'bi-products' of the scanning process, which was mainly concerned with gathering data on the skeleton. These literally were the 'digital ties that bind' - leaving us to feel in the dark to what was being examined. This created misunderstanding and presumptions that were later only resolved after seeing the actual mummy itself.

For example, a series of small objects that were rebuilt from these scans and were thought to be under the bandages and over the skeleton's eyes, due to an earlier verbal description by staff. We had even taken to referring to these ancient symbols of protection as 'horse-heads', because of the crude resemblance of form of the 3D print, when in fact they were on the surface of the mummy and were '*wedjat*' known as the 'eyes of Horus' and similar to the 'eyes of RA'. These *Wedjat* were in place to protect and watch over the body 'here' in the afterlife and ward off evil.



Above, 3D printed
models 2015, from
Rhind Mummy
University of
Edinburgh / National
Museums Scotland
Photo Artist

Right:
Bristol Museum
Wedjat
Photo Artist





Golden Garland of Armento

The **Staatliche Antikensammlungen**
(State Collections of Antiques), Munich,

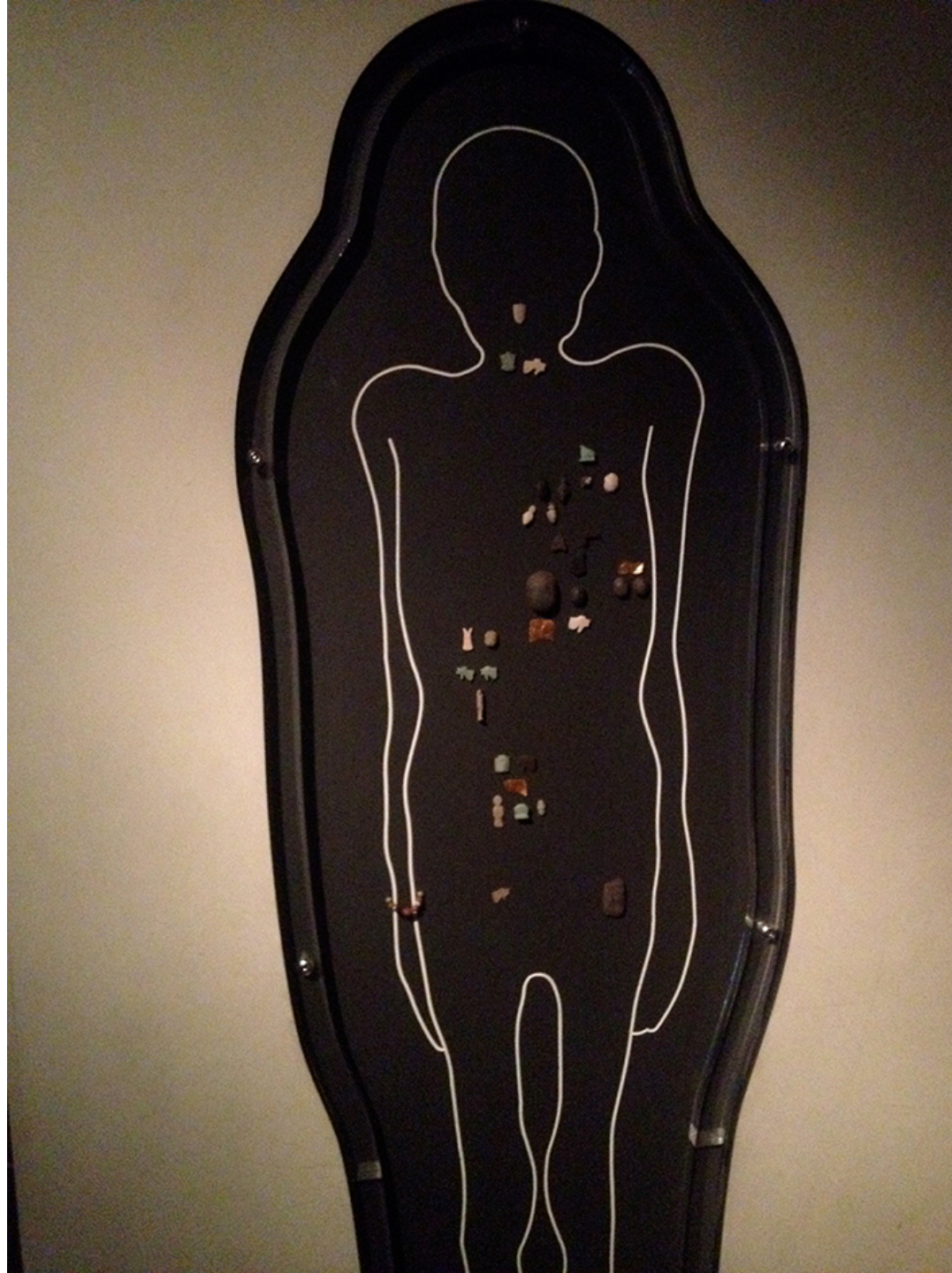
Golden decorated crown, funerary or
marriage material, 370–360 BC.
From a grave in Armento (Basilicata).

Photo SEB
March 2014,

Though archaeologists and historians believe some pieces of jewellery were buried as grave goods, they also believe others were made specifically for the grave. Burial jewellery may be made of thinner or more flimsy materials. A fine example of this is the golden garland of Armento, in state antiquity museum in Munich. The gold sheet is far thinner than that used for jewellery worn by the living, as in another example from the Egyptian rooms at the Metropolitan museum, proving a non-functional use. For, who would not want golden sandals for an afterlife's after-party?



Toe and
Finger Stalls.
Sandals.
Gold
Metropolitan
Museum
Photo
S Bottomley
Nov 2015



Bristol
Museum
and Art
Gallery,
2015
Photo
Stephen
Bottomley



Manchester
Museum
and Art
Gallery,
2015
Photo
Stephen
Bottomley

Jewellery, objects and tools valued in life have a long association with being used in death to represent a person. They become embodied in the burial rites that celebrate a passing life and the anticipated spiritual journey ahead to the next one.

The inter-relationship between maker and material when working with the mortal remains of our own existence has an equally long and fascinating history.



Bust of St
Mauritius,
Christoph
Angermair,
Munich
C 1630



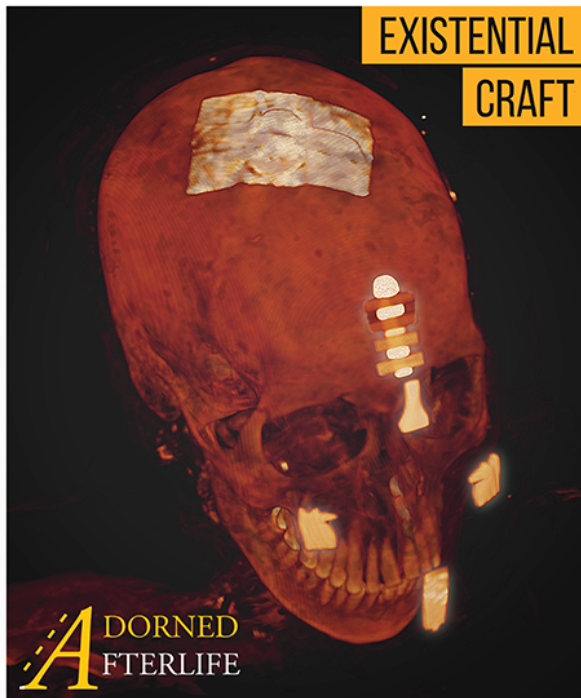
Relics from the Passion of
Christ. Workshop of
Abraham Lotter(?) Augsburg
c.1590 Cast Silver, Gold
enamel work, precious
stones, pearls
Photos S Bottomley

The Residenze in Munich, the city's former palace, holds an exceptional collection of religious reliquaries.

The skulls and bones of saints and martyrs are encased in bejewelled splendour, Gold, Silver, enamel work, pearls, precious stones, glass, crystal, ivory - all are used as the adornment to celebrate objects associated with a holiness achieved in life- and the through later canonisation by the Holy Roman church after their deaths.

Reported fragments of the true cross and the shroud of Christ are preserved to remind the living of the pain, suffering and ultimate redemption achieved through life. Yet when looking at these powerful objects is it possible to remain objective to the story and origin they claim?

Do we have a problem with their authenticity, and is this disbelief not representative of a wider core existential dilemma that questions our shared reality and existence?



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THE UNIVERSITY OF EDINBURGH
Edinburgh College of Art



National
Museums
Scotland



SCOTTISH GOLDSMITHS TRUST



Scans of the metal head piece, the 3D printed replica, a modern interpretation (Bottomley and Nolden)

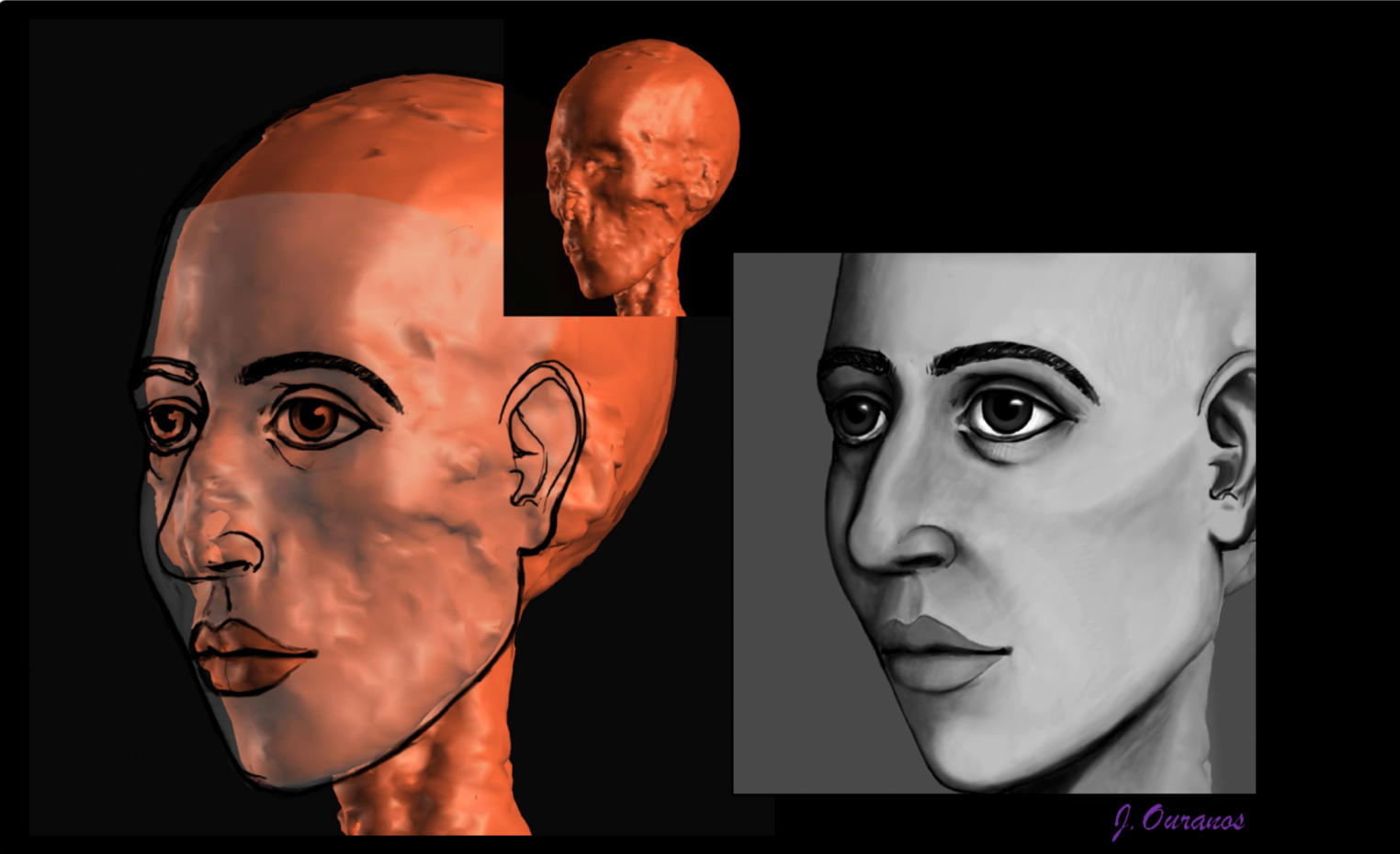
Adorned Afterlife display, Main Sculpture Court ECA 31.03.16

The low resolution of the CT scan and additive build process of the printing of the prototype all added qualities and characteristics to the models that were created that may not be attributed to the real object.

These are ghosts of the original, fakes and imitations that create their own narrative and persona. Taking this premise further I fashioned a woven beanie, or hat that bore a replica electroformed head-badge designed from the original scan. It became as a contemporary fashion label might be appear on a garment today.

From the original scans and the forensic anthropology work of Dr Elena Kraniota and her colleagues it is known the body within the Rhind Mummy is that of a woman 158cm in height and between 25-29 years of age.

In ancient Egypt names have power and the Egyptians wrote theirs on many items and texts, in the belief that their names being spoken gave them power and energy in the after-life. There is therefore an irony that this beautiful and powerful mobile grave and tomb that contains this woman's bones is now named after the Scottish Egyptologist Alexander Henry Rhind and commemorates his 1857 excavation and bears his name.



Facial reconstruction. Image Dr Elena Kranioti



Alexander Henry Rhind 1833-1863

There is hope however, that her name may be known one day. A rolled piece of parchment, most likely papyrus, was also identified sitting directly below her right thigh with the right hand placed alongside it as if holding it. This scroll would be the so-called 'Book of Breathing'. A late funerary composition found on mummies from Thebes between the 2nd Century and 1st Century AD. On this papyrus would be written her name, like a death certificate and future technology will enable this text to be read from this rolled scroll by 3D carbon scanning technology and reconstruction techniques being pioneered by scientists like professor Brent Seales at the University of Kentucky.

At our first Networking event each member gave lighting talks to introduce themselves and enable us to speculate on each member's potential contribution to future work and exploration. Short interview films were also made and later uploaded to our website.

One debate developed around if these objects embedded on the exterior of the Rhind Mummy could or should be classified as jewellery? Dr Margaret Maitland believed that museums would interpret these objects as religious amulets for spells and charms and not jewellery.

A contemporary maker might argue the fact that these handmade items were made for and pinned and placed to specific locations around a body, clearly identifying them 'wearable objects' and therefore included them in a contemporary vernacular of jewellery. The concept of objects being placed on static bodies after death for the purposes of a religious ceremony was more widely discussed.

Symbolised Values in Jewellery

Schmidt 2016

Traditional values of personal objects

Aesthetic expression of beauty
Gift of courtship and seduction
Symbol for self-affirmation
Symbol for group membership
ethnic marker
Sign of social facts social marker
Sign for individuality
Object for rituals and ceremonies
Object for offerings
Amulet and Talisman
Healing object
Means of exchange
Inalienable possession
Means of communication
Counting device

Angela Fisher, 1984
Marcel Mauss, 1934
Marian Vanhaeren, 2003

Additional values in jewellery today

Means for reward
Object for memory and comfort
Object for humour and play
Object for desire and envy
Object for sensual sensation
Underline physical attractiveness
Object for body modification
Sign for social status and demarcation
Weapon
Object of Investment
Exploitation

Karl Bollmann, 2015
Daniel Miller , 2008
Martina Dempf, 2002
René Girard , 2012
Wulf Schiefenhoevel, 2014
Pravu Mazumdar, 2014
Christa Sütterlin, 2014
Oppi Untracht, 1982

Research suggests historians believe the range of jewellery classifications, meanings and significances has evolved and been extended from Ancient to Modern times. The rationale for the classification for making, wearing and owning jewellery as presented by authors and historians (Untracht 1982) and (Phillips 1996) and in wider anthropological studies (Fisher 1984) over several past decades has been re-evaluated, most recently by Schmidt (2016) in her thesis “Contemporary Jewellery - Innovation or Mimesis?”.

What Schmidt proposes is a classification of how jewellery was seen and understood in the past compared to the present, representing this in two lists, as illustrated. Within the column ‘Traditional Values of personal objects’ -the older value system is drawn from the works of Fisher, Mauss and Vanhaeren. In relation to Rhind Mummy and according to Schmidt’s’ table, there are three categories that the head’s scarab might fall into to be classified as jewellery: ‘Object for rituals and ceremonies’, ‘Object for offerings’ and ‘Amulet & Talisman’. However, our experience with our own networks antiquity museum curators showed us this was not the case for them. Possibly others on the list may also be questioned, such as ‘counting devices’. Is it our contemporary perspective of jewellery and a wish for it to encompass a broader range of ideas widening the field retrospectively too early and too generally?

Stephen Bottomley	PI, Senior lecturer UoE / Professor Birmingham City University
Diego Zamora	RA , UoE PhD researcher /
Dr Elena Kranioti	Forensic Anthropology UoE
Giovanni Corvaja	Master Italian Goldsmith
Dr Margaret Maitland	Curator Ancient Mediterranean, NMS
Professor Elizabeth Moignard	Classics, University of Glasgow
Dr Siobhan McLaughlin	Consultant Radiologist, Royal Infirmary of Edinburgh
Dr Jack Ogden	Consultant Jewellery Historian /Author
Assoc Professor Gay Penfold	Birmingham City University (<i>retired</i>)
Dr Ben Russell	Classical Archaeology, UoE
Dr Lore Troalen	Analytical scientist/ Conservation, National Museums Scotland
Elizabeth Turrell	Vitreous enamel artist

Conclusion

Our research network demonstrated the clear advantages of an inter-disciplinary group. There was a great deal to be gained from shared discursive, ranging analysis and discussion. Our different experience, knowledge and perception of jewellery added new dimensions to how we imagined past work in museums and collections, as well the power of jewellery to be re-interpreted for future work.

Differences over the classification and the interpretation of meaning and significance of jewellery by both past and future generations of makers and historians may never be completely resolved or aligned. These two groups, makers and historians, examine the subject from different perspectives and starting points. The maker begins from the point of creation and the technicalities of 'how' and from 'what' it was it made, as well as the aesthetic language.

Our 2015 research project built on the anthropological research of the Fascinating Mummies exhibition and the 2012 scanning. An historian considers the scientific and recorded evidence of where it was found, how often it appears and if there is a systematic pattern to this occurring as proof or evidence.

After the initial case study of the Rhind mummy, the next intention is to engage a range of makers with a wider network of museums to explore the hidden, invisible or overlooked jewellery treasures that may lie within them. Current studio research has led me to investigate Egyptian paste and faience more closely with network partners. A recent relocation to work at Birmingham City University also opens up a new and exciting network of museum curators, as well as colleagues from within the School of Jewellery to work with.

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2015 Adorned Afterlife Rhind Mummy project

Stephen Bottomley, PI. Diego Zamora, Research assistant, Daniel Lester, Graphic Designer, Gary Grober, 3D technician
Elena Kranioti Forensic Pathologist/Anthropologist
Dr Margaret Maitland National Museums Scotland

2012 Project

Conservation & Analytical Research, National Museums Scotland

Dr Jim Tate, Head of Department and leader of the project. Dr Susanna Kirk
Diana de Bellaigue Artefact Conservator

2012 Clinical Imaging Research Centre, Edinburgh University

Prof Edwin van Beek, Head of Centre. Dr Saeed Mirsadraee, Senior Clinical Lecturer
Martin Connell, CT data analysis

Archaeology, School of History, Classics and Archaeology, University of Edinburgh

Dr Elena Kranioti, Forensic Pathologist/Anthropologist. Benjamin Osipov, PG student
Anthropology. Jakob Ouranos, Artist

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THE UNIVERSITY OF EDINBURGH
Edinburgh College of Art



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Schmidt B, Innovation oder Mimesis: Warum wir Schmuck tragen, Taschenbuch, 2016

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<http://blog.nms.ac.uk/2015/06/24/home-at-last-new-collections-facility-unveiled-at-national-museums-collection-centre/>

[Behind the scenes, National Museum of Scotland.](#) [Núria Ruiz](#)

<http://blog.nms.ac.uk/2015/06/24/home-at-last-new-collections-facility-unveiled-at-national-museums-collection-centre/>

Symposia

Egyptian Gold: Ancient Context, Modern Analysis A workshop organised by National Museums Scotland and PICS 5995 CNRS project Thursday, October 16th, 2014 National Museum of Scotland, Edinburgh. F. Guerra, M.Maitland, C.Price, M.Ponting, W.Grajetzki, I.Shaw and L.Troalen

Marian Vanhaeren, Speaking with beads: The evolutionary significance of bead making and use; In : d'Errico F. & Backwell L. (Eds.), *From Tools to Symbols, From Early Hominids to Modern Humans*. Proceedings of the International Round Table, Johannesburg, South Africa, 16-18 March 2003.

Schmidt B, Contemporary Jewellery Innovation or Mimesis? Industry Evening' Private view for the School of Jewellery Birmingham City University graduate shows, 2017