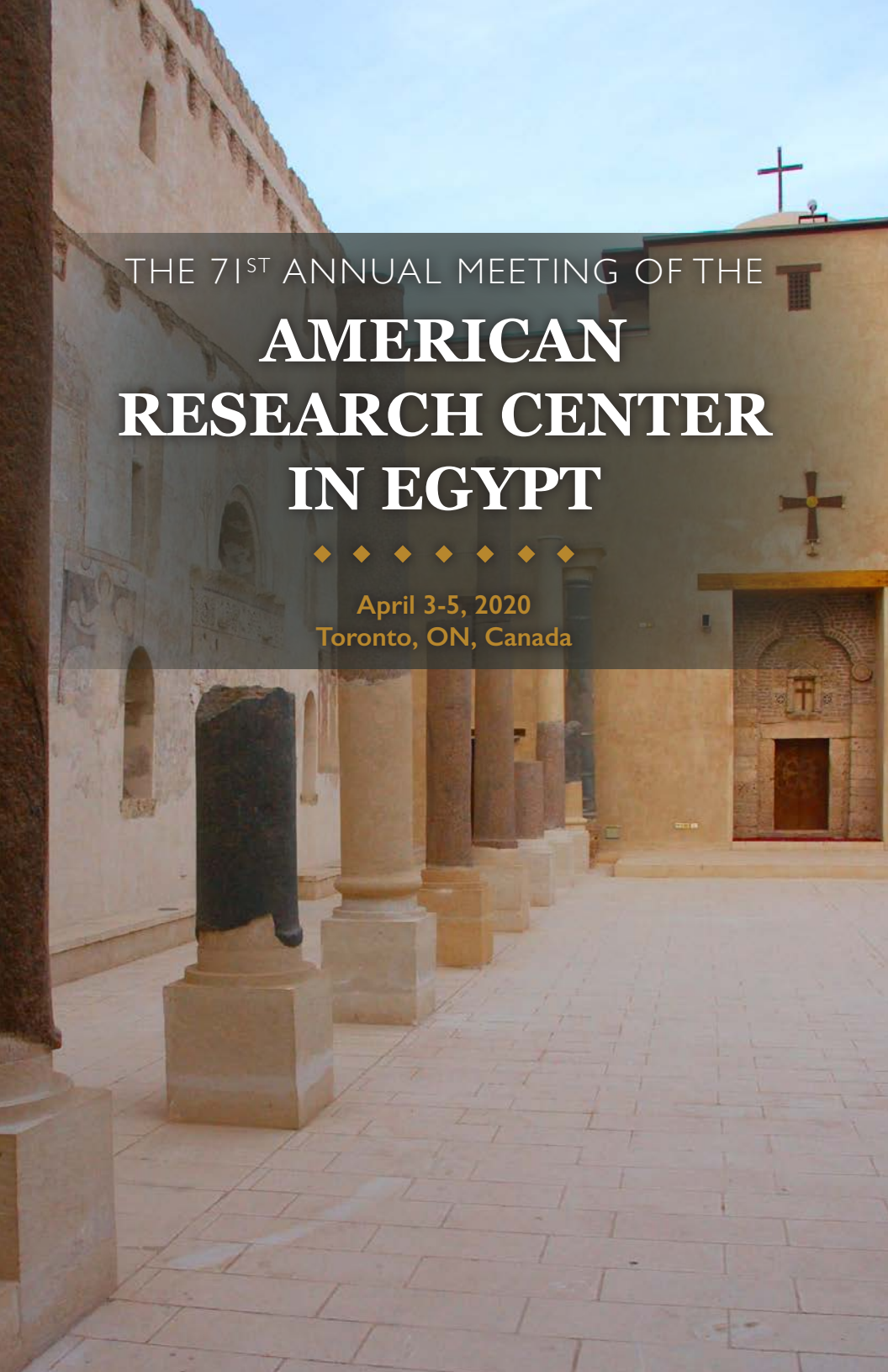

THE 71ST ANNUAL MEETING OF THE

AMERICAN RESEARCH CENTER IN EGYPT

April 3-5, 2020
Toronto, ON, Canada

ARCE
AMERICAN RESEARCH
CENTER IN EGYPT

ANNUAL MEETING OF THE AMERICAN RESEARCH CENTER IN EGYPT

April 3-5, 2020
Toronto, ON, Canada

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SILENT AUCTION

The Ancient Egyptians believed in achieving immortality through their burial practices. You can do it through a winning bid, and you don't have to die! Well-known mystery novelist Janis Patterson is partnering with ARCE to auction off a chance to become a character in her new and upcoming novel set in Egypt. The highest bidder will be named as a secondary character in her next fictional novel set in Egypt. There are still more chances to win: The second and third highest bidders will be named as tertiary characters in the novel.

The Silent Auction will begin the morning of

Friday, April 3 & finish at 2:00 p.m. on Saturday, April 4

The winning bidders will be announced at the April 4 Members and Awards Dinner.

Janis Susan May/Janis Patterson is a 7th-generation Texan and a 3rd-generation wordsmith who writes in mystery, romance, and horror. Once an actress and a singer, Janis has also been editor-in-chief of two multi-magazine publishing groups as well as many other things, including an enthusiastic amateur Egyptologist. Her husband even proposed in a moonlit garden near the Pyramids of Giza! Janis and her husband live in Texas with an assortment of rescued furbabies.

Location: Look for the Janis Patterson booth and win the chance for immortality!

CHAPTER COUNCIL FUNDRAISER AND KEYNOTE :

Of Masks and Mummies: The Discovery of a Saite-Persian Mummification Complex/The Saqqara Saite Tombs Project

Ramadan Badry Hussein is currently the Director of the Saqqara Saite Tombs Project at the Institute of Near Eastern Studies at the Eberhard Karls Universität, Tübingen, Germany. He first studied Egyptology at Cairo University from 1990-1994, then worked as an inspector of antiquities at Giza and Saqqara for seven years. During this time, he received training in archaeological methods and participated in the excavations of the Egyptian Ministry of Antiquities in Giza, Saqqara, and Bahariyya Oasis. He was admitted to the PhD program of Egyptology at Brown University, 2001-2009. At Brown, his research focused on the ancient Egyptian language and religious texts.

◆ ◆ ◆ ◆ ◆

Saturday, April 4

12:00 p.m. to 1:00 p.m.

Toronto Ballroom

The Hilton Toronto
145 Richmond St W
Toronto, ON M5H 2L2, Canada

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AUC PRESS

CASEMATE academic

Janis Patterson
...commiting crime with style!

BENBEN

CULTURAL NIGHT OUT

Join us for an open house generously hosted by the University of Toronto Department of Near and Middle Eastern Civilizations. A buffet dinner will be provided and hosted in the NMC Department reception area. Students from the university will also showcase some of the exciting research taking place in the lab during the event, and a tour of the NMC Archaeology Lab will be included.

The evening will continue at the Royal Ontario Museum with a private visit of the Museum's extensive Egyptological collection. Local beverages along with dessert will be served.

Buses depart at 6:00 p.m. from the west entrance of the hotel lobby, near the top of the escalators. See you there!

◆ ◆ ◆ ◆ ◆

Friday, April 3, 2020 from 6:00 p.m. to 9:30 p.m.
University of Toronto Department of Near and Middle Eastern Civilizations & Royal Ontario Museum

Tickets to the Cultural Night Out must be purchased in advance.

SAVE THE DATE

JOIN US IN MINNEAPOLIS FOR THE 2021 ANNUAL MEETING OF THE AMERICAN RESEARCH CENTER IN EGYPT

April 23-25, 2021

THE MINNEAPOLIS MARRIOTT CITY CENTER

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◆ ◆ ◆ ◆ ◆

STUDENT EVENTS

CAREER NETWORKING EVENT

Seeing the Future: Careers for Egyptologists

FRIDAY, APRIL 3, 12:30 p.m. – 2:15 p.m.

ROOM: Tom Thomson

See Flyer in Registration Materials

STUDENT POSTER DISCUSSIONS

FRIDAY, APRIL 3, 3:45 p.m. – 4:15 p.m.

ROOM: Foyer

Poster presenters will be on hand to discuss their research. Join the conversation: ask questions and share your views. Posters will be on display daily from 8:30 am.

FELLOWSHIP INFORMATION SESSION

SATURDAY, APRIL 4, 12:45 p.m. – 1:30 p.m.

ROOM: Toronto II

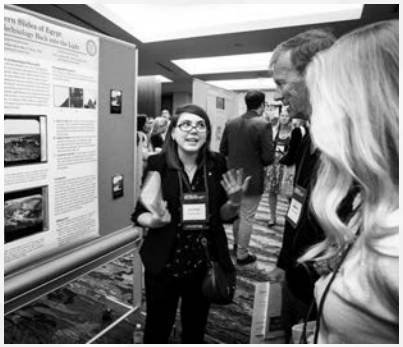
Wondering about funding or have a specific project in mind? An ARCE Fellowship might be just what you need! Learn more about opportunities for graduate, postdoctoral and faculty research in Egypt. Join the ARCE Academic Programs Manager and the Deputy Director for Research and Programs to find out more about the process and benefits.

STUDENT PUB NIGHT

SATURDAY, APRIL 4, 9:00 p.m.

ROOM: Town Crier Pub

See Flyer in Registration Materials



Thanks From The Executive Director Dr. Louise Bertini

This year marks the 71st Annual Meeting of the American Research Center in Egypt, and in a very exciting change-up, a move across the border to Toronto, Canada! The dynamic nature of the Annual Meeting that sees it shift to a new North American city every year not only keeps the event fresh but allows us to engage with our geographically diverse supporters, members, and research base.

As always, leading scholars from the fields of Egyptology, Archaeology and other specialties in Egyptian history and cultural heritage have gathered here to share, present, and discuss their research contributions and their passion for Egypt. In addition to presenters and attending scholars, we are also pleased to welcome our members, donors, and of course, enthusiasts of Egypt's history and ancient culture! Thank you to all who are attending this year, your energy and dedication is what makes this event so memorable.

I'd also like to express great gratitude to the many people that worked through different time zones over the past several months to ensure that this installment of the Annual Meeting, like its predecessors, is seamless and successful. Our Annual Meeting Committee Chair, Denise Doxey, has played a substantial role in the planning and execution of this event, as well as committee members Stephanie Denkowicz, Robert Ritner, Nicholas Picardo, Erin Moseley, Katherine Davies, and our ex-officio members Betsy Bryan, David Anderson, and Megan Allday.

Recognition and thanks must also go to ARCE's 14 chapters – including our newest chapter in Missouri – and our Chapter Council, for working to spread a scholarly appreciation for Egypt and for promoting ARCE's work there and in the United States. I'd also like to extend thanks to our steadfast institutional partners, including the Council of American Overseas Research Centers, the U.S. Department of State's Educational and Cultural Affairs Bureau, the National Endowment for the Humanities, and the U.S. Embassy in Cairo, for supporting ARCE's fellowship and academic programs, as well as our field work.

Last but certainly not least, I would like to thank our incredible staff and volunteers for their efforts in preparing every detail of this year's Annual Meeting. Their passion for ARCE and its community and mission is truly the cherry on top of this exceptional event.

Welcome to Toronto, everyone!

MEETING ITINERARY

THURSDAY, APRIL 2, 2020

TIME	EVENT	LOCATION
3:00 p.m. – 7:00 p.m.	Meeting Check-In, Information Desk and Registration	Foyer
3:00 p.m. – 7:00 p.m.	Speaker Audiovisual Check-In	Fitzgerald
Starting at 2:00 p.m.	Exhibit/Vendor Area & Student Poster Exhibit Setup	Foyer

FRIDAY, APRIL 3, 2020

TIME	EVENT	LOCATION
7:00 a.m. – 6:00 p.m.	Meeting Check-In, Information Desk and Registration	Foyer
7:00 a.m. – 6:00 p.m.	Speaker Audiovisual Check-In	Fitzgerald
8:00 a.m. – 6:00 p.m.	Exhibit/Vendor Area Open	Foyer
8:00 a.m. – 6:00 p.m.	Silent Auction bidding begins	Foyer
8:00 a.m. – 6:00 p.m.	Student Poster Exhibit Open	Foyer
8:00 a.m. – 10:30 a.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III
Various Times	VR Interactive Experience: 10-11am, 12-2:30pm, 3:15-4:15pm	Foyer
10:30 a.m. – 10:45 a.m.	Coffee Break, Underwritten by ISD	Foyer
10:45 a.m. – 12:15 p.m.	Paper sessions	Carmichael/Jackson Toronto I, II, III
12:15 p.m. – 2:15 p.m.	Lunch Break	
12:30 p.m. – 2:15 p.m.	Career Networking Event Sponsored by Walbridge Worldwide	Tom Thomson
12:45 p.m. – 1:45 p.m.	Chapter Officers Meeting	Casson
2:15 p.m. – 3:45 p.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III
2:45 p.m. – 3:00 p.m.	Coffee Break Available, Underwritten by Brill	Foyer
3:45 p.m. – 4:15 p.m.	Student Poster Discussion	Foyer
4:15 p.m. – 5:00 p.m.	General Members Meeting	Toronto III
6:00 p.m.	Bus Departure for Cultural Night Out—Ticketed Offsite Event	West Lobby
6:30 p.m. – 9:30 p.m.	Cultural Night Out—Ticketed Offsite Event *(Dinner at University of Toronto Department of Near and Middle Eastern Civilizations, followed by reception at Royal Ontario Museum)*	ROM

SATURDAY, APRIL 4, 2020

TIME	EVENT	LOCATION
7:00 a.m. – 6:30 p.m.	Meeting Check-In, Information Desk and Registration	Foyer
7:00 a.m. – 6:30 p.m.	Speaker Audiovisual Check-In	Fitzgerald
7:30 a.m. – 8:30 a.m.	Expedition Leaders Breakfast	Tom Thomson
8:00 a.m. – 6:00 p.m.	Exhibit/Vendor Area Open	Foyer
8:00 a.m.-2:00 p.m.	Silent Auction Bidding Continues	Foyer
8:00 a.m. – 6:00 p.m.	Student Poster Exhibit Open	Foyer
8:30 a.m. – 10:30 a.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III
10:30 a.m. – 10:45 a.m.	Coffee Break	Foyer
Various Times	VR Interactive Experience: 10:30am-12pm, 1-3:30pm, 4:30-5:30pm	Foyer
10:45 a.m. – 11:45 a.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III
11:45 a.m. – 1:45 p.m.	Lunch Break	
12:00 p.m. – 1:00 p.m.	Chapter Council Fundraiser (Keynote Speaker- Ticketed Event)	Toronto I
12:45 p.m. – 1:30 p.m.	Fellowship Information Session	Toronto II
1:45 p.m. – 5:15 p.m.	Paper Sessions –Silent Auction bidding closes at 2 pm	Carmichael/Jackson Toronto I, II, III
3:00 p.m. – 3:15 p.m.	Coffee Break Available	Foyer
6:30 p.m. – 8:30 p.m.	Members and Awards Dinner— Silent Auction winners announced	Toronto I & II

SUNDAY, APRIL 5, 2020

TIME	EVENT	LOCATION
7:00 a.m. – 12:00 p.m.	Meeting Check-In, Information Desk and Registration	Foyer
7:00 a.m. – 12:30 p.m.	Speaker Audiovisual Check-In	Fitzgerald
8:00 a.m. – 1:00 p.m.	Exhibit/Vendor Area Open	Foyer
8:00 a.m. – 1:00 p.m.	Student Poster Exhibit Open	Foyer
8:30 a.m. – 10:30 a.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III
10:30 a.m. – 10:45 a.m.	Coffee Break	Foyer
Various Times	VR Interactive Experience: 10:30-11:30am, 12:30-1:30pm	Foyer
10:45 a.m. – 1:15 p.m.	Paper Sessions	Carmichael/Jackson Toronto I, II, III

SESSION SCHEDULE

FRIDAY

Room	Toronto I	Toronto II	Toronto III	Carmichael/ Jackson
8:00 a.m. - 10:30 a.m.	Amarna	Art & Artifacts	Technological Advances	Language & Literature
10:45 a.m. - 12:15 p.m.	History of Egyptology	Foreign Relations	Coffins	Funerary Religion
2:15 p.m - 3:45 p.m.	Temples	Art	Technological Advances	Medicine

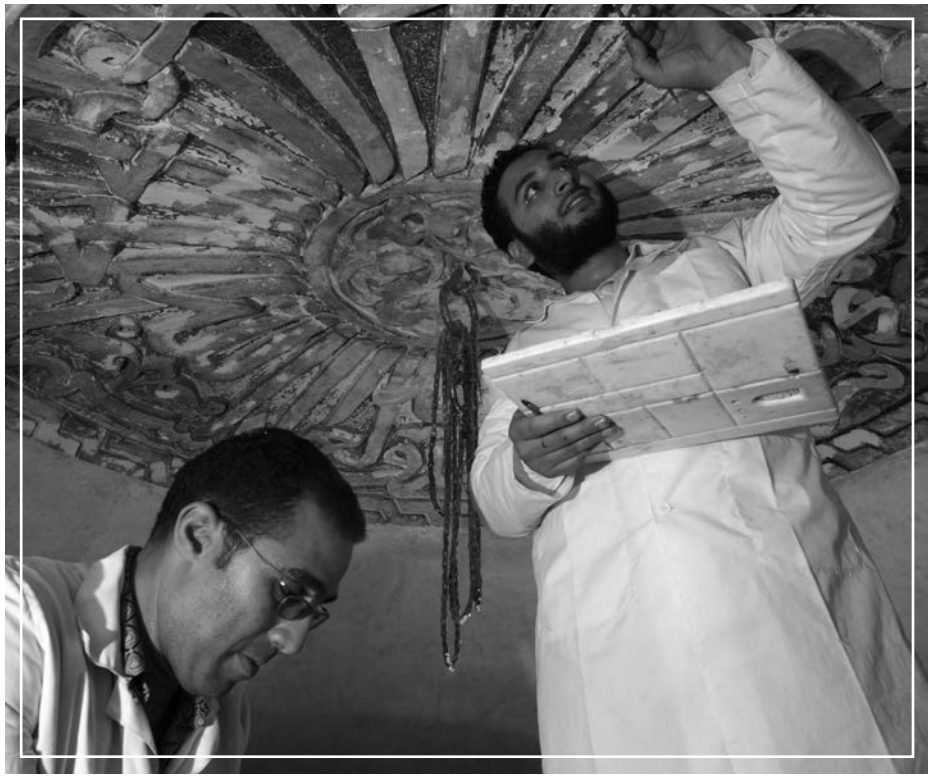
SATURDAY

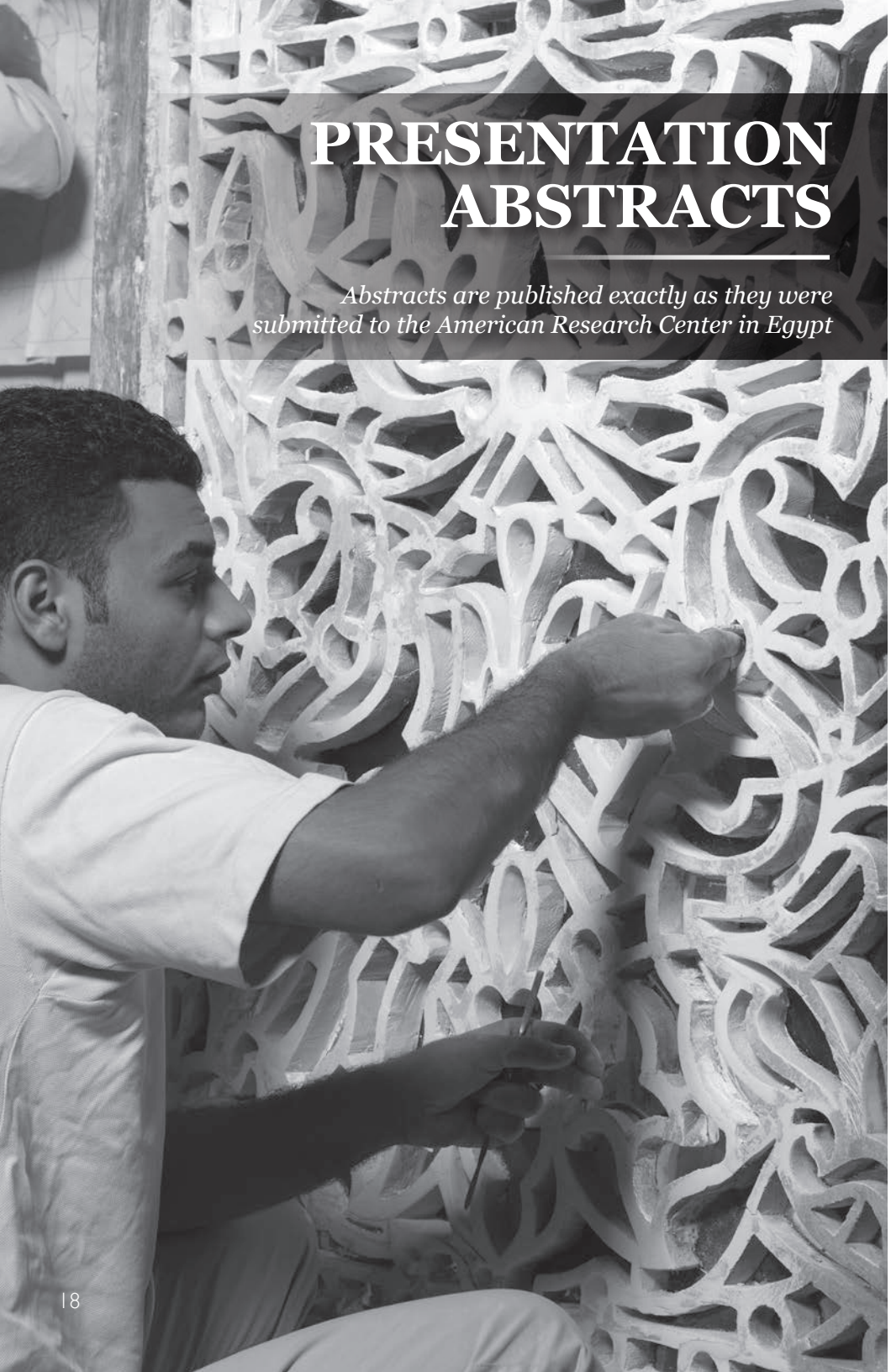
Room	Toronto I	Toronto II	Toronto III	Carmichael/ Jackson
8:30 a.m. - 10:30 a.m.	Art & Artifacts	Nubia	History	Temples
10:45 a.m. - 11:45 a.m.	Art & Artifacts	Afterlife Books	Archaeology	Art & Artifacts
1:45 p.m.- 5:15 p.m.	Conservation & Site Management	Borders and Foreign Relations	Language and Literature	Coptic to Modern

ARCE 71st Annual Meeting

SUNDAY

Room	Toronto I	Toronto II	Toronto III	Carmichael/ Jackson
8:30 a.m- 10:30 a.m.	Thebes	Nubia	Religion	Fakes & Forgeries
10:45 a.m. - 1:15 p.m.	Temples	Religion	Thebes	Cemeteries





PRESENTATION ABSTRACTS

Abstracts are published exactly as they were submitted to the American Research Center in Egypt

Adela Oppenheim, Metropolitan Museum of Art

The South Temple of Senwosret III at Dahshur 2019 Season

At a later point in the reign of Pharaoh Senwosret III, a large temple (ca. 47 x 76 m) was constructed to the south of the king's pyramid. The Egyptian Expedition of The Metropolitan Museum of Art resumed work in the area in 2017. During the 2019 season, additional fragments were found of the granodiorite colossal statue first recognized in 2018. Newly identified were fragments of an over lifesize statue depicting the king wearing a sed-festival garment and carrying a crook and flail. The king was probably flanked by two smaller representations of standing royal women. The presence of a sed¬-festival statue in the temple is likely connected to sed-festival imagery found in the wall decoration, and suggests that an anticipated or actual enactment of the rite was part of the south temple's meaning. Large portions of the temple's brick subfoundation were exposed, including a step between outer and inner portions of the temple, and a central gateway. Also discovered in the center of the temple was a foundation deposit that had been partially robbed in antiquity. On the south side of the temple, a drain or channel was uncovered that passed through an open court and under a gateway in the complex's south enclosure wall. Fragments of a lintel found in the area show Seth confronting Senwosret III's Horus name, an unusual juxtaposition that may also relate to the ritual function of the temple.

Agnieszka Dobrowolska, ARCHiNOS Architecture

A Tongue Twister Name and Collapsing Walls: Conservation of the Mausoleum of Mankalibugha in Cairo

The enormous Muslim cemeteries of Cairo stretch for more than eight kilometers and include some of the city's most important historic monuments. Unlike cemeteries in the Western countries, they were always intended to be also a place for the living and are now home to hundreds of thousands of people. When Sultan al-Ashraf Qaitbey built his splendid funerary complex in the 1470s, the surrounding area had been a cemetery for about 150 years. The tomb of Amir Munkalibugha al-Fakhri, built in the 1340s, is adjacent

to the lot where Sultan Qaitbey's palace once stood. In this area, a project combining historic preservation, cultural and educational events, and social development has been going on for a few years, financed primarily by the EU. The tomb of Munkalibugha is almost unique in its unusual form of three barrel-vaulted spaces with no dome, and its decoration displays many forms carried over from the earlier periods of architectural development in Cairo. However, by the 2010s the building was in ruin and in a precarious condition, in imminent danger of being irreversibly lost. In 2018, ARCE's Antiquities Endowment Fund granted funding for conservation of the mausoleum. The project began with emergency interventions to avert collapse. Further work involved permanent structural reinforcements and protective measures, conservation of fabrics, and ensuring that the building can be safely accessed by the public as part of a broader conserved area.

Ahmed Motawea Shaikhon, Egyptian Ministry of Antiquities

The Cemeteries of Jews in Alexandria, Egypt

Graves are of great importance in archeology, as tombstones contain valuable information about religious texts, Promotional phrases, dates, decorative elements and symbols. It is truly an official document that records the history and civilization of each country, the most authentic representation in the era and history recorded on it, shedding light on many different aspects of life throughout the ages reflecting the economic situation of the deceased in particular and of the country in general, and in genealogy, kinship and conjugal relations It's credible and beyond doubt. Those who wrote them never imagined that they would ever be a historical source. Tombstones, whatever their religion, are an important source of the history. The tombstones in Alexandria represent an open-air museum whose visitors draw cultural information about the lives of the Jews of Egypt, unparalleled in the world and in no other sources. This paper sheds light on an ignored part of the cultural heritage of Alexandria, which are the cemeteries of Jews. Unfortunately, few studies dealt with the cemeteries of foreigner's in Alexandria In addition, no research has been found that surveyed all the cemeteries in the city. The

aims of the study was to conduct a detailed survey to gather all available information from the various sources about The cemetery of Jews in Alexandria, Egypt these sources are archaeological sites and literature to highlighting the importance of the various architectural styles of the tombs in this historical period With a study of some models of tombstones.

Aleksandra E. Ksiezak, University of Toronto

The Hyksos Settlement at Tell el-Maskhuta in the Context of a Trade Route Across Central Sinai

Tell el-Maskhuta, a major settlement in the Eastern Nile Delta excavated by the Wadi Tumilat Project in the late 1970s-early 80s, is a site instrumental in understanding the 15th Dynasty activity on the Eastern Frontier of the Hyksos domain. After the initial excavation and land surveys ended, the site was never fully analyzed or published. This paper aims to summarize the results of a recent re-evaluation of the collected data for both the settlement and the entire site system, resulting in a much impactful understanding of the site's function and development in the MBA. Contrary to previously accepted theories, Tell el-Maskhuta, as well as the entire settlement pattern within the Wadi Tumilat, exhibits evidence of being involved in the long-distance, over-land trade with both Southern and Northern Levant commencing at the Hyksos capital. If that is the case, the Wadi Tumilat must be considered as a significant southern corridor leading in and out of Egypt, and its settlements discussed in the light of the southern desert route traversing the Sinai Peninsula towards the Negev Desert and the Jordan Valley. Tell el-Maskhuta, due to its size and location, can be deemed a "gateway city" into the Wadi, and consequently into the apex of the Nile Delta. Its domination over the eastmost section of the Wadi and role in the carefully planned settlement pattern provides invaluable clues to the functioning and span of the 15th Dynasty economy and its contacts with neighbouring areas beyond the reach of the maritime trade.

Anna Serotta, The Metropolitan Museum of Art; **Deborah Schorsch**, Objects Conservation / The Metropolitan Museum of Art

Painted Ladies of the Nile

Broadband Multispectral Imaging (MSI) is a procedure applied to the technical study and documentation of works of art that employs selected ranges of wavelengths in the electromagnetic spectrum to extend the capabilities of the human eye. Using a modified DSLR camera and interchangeable filters with visible, ultraviolet and infrared light sources, MSI can provide a map of superficial characteristics, such as pigments (including underdrawings and ground layers), ancient and modern organic coatings, and surface topography. The resulting images and their interpretation, particularly when augmented by X-ray radiography and instrumental analysis, can provide a physical underpinning for art historical reconstruction. A recent application of this technique at The Metropolitan Museum of Art is the study of wooden female statues dating to the Middle and New Kingdoms, designed to make visible evidence of their clothing and jewelry heretofore unsubstantiated. This paper will present the MSI techniques applied to this investigation and preliminary observations relating to these well-adorned ladies.

Annalise Pforr, Hellenic College Holy Cross Greek Orthodox School of Theology

Post-Pharaonic Influences on Civic Organization in Shenoute's Canons and the White Monastery of Upper Egypt

This research analyses the impact of Apa Shenoute's Monastic Rules on the societal structures, plenary systems, and democratic processes of the White Monastery as well as those of the larger monastic federation in fourth century Upper Egypt. Remarkable parallels may be drawn between aspects of Shenoute's rules and monastic and militaristic corpa from outside Egypt, including the writings of Greco-Roman voluntary associations, the Dead Sea Scroll corpus, and similar bodies of text preexistent to the Coptic canons. Special attention is given to semantic variations and

morphology of Greek loanwords present in these texts. This research aims to analyze potential connectivity between the early Coptic monastic community and the greater Mediterranean world, ultimately providing a nuanced view of Upper Egypt in an important period of development for post-pharaonic Egyptian written tradition and Coptic monasticism.

Anne Austin, University of Missouri - St. Louis

Recent Evidence for the Practice of Tattooing in Ancient Egypt

Physical evidence for the practice of tattooing in ancient Egypt has been rarely attested. Egyptologists have identified tattoos on only a handful of mummies spanning Pharaonic Egypt's more than 3,000-year history. Textual evidence is virtually silent on the practice and art historical evidence is often ambiguous. In 2014, the mission of the Institut Français d'Archéologie Orientale (IFAO) identified an extensively tattooed mummy from the necropolis at Deir el-Medina, the community of the workmen who cut and decorated the New Kingdom's royal tombs. Since then, we have identified several other individuals with tattoos among the many unpublished human remains at the site. This talk presents the most recent identifications of tattoos from the IFAO mission at Deir el-Medina's 2019 and 2020 field seasons. New tattoo identifications continue to rewrite our understanding of the roles, rules, and functions of tattoos in ancient Egypt. Additional tattoos found and analyzed during the 2016, 2019, and 2020 field seasons using infrared photography indicate that many more individuals were likely tattooed at Deir el-Medina. Additionally, the designs and placement of tattoos varied broadly. Coalescing the physical and art historical evidence, this talk offers some of the most comprehensive evidence we have to date on the practice of tattooing in ancient Egypt.

Annissa Malvoisin, University of Toronto

Geometry and Giraffes: The Cultural and Geographical Landscape of Meroitic Pottery

Despite being commonly overshadowed by their ancient

Egyptian neighbors, the ancient Nubian civilization of Sudan managed to solidify its cultural influence on the medieval world stage. The ceramic traditions of the Nubians, especially their thin-walled decorated vessels classified as fineware, is a primary marker for what became the third great Nubian cultural phase: the Meroitic Period (200 B.C. – 400 A.D). The movement of Meroitic fineware along the middle Nile Valley is evidenced by its discovery at several archeological sites within the Meroitic Empire. I have discovered strong evidence for its wider distribution within west and central African states during the 1st century A.D., and even bearing striking decorative similarities to pottery from Megiddo in the Near East. Despite these signs of widespread trade, the vast majority of studies conducted on Meroitic pottery halts at local distribution and trade with Egypt. Focusing on the archaeological data that has been collected at central Nubian sites where pottery production had become specialized based on common manufacturing processes, decorative techniques and vessel shapes, this paper employs a framework centered on continuity and change to analyze these typologies that adapt overtime and across geographical areas. Trade routes are cross-referenced with the movement of the specialized pottery to investigate medieval African trade systems. The shared pottery manufacturing processes that existed between Nubia and other African states via trade reveal that the Nubian civilization, which still exists as an indigenous community in North Sudan, was a dynamic global power at the turning point of medieval African commerce.

Anthony Barbieri, University of California, Santa Barbara;
Marissa Ashley Stevens, UCLA

Providing a Model Afterlife: Funerary Figurines and Models in Ancient Egypt and Early China

This paper compares tomb figurines and models from Middle Kingdom Egypt and Han Dynasty China, specifically focusing on elements of function, production, consumption, materiality, scale, and framing. The mortuary culture of both early China and ancient Egypt developed elaborate, three-dimensional tomb models that depict production motifs, offering bearers, modes of transportation, domestic and

public architecture, entertainers, and warriors. These models were an efficacious and economical means of offering perpetual provisioning for the afterlife. In both cultures it had been thought that the practice of incorporating models into the tomb arose out of a desire to substitute for “the real thing.” While human sacrifice was present in the late Neolithic and early Bronze Age of both Egypt and China (and a common practice of early state formation), and many items depicted in models have been found in tombs, this narrative is much too simplistic. A comparison of models from Egypt and China allows for a much broader and deeper understanding of the motivations behind the inclusion of such materials in burials. We also illuminate the original hierarchies of value along with other ideological expressions, going beyond the more basic understanding of the representational or substitutional nature of the models. Models from Egypt and China were enmeshed in a complex web of relationships with the human or object referent, the written word, and iconography that reveal strong similarities in the nature of the afterlife, while also allowing us to distinguish particular cultural emphases and the unique artistic evolution in each cultural area.

Ariel Singer, The Epigraphic Survey, the University of Chicago

Expanding Digital Epigraphy: developing a digital collation process

The significant developments in digital drawing-tablet technology over the past few years have led to a dramatic increase in the functionality of digital epigraphy. At the Epigraphic Survey we have been integrating digital tools into our drawing and photographic processes for over ten years, however it is only recently that it has become feasible to expand our digital tools into the sphere of actual collation. In the 2017-2018 season, the first full digital case study was completed for a drawing of a coronation scene of Amenhotep III from Luxor Temple. This included a digital photograph (extracted as a 1200 dpi orthomosaic image from a 3D model), and a drawing that was not just penciled and inked digitally, but also put through two epigraphic checks and a director’s check entirely on the iPad. Since

finishing this initial test case, the Epigraphic Survey has continued to work on streamlining our collation process while improving levels of accuracy. This talk will begin by reviewing how we adapted analog collation — using traditional blueprinting paper — into a digital process, and will discuss the lessons learned from doing so. It will also explore in detail our revised collation process, some of the issues that have arisen as a result, and the different tools that we have experimented with over the course of project. The talk will wrap up with a brief discussion of our future plans and goals for the integration of digital collation into our workflow.

Asmaa Alieldin Ali Abdelfattah, Egypt

The Composite Iconography of the Funerary Papyri of the 21st Dynasty

In the New Kingdom, The Scenes of Netherworld Books have been extensively and completely applied to the sufficient space on the decorated walls of the royal tombs in the Valley of the Kings. However, by the 21st dynasty, the cliff walls of royal cache (TT320) and Bab el-Gasus cache were left not decorated, instead that these religious scenes were applied on the funerary equipment (the funerary papyri and the anthropoid coffins). In the New Kingdom, The Scenes of Netherworld Books have been extensively and completely applied to the sufficient space on the decorated walls of the royal tombs in the Valley of the Kings. However, by the 21st dynasty, the cliff walls of royal cache (TT320) and Bab el-Gasus cache were left not decorated, instead that these religious scenes were applied on the funerary equipment (the funerary papyri and the anthropoid coffins).

Due to the limited spaces on the papyri, the religious scenes had to be abridged and greatly reduced, combined with other religious motifs, resulted in producing new types of decorated funerary papyri with composite iconography for the cosmology and the underworld depictions. This paper presents a comparative analysis of various and evolved iconography of the afterlife on the papyri of the Theban Priests and Priestesses of Amun. These papyri housed in the storage rooms of Cairo Museum and have never been

studied or published before. This research investigates the concepts behind these illustrations, not only by focusing on the study and the interpretation of these new complex iconographic compositions on the papyri, but also by tracing its artistic evolution and characteristics from its origins during the new kingdom till its transfer to the much smaller surfaces on the papyri of the 21st dynasty.

Finally, these depictions are the personification of the solar cycle and point to the daily regeneration of sun god, where the deceased hopes to accompany him in his ongoing revival for guaranteeing his rejuvenation each day.

Aurore Motte, Brown University*Songs, Speeches, and Captions in Ancient Egyptian Tombs*

This paper will present part of my PhD research results, focus of which was the speech captions (the so-called ‘Reden und Rufe’) in the private tombs from the Old Kingdom to the Late Period. It will explore the layout and the mise-en-texte of these captions added in the so-called daily-life scenes in private tombs, with insight on paratextual marks. This concept of paratextuality, coined by Gérard Genette in 1987, was rarely applied to ancient Egyptian texts (mostly papyri and ostraca) until quite recently, although it is a fruitful material in this regard. This corpus of texts, embodied in a monumental context, reveals just as much potential. Such formal means are highly indicative for a better understanding of the material textual culture as well as the categorization of these captions as a textual genre per se. This paper will accordingly show, from an emic perspective, several means used by the Egyptian scribes to formally distinguish these speeches from other captions and inscriptions displayed in private tombs. After a short presentation of the most common layouts and the pregnant texte-image relationship, I will turn my attention to the mise-en-texte and trace back the appearance of discursive marks in Old Kingdom mastaba as first evidence of paratextuality. I will then discuss further paratextual means, from the Old Kingdom to the New Kingdom, which were used to indicate the discursive nature of some captions.

Bahaa Gaber, Ministry of Tourism and Antiquities

The Work of the Egyptian Mission in the Cemetery of Draa Abo El-Naga, West of Luxor

Dra' Abu el-Naga is an area in western Thebes that extends along the mountain front, towards the north east, from the point at which the mountain cuts into the Deir El-Bahri bay to the wadi (valley) leading to the Valley of the Kings. It is commonly divided into three areas: north, middle and south. The north area contains 38 tombs, with TT numbering, and about 144 tombs numbered by Kampp. Tomb Kampp 157 Fortunately, during the last century, the site of Dra' Abu el-Naga necropolis (north) was not inhabited by villagers because of the irregular slopes and heights of the rocks in this area. On April 2018 the Egyptian Mission (DP2017) discovered the tomb while cleaning the area from debris (about 400³ m of rubble covered the court and the entrance of the tomb). Tomb No. 390 The discovery of Tomb no. 390, of the gold-maker Amenemhat, was announced as the second discovery of the Egyptian mission. The third discovery revealed two tombs: Kampp 150 and Kampp 161, as well as the burial chamber of the singer of Amon, Isis-Nefert, and associated archaeological finds. The Row Tomb The discovery of the largest row tomb in the cemetery of Thebes, was that of a person named Shed-su-Djehuty (He who is saved by Thoth) and his title was the most important seal bearer of Upper and Lower Egypt, and To, the Hereditary Prince and Mayor. Discovery of six tombs at the bottom of the cemetery courtyard.

Bianca Grier, University of Toronto

Medical Access in Deir el-Medina

The village of Deir el-Medina (18th-20th Dynasties, New Kingdom) housed the royal tomb builders and was located near the necropolis of Thebes on the West bank of the Nile. Many surviving sources found at this site contain official records outlining: lists of goods, wages and personnel. Other sources found at Deir el-Medina include a wealth of manuscripts created by the villagers revealing aspects of everyday life that not only include wages but also various benefits, that were provided by the Pharaoh. These

documents also reveal that medical access was available for workers and their families within the village included in these benefits. At different times, a physician (swnw, a title given to a secular healer) or a scorpion charmer (xrp-srq.t, a title given to a healer with some religious overtones) lived in the village and cared for the workers and their families. These types of healers are part of a medical tradition I call "formal medicine" (medical treatment, practiced by a person with formal training and/or by a person with a title). Though official records are the predominate sources attesting to formal medicine present in the village, nevertheless, other primary sources, mainly letters, discuss "informal medicine," (medical treatment or advice given by persons who are not formally trained or do not have a title). Based upon these varied source materials, this paper will illustrate how medical access was disseminated within the village of Deir el-Medina.

Brendan Hainline, University of Chicago

The Non-Royal Afterlife in the Pyramid Texts

The Pyramid Texts were originally believed to reflect specifically royal rituals and afterlife beliefs, due to their first appearance in the later Old Kingdom exclusively in the royal pyramids. It is the royal exclusivity of these religious texts in the Old Kingdom that gave rise to the theory of the "democratization of the afterlife". This theory has since largely been dismantled by scholars such as Harold Hays and Mark Smith (among others), in part because it is now known that several of the spells in the Pyramid Texts actually have a clear non-royal origin. In addition to problematizing the "democratization of the afterlife" theory, the existence of these specifically non-royal spells in the Pyramid Texts provides a textual window into the non-royal afterlife beliefs of the Old Kingdom. In this paper, I will summarize the methods that have been previously used to identify non-royal spells within the Pyramid Texts corpus, and additionally will offer two new non-royal markers: (1.) the deceased being the beneficiary of a ḥtp-ḏj-nj-swt; and (2.) placeholder text referring to the deceased's 'local god'. I will then highlight what these spells can reveal about non-royal afterlife beliefs and how these beliefs relate to those in

markedly royal spells. Finally, I will discuss the implications of the incorporation of non-royal beliefs — in particular, that of the deity Osiris — into royal mortuary practices, mainly that the royal conception of the afterlife was itself influenced and shaped in part by specifically non-royal beliefs.

Bryan Kraemer, Robert and Frances Fullerton Museum of Art, California State University San Bernardino

Minmose's Prayer: A Vision of the Secret Form of Osiris in the Sky over Abydos

An inscribed block from the tomb of the high priest of Shu, Minmose, from Abydos stands alone on top a wall in the Ramesside gallery of the Egyptian Museum in Cairo. It shows Minmose greeting the Abydene gods Horus-Savior-of-his-Father and Osiris-Foremost-of-the-Westerners. The text presents his prayer to these gods. Unnoticed thus far, the text hides a description of a very specific and auspicious event. Minmose requests to see a mysterious vision of the "secret form" of Osiris appearing against the mountain at Abydos and resting in the west. Further, it states that this happens at the time that the "beauty" of the god's "majesty" is visible. My analysis has found that this "secret form" is an astronomical phenomenon: an alignment of the constellation Orion with the full moon. Moreover, Minmose could only have witnessed it while participating in the festivals of Osiris at a very privileged level: The phenomenon is observable rising above the escarpment of Abydos from the tomb of Djer at Umm el-Qaab. It would rise and set again on the same night only on certain days in October and November. These days include the last ten days of IV Akhet in the 12th century BCE, when parts of the so-called "Khoiak-festival" of Osiris were celebrated during the reigns of Ramesses II and Merneptah. This talk will present my interpretation of this very interesting text and discuss how it is informative for understanding how the festivals of Osiris at Abydos were celebrated in the Ramesside Period and later.

Carl Robert Walsh, The Barnes Foundation

Assembling an Assemblage: The Egyptian Collection at The Barnes Foundation

Nestled and dispersed amongst the myriad works of art in The Barnes Foundation in Philadelphia, are a collection of roughly 30 Egyptian objects. Almost none of these objects have been researched or published, their provenance is unknown, and purchase details in the early 1920's are hazy. Most of the objects have flown under the radar of scholars, perhaps due to the disparate way they were/are displayed in Albert Barnes's 'ensembles,' which mostly consist of impressionistic, post-impressionistic, and modern paintings, a collection of African masks and Native American pottery and jewelry, and ancient Greek and Roman objects. Thanks to a grant awarded project at the Barnes Foundation, I have begun researching these objects in more detail and exploring how the objects can be related to current larger questions and theories in Egyptology, Art History, and Archaeology. In this paper, I will introduce the collection and outline some of my initial research questions and findings, and critically consider how the collection can be used as a multifaceted assemblage to engage scholars, students, and the public in the study of ancient Egypt.

Carla Gabriella Mesa Guzzo, University of Toronto

"Amazement of His Beauty in Every Body": The Language of Amarna Period Royal Display

The program of display employed by New Kingdom monarchs ranged from demonstrations of the king's martial prowess to official appearances within the palace. Rather than being merely a medium thorough which the king could disseminate a propagandistic message, these activities also served as a powerful means by which he could enact his cosmic role as ruler. While archaeological and iconographic materials offer a great deal of insight into the venues for and logistics of this kind of royal pageantry, the language used to describe such events may provide the keenest insight into the intentions of those devising this program of display, and how those witnessing such acts were expected to respond. Royal display was in use throughout the New Kingdom and beyond, but pertinent written sources from the Amarna Period are especially abundant. Thus, while the unique aspects of this era must be kept in mind, the Amarna Period is a particularly suitable place to begin investigations into the

language used to discuss royal pageantry. Royal displays were performances devised to engage the physical senses in order to bring about an emotional response. The specific impact of any given display would have varied according to the audience(s) to which it was directed. By looking at the use and occurrence of terms relating to display in royal and elite texts, this paper will explore the variety of ways in which such acts were conceptualized and experienced (or intended to be experienced) during the Amarna Period.

Carol A Redmount, UC Berkeley

In Requiem: The El Hibeh Temple of Sheshonq I

Sheshonq I, first ruler of Dynasty 22, founded, and had decorated with royal-quality relief, a small, elegant temple at the provincial site of El Hibeh in Middle Egypt. His son, Osorkon I, continued work on the temple. By Graeco-Roman times it lay in serious disrepair, although still in use. Today only the skeleton of the structure, ravaged by the vicissitudes of time, nature and man, remains in situ. This paper discusses the function, form, and decoration of the temple during its heyday and its decline, as well as the archaeological and intellectual history of its modern rediscovery.

Carol Meyer, PCMA

Gold Mining at the Fourth Cataract: Social Aspects

Nubia is famous as a source of gold in antiquity. The method of extracting gold is fairly well known, primarily washing out alluvial deposits, a very different process from Egyptian hard rock mining in the Eastern Desert. Salvage excavations in 2007 by the Oriental Institute at Hosh al-Guruf above the new Fourth Cataract dam documented a large gold-working site, a large field littered with gold crushing and grinding stones dateable to the Middle and Classic Kerma periods, ca. 2050 – 1500 B.C. The ancient work force was almost certainly local residents panning and processing gold as a seasonal supplement to subsistence farming. The question is where did the gold go from there, why, and by what means? We cannot assume a tax regime identical to the bureaucracy in Egypt of the time.

ARCE 71st Annual Meeting

Chelsea Kaufman, Johns Hopkins University; **Benjamin Doddy**, Loyola University Maryland

An Experimental Approach to Ancient Egyptian Metalworking and its Materiality

A great deal of attention has been paid to ancient Egyptian metal works for their beauty, elegance, and refinery. Serious discussions of metal production processes, however, have been largely overlooked, perhaps in part because the ancient Egyptians leave us with very limited direct explanations of their metal production processes beyond sparse, elusory tomb imagery and intermittent and enigmatic mythological allusions. Our research represents a case study focusing on loop sistra, or ritual rattles, to illuminate the challenges, processes, and both human and material agency behind such works that are only accessible through experimental archaeology aided by modern technology. Our experiments mark the early stages of our ongoing investigations into the materiality of metal production in ancient Egypt. We will present our recreated ancient Egyptian copper-alloy loop sistrum alongside video documentation illustrating our metalworking experiments and investigations into the metallic properties of the ancient instrument to reveal the ways in which the materials were manipulated to achieve the desired sound when played and where that sound falls in the spectral field. Simultaneously, since multi-component design of the instrument would have necessitated more than one production methodology to produce, we aim to demonstrate how the intended function of an object guides the choices made during the manufacturing process and uncover the hidden aspects of the materials and production technologies against a social and cultural background.

Christian Casey, Brown University; **Emily Beatrice Frank**, Institute for the Study of the Ancient World, NYU

Seeing Egyptian Manuscripts in a New Light

The immense variability of ancient manuscripts presents a major hurdle in creating digital archives. Texts appear on a range of substrates: papyrus, stone, ceramic, and textile. These substrates may be smooth or textured, uniform or

variegated, complete or riddled with lacunae. Their high degree of variation makes it nearly impossible to photograph these texts in a consistent manner for digitization, while also accounting for the unique properties of a specific text. Multiband imaging provides a possible solution to this problem. By photographing the text using a radiation source outside of the visible spectrum, multiband images provide additional information about the material of the object and can thus compensate for highly textured or low-contrast scenarios in a consistent and reliable manner. When compared to traditional digital photography, multiband imaging provides an additional advantage. Luminescent pigments, which absorb ultraviolet radiation and emit visible light, are abundant in the modern world but rare in ancient objects. Photographing texts against a luminescent background provides precise and unambiguous information about the shape of the object and the locations of lacunae. Using an approach that exploits this differentiation, our novel imaging method produces digital photographs that facilitate the clear separation of object from background. This allows further analyses to focus on the material properties of the manuscript itself, while also distinguishing between formerly ambiguous manuscript features, i.e. substrate and ink. In this paper, we explain our multimodal approach in detail and suggest it as a method for digitizing Egyptian texts.

Christina Geisen, University of Oxford; **Julia Hamilton**, University of Oxford

'The One Who Counts Corpses': Conceptualizing, Caves, and Chthonic Spaces in Ancient Egyptian Thought

It is well known that the way ancient Egyptian's perceived the world was highly influenced by Egypt's natural environment. The country's geological features and phenomena were mythologised and integrated into their overall world view. This paper is drawn from a broader research project concerning ancient Egyptians' awareness and understanding of their surrounding landscape, as well as its exploitation, and how their religious interpretation of these phenomena exemplifies the interplay of geography and religion. Specifically, this paper analyses the hieroglyphic lemmata for caves, caverns, and chthonic

spaces between the Old Kingdom and late New Kingdom. Classifiers (determinatives) for these terms, which reveal how ancient Egyptians observed these features and codified this knowledge in their language, are included as well. We discuss these geographical lemmata in different textual corpora in order to identify possible differences in their meaning and function with regard to natural versus netherworld landscapes. Following the terminological survey, the paper focuses on the attested names for caves in netherworld books, such as the Amduat, and descriptions of caves in the natural landscape, in order to draw conclusions about the symbolic meanings of these geographical phenomena, such as the so-called 'Waterfall cave' in the Valley of the Queens, which was allegorised as the uterus of the primordial mother goddess, Hathor.

Corina Rogge, The Museum of Fine Arts Houston; **Caroline R. Cartwright**, The British Museum

Facing the facts: Fayum portrait forgeries

Fayum mummy portraits dating from 1st-3rd century C.E., when Egypt was a province of Imperial Rome, are among the most engaging artworks of the ancient world. The naturalism and conveyed sense of personality of the sitter evokes a sense of communication across the centuries, and it is no wonder that they are sought after items for museum collections. As with any valued antiquity, demand far outpaces supply and so these items are prime candidates for forgers. Technical analysis of seven Fayum portraits held by the Museum of Fine Arts, Houston and the Menil Collection, as part of the Ancient Panel Paintings: Examination, Analysis and Research project (APPEAR), unambiguously identified/revealed two modern forgeries. Stylistic analyses had previously cast doubt on the authenticity of these two paintings, but the detection of anachronistic woods and modern materials from all paint levels clearly showed that these were not simply heavily restored objects or pastiches, putting the 'final nail in the coffin'. The two forgeries show very different levels of sophistication in terms of materials and methods of paint application and so help inform the field as to the range of forgery types that might be encountered. They also serve

as excellent education tools to explain how conservation science works and showcase the value of scientific analysis of cultural heritage objects.

D. J. Ian Begg, Trent University

A Pan Flute from Egypt

Despite countless references to Pan flutes in Greek and Roman texts and imagery, few remains have ever been found. There is so far no evidence for the use of the Greek syrinx in Egypt until they were introduced in Alexandria under the Ptolemies. At the Museum of the University of Padua, however, a rare complete Pan flute was recently rediscovered among the materials sent to Carlo Anti in Padua by Gilbert Bagnani from the excavations at Tebtunis in Egypt during the 1930s. Its provenance has been investigated through analysis of the archival documentation in Anti and Bagnani's archives. It is one of the best preserved ancient Pan pipes in the world, consisting of 14 reeds of different lengths held together by cords and a natural binder. C14 analysis dates the artefact to the Byzantine/Coptic period in Egypt. A set of non-invasive analyses were conducted on the syrinx, which were based on 3D CT scanning and materials chemistry. Using the available measurements, a preliminary analysis of the instrument's tuning was conducted. Applying theories of ancient Greek music has facilitated the replication of the sounds. Finally an interactive museum installation at Padua has been conceived and created to display the sounds of a virtual Pan flute to museum attendees. An attempt will be made to bring the ancient artefact back to life by reproducing the replicated sounds of these pipes so that we might hear what Egyptians, Greeks and Romans heard in Alexandria centuries earlier.

Danielle O Phelps, School of Anthropology, University of Arizona

Intentionally Forgetting the Amarna Royal Family—Inalienable Artifacts Amongst Tutankhamun's Burial Assemblage

Tutankhamun, one of the last kings of the Eighteenth Dynasty of ancient Egypt (circa 1330-1323 BCE), was buried in KV 62, one of the most intact royal tombs ever discovered in the Valley of the Kings. His burial assemblage contains many of the typical artifacts found in Egyptian mortuary practices. However, three groups are atypical: childhood mementos, heirloom, and artifacts with the names of Tutankhamun's immediate family members. The purpose of their inclusion in the tomb is unknown. This presentation will examine the atypical artifacts through the utilization of statistical analyses and the anthropological theories of memory works and secrecy to suggest that they are inalienable objects. They are a part of Tutankhamun's burial assemblage because of their connections to the tumultuous Amarna period. They could not be destroyed and were instead deposited in Tutankhamun's tomb as a means to intentionally forget the royal Amarna family and the Amarna period.

Dawn Power, University of Toronto

The Solar-Osirian Unity and Rebirth in the Book of Caverns

The Book of Caverns, which was the subject of my PhD thesis, is classified amongst the 'so-called' Underworld Books, which deal with the sun god's nocturnal journey in the Underworld. It appears in the New Kingdom royal tombs of the Ramesside Kings. The appearance of cauldrons in the lower registers has led this composition to be associated with punishment. However, upon examination of the text and iconography it became evident that the main emphasis is the Solar-Osirian unity and rebirth. The Solar-Osirian unity requires Re and Osiris to unite in the Underworld, so that Re can be reborn each morning and Osiris can be rejuvenated each night – the best iconographic example appears in the New Kingdom tomb of Nefertari. Although this phenomenon is alluded to in religious texts and Underworld Books that precede the Book of Caverns, it is not depicted in them. In the Book of Caverns the most apparent image pertaining to the Solar-Osirian unity consists of an ithyphallic Osiris with a sun disk above his erect phallus. However, there are various other images in this composition, which allude to this phenomenon and

contribute to the compositions association with the Solar-Osirian unity and rebirth. It is these elements that I will be discussing, in order to clarify the misconception that the emphasis of the Book of Caverns is on punishment. In rectifying this misconception, I will be able to present the Book of Caverns in a new light and demonstrate its emphasis on the Solar-Osirian unity and rebirth.

Deborah Schorsch, Objects Conservation / The Metropolitan Museum of Art; **Anna Serotta**, The Metropolitan Museum of Art

The Art of Misrepresentation

Just as the art and trade of falsifying antiquities has flourished for hundreds of years, detection of these fabrications on the basis of material and technological evidence has a long and storied past. Forgeries are works made with the intent to deceive, while fakes generally were produced under more innocent circumstances, for example as tourist curios, and subsequently misrepresented. Pastiches combine unrelated fragments originating from multiple ancient works. For conservators and curators, perhaps most difficult to negotiate are works that have been over-restored or otherwise substantially modified, not necessarily for the purpose of deception, but to a degree that original intent of the artist is obscured. This paper will present historical and more recent technical case studies from the Egyptian collection of The Metropolitan Museum of Art, with the goal of contextualizing issues raised by the three previous presenters in this session on the technical examination of fakes and forgeries.

Elizabeth Hart, Kelsey Museum of Archaeology

Technological Transition in the Time of Tut

In the modern world technological change happens in the span of a lifetime. In the ancient world it often took much longer, but some of the same questions apply: what circumstances facilitate or hinder technological change, and how are people affected by it? The transition from stone to metal tools was one of the most momentous

technological changes in human history. Egypt was one of the places where stone tool use continued the longest after metals became available. Combined with Egypt's incredible preservation, it presents a unique opportunity to understand the critical facets of this transition. A brief review of recent research about the decline of stone tool use shows that the transition took thousands of years, was punctuated, and that the New Kingdom to Third Intermediate Period was the last major phase of organized stone tool production in Egypt. However, there has been only minimal research into stone tools in these periods, and the types and production systems are not well understood. An analysis of lithic artifacts found in KV 10 (and associated worker's huts), in comparison to other recently analyzed New Kingdom stone tool assemblages, demonstrates what kinds of stone tools were still use in this period, and possible systems of production. The results will be used to consider the issues surrounding the decline of stone tools. Moreover, this work demonstrates that lithics are a significant artifact type even in these relatively late periods, and that their collection and analysis need to be part of all research strategies.

Elizabeth Minor, Wellesley College*Continuity of Kerma Religion: Rams, Lions, and Winged Hippopotami and Giraffes in Classic Kerma Contexts*

An analysis of key elements of Classic Kerman religious imagery can provide suggestions of possible precursors for some aspects of Napatan and Meroitic religion. The connections between Kerman and later Kushite cultural practices are difficult to determine with certainty, however, exploring the Kerman use of indigenous animal forms does reveal concentrations of religious emphases that may have echoes in later Kushite religion. This paper will also address the use of lions, hippopotami, and the Kerman emphasis on flying animal deities. Evidence for a ram deity in early Nubian cultures is widespread, and by the Classic Kerma Period rams and ram horn imagery were included in royal sculpture, mortuary sacrifices, and at least one high-status woman's headdress. The link between this deity and later forms of Amun as a ram will continue to be debated. Lions similarly spanned royal and elite Kerman use, with faience

tile lions leading into the royal Funerary Chapel KII and other royal sculpture. The importance of lions in Kushite religion comes to a peak in the Meroitic Period with the worship of Apedemak. An adapted Kerman form of the Egyptian hippopotamus goddess Taweret was featured on funerary beds, some known to be for women. By the last generation of the Classic Kerma Period, Taweret and giraffes were transformed into fantastical winged forms. The transformation of Egyptian deities into winged forms is prevalent in Napatan faience amulets. Underlying religious commonalities and themes can help highlight the long-term continuities in Nubian religion and cultural practices.

Elizabeth Warkentin, University of Memphis

The Connection between the Cults of Hathor and the Early Ramesside Pharaohs

The "Procession to the Cults of Hathor" relief, found on the northern half of the western interior wall of Great Hypostyle Hall at Karnak, depicts fifteen Hathor manifestations. The Hathor representations each have an associated epithet that designates a specific cult location of the deity. It is proposed that the "Procession to the Cults of Hathor" relief is a portrayal of the connection between the early 19th dynasty rulers with these cults of Hathor. In addition, to the Hathor's found in the "Procession" relief, Hathor was depicted elsewhere in the Hall as well. Most notably, Hathor's Dendera manifestation was found twice within the "Procession" itself along with four additional representations found on other walls in the Hall. These portrayals of Hathor as the Lady of Dendera link her Dendera cult to three generations of Ramesside kings—Ramesses I, Sety I, and Ramesses II. The connection between the 19th dynasty rulers to specific cults of Hathor is what this paper will explore, not only at Dendera, but other cult locations mentioned in the "Procession to the Cults of Hathor" relief as well. It is believed that these dynastic connections to the cults of Hathor were made as a way for these Ramesside pharaohs to legitimate their reigns and bolster their political power around Egypt.

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Ella Karev, University of Chicago

Mark Them with my Mark: The Question of Slave Branding in Egypt

This paper analyses the Aramaic and Demotic textual evidence related to the practice of marking slaves in Late Period Egypt, with a goal of providing a clearer definition of the terminology. Documents from the Late Period in Egypt often refer to an enslaved individual being "marked". The historical practice of marking the bodies of slaves is well-paralleled and perhaps unremarkable. But in translation, there is the choice to be made between "branding" and "tattooing". Egyptian Aramaic references to slaves marked with l- ('belonging to') and the owner's name seem to be too complex for a branding iron, and support the translation of 'tattoo'. The Aramaic terms sṭrw [b]šnṭ (ʾ 'inscribed with my mark') have some linguistic parallels in Babylonian that likely refer to branding. Demotic Egyptian cattle sale documents indicate that certain ones are marked (wš) and provide a description of some of these marks, parallel to the modern practice of cattle branding. In Ptolemaic contexts, kharaktēr and kharassesthai are usually translated as 'brand' while stizein and stigmazein are translated as 'tattoo', with no concrete reasoning behind either translation. Although contemporary evidence is sparse, archaeological and textual pharaonic evidence—including a visual depiction of human branding and branding irons—suggests that branding is a well-known practice by the time of the Late Period. With the aid of linguistic parallels, textual references, and archaeological evidence from the pharaonic period to the Ptolemaic, this paper will propose that an accurate translation of the Aramaic and Demotic terminology is 'brand' rather than 'tattoo'.

Emanuel Fiano, Fordham University

Shenoute's "Rhetorical Ventriloquism:" Citational Practices in Discourses 4,6-9

This study focuses on the liberal use of citations of himself and other contemporaneous actors made by the Egyptian archimandrite Shenoute of Atripe in four of his homilies (Discourses 4, 6-9). These Discourses are collectively

introduced by the section heading “Discourses in the presence of some dignitaries who came to him with their retinues”. However, with one exception, the Discourses under this heading are not actually addressed to a dignitary. They constitute, rather, the reporting to a different audience about words Shenoute allegedly pronounced in the presence of officials at previous times. Moreover, they contain in turn further citations from previous verbal exchanges Shenoute had had with other actors. The use of citations from oneself or others was a rhetorical figure long codified in rhetorical manuals. Depending on the ancient taxonomy and conceptualization adopted, Shenoute’s insertion of reported dialogue into his homilies qualifies either as dialogism (sermocinatio, διάλογος) or as impersonation (προσωποποιία). But Shenoute’s “voice games” are particularly interesting, among other reasons, because of his repeated thematization of the significance of each situation of utterance (aimed at granting him control over the various addressees of his allocution at different times) and of his tendency to embed into the reports other literary devices such as “question-and-answer” riddles (allowing him to pose as an expert). By elucidating through rhetorical, stylistic, and narratological tools these and other features of Discourses 4, 6-9, this paper aims at furthering understanding of Shenoutian textuality.

Emily Grace Smith-Sangster, Princeton University

Crutched Pharaoh, Seated Hunter: An Analysis of Artistic “Portrayals” of Tutankhamun’s Disabilities

Academic and popular sources alike regularly refer to Tutankhamun as ‘disabled’ at the time of his death, citing artistic representations from the items in his tomb to back up such claims. This group of objects has been said to depict the young king seated while hunting and using a staff as a ‘walking aid’ which seems to specifically highlight the presence of a leg-based disability. This narrative of the image depicting the truth of Tutankhamun’s physical condition has publicly become accepted as ‘fact’ with images of the seated king even being used in the touring exhibit “Tutankhamun: Treasures of the Golden Pharaoh” to suggest Tutankhamun’s ‘fragile constitution.’ A comparison

of these depictions to historical representations of kings hunting and using staffs of authority, however, suggest that these depictions of Tutankhamun were part of a traditional iconography utilized by Tutankhamun’s artists, not to highlight his unique features, but instead to situate his image within the artwork of kings of the Old, Middle, and New Kingdoms. This study, thus, works to dispel the pervasive myth of an artistically disabled Tutankhamun while providing a basis for understanding the true nature of the representation of disability in Egyptian art. Further, this work urges Egyptologists to avoid relying on physical remains to ‘decipher’ mortuary artwork. Such a change in method can only lead to a better understanding of the purpose of the body as depicted within the mortuary context and its role as separate but complementary to the physical body in New Kingdom thought.

Federico Zangani, Brown University

Pharaonic Administration and Intelligence at The Frontier of The Egyptian Empire: The Case-Study of Kumidi

Following the Levantine campaigns of the early 18th Dynasty, the wealthy town of Kumidi (present-day Kamid el-Loz, Lebanon) became a center of the Egyptian imperial administration in Syria-Palestine, as is documented by the presence of a governmental official, usually designated with the generic term of rabû (‘the great one’) in cuneiform sources, during the reigns of Amenhotep III and Akhenaten. This paper sets out to analyze the evidence from the Egyptian inscriptions, the Amarna letters, and the archive of cuneiform tablets discovered at Kamid el-Loz to investigate the strategic significance of this town to the functioning of the Egyptian empire in Syria-Palestine. It appears that the rabû of Kumidi acted as an intermediary between the pharaonic court and the local centers of power, with jurisdiction over an area stretching from Damascus and Qadesh to the Mediterranean coast. His role entailed not only the protection and security of the territories within the Egyptian sphere of influence, but also “intelligence” data gathering for the pharaonic court: both the Amarna letters and the Kumidi texts indicate that the local rulers constantly supplied him with first-hand information about

security threats and shifting alliances, and the Egyptian administration must have relied upon this kind of knowledge for the successful planning of its imperial strategy in Syria-Palestine.
Finally, these depictions are the personification of the solar cycle and point to the daily regeneration of sun god, where the deceased hopes to accompany him in his ongoing revival for guaranteeing his rejuvenation each day.

Florence Friedman, Brown University, Dept of Egyptology and Assyriology

Damage on the Menkaure Dyad and What it May Mean

Discussions of one of the most famous statues of antiquity, the Menkaure dyad (MFA, Boston 11.1738), do not typically focus on the statue's damage, minor as it is, nor on what that damage might mean. Reisner found the work, unfinished and uninscribed, in the king's valley temple, standing in a hole, which, as Mark Lehner and the AERA team now show, was not Reisner's so-called thieves' hole, but an older, deeper hole to the east. Reisner suggested the statue, found upright and leaning against a core block, had been thrown into the hole by Arab treasure seekers. But at almost 1500 lbs., 2/3 life-size and showing very little damage, this was not a statue thrown anywhere. And given the almost pristine condition of the figures, it was not mishandled by anyone, much less robbers. Nonetheless, there is some damage on the beard and the base, and that small amount of damage is worth looking at. The beard has not a chip, as Reisner described in his diary, but a break, as photos show; and the base has serious damage on three corners. This paper will look at the damage on the beard and the base, suggesting when that damage might have occurred, and what its chronology might mean for understanding the use and cultic significance of the dyad.
Florence Dunn Friedman Visiting Scholar, Department of Egyptology and Assyriology, Brown University

Francesco Tiradritti, Associazione Culturale per lo Studio dell'Egitto e del Sudan

Latest News from the Cenotaph of Harwa, Luxor

ARCE 71st Annual Meeting

The Cenotaph of Harwa (end of the 8th – beginning of the 7th century BC) has been excavated for more than twenty years by the Italian Archaeological Mission to Luxor (MAIL). It can be considered a key-monument to understand the moment in which the Kushite pharaohs of the 25th Dynasty took firm hold of Thebes. Its amazing and delicate decoration is a striking example of the so-called "Pharaonic Renaissance", an epoch of renewed material and cultural wealth in which the Egyptian art took inspiration from its roots while looking for innovative solutions, exactly like in the Italian Renaissance. The scientific results gotten by the MAIL in these years brought to a better knowledge of the Cenotaph of Harwa but of its history and of that of the Theban necropolis too. Excavations had the result to uncover an unique archaeological phase documenting the Plague of Cyprian, an epidemic that scourged the Roman Empire in the middle of the 3rd century AD. In the last five years the activities of the MAIL in the Cenotaph of Harwa were mainly devoted to restoration and documentation. That was also possible thank to the Antiquities Endowment Fund grant received by the American Research Center in Egypt for the Conservation of the courtyard of the Cenotaph of Harwa.

Gaelle Chantrain, Yale University

Understanding and Translating Metaphors for Character, Feelings and Emotions in Ancient Egyptian

The presence of metaphors is very common in words and (idiomatic) expressions for feelings, emotions and/or personal characteristics in ancient Egyptian. The transfer is often made between emotional world and physical world through the following paths: emotional state = physical state, emotional state = action of the heart, emotion = taste, emotion = colour, emotion = temperature, emotion = situation (up, down, inside, outside). Conceptual metaphors can be actualized on several levels in the Egyptian language: through linguistic metaphors and through the use of semantic classifiers, which, by their inherent iconicity, add a visual dimension. The metaphorical processes behind the use of classifiers in the Egyptian hieroglyphic script have been addressed in a series of earlier studies. I intend here to

illustrate cases in which they can reflect an underlying initial metaphor (whether there is semantic change or not on the lexical level) and make it explicit on the visual level. The role of metaphor usage in semantic change will also be treated, in the perspective of highlighting recurring patterns. The final aims of this paper will be: 1) to show the conceptual similarities and dissimilarities between linguistic and visual metaphors found in ancient Egyptian and to compare them with the results of cross-linguistic studies in other ancient and modern languages, 2) to address the difficulty of metaphor interpretation and translation in case of cross-cultural, -linguistic and -temporal studies and 3) to propose a methodological framework for the identification of metaphors on a large corpus for dead languages.

Gaia Bencini, Scuola Normale Superiore, Pisa; Fulbright Visiting Student Researcher at Harvard University

The Essence of Small Things: Testing Definitions of Miniatures Through the Case Study of Deir el-Medina

The notion of miniature and the process of miniaturization in ancient Egyptian representation are highly problematic for assigning definitions. Issues include considerations of scale, the nature of representation, expectations of monumentality and the concept of resemblance. In this paper, I test a definition of miniature by concentrating my analysis on the process of miniaturization as involving three main factors: scaling, simplification and persistence of resemblance in relation to a prototype. These three factors in the process of miniaturization will be exemplified through case studies of three-dimensional objects from the New Kingdom site of Deir el-Medina. This site provides an established frame of reference, both temporal and physical, and reveals a considerable range of production including miniatures. By increasing the distance between the miniature and its prototype, acts of scaling and simplification reduce the object to a small number of meaningful, highly connotative aspects. The significance of the object in part lies in what is evoked by those few meaningful elements within a social code, without aiming to be a functional, faithful replica of its original prototype. Analyzing the constituent elements of a miniature may shed light on their significance as retainers of

meaning within the social context in which the miniature was created. This study may therefore have potentially important implications for our understanding of ancient Egyptian artistic and cognitive categories, as well as mechanisms of decision-making in the creation of New Kingdom visual and material culture.

Gaultier Mouron, Université de Genève

The Determinative of the Wt-Priest a "Mummy-Cloth"? A Band-Aid Solution!

From its earliest attestations, the word for "embalmer" (*wt*-priest) is usually determined by an oblong ellipse. For almost a century, it has been generally accepted that the sign represents a "bandage" or a "mummy-cloth", after A. Gardiner's V38 sign. The *wt*-priest being mostly interpreted as the embalmer, the practitioner of the mummification, the reading of the determinative makes perfect sense up to that point. Nevertheless, a confrontation of the sign's forms and its evolution from the earliest dynasties to the end of the Old Kingdom and the First Intermediate Period with the iconography from contemporary tombs questions the original interpretation. The study of texts and images, as well as artefacts, all of the same period, seems to confirm the unfunded reading of the sign as a bandage. A new understanding of the determinative leads to a new interpretation of the word *wt* and, by extension, of the functions of the *wt*-priest.

Heather Lee McCarthy, New York University Epigraphical Expedition to the Ramesses II Temple at Abydos

The Book of the Dead at Deir el-Medina: Preliminary Observations and Findings

The early Ramesside period was a time of tremendous innovation that impacted religion, art, and the ideology of kingship and queenship. The funerary realm was one of the settings for this upsurge of new ideas, and sweeping changes were brought to bear on royal and non-royal tombs alike. Perhaps the most dramatic changes concerned the burials of Ramesside royal women, who, from the start of

Dynasty 19, were interred in a separate, discrete necropolis specifically re-purposed for royal women and now called the Valley of the Queens. These royal women's tombs were larger and more elaborately decorated than those of their 18th Dynasty predecessors. In the early 19th Dynasty, new decorative schemes were developed for Ramesside royal women's tombs, including the creation of new Book of the Dead vignettes and new arrangements of pre-existing vignettes. The design of these decorative schemes impacted the iconographic tradition of the Deir el-Medina villagers who cut and decorated these tombs. The purpose of this paper is to present an overview of my work in progress investigating the role of Ramesside royal women's tombs as loci of religious, iconographic, and artistic innovation and the paths of transmission from queens' tombs to Deir el-Medina private tombs. I will discuss my preliminary observations and findings concerning the usage of Book of the Dead scenes gleaned from my examination and photographic documentation of selected Deir el-Medina tombs during my 2019 field research season in Egypt, which I conducted as an ARCE postdoctoral fellow.

Inês Torres

A Unique Lassoing Scene From The Mastaba Of Akhmeretnisut at Giza

The Giza mastaba of Akhmeretnisut (G 2184), excavated in 1912 by the Harvard University-Boston Museum of Fine Arts Expedition, has been occasionally mentioned in the scholarly literature due to its innovative iconographic program. However, an exhaustive analysis of this unusual funerary complex has never been undertaken, thus providing an opportunity for a deeper discussion of the art, iconography, and architecture of private tombs of the Fifth Dynasty at Giza. This paper analyzes a unique scene from the mastaba of Akhmeretnisut, which shows the tomb owner in larger-than-life size holding a rope, ready to throw his lasso. The active participation of the tomb owner in a lassoing scene is unique in the iconographic program of Fifth Dynasty private tombs. The location of this scene within the mastaba is also unparalleled: it is the first scene on the right (west side) seen by visitors as they enter the funerary

monument of Akhmeretnisut. To understand this decorative choice, this paper discusses the iconography of lassoing in the Old Kingdom and its importance and meaning in the private tombs of the same period, putting forward an alternative interpretation for the lassoing scene and its placement within the mastaba of Akhmeretnisut.

Jackie Jay, Eastern Kentucky University

Resuscitating the "Democratization of the Afterlife": A Reevaluation

Once a truism in Egyptology, the concept of a "democratization of the afterlife" has in recent years come under scrutiny. Mark Smith and Harold Hays have been among the most intense critics to argue against the notion that prior to a "democratization" in the late Old Kingdom there was a sharp separation between royal and non-royal conceptualizations of the afterlife. Their arguments have a great deal of value, presenting a persuasive case that from the earliest periods both groups desired transfiguration into an akh ("effective spirit") existing in a celestial afterlife, with both groups using the same spells to bring about this end. However, while belief and aspiration may not have changed, this paper will emphasize the fact that important changes did occur in terms of what members of the Old Kingdom elite were permitted to display in their funerary monuments. Where non-royal tomb decoration of the Fourth Dynasty portrays an afterlife existence exclusively in the tomb and surrounding necropolis, tombs of the Fifth Dynasty begin to make explicit reference to the deceased's journey to the Field of Offerings/Reeds. I will argue that this removal of the divide between belief and display is a shift so significant it can justifiably be labeled a "democratization of the afterlife."

Jacquelyn Williamson, George Mason University

Evidence for Innovation and Experimentation on the Akhenaten Colossi

The colossal statues of King Akhenaten from Karnak are often cited as the visual embodiment of Akhenaten's iconoclasm; it is essential to understand their origins. This

talk reexamines the evidence and arguments surrounding the recutting of the colossi of Akhenaten. It will expose the phases of artistic experimentation that took place between king and sculptor in the first years of Akhenaten's reign. Pharaoh and sculptor were working together to create a new iconography that reflected the iconoclasm of Atenism and Akhenaten's redefinition of divine kingship. This talk also provides an explanation for the large projecting plaques inscribed with the name of the Aten that appear on Akhenaten's chest and arms. It appears they preserve the original surface of the statue, before they were recut. The cartouche plaques (body-cartouches) thus provide evidence that these statues were recut from statues of Akhenaten himself.

James Karl Hoffmeier, Trinity International University; **Pearce Paul Creasman**, University of Arizona; **Thomas Davis**, Southwestern Baptist Theological Seminary

Investigating the Pyramid Complex of Taharqa at Nuri

A century ago, George Andrew Reisner spent several seasons of archaeological explorations in the Napatan region, between 1916 and 1923. In 2017, the "Nuri Archaeological Expedition" was initiated, to focus on the most prominent Napatan site not have received subsequent investigation. Recent efforts have focused on the study of the tomb of Queen Yeturow (ca. 650 BC), pyramid and tomb of King Nastasen (ca. 328-308 B.C.), and understanding the diverse subsequent uses of the site. The 4th that took place, from December 2019 to February 2020, marked an expansion of the project to include beginning to clear the pyramid complex of Taharqa. Reisner's least thorough job in Nubia was at Nuri, where he left little detail of any specific monument. Consequently, only a rough plan of the pyramid's interior and architectural drawings of the pyramid, and fragmentary finds were eventually published by Dows Dunham in 1955. The importance of King Taharqa to the 25th Dynasty in Egypt, and the fact that his burial was the first and largest at Nuri, cries out for renewed, modern research of his complex. Reisner did not discover the funerary temple, nor make epigraphic recording in the complex. With these priorities in mind, clearance of

the pyramid entrance began in January 2020. One of the goals of this collaborative effort is to regain access to the subterranean chambers to assess their condition in view of the ground water that has without doubt seeped into the rooms, believed to be painted, and then record and consolidate any decorated surfaces.

Jana Mynarova, Czech Institute of Egyptology, Charles University

The Beginning or the End? Egyptian Levantine Politics and the Evidence of the Amarna Letters

The Amarna letters are often understood by scholars as both the most illustrative evidence on the Egyptian presence and government in the Levant in the Late Bronze Age (ca. 16th–12th centuries BC), and at the same time as a fundamental testimony of the decline of the Egyptian rule over the region in the mid-14th century BC. But what picture of the Egyptian administration in the region does this set of documents offer us if we look at it from the broader perspective of the Levantine cuneiform tradition? To what extent do the Amarna letters provide information on the Egyptian "Empire" in the Levant and to what extent do they reflect local realities and traditions? The aim of this paper is to critically analyze the evidence of the Amarna letters both in relation to the Egyptian presence in the Levant during the Late Bronze Age, and in particular to the possible dwindling of the Egyptian government in the mid-14th century BC.

Janice Kamrin, The Metropolitan Museum of Art; **Anna Serotta**, The Metropolitan Museum of Art; **Vera Rondano**, The Metropolitan Museum of Art; **Chantal Stein**, Metropolitan Museum of Art

Ankhshepenwepet, Singer of the Residence of Amun (Tomb MMA 56)

During its 1923-24 season, The Egyptian Expedition of The Metropolitan Museum of Art to Deir el-Bahri, under the direction of Herbert Winlock, discovered a small tomb cut into the bedrock at the base of the northern enclosure wall of the Hatshepsut complex. The tomb contained the burial of a

Singer of the Residence of Amun named Ankhshepenwepet, dating to the late 25th - early 26th Dynasty. The coffins had been rifled and the mummy taken away but what remained, most of which was granted to The Met through partage, provides an excellent opportunity to study tomb group from this period. The authors will discuss Ankhshepenwepet's equipment from several perspectives, presenting ideas about the style, function, construction, and economic value of this assemblage.

Jean Revez, Université du Québec à Montréal

Making Use of 19th Century Photographs to Reconstruct Columns Inside the Hypostyle Hall at Karnak

By the time the dust had settled in 1899, in the immediate aftermath of the collapse of no fewer than eleven columns inside the northern half of the Hypostyle Hall at Karnak, close to a third of the columns in this section of the monument lay in pieces on the ground (if one adds the nine other columns that had fallen prior to this catastrophe). Georges Legrain, then director at the site, courageously took on the task of re-erecting most of the fallen columns. Today, we are largely indebted to him for clearing the Hall of the debris it contained and for consolidating the foundations of the columns. In a previous lecture at ARCE, following the 2016 field season organized jointly by the University of Québec in Montreal and the University of Memphis, we were able to show that incongruities in the decoration on some of the columns meant that some individual drums had not been put back in their original location. The work carried out during the past three seasons (2017-2019) has confirmed these findings. With the help of photographic archives dating back to Legrain and sometimes even before his time, we can prove that entire columns were rebuilt in the wrong place. By the same token, we were also able to exploit early photographs of the Hall in order to reconstruct columns that are no longer in situ, as the loose blocks that once belonged to them are now stored in the yards around the precinct of Amen-Ra.

Jennifer Miyuki Babcock, Fashion Institute of Technology, SUNY

Between Anthropomorphism and Zoomorphism: The Iconography of Divine Beings from Deir el-Medina

A group of New Kingdom ostraca and papyri believed to be from Deir el-Medina includes images of anthropomorphized animals that have clear compositional and thematic parallels to images found in Theban tombs. However, there have been no attempts to compare the methods of anthropomorphism in the ostraca and papyri and in the tombs at Deir el-Medina The most notable case of anthropomorphism in the Deir el-Medina tombs is the "Great Cat," the manifestation of the Eye of Ra. The cat is depicted naturalistically, except that it is wielding a knife. Interestingly, one ostracon from Berlin (Inv. –Nr 21443) also shows a cat with the same subtle use of anthropomorphism, in contrast to the other ostraca and papyri, in which animals are walking upright and dressed. The cat in the Berlin ostracon is identified as the goddess Tefnut, and is believed to be an illustration of the "Distant Goddess Myth," in which the god Thoth convinces Tefnut to return to Egypt by telling her animal fables. The fact that this cat represents a goddess, and is more stylistically similar to the images of Eye-of-Ra cats found in the Deir el-Medina tombs, would explain why it does not show anthropomorphism in the same way as animals seen in ostraca and papyri, in which the animals are intended to represent common and elite Egyptians. This paper will outline different types of anthropomorphism used at Deir el-Medina, which may shed light on how the ancient Egyptians looked at and represented their deities.

Jill S. Waller, Johns Hopkins University

It's Ill Waiting for Dead Men's Shoes: A Message on a Sandal from Naga ed-Der

The famous site of Naga ed-Der was excavated a century ago by George Reisner and his team. Since then, many of the discovered objects have languished in museums, still unstudied. This paper will shed light on one particular object: a sandal from tomb 483. Sandals were often included in tombs as an ordinary grave good, but this particular

sandal bears a short yet intriguing ink inscription. Both the inscription itself and the tomb context will both be looked at to gain a better understanding of this short message and why it would be written on a sandal in a tomb context.

Jing Wen, Tsinghua University

The SN-DT Problem Revisited

This study examines the term sn-Dt “brother of the funerary estate” that appears in the inscriptions in Egypt’s elite tombs of the Fifth and the Sixth Dynasties through an investigation into the iconography of fifty-seven examples of tombs containing individual figures bearing this designation. These examples reveal some essential aspects of the term. A sn-Dt could be both man and woman. It could be a real brother or sister, or even the wife of the tomb owner. No example of a husband being the sn-Dt of his wife. Other kinship terms attached with Dt is msw “children” and a single example of a mwt-Dt. An analysis of the relief of Wekhem-ka’s tomb at Giza indicates that the msw-Dt may have been children of a sn-Dt. Furthermore, the designation sn-Dt does not reflect its bearer’s social status. People acquired it when they were still alive. The sn-Dt could also be a ka-priest at the same time and appears among the offering bearers depicted on chapel walls. A sn-Dt may follow the sons or even precede them to occupy the initial position in a sequence of offering bearers. He or she may also be responsible for the reallocation of offerings. In conclusion, the sn-Dt may have been an individual to provide offerings in return for a certain amount of land but remained independent from other family members. It integrates socially related individuals into one’s family with a metaphorical kinship of siblinghood to take part in the funerary cult.

JJ Shirley, Journal of Egyptian History/JARCE/Chapters Council

Defining the xA n TAty

Discussions of the vizier in ancient Egypt have most often centered on the duties and responsibilities of the office-holder and the vizier’s power vis-à-vis the king. Less often

has the conversation turned to the actual place in which the vizier conducted his work. His xA n TAty, or “office” of the vizier. In fact, there are very few textual mentions of the vizier’s office, and even fewer depictions of it. This paper will attempt to shed some light on where this important administrative building might have resided, and what its location relative to the king’s palace relays about the office and office-holder.

John Gee, Brigham Young University

Testing Linguistic Dating

Use of linguistic dating of literary texts has long been used in Egyptology, with arguments going back to Adolf Erman and Kurt Sethe. A recent (and hefty) book on the subject also advocates for the use of linguistic dating. Although this means of dating texts has long been advocated, it has not necessarily been tested. Will the method work if the text has been deliberately updated? Will the method work after the text has been consciously edited? (For example, can one tell if a reworked Pyramid Text is ancient without an Old Kingdom manuscript?) Can deliberately archaizing texts fool the linguistic dating process? (E.g., if the Shabako Stone is an archaizing text can linguistic dating tell?) I propose to examine these questions by looking at a text that has a long textual history and that has been updated during that history. This should help clarify which, if any, criteria are helpful in dating a text linguistically and whether linguistic dating can actually give the correct date of a text.

John Shearman, American Research Center in Egypt

Preservation of Jewish Heritage in Egypt - Bassatine Cemeteries

ARCE was awarded the 2019 U.S. Ambassadors Fund for Cultural Preservation (AFCP) based upon our proposal to document, clean up and preserve as much as possible several cemeteries associated with the extensive Bassatine cemetery located between the center of Cairo and the suburb of Maadi. Bassatine is the second oldest Jewish cemetery in the world. The presentation will review the

ongoing work being focused on the Leishaa and Rav Haim Capusi cemeteries that started in December 2019 and will be completed in June 2020. The work is focused on documentation (including survey work) and cleanup of extensive on-site debris. The scope also includes stone conservation, signage and security lighting.

John William Stephenson, Appalachian State University

"Coptic textiles as metaphors of gender and privacy in late Roman Egypt"

The period of late antiquity, c. 200-500 AD, saw a dramatic increase in the social, political and religious significance of domestic textiles as revealed in literature and art and by excavated archaeological textiles in Egypt. This paper explores the roles of textiles, particularly hangings and curtains, in such domestic settings from a social perspective, examining how they served the increased concerns with privacy, visibility, mystery, boundaries and shifting gender relations that are amply attested in late Roman culture. I further examine a metaphorical equation in late antique Christian writers in Egypt, such as Clement of Alexandria, that conflates gendered issues of veiling and domestic privacy with ritual concealment by textiles in temples. Playing on the ambiguous quality of textiles as coverings that reveal as they conceal, Clement reveals an equation between bodily and architectural enclosure that illuminates late antique ideas about privacy, gender and power. This paper takes Clement as a point of departure to examine a class of so-called Coptic textiles that were employed as curtains and coverings in late Roman and early Christian houses. The late Roman period saw an explosion of such colorful textiles in Egypt, whose ubiquity and often pagan imagery seem to confirm as well as to challenge our perceptions of the era. Comparing literary references with the textiles and with archaeological evidence from late Roman houses, the paper explores parallels in the gendered notions of covering and display in contexts both of domestic use, and in contemporary veiling practices of women in late Roman Egypt.

ARCE 71st Annual Meeting

Jose Rafael Saade, Brown University

Rethinking Dynastic Divisions: The Case of Dynasty V

The dynastic divisions featured in Manetho's Aegyptiaka have proven invaluable for establishing an internal classification and relative chronology in Egyptology. However, just as happens to modern scholars, Manetho's dynastic divisions may respond to ideologies of his time and not to realities of the periods he writes about. This talk will question these long-established axioms; not doing so could lead the historian to consider the dynasties as unbending compartments into which all archaeological and textual documentation should be organized. In turn, a fixed dynastic framework may impose a predefined interpretation of the facts, ultimately influencing how we write Egypt's historical narrative. Moreover, it forces a self-centered study of Egyptian civilization, inadvertently isolating Egyptology from the rest of the disciplines in Near Eastern Studies, whose use of absolute dates allows and favors a multicultural analysis of the Ancient World. Focusing specifically on the Manethonian Dynasty V – traditionally characterized by some scholars by its connection with the solar deity, but also defined by others based on innovations in royal funerary architecture or geographical and familial criteria – this paper challenges the notion that the succession of kings between Userkaf and Unis constituted a clearly delimited group in the contemporaneous Egyptian mindset. Perhaps our understanding of this issue is hindered by our own anachronistic expectation, originated from the taxonomical nature of modern science, that, if kings were organized in dynasties, they should be so following one sole unassailable principle.

Josef William Wegner, University of Pennsylvania

2019-19 Excavations of a Late Middle Kingdom Bakery Complex at South Abydos

Recent work at South Abydos have focused attention on patterns of use of the low desert landscape in the area of the Senwosret III mortuary complex and settlement site. Excavations in 2018-19 exposed the remains of an original

late Middle Kingdom temple bakery building associated with the Senwosret III mortuary temple. The bakery building underwent a series of modifications over the course of the late 12th and 13th Dynasties. Investigation of the bakery building adds considerable new evidence to previous knowledge of the Shena / production area adjacent to the Senwosret III mortuary temple. This newly identified structure has implications for the wider organization of state-planned activity along the interface between floodplain and desert at South Abydos.

Joseph Cross, University of Chicago

The Interface of Public and Private in Demotic Literature: A Case Study from P. Spiegelberg

In the Demotic tale of P. Spiegelberg, the priest of Horus from Buto interrupts the procession of the bark of Amun in the Festival of the Valley, giving a speech to stake his claim to the prebend of Amun. It culminates in a tour de force mythological reading of the parts of the bark (cols. G.1-2.5). Previously interpreted as a hymn similar to Coffin Text 398 and Book of the Dead 99, both of which interpret the parts of a boat, this passage is in fact a prosaic speech mimicking the technical, learned discourse found in works of scholarship. With the help of this passage, and through comparison with contemporaneous texts such as the Book of Thoth, I will recover a component of the scholarly education and know-how of priests in the Graeco-Roman period. I will also argue that the entire speech is colored by its author's expertise as a professional chancellery scribe. The artful combination of these two aspects of the profession points to the author's position, as a priest, on the interface of the public and private, and to the inward-looking capabilities of Demotic literature which, stemming from an increasingly privatized sphere of pharaonic tradition and culture, took on a new relevance as a result of the priesthood's compromise with the Ptolemaic state. Thus, a careful elucidation of this understudied and difficult portion of the Demotic tale gives us a window into the new relevance that narrative literature has in Ptolemaic Egypt.

Jovana Zagorac, Yale University

In Search of Lost Time: An Astronomical View of Ancient Egyptian Star Clocks

Though the Ancient Egyptians clearly had a relationship to the heavens, the observational data behind the relationship remains shrouded in mystery. One of the most enigmatic elements of their supposed timekeeping were star clocks, lists of stars and constellations – called decans – which marked the passing of the hours of the night. The decans performed mysterious actions during the night, which the most prolific work in Egyptian Astronomy (Egyptian Astronomical Texts, Neugebauer and Parker) equates with heliacally rising, or rising at sunset. This theory is not without tension, however, and leaves the vast majority of the decans unidentified. We plan to compare these lists and tables to a reproduction of the Ancient Egyptian sky at different dates in a planetarium software, and attempt to create a correlation of the Egyptian sky with the Greek names we use today, thus creating a diagram of the Egyptian heavens. Such a project has been attempted once before by Joanne Conman, an anthropologist specializing in Egyptian astronomy, but the results have not been widely accepted in the Egyptological community. We intend to reproduce the methodology in a more detail and for several dates, controlling for the changing of the sky due to the Earth's precession. We hope that our project either provides concordance with Conman's model, concordance with Neugebauer and Parker's decanal rise model, or establishes a new one.

Julia Troche, Missouri State University

Imakhu kher and the "Democratization of the Afterlife"

In this paper, I assert the imakhu kher formula (among other things) communicates the king's centrality as mortuary benefactor in the early Old Kingdom. I further argue that this same formula, in Dynasties V-VI, can be mobilized as evidence in support of expanding mortuary access. I show that non-royal dead in the Old Kingdom had access to an afterlife, but that the full benefits and privileges of this afterlife were restricted, and their granting was primarily recorded by various formulae, which elucidates

changes in mortuary access. In doing so, this paper offers updated insights into the refuted phenomenon known as "democratization of the afterlife." The democratization of the afterlife theory relates the decline in Egyptian kingship at the end of the Old Kingdom with an expansion in mortuary access, as evinced by the ubiquity of Coffin Texts in the First Intermediate Period and Middle Kingdom. To the contrary, both Hays (2011) and Smith (2009) argue that this "ubiquity" is reflective not of a change in religious belief, but instead a change in fashion (Hays) or practice (Smith). Notably, both refute that this change is reflective of greater demographic access. I push back against this latter conclusion, arguing that there was an "opening" of mortuary benefaction in the late Old Kingdom concurrent to a decline in the king's religious centrality, evinced though not by Coffin Texts but by cults to distinguished and deified dead and a restructuring of mortuary access communicated in part by the imakhu kher formula.

Julien Cooper, Yale University

Goldmines and Nomads: New excavations and surveys at Gebel Rafit

The region east of the Nubian Nile, a region known as 'the Atbai', is well-known as the source of much of Northeast Africa's gold and the homeland of nomadic groups. From the Third Millennium BCE to the medieval period this desert acted as a major source of gold for Egypt, Nubia and greater Northeast Africa and the Eastern Mediterranean. As part of a larger project investigating the relationship between foreign states on the Nile and local groups in the context of gold exploitation, the 2019 Atbai Survey Project began a series of excavations at the site of Gebel Rafit, a complex multi-period site deep in the desert dominated by goldmines and a large cemetery field. Excavations at the site focused on Late Antique tombs most of which are ascribable to the local 'Blemmyean culture'. Surveys identified numerous other features such as gold processing sites, settlements, rock art tableaux, ancient desert tracks, and water sources. The density of these discoveries highlights the importance of not only continued work in the region under threat from modern goldmining, but also demonstrates a new and

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important node for goldmining and settlement in the heart of the Eastern Desert. This paper will summarize and assess the importance of this year's fieldwork, while also contextualizing the discoveries with the little that is known from other Eastern Desert sites.

Karen (Maggie) Bryson, Johns Hopkins University

Art and History in the New Kingdom: A 3D View

In recent years, digital 3D imaging has surged in popularity among scholars in a variety of cultural heritage disciplines. It offers exciting possibilities not only for recording and presenting ancient sites and objects, but also for reconstructing, re-imagining, and experiencing the past. In many ways, however, the real potential of 3D imaging as a tool for the study of the ancient world is just beginning to emerge. Exploring how and to what extent it can go beyond documentation and communication, contributing to new analyses and interpretations, is the next stage in the development of this technology as a part of the methodological repertoire of Egyptologists. This paper will present new results in an ongoing case study of the analytical use of 3D images – in this instance, as a means of examining the formal properties of the non-royal elite Theban tomb art of the post-Amarna period. Through the creation of highly detailed models of painted and relief scenes, I have found that it may be possible to identify certain types of stylistic affinity in a newly detailed and rigorous manner. 3D imaging could open up the possibility of using quantitative methods to describe and analyze certain characteristics of Egyptian artwork in new ways, helping to unlock new insights not only into the artworks themselves, but also into the complex political and social milieu in which they were created.

Kate Liszka, California State University, San Bernardino

Eight Medjay Walk into a Palace: Bureaucratic Categorization and Cultural Mistranslation of Peoples in Contact

Papyrus Boulaq 18 is a daybook account from the Egyptian

palace of the 13th dynasty. Scattered among miscellaneous entries, it records an encounter between palace bureaucrats and peoples from the Eastern Desert called the Medjay. Scholars have previously understood the interaction to be of the highest importance with an international delegation, perhaps in preparation for upcoming wars. The scribe who wrote Papyrus Boulaq 18 calls the leaders of the people who come to the palace "Medjay Chiefs/Elders" (wr.w MDAy.w) and enumerates food given to them. In reinterpreting this text, I argue that the Medjay were pastoral nomads who came to the palace to receive a payment for work done as itinerant laborers. They likely never met with the king nor had an impact on a historic event. Scholars have overvalued the importance of this record because the ancient scribe did something misleading: he used a bureaucratically approved scribal format with titular terms and social labels that were standard for his bureaucratic mindset. As historians, we are seeing these Medjay through the Egyptian scribe's eyes, but their real social organization and purpose were likely different. By parsing of texts and applying comparative knowledge of the Medjay and palace practices at that time, we can more accurately understand the Medjay social organization and this particular encounter with the Egyptian palace bureaucracy.

Kathryn A Bard, Boston University

Locating Punt: Evidence from Mersa/Wadi Gawasis, Egypt and Kassala, Sudan

Excavations at the 12th Dynasty harbor of Mersa/Wadi Gawasis (ancient Saww) have uncovered evidence of seafaring expeditions to the southern Red Sea region, including texts on stelae and cargo boxes that mention "Punt" and "Bia-Punt." Materials (obsidian, ebony) and ceramics from culture groups in the southern Red Sea region have also been identified at the harbor site. Analysis of this evidence points to the location of Punt and Bia-Punt in the 12th Dynasty as in the Northern Horn of Africa, and recent excavations at Kassala (eastern Sudan) have uncovered 12th Dynasty ceramics (potsherds of Marl A3 jars) at a Classic Gash Group site (ca. 1900-1700 BCE). Much earlier evidence of contact with Egypt has also

been excavated at Kassala: faience beads in an Early Gash Group burial (ca. 2800-2400 BCE), which probably represents (indirect?) overland routes from Egypt in the early Old Kingdom. But in the Middle Kingdom the much more complex seafaring expeditions to Punt and Bia-Punt may have sailed to different harbors in the southern Red Sea region, which were connected to transhumance routes to interior regions in the Northern Horn of Africa. Possible harbor sites and interior routes are suggested in this paper.

Kathryn Bandy, Tell Edfu Project

One Size Fits Most? Urban Administration in Southern Upper Egypt

The administrative system of the late Middle Kingdom-Second Intermediate Period has been extensively studied, with recent focus expanding to the local and regional level. Edfu in particular has served as an important model for local administration due to its extensive textual and archaeological record. The network of important local institutions (including their physical locations) and their officials and staffs, as well as the surrounding area can be mapped. The picture of Edfu is imperfect and gaps remain; however, a general framework of who is who and their responsibilities can be reconstructed. But does Edfu's model translate to elsewhere in Upper Egypt? Shared titles and the prominent position of local temples and institutions are suggestive. Yet variations must have existed due to different local circumstances and ties between different local centers cannot be ignored. Cognizant of the discrepancies in preservation, as well as chronological challenges, this paper will explore the extent to which structural changes appear to have been present in the capitals and towns of first three nomes of Upper Egypt.

Kathryn Elizabeth Piquette, University College London

New Studies on the Shabaqo Stone: Material analysis in light of advanced imaging

This paper presents the preliminary findings of a new research project on the Shabaqo Stone. Probably dating

to the 25th Dynasty reign of Shabaqo, one face this large slab of green breccia is inscribed with text recounting the unification of Egypt and mythical creation of the world. The stone, now held in the British Museum (EA498), preserves a complex array of marks relating to its material transformation, including shaping, smoothing, inscription and subsequent mutilation, as well as extensive surface wear from grinding and / or other re-use. The latter forms a particular barrier to legibility. A key innovation of our research is therefore the application of Highlight Reflectance Transformation Imaging (H-RTI), a raking light photographic technique that is enabling recovery of additional signs as well as revealing tool marks and other details relating to the life history of this object. This paper will deal with the material aspects of the stone and consider what the tool and other marks can tell us about the practices that gave rise to this text-object and which, in turn, informed display, reading / viewing experience, and meaning.

Kathryn Howley, Institute of Fine Arts, NYU

New Fieldwork at Taharqo's Amun Temple at Sanam

King Taharqo was the most prolific builder of the Nubian Napatan period kings, known in Egypt as the 25th Dynasty. He built a network of stand-alone Egyptian-style temples dedicated to Amun throughout his Nubian territory. These are mostly now archaeologically inaccessible, but the temple at Sanam, located in the middle of the rulers' religious and political heartlands of Napata, still offers a striking amount of archaeological potential. The temple was excavated by Francis Llewellyn Griffith in 1912 in a single season. He found the remains mostly unimpressive and published only a preliminary report on his findings that reflected his level of interest. Due to Griffith's apparently thorough clearance, the temple remained untouched by archaeologists for over 100 years. In 2018 new excavations were inaugurated at the temple to investigate whether archeological deposits still remained, and to address questions arising from Griffith's work in light of a century of archaeological investigation of other Nubian monuments of the first millennium BCE. This talk will present the results of the first three seasons of fieldwork by the IFA mission to Sanam Temple and discuss

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the large amounts of exciting material still remaining at and around the temple, including faience production areas, an early eighth century BCE monumental mud brick building, and numerous remains from the temple itself overlooked by Griffith. The picture that emerges is one of a thriving Nubian ritual space, in use for centuries, with much to tell us about the Nubian adoption and adaptation of Egyptian architectural and religious ideas.

Katja Goebs, University of Toronto

German Women Archaeologists in Early 20th Century Egyptology

Women engaging in archaeological endeavors around the Mediterranean and the Middle East in the mid to late 19th and early 20th century normally entered the field at the side of their husbands or brothers, who brought them along to their own projects. Yet, these women often supplied essential new insights and materials that greatly enhanced the published results – although they were rarely acknowledged in them. Thus Maria Junker (1878–1971), sister of Hermann Junker, was engaged in measuring, drawing, and describing tombs at Ermenne and supervised the excavations in her brother's absence. By the late 1800s and early 1900s, women such as Margaret Murray (1863 – 1963) in the UK and Harriet Boyd Hawes (1871 – 1945) in the USA secured university posts or undertook their own archaeological work in Egypt and the Mediterranean. A comparable recognition of female competency in Germany would have to wait another 25 years and remained extremely uncommon well into the 1970s. Based primarily on the examples of Elise Baumgartel (1892 – 1975), Herta Moor (1914 – 1945) and the Classical archaeologist Margarete Bieber (1879 – 1978), this paper seeks to elucidate the social, cultural, and political contexts in which German women with archaeological and egyptological interests were socialized, educated, and struggled to succeed. Factors that shaped their roles included changes in women's education, the development of Archaeology as a university discipline, as well as the societal changes brought about by the First World War and National Socialism.

Kea Johnston, University of California, Berkeley

North, South, or Somewhere in the Middle? Third Intermediate Period Coffins from Akhmim

The fall of the New Kingdom in Egypt (circa 1100 BCE) resulted in economic instability and the collapse of the central state in Egypt. These and changing religious views led elites to abandon their large decorated tombs in favor of smaller, more portable anthropoid coffins. Our understanding of the development of these coffins is based primarily on examples from the city of Thebes (modern Luxor) in southern Egypt. We know that shifting funerary beliefs and a change in the dominant ethnic group in the North led to the emergence of a distinctive new coffin tradition in the emerging political power-centers of Middle Egypt at Memphis and around the Faiyum. Where the cities south of the Faiyum and north of Thebes stood politically is poorly understood today. Examples of coffins from these cities are rare. The city of Akhmim lies about 200 km north of Thebes. Coffins purported to be from the site bear a mixture of traits that are characteristically "Theban" and characteristically "Northern". Is this simply a matter of incorrect provenance? Of travelling artists? What can the Third Intermediate Period coffins from Akhmim tell us about spheres of political and religious influence in this tumultuous period?

Kerry M Muhlestein, BYU; **Brian Christensen**, Brigham Young University

Kill Holes in Graeco-Roman Pottery of the Fag el-Gamous Cemetery: Comparanda and Questions

At the Graeco-Roman cemetery of Fag el-Gamous many whole pieces of pottery have been found. Of these, several have exhibited "kill holes." This phenomenon has been receiving growing attention in Egyptology of late, and many of us are wrestling with trying to determine meanings and patterns. Most of the kill holes published to date are from the Pharaonic era, with very little information about the Graeco-Roman phase of the practice being available. Thus, this paper will represent an important contribution to the studies of this practice. We will present the context of the kill hole pottery, and compare both the pottery and the

placement and method of hole creation to contemporary and earlier pottery. We will present our own re-creation of similar pottery and our own attempts at making kill holes so that we could determine exactly how these holes were created. We will then try to fit it in a larger global but especially Egyptian context, including the various theories for why kill holes exist. This will help us understand the practice in the Graeco-Roman era in general, and for Fag el-Gamous in particular. Most importantly, it will add this corpus to the academic repertoire, allowing future research to take into account as much data as possible.

Kristin Thompson, The Amarna Project

A Mysterious Fragmentary Greywacke Statue of Akhenaten

During late 1924 and early 1925, the Egypt Exploration Society team at Tell el-Amarna moved from the southern expedition house to a new one in the northern end of the site. As part of the move, they buried a large quantity of material from their own excavations in the early 1920s, as well as many pieces left behind by Ludwig Borchardt's German team before World War I, behind the southern house. This cache was rediscovered and cleared by the current expedition, the Amarna Project, and termed the "South House Dump." Among the finds were hundreds of hardstone statuary fragments, including over fifty from a single superb greywacke statue of Akhenaten, currently unpublished. Some of these fragments are larger than the typical pieces found in the dumps at Amarna, and they preserve enough information to indicate not only the person represented but the size and pose of the original statue. This paper will begin with a description of the statue. Though the greywacke statue fragments were undoubtedly originally discovered at Amarna, their specific initial findspot remains mysterious. There is nothing written on any of the hardstone pieces from the South House Dump to indicate which expedition found them and where. Remarkably, considering the statue's importance, no reference is made to it in the publication of either expedition's excavations. The paper attempts to narrow down the possible options and to suggest why it might have remained unrecorded at the time it was reburied.

Laura Taronas, Harvard University

Against All Gods? Iconoclasm in the Amarna Period

The campaign to erase the names and images of some of Egypt's traditional deities during Akhenaten's reign is one of the few key elements of the Amarna Period that Egyptologists have yet to treat on depth in order to better understand the phenomenon. This paper is the product of my dissertation research, which explores which elements are erased — and with what frequency — from portable objects that are now housed in museums and private collections. The objects in the resulting catalogue range in date from the First Intermediate Period to the early years of Akhenaten's reign and come from thirty-seven different sites from Egypt, Nubia, and the Sinai Peninsula (with of course several objects of unknown provenance). I recorded the erasure of twenty-two separate terms including the names and images of various deities, references to divine plurality, and references to Karnak, with Amun and his syncretized forms accounting for the vast majority of erasable terms in this catalogue. It appears that Amun was the unambiguous target of the erasure campaign, while divine plurality faced marginal persecution. My analysis of Amarna Period name changes suggests that the Atenist iconoclasm began before the Aten's final didactic name change, most likely between Akhenaten's years 5 and 9. Lastly, I consider who the Atenists might have been and what skills they needed to carry out their agenda. This project aims to provide a better understanding of the erasure campaign and to dispel some of the old misconceptions of Akhenaten's iconoclasm.

Laurel Bestock, Brown University

Recent Excavations at Uronarti Fortress

Recent work at the Middle Kingdom fortress at Uronarti, Sudan, has revealed surprising details about the architectural foundation of the fortress as well as significant findings about life in this outpost. This archaeological update will provide data and interpretations from recent work. It will suggest, among other things, that the site was massively terraced to provide flat ground for construction of the fortress; that the plan of the fortress was laid out as a whole

but, in the interior, never entirely built according to that plan; that one area of the fort was explicitly designed as an area for exchanging grain for gold brought by the local population; and that the wider regional landscape included far more contemporary remains than previously recognized.

Leslie Anne Warden, Roanoke College

Analyzing Archaeological Ceramics using Business Intelligence

The time required to process and analyze archaeological ceramics requires selective sampling and analysis of the materials. Digital solutions increasingly have promise of expanding the range and volume of what ceramicists analyze. This paper explores the application of business intelligence (BI) to ceramic data. BI analyzes big data for trends and patterns, especially those not-so-obvious. This focus on finding answers in big data mirrors the goals of the ceramicist and has the potential both to help answer research questions and guide sample selection – all while working on-site. This paper will focus on InfoArch, a BI dashboard, exploring how it works and the results it has yielded. InfoArch was created in partnership between the Kom el-Hisn Provincialism Project (KHPP) and InfoSol, a leader in BI. Currently, InfoArch contains ceramic data from ongoing excavations at Kom el-Hisn and Elephantine Island ("Realities of Life" Project, German Archaeological Institute). These data are ideal for individual and comparative analyses: both projects focus on Old-Middle Kingdom settlement occupations, the processing methodologies are essentially the same, and the research questions focus on determining large-scale patterns in site use, commodity movement and exchange, foodways, and local identities. Comparative analysis via the InfoArch dashboard has allowed us to identify both chronological trends, such as change in form, and local/regional trends such as the diversity of the ceramic corpus and possible trends in cooking. These data provide a necessary quantitative foundation for social reconstructions.

Lingxin Zhang, Johns Hopkins University

Who wrote the Tebtunis astrological books? — A proposal

Who composed the astrological treatises at the Tebtunis Temple Library? This presentation proposes a likely scenario in which the High Priests of Ptah at Memphis and their associates were involved in adapting Babylonian astronomical/astrological knowledge into Egyptian traditions. In support of this hypothesis, I investigate the connections between Memphis and Tebtunis from the literary, funerary, and religious perspectives. Perhaps most striking are the textual similarities between the Tebtunis astrological compositions and the funerary autobiographies of Memphite priests from the Ptolemaic period, especially those belonging to the family of the High Priests of Ptah. The Memphite connection could also explain Imhotep's prominent role in texts across the board from the Tebtunis Temple Library; since the Memphite necropolis (Saqqara) is a renowned cultic center for that deity. This talk grounds the Tebtunis-Memphis connection on the historical agents by examining the priestly titles which the High Priests of Ptah and their associates bear. The intersection of cultic fluency, high literacy, and intellectual curiosity identifies the High Priests of Ptah and their associates as strong candidates for composing astrological materials such as those discovered at Tebtunis. Additionally, the High Priests' access to foreign knowledge through their ties with the Alexandrian court is a sufficient condition for adapting and circulating foreign knowledge. Recently there has been a revision in the history of early science regarding Egypt's contributions. This talk engages with such discussions from a less explored perspective by focusing on historical individuals and their agency in knowledge production.

Lisa Saladino Haney, Kansas City Art Institute

Considering Coregency: The Evidence for Shared Power between Amenemhet I and Senwosret I

For nearly 50 years, Middle Kingdom scholars have debated the existence of a series of coregencies during the 12th Dynasty. Evidence in favor of the practice first surfaced in 1828 as a result of T. Young's discovery of the Stela of Hapu

at Aswan, one of three known double-dated monuments from the early 12th Dynasty. These inscriptions preserve the names of two kings along with two separate year dates; however, they all differ in both style and context. In the late 1970s, a discussion began over the interpretation of these monuments, causing a rift in the scholarship that is still present today. For many, the validity of the concept rests on the proposed period of shared power between Amenemhet I and his son, Senwosret I. This first potential coregency is the best documented and the most intensely scrutinized. This paper provides an up-to-date reanalysis of all of the data related to a potential period of shared power between these two kings. The evidence includes a double-dated stela, a series of single dates, several objects that name and/or depict both kings, archaeological remains, and potential literary references found in The Teachings of Amenemhet I and The Tale of Sinuhe. In addition, an overview of the royal statuary of these two kings, in particular that of Senwosret I, offers further insight into some of the technical aspects related to shared power during the 12th Dynasty.

Lorelei H Corcoran, University of Memphis

'Got Pearls?' Costume as an Indicator of Elite Status in Roman Egyptian Mummy Portraits

The men, women and children depicted in the painted funerary portraits from Roman Egypt display the elaborate hairstyles, luxurious clothing and ostentatious jewelry (specifically for the women, necklaces and earrings adorned with precious pearls) popular among the well-to-do throughout the Roman Empire. A common characterization of the patrons of these paintings, therefore, is that they represent "the elite" stratum of Roman Egyptian society, a core of first-class, Hellenized citizens that inhabited a second-class world of hybridized religious beliefs and artistic aesthetics. This interpretation is widely accepted although an enumeration of formal criteria for identifying the "elite" class in Roman Egypt has never been articulated. By carefully comparing the clothing and jewelry shown in these portraits with evidence from the archeological record, this paper critically examines to what extent the sartorial selections of these individuals accurately portrayed their

economic and social status and/or their ethnic identity. The conclusions contribute toward a new dialog of investigation grounded in material culture, computer-aided studies of physical remains and textual documentation for such markers as literacy, language fluency, citizenship, and access to luxury goods. Such data will enable us not only to identify the lifestyle of the subject group with objectivity but also to determine whether the mummy portraits record a truly assimilated Roman identity, a reconciled, multi-layer ethnicity, or a contemporary version of an idealized image that continued a native, funerary tradition of preservation and self-presentation.

Luigi Prada, University of Oxford

Hieroglyphic Inscriptions by Roman Citizens: A New Study of the Twin Obelisks of Benevento

The twin obelisks of Benevento, in southern Italy, are the best-preserved examples of a relatively rare type of monument: obelisks with newly-composed hieroglyphic inscriptions commissioned not by Pharaoh, i.e. the Roman emperor as the successor of Egypt's kings, but by private Roman citizens. Erected in the year 88/89 CE by Rutilius Lupus, a local notable, the two obelisks bear hieroglyphic inscriptions in archaic Middle Egyptian honouring Emperor Domitian and the goddess Isis, in front of whose temple in Benevento they were originally erected. These obelisks have been known to scholars since the dawn of Egyptology: they were even inspected by Jean-François Champollion in 1826, and have figured in many a study about the use of Egyptian language and religion in Roman Italy. The conservation of one of the two obelisks in 2018 at the Getty Institute made it possible to carry out a new, detailed epigraphic study of the inscriptions. The present paper will discuss the results of such research, which has led to considerable improvements in our understanding of these twin monuments, in terms of both their materiality and the texts they bear. Comparison with other specimens of non-royal inscribed obelisks from Roman Italy will shed further light on the nature of this poorly-represented kind of monuments as a whole.

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Luiza Osorio G. da Silva, The University of Chicago

Out of Ruins: The Mechanisms and Implications of Architectural Reuse in Amenemhat I's Reign

Amenemhat I is a pivotal king in ancient Egyptian history, but much about his reign is still obscure. Textual evidence is useful though often inconclusive due to dating uncertainties, and much less is known about material remains. The king's Lisht pyramid has been studied extensively, particularly the considerable number of reused blocks from Old Kingdom monuments discovered in its foundations. Largely unconvincing arguments have been made both for the solely utilitarian or ideological reuse of the blocks, a seemingly insupportable opposition fabricated by modern scholars. The mention of royal architectural reuse in the Teaching for Merikare, set not much before the start of the Middle Kingdom, frames the practice as one with ideological implications. The purpose of this paper is not to disregard the practical factors that likely contributed to architectural reuse, but rather to contextualize Amenemhat I's example in wider ancient Egyptian reuse practices in order to generate new questions about the king himself, as well as the mobilization of reuse for the expression of kingship. This will involve a consideration of the potential significance of the invisibility of the reused blocks in the pyramid's foundations, and of the possibility that the transportation of the blocks added a compelling performative dimension to this practice. Additionally, the reuse of Old Kingdom monuments in Delta sites, which might date to the reign of Amenemhat I or the beginning of the Middle Kingdom, will be used to further nuance the opposition between utilitarian and ideological reuse in this period and more generally.

Maarten Praet, Johns Hopkins University

Mentuhotep II's Jigsaw Puzzle: An Attempt at Reconstructing Brussels Fragment E.5261

The Art and History Museum in Brussels preserves a peculiar column fragment originating from the mortuary temple of Mentuhotep II in Deir el-Bahari. It is the only column fragment from the temple known to be inscribed with the nsw.t-bity name of Mentuhotep II. However, due to

the ruined state of the building, it cannot be unambiguously located within the decoration scheme of the columns in the temple. In fact, the thousands of fragments which originally belonged to the decoration of this early Middle Kingdom mortuary complex remain distributed around the world without a full study to complete its decorative scheme. This paper offers a small amount of progress for this large and important challenge. I have combined archival research with museum searches for similar relief fragments from the same temple worldwide, and have compared these pieces with similar scenes from other contexts. As a result, I offer a plausible reconstruction of this column fragment. Therefore, this case study shows that it is still possible to draw meaningful conclusions about the original decoration of the mortuary temple of Mentuhotep II and consequently contribute to an understanding of its position in the evolutionary process of royal funerary architecture from Old Kingdom mortuary complexes to the New Kingdom "Houses of Millions of Years".

Margaret Geoga, Brown University

Papyrus Sallier II: How Inena Read "The Teaching of Amenemhat"

Papyrus Sallier II (BM EA 10182), dating to the reign of Seti II, contains the only complete copy of the Middle Egyptian poem "The Teaching of Amenemhat." Often dismissed as garbled and corrupt, P. Sallier II's copy of "Amenemhat" provides unique evidence of how its copyist, Inena, engaged with the poem. This paper seeks to reorient the study of P. Sallier II by asking not what the manuscript indicates about the textual history of "Amenemhat," but rather what its material and textual features suggest about Inena's encounter with the poem. Noteworthy textual features include Late Egyptianisms, errors, and redactional changes that show that interpretations of certain elements of the poem were evolving in the Ramesside Period. The manuscript's paratextual and material features, including handwriting and ink density, provide evidence of the physical practice of copying and of Inena's level of experience as a scribe. In addition to P. Sallier II, this paper considers Inena's other known manuscripts, which provide additional

evidence of his life and literary-historical surroundings. Drawing on reception theory, textual criticism, and material philology, this paper argues that P. Sallier II, despite (or perhaps because of) its numerous errors, is a valuable source of evidence of how "The Teaching of Amenemhat" was interpreted by its Ramesside readers.

Margaret Maitland, National Museums Scotland

Rediscovering Ancient Egypt: A History of Collecting and Display at National Museums Scotland, Edinburgh

In 2019, 200 years after the first objects entered the collection, a new permanent ancient Egyptian gallery opened at the National Museum of Scotland. This paper will present research on the history of collecting and display in Edinburgh and discuss how this informed decisions in developing the new gallery. The collection was compiled by both archaeologists and curators, positions which sometimes overlapped to the benefit of the objects' study and display. Pioneering excavator Alexander Henry Rhind was possibly the first to include archaeological plans in his displays of an important Theban tomb group in 1859. Later, the Museum sent curator Edwin Ward to excavate with Petrie, seeking 'more intimate' contact with archaeological processes, resulting in the acquisition of a 17th dynasty royal burial. Emphasis on aesthetics brought extensive deaccessioning under art historian Cyril Aldred, as well as an increasing educational focus, in which he designed dioramas and replicas. Today, the gallery aims to present an accessible version of ancient Egyptian history, foregrounding the stories of individual people to create more personal connections with the past. Although most of the objects were collected in the 19th and early 20th centuries, digital technologies re-contextualize them in a variety of ways, such as sharing the perspectives of excavators, providing access to archival material, and bringing ancient experiences to life. The displays address past imbalances, including the contested nature of past collecting practices, highlighting forgotten female contributors, and featuring authoritative voices of Egyptian archaeologists.

Margaret Swaney, Johns Hopkins University

Queenly Power at the Ptolemy XII Repit Temple at Athribis

During the Ptolemaic Period, several Egyptian queens attain heightened levels of political power, a dynamic that is borne out in the decoration of contemporary temples. As divine co-rulers, these women typically appear behind—or, more exceptionally, in front of—their male counterparts as either passive or active participants in cult. The most powerful queens, however, appear alone as sole ritualists. This paper considers exciting new evidence for the representation of three now-anonymous queens at the Ptolemy XII Repit temple at Athribis, two of which appear without their male counterparts, thus challenging the assumption of a decline in queenly power during this king's reign. In addition to considering the potential identities of these women, I also discuss the somewhat surprising presences and absences of queens' names in the Repit temple texts, including the only hieroglyphic attestations of Berenike IV, Ptolemy XII's daughter who ruled during his exile to Rome, shedding new light on some unresolved historical questions. A stylistic analysis of these queenly representations within their architectural contexts also acts as a point of entry for fine-tuning the temple's decorative phases, providing new insights into late Ptolemaic temple building.

Mariam F. Ayad, The American University in Cairo

Some Reflections on the Role of Seth in the Opening of the Mouth Ritual

The Opening of the Mouth Ritual (OMR) is arguably the most widely attested Egyptian ritual, occurring in both cultic and funerary contexts. The purpose of the OMR was the animation of the cult-statue or the reanimation of the deceased's mummy. In a funerary context, a number of ritualists utilize several implements to touch the deceased's eyes, mouth, nose and ears with the aim of restoring his/her senses, so that s/he may be able to see, speak, eat, smell and hear again. The restoration of the senses was crucial for the deceased's survival in – and enjoyment of – the afterlife. In a number of OMR scenes, the ritualist identifies with Horus, or the "Beloved Son," as he performs the ritual acts.

In one instance, however, the ritualist claims to be Seth. The identification with Seth here seems incongruent, running contrary to his mythic role in the slaying of Osiris. This paper investigates this apparent inconsistency, highlighting the content and context of OMR episode mentioning Seth and offers some possible reasons for including Seth in what is essentially a restorative ritual.

Mark Janzen, ARCE; **Terrence J. Nichols**, Southwestern Baptist Theological Seminary

The Third Season of Epigraphic Work at the Cour de la Cachette, Western Exterior Wall

The scientific recordation and reproduction of the reliefs inscribed on the western exterior wall of the Cour de la Cachette remains one of the goals of the Karnak Great Hypostyle Hall Project. It is vital that the western wall receive full recordation due to its exposure to weathering and other natural sources of damage. The third field season at the Western Wall took place in December 2019. This field report serves to accomplish three purposes: first, to recount the principal discoveries made at the wall during the season and their implications; second, to provide an update of research done to substantiate a discovery in a previous season; third, to discuss the updated process of digital epigraphy used to further the discussion on digital epigraphic methodology. Regarding the results, a few of the principal discoveries include the large number of revealed palimpsests in several scenes on the north end, the verification and update to the hieroglyphic text on the wall, and a newly discovered, badly damaged cartouche. In addition, research was conducted in the libraries and photo archives in Luxor regarding the reconstruction of Karnak Temple to help substantiate the claim of a misplaced block located during the 2017 season. Regarding digital epigraphy, the modified process to Chicago's Digital Epigraphy was used in the field for only the second time and demonstrates that it continues to produce good results. In summary, the 2019 field season was a productive year, with all of the initial season goals met and even more work completed.

Martin Uildriks, Brown University

Recording Mesa'eed: Accuracy in Early 20th Century Archaeological Documentation

Our understanding of Egypt's Predynastic period relies heavily on late 19th and early 20th century Upper Egyptian cemetery data. The last five decades of excavations in neighboring regions and settlements have begun to remedy this biased situation, but the quality of these earlier, key data remains unconfirmed. My dissertation examines this issue through the unpublished early 20th century excavations of the Upper Egyptian cemetery at Mesa'eed. George Reisner began preliminary excavations at Mesa'eed in 1901 and resumed work there in 1910, while one of his students completed excavations at the site in 1913. Many data from these excavations were exported to Boston including thousands of artifacts and a very rich documentary archive including diaries, photographs, field notes, and correspondence. According to these sources, Reisner and his men uncovered, exposed and emptied some 700 graves in the span of a few weeks in a manner typical of what other early 20th century excavation reports portray: fast, certain, clear, complete and thorough. In this paper I examine three sources of data—context cards, photographs and theodolite observations— to illustrate some standards used at the time. These sources present possibilities to juxtapose raw data with polished published final reports, which allow me to argue that while these reports present systematic controlled excavation, the raw data from Mesa'eed shows otherwise. Contemporary studies acknowledge deeper problems with accuracy of early 20th century excavation data, but this paper presents the serious first attempt at exposing them, providing a fresh outlook on early excavation reports.

Mary-Ann Pouls Wegner, University of Toronto

Heket, Isis, Nut and the Abydos Birth-House

The early 19th Dynasty 'Portal Temple' at Abydos has intrigued investigators since the time of Petrie, who first investigated its unusual portico. The location of the structure at the interface between the Votive Zone and the Osiris Temple precinct, as well as elements of its relief

program and architectural plan, point to a highly specialized role within the context of the broader Abydos landscape. This paper explores aspects of the temple's function as an integral element of the symbolic geography associated with the Osiris festival procession, in which elements of the environment were invested with meanings linking them to locations within the conceptual realm of the Duat. Examination of preserved architectural and iconographic elements of the structure, construction accounts, and archaeological remains from the Votive Zone allows for interpretation of the Portal Temple as an integral feature of the setting within which the cults of Osiris and the royal ancestors were celebrated. These converging lines of evidence also shed light on changes in the significance of the Votive Zone over time. Monuments from the preceding Middle Kingdom attest to the importance of Heket and Khnum at the site, while analysis of inscriptional data indicates a shift of focus to Isis and Nut in the New Kingdom and subsequent periods. Underlying these developments is continuity in the strong birth-related associations of the Votive Zone. The research unpacks some of these connections with transformation and rebirth, expanding our understanding of textual references to the 'birthplace' of Abydos.

Melissa Barden Dowling, Southern Methodist University

Constellations and Myth in the Graeco-Roman Cult of Isis

In the largest narrative group in the night sky, the constellations of Perseus, Andromeda, Cepheus, Cassiopeia, and Cetus tell the story of Perseus' heroic rescue of the princess Andromeda. This Greek myth is embraced by worshipers in the cult of Isis in the Graeco-Roman world to provide heroic models for framing human lives and especially human suffering. The great temple of Serapis in Alexandria bore reliefs illustrating the labors of Perseus around its courtyard. At Pompeii, the temple of Isis included Perseus' rescue of Andromeda on the small shrine leading to its crypt where worshipers were initiated. Heliodorus' Greek novel, The Aethiopian Romance, develops the cultic use of the myth. The novel connects the Greek constellations to the traditional Egyptian stars of

Sirius (Isis) and Canopus, and to the constellation of Orion/ Osiris, revealing the celestial story as the protagonists travel through Greece, Egypt and Aethiopia. Heliodorus maps their journey to the traditional calendar of festivals in the cults of Isis and Osiris and connects geographic locations in the novel to the constellations. The travelers follow both a physical map between important temples of Isis and Osiris (Delphi, Canopus, Memphis, Philae, Meroë) and a celestial map that connects the story of Perseus and Andromeda to the story of Isis and Osiris. Heliodorus' novel offers important insight into the cosmology of the Egyptian mystery cults and into their use of myth as allegory in the Roman period.

Michael Robert Tritsch, Johns Hopkins University

The Encroachment of Domestic Religion at Karnak: Preliminary Interpretation of Findings in the Mut Precinct

This paper explores the archaeological excavation of Violaine Chauvet, located in the rear of the Precinct to the Temple of Mut, outside the Eighteenth Dynasty enclosure wall, with the context of interest consisting of a sandstone feature comprised of pavers and a lintel with cavetto cornice and torus roll, surrounded by collapsed, painted mud brick, primarily red. The latter appears to be related to architectural features, mainly jambs and cornices. The majority of pottery recovered in situ dates it to the first half of the Eighteenth Dynasty, but this area had been cleared in 2005 when pottery identified as Ramesside was reportedly found, with the interpretation being a neighborhood chapel with a garden shrine. However, from a thorough review of New Kingdom domestic sites, this context shares significant similarities to the "divan room" in Deir el-Medina houses or the "central room" in Amarna houses. The sandstone feature bears a striking likeness to a divan and the painted mud brick is consistent with a niche shrine commonly found in these rooms. At both sites, the color red appears almost exclusively on door jambs and niches, however the style of painting seems unique. Photogrammetric analysis of this context and objects from similar contexts at European museums has also been performed, greatly aiding in the interpretation. These findings may help to elucidate the

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purpose of these enigmatic emplacements and identify a local regional style in domestic architecture, possibly speaking to the representativeness of Deir el-Medina to other New Kingdom habitation sites.

Miguel A. Sanchez MD, Englewood Hospital MC- New York School of Medicine); **Jesus Herrerin**, Universidad Autonoma de Madrid, Antropologia Fisica; **Salima Ikram**, American University in Cairo, Egypt

Pharaoh's Revenge (or not): Paleopathology from mummies found in Dejhuty's Project (Luxor, Egypt) The Djehuty Project, directed by Jose Galan (Spanish National Research Council) includes excavation of TT11-12 and environs, and has been active since 2001. The investigations include physical anthropology, paleopathology and radiology. The human remains range from mummies from the Middle Kingdom to the Graeco-Roman era, which have been examined macroscopically and through radiology and histology. A simple modification of the rehydration process in the histological preparation allows us to present two cases of intra-abdominal tumors and one of gastro-esophageal varices. One is lipoma-liposarcoma of the retro-peritoneum and the second is a gastric-stromal sarcoma with remarkable preservation of the histological picture, most likely a fibrosarcoma. The former is found in mummies of the Ptolemaic or Roman Period, and the latter in a mummy of the XXII Dynasty. The presence of perivascular granuloma strongly suggests portal hypertension secondary to infectious liver disease. A rather unique finding was the discovery of mummified fragments of four adult pelvises (XXII Dynasty) with unique penile mutilations, consistent with longitudinal dissection of the phallus. This will be the subject of a future presentation.

Mohamed Abdelaziz Abdelhalim Mahmoud, Alexandria University, Indiana University and Ministry of Egyptian Tourism and Antiquities

Physically based rendering (PBR) of Egyptian collection at Brooklyn Museum: New methods for photorealistic rendering

Physically based rendering (PBR) is an approach in

computer graphics that seeks to render graphics in a way that more accurately models the flow of light in the real world. Photogrammetry may be used to help discover and encode accurate optical properties of materials. The paper presents methods for photorealistic rendering of virtual objects at Brooklyn museum so that they can be seamlessly composited into images of the real world. To generate predictable and consistent results, we study physically based methods, which simulate how light propagates in a mathematical model of the augmented scene. This computationally challenging problem demands both efficient and accurate simulation of the light transport in the scene, as well as detailed modeling of the geometries, illumination conditions, and material properties. In this presentation, we discuss and formulate the challenges inherent in these steps and present several methods to make the process more efficient. This work-in-progress 3D imaging project by the Egyptology Program at Indiana University Bloomington. The paper also presents use the development of a methodology for the virtual anastylosis (re-erection) of five sculptural fragments belonging to Ramesses II located in Tanis, Egypt. Fundamental to the method is photogrammetry to create 3d modeling of fragments. Through this process we are able to visually re-assemble the fragments without intervening directly on the pieces.

Mohamed Wahballa, Ministry of Tourism and Antiquities

El-Ghorifa Burial Methods

El-Ghorifa is a name given to an archaeological site located 3km north of Tuna al-Gebel, Minya. This site was used as cemetery and consists of a large number of tombs dating from the Late Period to the early Ptolemaic. It belonged to the high priests of the ancient Egyptian God Thoth, the main deity of the ancient Egyptian 15th Nome, and its capital was Al-Ashmounein. The nature of the site was unknown to Egyptologists until 2017 when the Supreme Council of Antiquities planned to explore the place to search for the New Kingdom necropolis of this nome. The necropolis of the nome during the Old and Middle Kingdoms, however, was located on the east bank of the Nile, and the necropolis of the Ptolemaic and Roman periods was located in the

area of Tuna el-Gebel. The mission started excavations at the end of 2017 until now. The excavations revealed a big part of the necropolis, which was used for a long time, from the Saite Period, and resulted in a number of hewn underground tombs in the limestone cliffs of the eastern mountain, reachable through deep shafts. These tombs belonged to the elite of the 15th Nome, mostly the high priests and their family members. The burial methods were varied, between people who had limestone sarcophagi, inscribed and uninscribed, anthropoid, and rectangular, and people buried in wooden coffins, as well as others buried in ground-cut burials. These excavations resulted in a lot of historical information, which will contribute to our knowledge of Egyptian history.

Morgan E. Moroney, Johns Hopkins University

Who's that Girl?: An Investigation into the Woman in Pahery's Wine-Making Scene

In the tomb of Pahery at el-Kab an unlabeled woman stands beneath an arbor collecting grapes from the vines. Two men kneel on either side, also harvesting. Wine-making is not an infrequent theme in Egyptian elite tomb scenes—there are about 95 known examples dating from the Old Kingdom through the Late Period. However, this portrayal of a woman participating in the manufacturing of wine is unusual, if not unique. She might simply be a fellow worker or a remarkable artistic choice, but her singular place arguably suggests something further. We might credit her presence as an expression of the matrilineal ties possibly emphasized in Pahery's tomb. Within this tomb's context, and moving beyond, she might also be highlighting mythical and ritual significances subtly expressed, but not yet fully explored, in early New Kingdom wine-making scenes. Tomb wine offering and wine-making scenes have been connected with Osiris, Hathor, Renenutet, Seshmu, abundance, and rebirth. This paper examines how associations between Hathor, other goddesses, and wine-making scenes in the early 18th Dynasty are expressed through iconographic and stylistic changes in wine-making scenes compared to earlier examples. By comparing Pahery's wine-making scene with earlier and contemporary scenes and other wine-related

iconography, particularly marsh bowls, the meaning of these scenes is expanded to incorporate associations with Hathoric myths and festivals. The development and changes in the style and iconography of wine-making scenes are, too, connected with the increase in Hathoric worship and festivals, and greater political and religious changes in the early 18th Dynasty.

Mostafa Abdelmeguid, Independent Scholar

Paris, Hyde Park, Beverly Hills All in Cairo

This essay argues that two Egyptian rulers used their power to impose meaning – through architectural forms to transform their capital city – to manifest their influence over society. This essay will focus on two epochs in Cairo: the time of khedive Ismail to modernise and 'Europeanise' Cairo, with Haussmann architecture and, Hosni Mubarak's era, where an urban boom of gated communities and malls set to promote neoliberalism. I borrow concepts from Pierre Bourdieu's symbolic violence and capital, which will help illustrate how architecture has been a primary influence to change the culture of the city. Additionally, Veblen's conspicuous consumption will also be crucial in explaining patterns of consumption of these architectural forms within the two case studies. Symbolic capital has the power that allows the dominant (i.e. Egyptian rulers) to impose their habitus through giving high status value to creative goods and services; urban forms and policies. Through conspicuous consumption of buildings and urban expansion initiated by the rulers, the buildings gain high status value since they are immediately adopted by society's affluent people for recognition by the possessors of symbolic capital. The ruler's habitus becomes the means that categorizes social classes and signals status. However, the possessor, or ruler in this case, must not fall into the illusion that owning the highest symbolic capital, grants the possessor the ultimate ability to transform society. The pace of introducing new social values has to be governed by the reality of that society; otherwise, it does not flourish, as the two cases indicate.

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Nancy Arthur Hoskins, Independent Scholar

The Attire of the Aamu of Shu: Imaginary Apparel or Real?

The unique Beni Hassan tomb painting of a procession of Asiatics bearing gifts for Khnumhotep II is considered an "artistic gem." The Middle Kingdom event was important enough to be recorded in the tomb during the reign of Sensuret II (circa 1890 BC). The extraordinary, colorful, patterned garments worn by the Aamu men and women in the caravan must have seemed startling to the Egyptians dressed in their ordinary garments of natural linen. The artist that created the panel of the Aamu captured the costumes of the visitors, and meticulously differentiated the patterns on the leader's robe, the men's two tunics, the women's four dresses, and even the saddle bag and blanket on the donkeys. European explorers recorded the tomb paintings during the 19th century when the colors were still vivid. They thought them "remarkable for their delicacy and beauty." More recent researchers have published their Beni Hassan photographs and video tours on the web. The colors and patterns on the costumes of the Aamu men and women in both the antique paintings and modern photographs are consistent. The consensus among scholars is that the fabrics were made of wool. A better breed of sheep, that was useful for spinning, dyeing, and weaving, became a plentiful product during Mesopotamia's 'Wool Age'. The woolen patterns on the costumes of the Aamu, which can all be woven on a primitive loom with the same method, were the subject of my 'experimental archaeological' project. I believe that the fabrics were not imaginary, but real.

Natasha Ayers, Institute for Oriental and European Archaeology, Austrian Academy of Sciences

New Kingdom Intrusive Burials at Saqqara: Cultural Complexity in Material and Practice

While excavating the large Early Dynastic mastaba tombs at Saqqara in the 1950's and 1960's, Walter B. Emery uncovered a number of intrusive New Kingdom burials with a complex combination of material culture and burial practices traditionally interpreted as signifiers of distinct cultural groups. Modes of burial documented by excavation

records and photographs (now in the EES Archives) show some persons buried in coffins and others, more surprisingly, on “Nubian style” wooden beds. So far, only one of the Saqqara burials has received much attention from scholars, due to that assemblage containing a rare faience rhyton of Minoan shape, a Cypriot Base Ring I jug, Egyptian pottery, and Nubian or “Nubian style” pottery. Previous scholarly disagreement over the date of this burial (i.e. late Second Intermediate Period, R. Merrillees; early Dynasty 18, J. Bourriau; Tuthmoses III, D. Aston), as well as the overly simplistic cultural-historical description of many of these burials as Nubian soldiers by Emery, demonstrates a fresh appraisal of the Saqqara intrusive burials is overdue. Can these burials be more securely situated chronologically? How can recent material culture theory aid in understanding the objects and burial practices employed at Saqqara? This paper will discuss preliminary observations on several specific burials, in addition to the character of the intrusive burials as a group, based on original excavation documentation used in combination with recent study (2019-2020) of the objects now held in U.K. museums.

Nicholas R Brown, UCLA Egyptology

Raise Me Up and Repel My Weariness! A Study of Thutmose III’s Coffin (CG 61014)

Discovered in the Royal Cache of Deir el-Bahari in 1881, the coffin of Thutmose III serves as a striking example of the re-commodification and reuse of royal coffins and burial equipment during the 21st Dynasty. Here, the coffin receives the attention it deserves with an in-depth study, analysis, and proposed reconstruction of its exterior decoration. First, the coffin’s movement is tracked from its original burial place (KV34) to the Deir el-Bahari cache (TT320), along with a summary of the coffin’s attributions to Thutmose III. Second, an overview of the coffin’s preserved exterior decoration follows, with an analysis of particular motifs and iconography. Third, the same is done for the interior decoration, which unlike the exterior is completely intact. Fourth, the preserved hieratic joint inscription is translated with commentary. Some highlights of studying the coffin of Thutmose III include: the earliest evidence of the vulture-

cobra motif at the king’s forehead in the 18th Dynasty; the use of a matting motif to decorate the interior, to aid in the king’s protection and regeneration in the afterlife; and a translation of a hieratic joint inscription, the only-known example from a royal coffin to date.

Nicholas Warner, American Research Center In Egypt

Conservation at the Red Monastery in Sohag: The 2019 Campaign

The fall 2019 campaign at the Red Monastery focused on completing all outstanding tasks related to the conservation of the nave of the church and the recording of both the church and its surrounding archeology. The work was extremely diverse in scope, ranging from ‘heavyweight’ interventions such as finalizing the architectural reconstruction of the granite columns in the basilica of the church to more delicate operations such as the conservation of the two outstanding 5th century carved limestone portals of the church as well as the last remaining area of untreated medieval plaster. Both the church and the archaeological area were recorded through high-resolution photography and 3D laser scanning, the latter after a major clean up of all exposed surfaces had been undertaken. Smaller details such as re-used pharaonic blocks were also drawn by hand to supplement the digital record. To achieve these outputs required the co-ordination of five separate teams of specialists: a building team to set up the columns, a stone conservation team to clean the portals, a plaster conservation team, a cleaning team for the archaeological area, and finally a documentation team. The successful conclusion of the work means that the last major part of the project, started in 2015, can now move forward to a final publication; documenting and providing access to the mass of new data assembled over the past four years.

Nicola Aravecchia, Washington University in St. Louis

A Space for Whom? The Gathering Hall of a Fourth-Century Church in Dakhla

This paper will assess the archaeological evidence of a

large hall that was part of a fourth-century church complex located at ʿAin el-Gedida, in Dakhla Oasis. The focus will be on the spatial and functional relationship of the hall with the church and the other rooms of the complex. The room, of a rectangular shape, was broadly identified as a gathering hall because of the existence of mud-brick mastabas (benches) running along three of its walls. It was also connected to the church via two passageways, one of which was sealed—at some point in antiquity—with a partition wall that obscured the remains of a stepped podium between the two spaces. The location of the podium suggests that it was once used by someone—possibly a priest—who needed to be seen and heard by people sitting in both the church and the gathering hall. Suggestions have been made that the latter was a room destined to catechumens, who were allowed only partial participation to the Eucharist, or women. In its latest phase, the gathering hall may have instead been used for the eating of common meals. The paper will discuss comparative evidence for gathering halls in church complexes from other sites in Egypt. The goal is to shed light on who might have congregated in the hall at ʿAin el-Gedida and—more broadly—on the social composition of the community that inhabited this rural site of Egypt's Western Desert in Late Antiquity.

Nozomu Kawai, Kanazawa University

The Discovery of a Roman Catacomb at North Saqqara

The Japanese-Egyptian mission to North Saqqara has excavated at the eastern escarpment at the North Saqqara plateau since 2017. In the 2017 season, the mission opened a test trench to understand the stratigraphy of the area and found 21 simple burials dating from the Ptolemaic to the Roman Period. In February – March 2019, we extended the excavation area to the north and found a wall made of limestone blocks on the rocky cliff. In the course of the excavation in front of the cliff, we found three simple burials and dense concentrations of the Roman pottery shards. In August 2019, we found the entrance of the vaulted mud-brick structure connecting the entrance to an intact catacomb dating to the Roman era. It is apparent that the vaulted mud-brick structure was reused several times. Above the entrance

gate to the rock-cut tomb, we found a stela with Greek inscription and fragments of terracotta figurines of Isis-Aphrodite, rumps, and small pots in front of it. After removing the sand in front of the gate, we found the completely sealed entrance to the rock-cut tomb. After entering the entrance gate, we found a number of human remains, some of them are mummified which are placed inside the wooden coffins. Some Greco-Roman stelae were found in situ. In this presentation, I will present a preliminary report of the latest season of the excavations at North Saqqara.

Owen Murray, OMM Photography/The Epigraphic Survey (Chicago House)

Modeling the Past: Creating 3D Models From Archival Imagery

Since the inception of photography, Egypt and its monuments have found themselves the subject of countless photographers, not to mention millions upon millions of tourists. The photogrammetric processes used to generate 3D datasets that have become a staple in modern Egyptological documentation require multiple, overlapping images, generally taken in a specific order. Although archival photographs rarely overlap enough for them to be used in this process, there are rare — and valuable — occasions when they do. This paper will look at reconstructing the East Wall of the Hall of Offerings (VIII) in Luxor Temple from the archival imagery of French Egyptologist Alexandre Moret, courtesy of the Collège de France. It will cover how archival film negatives can be integrated with more recent digital imagery in order to produce rectified 3D models that virtually reconstruct monuments as they would have appeared in the past. It will cover basic photogrammetric methodology, from image acquisition to post-processing and treatment of individual images using Adobe CS applications, through to combined image alignment, dense cloud, mesh and texture generation using Agisoft Metashape. The paper will also emphasize how archival and publication best practices can assist the work of current documentation efforts, and explore how further archival imagery data mining may provide a glimpse into the past that has been hitherto unimaginable.

Patricia A Butz, Savannah College of Art and Design

Dialogue at Edfu? The Dedications of Lichas, son of Pyrrhus, and the Concept of Double Composition

This paper examines the dedications of Lichas, son of Pyrrhus, associated with the temple site of Edfu. The better known of the two plaques, today in the Brooklyn Museum, is secure in provenance and dated internally to the reign of Ptolemy IV Philopator. It consists of a 7-line inscription in Greek on heavy black basalt. The second plaque, in the Hermitage, displays the same text with only one difference: the god Dionysos is named instead of Serapis. Most remarkably, the stone is described as granite, maybe even light-colored. The plaques recall another pair of dedications: the inscribed statuettes of Nebmerutef in the Louvre and dated to the reign of Amenhotep III, one fashioned in greywacke but the other in alabaster and the gift of the king. Both were probably given by the high official at Hermopolis honoring the god Thoth, depicted with him as a baboon. The paper argues that the Hermitage plaque should also be from Edfu and discusses the meaning of the iteration of the text, accompanied by the differentiation of materials. Furthermore, the Lichas inscriptions state that he served twice as commander of the expedition to obtain elephants from the Red Sea area for the king's military engagements. At the core of the paper is the concept of doubleness in Egyptian art, and why each of these high officials, one Egyptian and one Greek, dedicates his supreme work, scribal for Nebmerutef and military for Lichas, in this format at a religious site.

Patricia Coletto, University of Exeter

Emerging from the Belly of Hathor: Excavations at the Gebel el-Silsila New Kingdom Necropolis

Located in Upper Egypt, Gebel el Silsila is an archaeologically rich site encompassing 30 square kilometers and preserving evidence of human activity from the epipalaeolithic through the Roman period and beyond. The landscape of the site is dominated by its massive sandstone quarries, 104 in total, which were the source of fine sandstone in ancient Egypt from at minimum the

Middle Kingdom through the Roman Period. Naturally an operation of this size necessitated a large workforce of quarry laborers who needed to be fed, housed, ritually protected, and of course buried. The Gebel el-Silsila team has been excavating at the site of the Thutmosid necropolis since 2015 and some significant insights into the lives of the laborers have been revealed. Ongoing excavations and analysis of the archaeological evidence, material culture, and the osteological remains have yielded some exiting results in the team's mission to establish a better understanding of life as a quarry laborer during the New Kingdom at Gebel el-Silsila, ancient Kheny. This paper will present an update from the field and discuss recent finds and revelations.

Peter Der Manuelian, Harvard University

40 Years and 23 Sites: Notes from a New Biography of George A. Reisner

From the Giza Pyramids to the Fifth Cataract, the archaeological legacy of George Reisner (1867–1942) includes more than forty years of breathtakingly successful excavations at 23 different sites in Egypt, Sudan, and Palestine. Reisner's career leading the Hearst Expedition, and then later the Harvard University–Boston Museum of Fine Arts Expedition revolutionized fieldwork methods and impacted both Old and New World archaeology. His Egyptian teams achieved the excavation results and mastered the arts of photography, recording and documentation. Based on selections from a forthcoming biography, this talk follows Reisner's path from humble American Midwest beginnings to Harvard, Berlin, Cairo, and beyond, as he helped reveal Egyptian and Nubian history and build world-class museum collections in Boston, Cambridge, Cairo, and Khartoum. His life encapsulates the golden age of early twentieth century archaeology in the midst of tumultuous and exciting political times.

Peter J Brand, University of Memphis

Unrolling the Columns of the Great Hypostyle Hall at Karnak Through Photogrammetry

The Karnak Great Hypostyle Hall Project has produced spectacular photogrammetric renderings of its columns by unrolling their decorated surfaces, revealing a complex decorative program. With the support of an ARCE-AEF Grant, we made thousands of high-resolution images of the column scenes and produced a systematic corpus of unrolled photomosaics of the scenes. This paper highlights the results of our photogrammetry, which provides a new corpus of more than 300 ritual scenes of Sety I, Ramesses II, and Ramesses IV, heretofore largely unknown to scholarship. These breathtaking images reveal the complex artistry, iconography, paleography, and epigraphic aspects of the column sense. Many are palimpsests where Ramesses II recarved reliefs of Sety I or his own early raised relief decoration in sunk relief. By presenting the scenes on the entire circumference of each column, the new images permit detailed study of the early reliefs of Sety I and Ramesses II and their relationship to later scenes of Ramesses IV. It is now possible to study the larger decorative sequence of decoration of the columns side by side. We will publish these unrolled images in print and online to make them available to scholars and the public.

Peter Lacovara, The Ancient Egyptian Heritage and Archaeology Fund

Rescue Archaeology at Deir el-Ballas 2019-2020

The fieldwork undertaken at Deir el-Ballas from December 1, 2109 to January 30, 2020 conducted by the Ancient Egyptian Heritage and Archaeology Fund under the aegis of the American University in Cairo, concentrated on developing strategies to protect and restore the important Palace-City of Sekhenenre and Ahmose. In addition, we have also concentrated on the completion of recording of the areas excavated by the original Phoebe A. Hearst Expedition, directed by George A. Reisner on 1900-1901. In particular, we have concentrated on those areas threatened by the expansion of the adjacent modern town and cemetery, and the stabilization and preservation of the standing monuments. This season we continued our work on the survey, documentation, and restoration of the 'South Palace,' as well as several houses beside the

North Palace that were in danger of destruction by the expansion of the neighboring modern cemetery. We also undertook a survey and clearance in preparation for the construction of enclosure wall to protect North Palace from the encroachment of the modern village.

Rachel Sabino, Art Institute of Chicago

Gender, Identity and Transformation: The Art Institute of Chicago's Mystery Mummy

Recent investigations of a mummy at the Art Institute of Chicago demonstrated that it was not quite what it seemed. Although hieroglyphs on the coffin it was displayed in definitively confirm that it belonged to a woman named Wenuhotep, x-rays and CT scans from a previous examination offered conflicting information regarding the mummy's age, height, state of health, the presence of jewelry inside the wrappings, and the preservation of internal organs. Moreover, curatorial research indicated that the mummy and coffin are not stylistic matches: the coffin dates to the 26th Dynasty (664–525 BC) and the mummification method to the Ptolemaic Period (332–30 BC). To shed further light on this discrepancy, the mummy was examined again with a new CT protocol using four voltages (80, 100, 120 and 140 kV) that, when combined, give outstanding sensitivity and detail. The enhanced data set revealed a robust skeleton with an atypically large stature for a female and a pelvis more characteristic of a male. Prompted by these anomalous findings, 3D and multi-planar reconstructions were generated, disclosing the presence of male genitalia that had been wrapped or encircled with an unidentified material or structure, perhaps a reed or a roll of resin-coated linen. Such bodily preparations are not uncommon, but the findings of this study demonstrate that without benefit of this enhanced scanning protocol, crucial details may be missed, unwittingly perpetuating mysteries and riddles.

Richard Jasnow, Johns Hopkins University; **Christina Di Cerbo**, Epigraphic Survey of the Oriental Institute-University of Chicago

Tidbits from Sobek Demotic Papyri from Tebtunis Recovered between 1997-2000

The Franco-Italian Excavations in Tebtunis directed by Prof. Claudio Gallazzi have brought to light many Demotic papyri and ostraca. We present here an overview of those Demotic papyri recovered between 1997-2000 from the area southeast of the Dromos of the Temple of Sobek, Lord of Tebtunis. A total of 562 fragments and 218 relatively well-preserved papyri have been conserved, documented, and inventoried. 180 of the texts were oracular questions; these are now nearing publication. In this lecture we focus on the remaining texts, which are to be edited by the presenters. While many fragments of lists and accounts are too small to offer much of scholarly interest, there are numerous larger pieces of varying content. Among these more complete texts are twelve "Admission/Election to the priesthood" documents, several petitions or administrative letters, and three lengthy lease agreements. There are only two literary fragments, one being a version of the Wisdom Text of Onkhsheshonqy.

Richard William Redding, University of Michigan, Kelsey Museum; **Mohamed Hussein Ahmed**, Ministry of Antiquity, Egypt

Kawara at Giza in the Old Kingdom? Fauna from Excavations in the "Kromer Dump"

Ancient Egypt Research Associates (AERA) re-excavated the "Kromer Dump" in 2018. Kromer had excavated the area in 1971-1975 and described it as a dump from some other, unknown, area. The fauna from Kromer's excavations was published by Kokabi (1980). During excavation the AERA team collected faunal remains from several previously unexcavated strata. The faunal remains are dominated by sheep and goat limb shaft elements. These limb shafts exhibit multiple butchering marks that resulted from the stripping of meat from the bones Most of these limb elements are missing their articular ends. Metapodials are over-represented in the sample while carpals, tarsals, and phalanges are under-represented. We will argue that these patterns are the result of removal of meat for consumption

and the preparation of limb joints for a knuckle bone stew, Kawara. Kawara would have been an ideal diet for individuals involved in heavy labor as it is protein rich, high in calories (519Kcal per 100g), collagen, and amino acids. The radius, tibia, metapodials and first phalanges would have been favored because the amount of oleic acid in marrow increases in more distal elements.

Rita Lucarelli, University of California, Berkeley

Agents of Punishment and Protection. Assessing the Demonic in First Millennium BCE Egypt

Demonology is an integral, though often neglected aspect of ancient Egyptian religion. The conceptual dimension of the demonic always poses questions of definition and classification, especially when dealing with an ancient civilization where one can only attempt to interpret available written, iconographical and material sources, which are rarely comprehensive. In the specific case of ancient Egypt, demons appear to function not only as agents of divine punishment but also of protection of sacred and liminal spaces on earth (temples and tombs) and in the netherworld (gates and other passages). In this lecture, while presenting a current book project, the role that ancient Egyptian demons played in relation to the main deities and to humankind will be outlined, by distinguishing categories of demons according to where they appear, namely demons of the netherworld and demons wandering on earth. By assessing the existence of an ancient Egyptian demonology that is comparable to other discourses on demons in the ancient world, I intend to define how demonic agency may be distinguished from divine agency within the ancient Egyptian religion and according especially to sources produced during the first millennium BCE.

Robyn Adams Gillam, York University

How Divine Was Antinous? Once Again the Obelisk

Since Adolf Erman first provided a coherent translation of the Pinciano obelisk, there has been little agreement on either its original location or the content of its inscription.

It is clear that it commemorates Hadrian's beloved friend Antinous with the foundation of Antinoopolis, following his premature death in Middle Egypt in 130, but the details are disputed. The orthography, grammar and layout of the text have been described as peculiar, characterized both as a late, decadent example of a hieroglyphic inscription or as an attempt at literal translation of a Greek or Latin official decree. However, more recent scholarship has focused on its immediate cultural context in Graeco-Roman Egypt. Its language may compared to contemporary Demotic as much as "temple" Egyptian and the topics and tropes covered by the inscription have much in common with later mortuary beliefs, as expressed in funerary literature and commemorative inscriptions. What this makes clear is that Antinous' "divine" prerogatives, such as joining the solar cycle, are nothing unusual for the ordinary deceased. This paper will try to uncover what makes him exceptional in this regard and relate it to the setting up of his Egyptian cult, as well as his worship elsewhere in the Roman empire.

Salima Ikram, American University in Cairo

Photo-ing, Fixing, and Footling: An Update on KV10

Now that KV 10 has been completely cleared, the team is working on recording the tomb itself, and carrying out the documentation and conservation (as needed) on the objects found within it. This paper will present some of the issues with recording the three levels of decoration due to the tomb's re-use, results of the ceramic analysis, and ideas concerning the history of the tomb's use based on funerary items. The restoration of two limestone canopic jars and a sarcophagus lid and the re-appropriation of one of its fragments from the monastery of Mari Girgis at Naqada will be highlighted.

Sameh Iskander, New York University

New Discoveries at the Temple of Ramesses II in Abydos

New discoveries at the temple of Ramesses II in Abydos I will present in this paper the new discovery of a palatial structure south of the temple of Ramesses II in Abydos

during the New York University-ISAW 2019 field season, along with the planned 2020 excavation season at the site. Particular attention will be paid to the excavated finds in the vicinity of the temple, which included statues, stelae, ostraca, and seal impressions. The presentation will also discuss the discovery of the rare Ramesses II cartouches inscribed on the sub-foundation of the temple's four corners, which sheds important light on the temple's construction history and phases.

Sarah L. Symons, McMaster University

Star Clocks and Astronomical Tableaux in XXth Dynasty Tombs in the Valley of the Kings

Tombs KV1, 6, and 9 in the Valley of the Kings each contain pairs of depictions of the sky ("sky pictures" or astronomical representations (Symons, 2015)) associated with twenty-four star charts known as "Ramesside Star Clocks" (Champollion, 1833; Neugebauer and Parker, 1966; Leitz, 1995). Together, these elements form extensive astronomical "tableaux". KV9, the tomb of Rameses V/VI, contains two such tableaux while KV1 (Rameses VII) and KV6 (Rameses IX) contain one each. These four tableaux represent a dense volume of pictorial astronomical knowledge. The astronomical diagram elements have been well-studied (headed by Neugebauer and Parker, 1969), but the star clock tables still pose many unanswered questions and their relationships to the diagrams and to the tombs themselves have also been somewhat overlooked. Here, we will review the spatial location and orientation of the Ramesside astronomical tableau within the tomb and explore what it indicates about the observational method underlying the star clock tables.

Sarah M. Schellinger, The Ohio State University; **Edmund Meltzer**, Pacifica Graduate Institute*The King's Brother, Kariben: An Examination of Stela AMUM 1981.1.42*

Since its discovery within the southern pyramid field at Meroe in 1922, the stela of Kariben has received little attention. Upon publication in 1950 by Dows Dunham, the stela was described as having "six lines of incised corrupt

Egyptian hieroglyphs" (380) and was subsequently left unstudied. The stela is now housed in the Art Museum at the University of Memphis. This paper will discuss recent attempts to translate the inscription on the stela and postulate potential reasons for the irregularities in the text. We will make suggestions regarding both Egyptian phraseology and personal names in the text. This paper will also examine Kariben's role within the Kushite royal family and how his stela fits into the broader context of Nubian elite burials.

Sayed Mamdouh Soliman, Ministry of Antiquties

A Rediscovered Tomb in Qurnet Marei: TT382 (Usermontu)

Usermontu's tomb (TT 382), which was re-discovered in 2010, is located in Qurnet Marei. Usermontu, who is also known from his granite sarcophagus (MMA 17.190.2042a-c), held multiple important titles, including High Priest of Montu, Overseer of Cattle, Overseer of the Two Granaries, and Overseer of the Treasury. With these reponsibilities, it is not surprising that his tomb is one of the largest in the area. A brief survey of the wall scenes in Usermontu's tomb suggests that it was built during the Ramesside Period, which was confirmed during an initial clearing out of the transverse hall which revealed a plaster fragment bearing the cartouches of Rameses II.In 2018 I EES Centenary Award. By utilizing the EES funds, the transverse hall was cleared completely of a massive amount of human remains covering both sides of the hall. During this time we discovered hundreds of painted plaster fragments that had fallen from the walls of the tomb, mixed among the human remains. An initial investigation determined that the painted plaster fragments came primarily from the NW and NE walls. Despite the damaged condition, the large fragments still show unique scenes and surviving color. After removing the bones and plaster, we started excavating and recording a series of archaeological features in the transverse hall. The tomb was particularly vulnerable to flash flooding in antiquity because it is located on the lower level of the mountain. The remains of a mud-brick structure was also found in the passage of the longitudinal hall.

Seria Yamazaki, Waseda University

"Royal Object Ritual" in the Middle Kingdom: Analysis of Object Friezes and Archaeological Materials

In the Middle Kingdom, it was important to associate the deceased with Osiris for resurrection, and certain royal insignia, such as scepter and flail, were deeply connected to this. These objects were often depicted in friezes on the interior of rectangular coffins. The object friezes comprise pictures of various objects and labels indicating their names and locations, but their assemblages and the relationship between the pictures and labels are unclear. Some of their parts represented "royal object ritual," which originated from the Pyramid Texts in the Old Kingdom, with certain royal insignia used for this ritual. Such royal insignia were also used as real grave goods in royal and non-royal burials, which are sometimes called "court type burials." The aim of this paper is to clarify both the idea and practice of using certain royal insignia at funerals in the Middle Kingdom. Specifically, this paper reconstructs the ideal usage of royal insignia at funerals through the analysis of object friezes, which is further compared with the assemblage of real royal insignia from Middle Kingdom tombs. The results indicate that there were differences between the representations in object friezes and actual usage of royal insignia, though there was also correspondence. For instance, certain rules, including the disposition of royal insignia, which are not shown by labels in object friezes, can be seen in actual burials. This indicates the strengthening of the Osirification in reality when we consider the idea behind such differences.

Shenouda Rizkalla, Minya Inspectorate, Egyptian Ministry of Tourism and Antiquities; **Hanna Kurnitzki-West**, Independent Researcher

Beyond Beni Hassan: New discoveries from Speos Artemidos and the archaeological landscape of Middle Egypt

Middle Egypt exists as a unique juncture between Upper and Lower Egypt and it is home to some very important archaeological landscapes in the country – Amarna, Dayr al-Barsha, El-Ashmunein, Tuna El-Gabal, and Beni Hassan;

the latter named for the eponymous nomadic tribe of Arabian origin. As a site, Beni Hassan has experienced use from the Old Kingdom onward and is noted for its Middle Kingdom rock cut tombs. This presentation will focus on an area adjacent to the site, called Speos Artemidos - known for its rock cut temple dedicated to the goddess Pakhet which dates to the reign of Hatshepsut in the New Kingdom. As of 2019, new Roman era discoveries have been made as part of salvage excavations conducted in response to systemic looting in the greater Beni Hassan el-Shorouq area. These salvage excavations are crucial to our collective understanding of an “at risk” site’s importance within the context of a regional/broader archaeological landscape over time - whose unique mix of artifact assemblages and captivating “story” would otherwise be lost to time. The longevity of these types of salvage projects will be called into question as they are limited by their very nature. By addressing barriers to these types of excavations, the presenters intend to discuss establishing a place for salvage excavations in future by transitioning these types of projects from short-term to long-term endeavors.

Sherine ElSebaie, University of Toronto Graduate

The Egyptian Museum in Cairo: A Gem of Great Price

The Grand Egyptian Museum, in the shadow of Giza’s eternal pyramids, has been under construction since 2002. Upon completion (scheduled for 2020), it is expected to cost a billion US dollars, and will have the capacity to display 100,000 artifacts. Until then, Egypt’s treasures continue to be housed in the Egyptian museum in downtown Cairo, as they have since 1902. In its day, this building represented the crowning achievement of herculean efforts, starting in the mid-1800s, to preserve Egypt’s ancient heritage. Those efforts, driven by the passion and determination of many Egyptologists, will be briefly outlined in this presentation. While the architectural design competition soliciting ideas for the building and the winning project of Marcel Dourgnon will be more closely examined within the socio-political environment of the era.

ARCE 71st Annual Meeting

Silvia Zago, University of Liverpool

“Highway Through Hell”: a Netherworld Books Scene on an Ostracon at the MFA, Boston

While funerary texts complemented by illustrations make their first appearance with the Coffin Texts and continue to evolve with the Book of the Dead in the New Kingdom, it is only with the royal Netherworld Books that the full potential of visual imagery is explored. The beyond is now increasingly encoded in images that articulate its essence of nocturnal space-time of solar-Osirian gestation in symbolic terms, thus serving as illustrated summaries of the main themes of the compositions. Among these are a few giant figures, which are generally believed to embody the netherworldly space and its connection with solar rebirth. This paper will explore the attestations of the figure of Shetayt, the “Mysterious One,” a divine feminine entity personifying the spatial aspect of the nocturnal journey of the sun in the Netherworld Books. The focus will be on an as yet unpublished occurrence of this motif on a New Kingdom figured ostracon kept at the Boston Museum of Fine Arts. Based on the textual and iconographic parallels from the other known attestations of Shetayt, this paper will provide an analysis and interpretation of the ostracon, thus shedding more light on the role(s) and function(s) of this divine figure. At the same time, her connection with the realms of magic and ritual, within and beyond funerary texts, will be outlined, and further insight will be gained into this intriguing, yet elusive, aspect of the (divine) netherworld in the New Kingdom and on how it worked within the broader cosmic dimension.

Steven Blake Shubert, Royal Ontario Museum; **Rexine Hummel**, Royal Ontario Museum*“Like a Broken Vessel” (Psalm 31): Egyptian Blue Painted Pottery in the Royal Ontario Museum*

Pottery with blue-painted floral decoration from the New Kingdom has been extensively studied over the last twenty-five or so years by such scholars as David Aston, Janine Bourriau, Julia Budka, Colin Hope, and Pam Rose. This presentation looks at the blue-painted pottery

in the collections of the Royal Ontario Museum in the light of these studies and an examination of the pieces themselves. Some of these blue-painted vessels have been published by Colin Hope "Blue-Painted and Polychrome Decorated Pottery from Amarna: A Preliminary Corpus", Cahiers de la Céramique Égyptienne 2. (Le Caire: Institut français d'archéologie orientale, 1991) pp. 17-92. Further information will be provided on these pieces, as well as the evidence that they actually came from Amarna. A discussion of the different design elements and decorative techniques used on the seven complete vessels and some of the eight sherds in the Royal Ontario Museum's collection provides the evidence for a discussion of the original provenance of these vessels. How and when these vessels entered the Museum's collections provides further evidence for their interpretation. This presentation of a small group of artefacts long in the Museum collection emphasizes that our understanding of museum artefacts is not static, but continues to evolve over time with further study.

Stuart Tyson Smith, University of California, Santa Barbara

Iron and Stone: Racism, Egyptological Stereotypes, and the Intersection of Local and International at Kushite Tombos

Herodotus' description of "barbaric" Kushite warriors in the Persian army has over the years reinforced Egyptological and more popular perceptions of Nubia and Nubians as a periphery to civilized Egypt, interlopers in the broader Mediterranean world. For Egyptologists, it would reinforce the perception of Nubia as a backwater. Similarities with depictions of Nubians from earlier periods of Egyptian history, like Tutankhamen's painted box, reinforced these ideas. But to what extent was Nubia a "backwater" to "effete and sophisticated" Egypt as Wilson once asserted? For the Persians, depictions of Nubians and other foreigners presenting gifts at Persepolis represent the diversity of the empire paying homage to the Persian king as an all-lord whose rule encompasses numerous peoples. Archaeological evidence supports the more cosmopolitan Persian view of Kush against older racist Egyptological stereotypes of "barbaric" Nubians. It is clear from recent archaeological work at Tombos and elsewhere that Nubia was not an

unsophisticated backwater. Objects with Egyptianizing motifs in the international style asserted a cosmopolitan social status that connected their owners to an international elite culture that spanned Nubia, Egypt and extended across the Mediterranean during the Iron Age. Yet consumption of this material culture was mediated by cultural preference, and balanced by objects like pyramids and black topped pottery that reflected ties to an Egyptian colonial and deeper Nubian past, but had by this time become thoroughly incorporated into local practices and belief systems creating a kind of pluralistic identity.

Tara Prakash, College of Charleston

A Picture of Nothingness: The Meaning and Function of Pain in Stereotypical Foreigner Imagery

Ancient Egyptian art is filled with images of stereotypical foreigners. They can be seen on temple and palace walls, steles, religious implements, objects from daily life, and in many other contexts, and they served as symbols of all rebels, negative forces, and threats that the pharaoh defeated and subdued. While Egyptologists have studied this imagery from multiple perspectives, they have overlooked the degree to which these foreigners were consistently depicted in horrifically agonizing and distorted positions. Throughout pharaonic history, Egyptian artists made an effort to emphasize the physical pain of these foreigners in creative and nuanced ways. In this paper, I will consider the reasons why. After briefly surveying some examples of foreigners in pain, I will turn to New Kingdom texts that accompany such scenes. These texts suggest that pain was a visualization of the foreigners' annihilation and defeat. In other words, the Egyptian artists used physical pain to represent the king's control and complete destruction of his enemies. Moreover, such imagery served to reinforce the sanctioned Egyptian collective identity. The same New Kingdom texts indicate that the Egyptian people were supposed to enjoy and take pleasure in the sight of rebellious foreigners in pain. On the other hand, viewers who expressed fear or other negative emotions marked themselves as Other. In this way, this paper contributes a new understanding of how stereotypical depictions of foreigners functioned in ancient Egypt.

Traci Lynn Andrews, University of Chicago

Anubis and Clark: an ancient expedition to reach the Red Sea

From the Punt expedition on the walls of Deir el-Bahri to the copper mined from the Sinai, ancient Egypt's use of the Red Sea for transportation and trade is well known. But, how did they discover the Red Sea? The Eastern Desert, which separates the Nile from the Red Sea, is the size of Minnesota and quite inhospitable. With no access to water and 100s of miles to traverse, how would the Egyptians have known the Red Sea was there? This paper seeks to answer these questions utilizing Geographic Information Systems (GIS) and the numerous petroglyphs that graffiti the Eastern Desert cliffs. Initiated using satellite imagery, the region's maze of wadis were mapped by studying the slope and the hydrology that created this distinct landform. Then, documented petroglyphs were used for spatial distribution analysis, in order to understand the spread and accumulation of these engravings. With this spatial autopsy, we could know whether the Egyptians discovered the Red Sea by accident or if they ventured into the unknown with an end in sight, granting more insights into Egypt's over-land travel along with the possibility of identifying new sites for ancient maritime activity. This paper presents a holistic review of both the naturally formed landscape and the man-made art that adorns it to understand the people who journeyed through it.

Victoria Almansa-Villatoro, Brown University

Networks And Etiquette In The Old Kingdom: Analyzing Identity and Interaction in Private Letters

It has been argued that private local power reached its peak at the end of the Old Kingdom, almost usurping the duties and privileges of the pharaonic institution in Egypt. However, this view is biased by an assumption, based mainly on a modern western perspective that pursues individual freedom and recognition. After conducting an examination of (Im) Politeness strategies in 6th Dynasty private letters, it is proposed that the late Old Kingdom social self is rather

subordinated to, and dependent on, the collective group. Discernment Politeness and Facework are sociolinguistic methodologies that investigate how language is used to mask requests and complaints in communications that are affected by hierarchical and power constraints. By matching patterns of redressive acts in Old Kingdom letters of complaint and request this methodology identified what kind of behavior is appropriate or offensive in each context. Besides providing a better understanding of the role of the individual within their network, and exposing obscure aspects of the letters, this research yielded surprising results for the study of the Egyptian social, religious and linguistic life. First, the ranking of concealed offenses demonstrates how letters can provide more accurate insights into ethics than wisdom texts. Second, the application of Facework to the letters to the dead showed that the deceased were not considered active social agents in the community. Third and finally, linguistic analysis reveals that Middle Egyptian innovations appear as colloquial devices used to express eloquent and animated complaints to an inferior, or even a superior.

W Benson Harer, California State Univ San Bernardino

Forensic Archaeology to Find the Murderer of Ramses III

The murder of Ramses III was done through a well-documented conspiracy orchestrated by his wife Queen Tiyea in an aborted attempt to put her son Pentawere on the throne. Recent DNA studies have shown that the enigmatic mummy labelled Unknown Man E from the Dier el Bahri find of 181 is the son of Ramses III. The anomalies of his mummification and burial have led many to suspect that Unknown Ma n E is Pentawere. The Niagara Falls museum acquired nine mummies from Egypt around 1860. It is probable that at least two of them came from the Abd el Rasool family in Luxor, who mined that Dier el Bahri hoard. All nine were sold after the Niagara Falls Museum closed in 1999. One has subsequently been identified as royal, possibly Ramses I. Beside him for 140+ years lay the mummy known as the Braided Hair Lady. Analysis of her coffin and her mummy show that her burial was almost identical to that of Unknown Man E. Her mummy

now resides in the Museum of World Wonders in Wichita, Kansas, where I was privileged to examine it. Efforts to analyze her DNA in 2003 were unproductive. New, advanced techniques have since been refined so that it may be possible to do analysis of some available muscle tissue and a broken tooth. If that shows the Braided Hair Lady is the mother of Unknown Man E, it would be compelling evidence that he is Pentawere and she is Queen Tiye.

Walaa Mostafa, Director, Greco-Roman Museum Alexandria

The Effects of Different Cultural Influences on Ancient Egyptian Tomb Stelae

Egyptian stelae were where offerings to the dead were made since the beginning of Egyptian culture. They were rectangular in shape and bore the names and titles of the dead, indicating that the ancient Egyptians believed in life after death. Stelae were made of stone and later developed to become tall rectangular objects with rounded tops. When Alexandria became the capital of Egypt in the Ptolemaic Roman Periods, it was one of the important centers of Hellenistic culture. Its unique geographic location made it a junction and meeting point connecting different cultures. Alexandria was a cosmopolitan city full of different nationalities, cults, traditions, costumes and jobs. Stelae were, therefore, made in different shapes, materials, styles and forms, being products of the different cultures in Alexandria, which influenced Egyptian society. My research is based on analyzing the development of stela shapes and materials, as well as trying to distinguish the different types, from the beginning of Egyptian history, up to the periods in which Greeks and Roman inhabited Egypt and settled there for years, thus interacting with the Egyptian environment and people. My paper will demonstrate how this kind of multiplicity and cultural acceptance affected the style of Egyptian stelae.

Yasmin El Shazly, ARCE

The Iconography of the Deified Amenhotep I on Twenty-first and Twenty-Second Dynasty Coffins

The posthumous veneration of Amenhotep I has been the

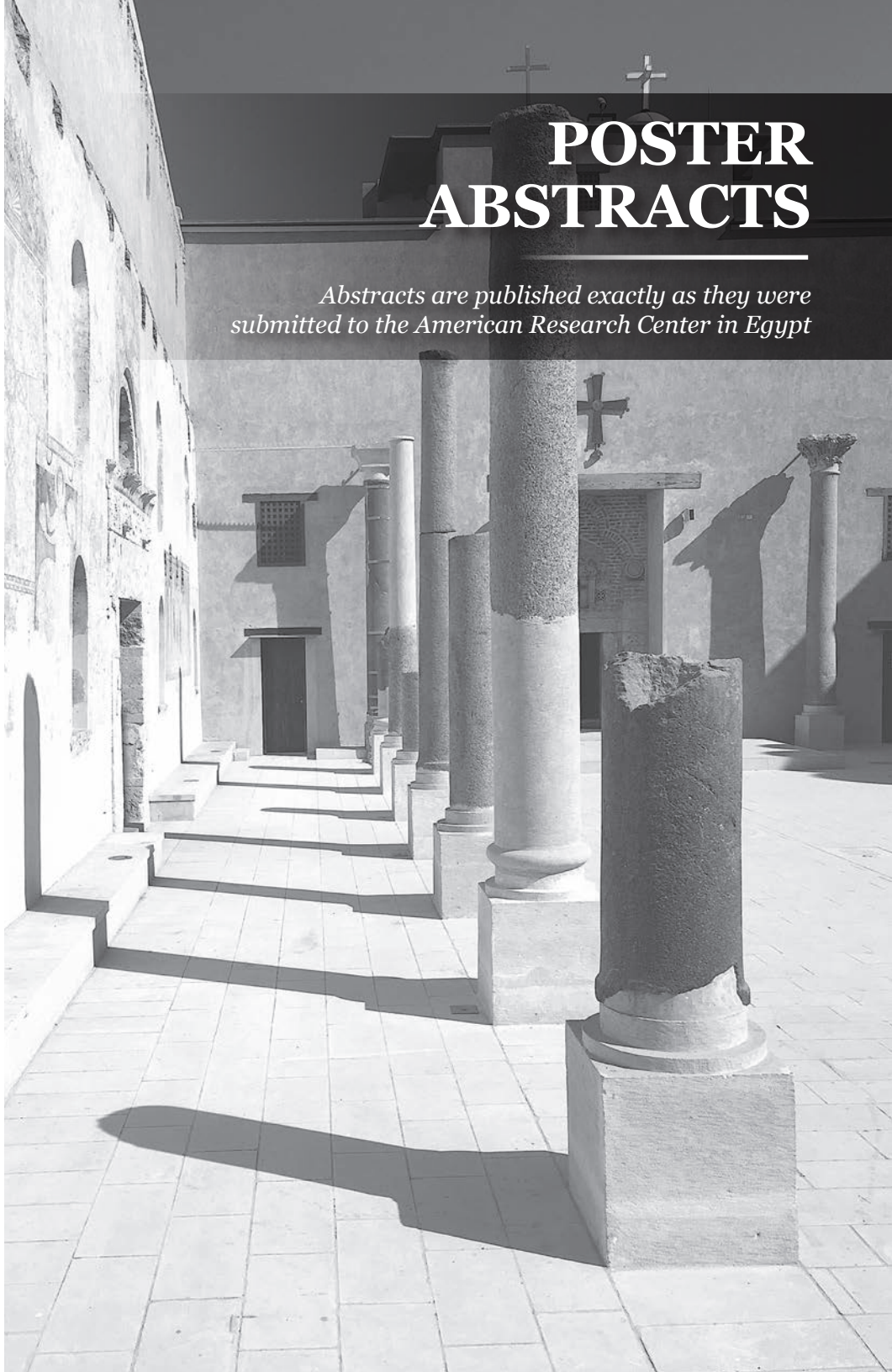
subject of interest for many scholars, but the focus has mainly been New Kingdom sources. This is largely due to the vast amount of evidence, especially from the Theban Necropolis, dating to this period. This created an impression that the worship of Amenhotep I ended abruptly following the New Kingdom. Recent research, however, has shed light on his continued veneration after the New Kingdom, to as late as the Ptolemaic Period. This is particularly evident in the coffins of the Twenty-first and Twenty-second Dynasties, on which Amenhotep I is frequently represented. He is occasionally accompanied by other members of the Ahmosid line, the coffin of Butehamun (Turin inv. 2236) being the most famous example. Butehamun's coffin is extremely important because it illustrates the change in the cult of Amenhotep I and the Ahmosid line between the end of the New Kingdom and the beginning of the Third Intermediate Period. This paper will analyse the manner in which Amenhotep I is represented on the coffin of Butehamun in comparison to his New Kingdom representations from Deir el-Medina, and then analyse how this differs from his depictions on a sample of later coffins dating to the Twenty-first and Twenty-second Dynasties, as well as suggest possible reasons for these changes. The paper is part of a larger project to study the Third Intermediate Period evidence for the veneration of Amenhotep I. It is, therefore, a work in progress.

Ziting Wang, The University of Chicago

The "Breath of Life" in Foreign Relations During the New Kingdom

The term "Breath of Life" (ṯ3w (n) ꜥnḫ) was first attested in New Kingdom royal inscriptions during the reign of Hatshepsut and seemingly referred to some kind of spiritual nourishment that the Pharaoh granted to compliant foreigners. Over time, it became an indispensable element of the texts accompanying foreign tribute/gift presentation scenes and largely retained its original meaning as an ideological item. Thus, it concealed the indisputable fact that the Pharaoh reciprocated foreign rulers with material goods, which was abundantly evidenced by the Amarna Letters. Furthermore, it strengthened the concept of divine kingship

for it was the gods that were normally depicted as the dispenser of life/“Breath of Life” in religious contexts. This term continued to emerge in New Kingdom royal and private inscriptions with expanding connotations. It is noteworthy that it featured not only in Egyptian sources intended for an internal audience; it also entered the repertoire of diplomatic vocabulary and was employed by foreign rulers in a few of the Amarna Letters. This research seeks to clarify the various meanings of the “Breath of Life” and explore its significance in foreign relations during the New Kingdom. It will present a diachronic study of the term from political, economic, and religious perspectives, utilizing both Egyptian and cuneiform sources. Its main goal is to furnish evidence for intentional export of Egyptian ideology during Egypt’s interaction with other ancient Near Eastern political entities and ameliorate the impression of wholesale adoption of the ancient Near Eastern diplomatic traditions.



POSTER ABSTRACTS

Abstracts are published exactly as they were submitted to the American Research Center in Egypt

Anna Ruth Dean, University of Chicago

Power in Symbols: Discerning Shifting Societal Roles for Women in Ptolemaic Egypt

The office of queenship during the Ptolemaic Empire greatly expanded beyond the role it played during pharaonic times. The evidence for this can be seen in physical representations of ruling couples, often shown performing the ritual office of kingship together and in similar or equal hierarchical scale. This naturally would have had an effect on non-ruling women living in Egypt at this time. I wish to demonstrate how this consistent narrative of women living among Egyptian Hellenized society as goddesses affected the status of other women living outside of the palace. This is evident within the archaeological record. For example, the lily scepter is shown in the hands of female family members of the royal family during pharaonic times. During the Ptolemaic Dynasty the statues of non-royal priestesses in Thebes are shown holding the same lily scepter. This is physical evidence of a shift within the role of non-royal women during this time period with a direct link to the royal women themselves. My plan of research is to define the role of pharaonic queenship, ascertain how that role shifted or expanded during the Ptolemaic, and then look for signs of the 'democratization' of this role in the lives of non-royal women. This research will help to further elucidate the dynamic role of women in Egypt within the shifting socio-political landscape of the Hellenistic world.

Cannon Aileen Fairbairn, University of Memphis

Communicating Power Through Iconography: A Suckling Scene from the Temple of Seti I at Abydos

This poster looks in detail at a scene from the First Hypostyle Hall of the Temple of Seti I at Abydos. The scene is located on the lower portion of the south wall (PM VI [1970], 5 [49]). In the scene, Ramesses II is first shown being held by the goddess Isis while wearing the Blue crown. He is subsequently shown being suckled by four forms of the goddess Hathor, each with a different geographical epithet. In each Hathor-Ramesses II pairing, Ramesses II wears a different crown – the White crown, Red crown, Atef crown, and Nemes headdress. This scene has received very little scholarly attention. The most recent line drawing, by Mariette, dates to 1869 and the only known published photograph, by Capart, dates to 1912. First, an entire translation of the text accompanying the scene will be provided. Next, I will examine the implications of the ideology of the scene looking at the roles played by Hathor and Isis, the significance of suckling, the locations presented in the epithets of Hathor, and the choice of crowns worn by the figures. Finally, I will interpret the scene in the context of the First Hypostyle Hall as a demonstration of the extent of Ramesses II's power over both the geographical land of Egypt and his power in the divine realm

Erin Anderson, Indiana University; **Amanda Ladd**, Indiana University

From Ostraca to Operating Systems: Using Anki to Facilitate Mastery of Middle Egyptian Vocabulary

Learning an ancient language can be daunting, but creating the myriad of flashcards required to have a secure understanding of the vocabulary is a monumental task, not to mention carrying the stack of flashcards wherever you go. The software Anki solves

these problems, and was integral to our study of Middle Egyptian here at Indiana University. Anki is a virtual flashcard software that utilizes spaced-repetition and multi-media support for a unique study experience ideal for studying language. The spaced-repetition feature of Anki allows the user to rate how well they did on a particular card, and then determines the next time the card will be shown. The higher the rating, the longer Anki will wait before showing the user the card again. By doing so, only newer cards and cards that are difficult for the user are shown on any day, meaning less time is spent on cards the user is comfortable with. In this manner, we spent only about ten minutes a day studying around 550 words, yet still have a firm grasp of the vocabulary we are expected to know. We created flashcards using JPEGs from JSesh of the hieroglyphs and vocabulary sheets based on the lessons in Hoch's Middle Egyptian Grammar. By using Anki, we were also able to share the deck with other students, allowing them to study with it as well. Here, we discuss briefly how we created our deck of Middle Egyptian vocabulary cards and the benefits of using Anki for studying ancient languages.

Julie Desjardins, University of Quebec in Montreal; **Véronique Lacroix**, UQAM; **Perrine Poiron**, UQAM/ Paris-Sorbonne; **Vincent Labelle**, UQAM

Unrolling the Columns of the Great Hypostyle Hall at Karnak: Methodology and Process

The Karnak Great Hypostyle Hall Project is a joint mission between University of Memphis and Université du Québec à Montréal (UQAM). Through interdisciplinary collaboration, the mission has been able to develop a new way for unrolling the decoration carved on all the standing

columns in the Great Hypostyle Hall. UQAM's team was in charge of building a systematic corpus of unrolled column scenes. This progress was possible with the support of an ARCE Antiquities Endowment Fund Grant. The poster will highlight the method behind the unrolling process, method that makes the best of new technologies. First, we will give an overview of the first attempt made to unroll columns, thus giving the starting point and explaining its strengths and limits. Then, by presenting the different softwares used to unroll the columns (Agisoft Metashape, Cumulus, Photoshop), we will explain all the different steps required to obtain a full high-resolution image of the column scenes, therefore showing that with those methods, new technologies are accessible for anyone in our field. The possibilities of what those techniques can bring in future research will also be explored, especially in terms of virtual anastylosis. We will also look at ways the general public can gain knowledge on Ancient Egypt through our project. In fact, with the collaboration of UQAM's team, two columns are now on display inside the educational space linked to the exhibition Egyptian Mummies. Exploring Ancient Lives held from Sept 2019 to March 2020 at the Montreal Museum of Fine Arts.

Leah Packard Grams, Bryn Mawr College

Bilingual Word Lists and Lexica in Greco-Roman Egypt

The linguistic environment of the Greco-Roman Period in Egypt was formed by interactions between people in an increasingly multicultural society. The language of administration shifted from Egyptian to Greek in the Ptolemaic era, and soon after to Latin with the Roman annexation. Other languages in use during this era included Hebrew, Syriac, and various forms of Persian; even the administrative languages often mixed depending on the origins of officials. This multicultural

and multilingual environment made language learning a necessity for many. The tools to overcome language barriers included bilingual word lists, sometimes referred to as glossaries. These glossaries survive in a variety of formats and media, and they tell us much about linguistic equivalencies and language learning. The corpus of Greek-Coptic glossaries is small but proven to be part of a copyist tradition, with at least seven different papyri, most of which were published in the P.Rain. Unterricht Kopt. series. Beyond their contribution to our knowledge of ancient education, these papyri also have connections with ancient lexical traditions. It is during the Greco-Roman era that the first Greek literary lexica appear in the papyrological record, followed by Greek-Egyptian glossaries. The format of these word lists and lexica echoes that of the Akkadian-Sumerian cuneiform lexica of the Near East. This paper will explore the usage, layout, and interconnections between word lists and lexica of the Greco-Roman period in Egypt.

Michael Chen, University of California, Los Angeles

The Liquid Component of Ritual: A Study of Two Object Types

Liquids are used in many Egyptian ritual practices in the activation and transfer of religious power. From libations to purification rites, the liquid ingredients in many ritual practices carry their own creative potency that allows for the catalyzation of the ritual. Recent research into several of these liquids, such as blood or water, has illustrated important characteristics of their symbolism, attached meanings, and use. However, to understand the function of these components in

ritual practice requires further study of their use and interaction with religious objects. In this poster, I examine the use of liquids in rituals involving two specific religious object types: amulets and healing statues. Amulets transferred their power to their owners through close proximity or attachment to the body. The Isis-knot amulets are described as being moistened with water (Book of Dead Spell 156), which showcases how water is wholly integrated with the religious object. Similarly, the use of water to absorb the magical potency of healing statues also reflects the liquid's ability to interact with magical texts and other inscriptions on statues. Both of these case studies permit us to consider the delineation between religious objects and their activators.

Nagwa Sayed Abdel Rahim, Department of Conservation, Faculty of Archaeology, Fayoum University, Egypt; **Wael Sabry Mohamed**, Polymers Department, National Research Center, Egypt.; **Mohammad Hefny Moghazy**, Department of Conservation, Museum of Islamic Art, Cairo

The Use of Nano - Polymers in the Assembling of Archaeological Glass

The most common materials used in the step of assembling the glass archaeological are epoxy material But it has two disadvantages, yellowing and non-reactivity, so the poster aims to use nanoparticles polymers for the assembling of archaeological glass and are reactivity and do not discoloration and Nano materials are widely dispersed. Four polymers are studied in the form of Nano scale to determine their quality for use in glass assembling, and also to know the extent of change in aging. Some polymer is the Nano form will be treated using different technics and we got it

polymers will be Examination via SEM, TEM and XRD. At first, the optical properties of these materials are studied. Experimental work is carried out by aging (Heat – moisture – U.V) and follow-up of color change of samples are performed by (Colorimeter – ATR). Some of these materials are reactive and also have a color change less than epoxy.

Sohair Said Ahmed, Ain Shams University *The Importance of Camel in Coptic Egypt*

The Camel was very important animal in Coptic Egypt. The Copts used it in transportation and other purposes will be presented in poster. Sometimes it represents on some Coptic monuments, but it mentioned widely in Coptic documentary texts. The poster will present the importance of camel and how the Copts use it in many aspects in their daily life even in medicine. It will present also about the herds of camel and how caring and feeding the camels in Coptic Egypt. The poster will present publishing a fragment of ostracon, it is unpublished and written in Coptic shows uncommon name of camel and special function of it.

Sophia Kroft, Institute of Fine Arts, NYU

An Analysis of Predynastic Egyptian Figural Compositions on Pottery as Early Narratives

Narrative is a foundational communication strategy across cultures, yet recognizing it in a prehistoric context consistently proves challenging. Consequently, scholars have yet to comprehend many aspects of Predynastic Egyptian culture in which image-makers drew from a different shared visual language in order to communicate. In the absence of writing, figural

compositions on Predynastic decorated pottery offer a rich repertoire of this iconographic vocabulary and access to this early culture. Unlike imagery executed on a flat surface, compositions painted on Predynastic pottery cannot be viewed in their entirety all at once; the vessels must be actively turned. Therefore, the continuously curved surface of the vessels will be accounted for in this interpretation of the imagery and its investigation of a potential sequence of the scenes. This study will analyze how the iconographic elements within the compositions work together with the vessels' shape to suggest a deliberate sequence of scenes, and therefore communicate the passage of time, to convey a narrative. This poster will outline the methodologies that will be used to elucidate the narrative aspects of Predynastic figural compositions on pottery focusing on the temporal experience of handling the vessels and viewing the scenes sequentially. Experimental archaeology and photogrammetry will be used to recreate the scenes in their three-dimensional, continuous form, a dimension of the imagery eclipsed in traditional photographic methods, for analysis. By painting replica vessels, different patterns and compositional layouts will be tested to examine whether the compositions were conceived in their entirety prior to painting or if the scenes were realized over time.

Sophia Slotwiner-Nie, The University of Chicago

Hair and Wig Styles as Markers of Identity in Ancient Egypt

Throughout the history of ancient Egypt, hair and wig styles evolved in meaning and appearance. Evidence of ancient Egyptian hair and wigs falls

into three main categories: visual evidence, such as reliefs, paintings, and statues; textual evidence, mostly confined to inscriptions on reliefs and statues; and finally archaeological evidence, such as human hair remains, wigs, and styling tools. Using these various categories of evidence, this poster examines how hair and wigs can represent different aspects of identity, including gender, class, and age from as early as the Old Kingdom to as late as the Third Intermediate Period. Three main questions organize this research: how can hair and wigs both differentiate between different gender identities and obscure gender identity?; how can wigs and hair represent different classes and occupations?; and finally, how do hair and wigs represent different stages in life? While gender, social status and occupation, and age are treated as separate categories, these topics often intersect and complicate each other. Furthermore, specific hair and wig styles which may indicate a certain gender, class or occupation, or stage in life, may shift in meaning from one period or context to the next. By focusing on specific examples, this poster sheds light on the ways that aspects of identity as represented in hair and wigs shift in relation to their context. This poster contributes to the topic of how ancient Egyptians represented gender, class, and age in everyday appearance and how such understandings are reflected in the archaeological record.

Susannah Ruth Marshall, Indiana University Bloomington

A Restoration Model of the Coffin and Cover of Princess Mayet (Brooklyn 52.127a-b)

Brooklyn Museum 52.127a-b is a badly worn and

faded box coffin with cover dating to the early Eleventh Dynasty. The coffin belonged to Princess Mayet, who died at the age of five and was probably the wife or daughter of Nebhepetre Mentuhotep II; it was discovered in her nearly intact pit tomb towards the rear of his mortuary temple at Deir el-Bahari. My goal in creating a 3D restoration model of this coffin was to visualize how it might have appeared in antiquity and to reconstruct its complete inscriptions (three ḥtp di nsw offering formulae) in order to prepare a complete translation. The model was based on new photographs and created with MetaShape, ZBrush, Photoshop, XNormal, 3D Studio Max, and SketchFab. Using imaging technology and examining this coffin in detail enabled me to discern much about the coffin itself, including its construction, painting, and painters, and about its inscriptions, including some peculiar grammatical characteristics and strange signs or marks. The impact of this model for the scholarly community is three fold. First, the model provides a fully reconstructed, easy-to-read version of the inscriptions, sections of which had been difficult to read, with some nearly unintelligible. Second, it provides a basis for future discussion in the Egyptological community about the various peculiar inscription characteristics discovered during the restoration process. Third, it helps give a better understanding of painters and painting techniques and, perhaps even construction techniques, on this mass-produced royal coffin.

Traci Lynn Andrews, University of Chicago

Female Pharaohs: Degendering Royal Regalia

Throughout Pharaonic Egypt's long history the office of Pharaoh was most predominantly held by a man.

The title of Pharaoh came with its own regal titulary and its own traditional royal garb. This royal garb, having been worn for millennia by mostly men, is generally gendered by academics as masculine and when it is worn by women they are often described as cross-dressing or assuming a male persona. But the rare woman that assumes the throne and title of Pharaoh is not pretending to be a man. There is a blending of feminine and masculine aspects and clothing in their representations. Studying the ways female pharaohs were represented during their rule within iconography and statuary illuminates that they were not hiding their gender but merely dressing as their predecessors. The women who would rule as pharaohs, Sobekneferu, Hatshepsut, and Tausret, would rule as every other pharaoh who had come before her and thus would don the traditional royal costume, but she did so as a woman. This poster demonstrates that the royal dress and accessories associated with the Pharaoh are not gendered but rather gender neutral symbols of power and divinity traditionally associated with the royal cult.

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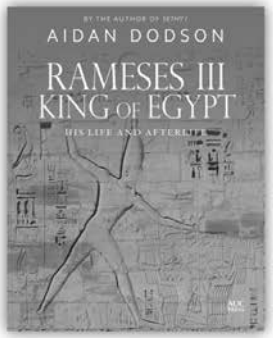

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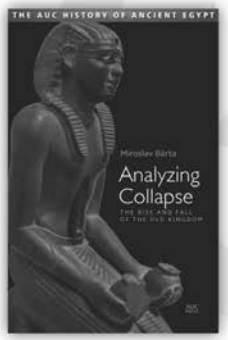

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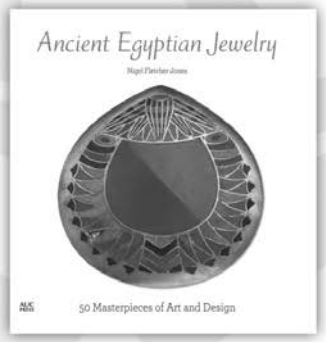

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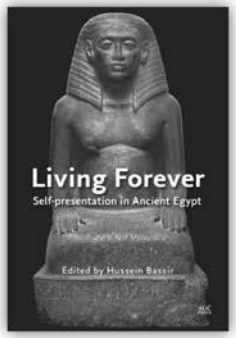

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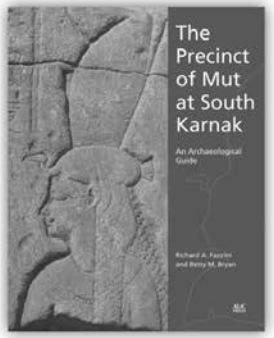

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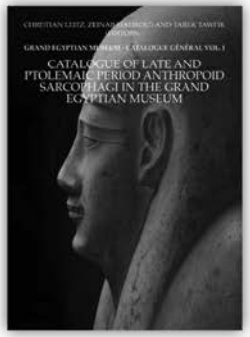

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