

Newsletter

SOCIETY FOR THE STUDY OF EGYPTIAN ANTIQUITIES

Editor: Melissa Campbell

Winter 2012 - 2013 #1



CAIRO CALLING: NEWLY REOPENED MONUMENTS IN SAQQARA AND THE COPTIC MUSEUM

Kei Yamamoto

S.S.E.A
PO Box 19004 Walmer
360A Bloor St W
Toronto, Ontario
M5S 3C9
CANADA



Figure 1: Interior of the restored Serapeum

Kul sana wa intu tayyibeen! This weekend was the Eid el-Adha, the Feast of Sacrifice – one of the two most important Islamic festivals. Even along the main 26th of July Street in Zamalek district, I encountered some makeshift pens enclosing dozens of sheep marked with pink paint.

I am in Egypt again as a member of the Metropolitan Museum of Art's ongoing archaeological expedition to Dahshur. Located 30 km south of Cairo, Dahshur's landscape is dominated by the two large pyramids built by King Sneferu in early 4th Dynasty. Perhaps in part inspired by these monuments, several 12th Dynasty pharaohs, including King Senwosret III, also built their pyramids at Dahshur. It is Senwosret's pyramid complex and the surrounding elite cemetery that the MMA has been investigating since 1990. The expedition team consists of Egyptologists, anthropologists, photographers, artists, conservators, and a mason. We work six days a week, from Saturday to Thursday, and get Fridays off. I tend to go to Cairo every other weekend, so that I can meet my friends who now live in Cairo. For the Eid, we got an extra day off, so I decided to take advantage of the rare two-day weekend.

On Thursday, my friends and I went to Saqqara, especially since some monuments that had been closed for some time have re-opened recently. The Old Kingdom tombs of Tjy and Mereruka have been closed on and off for the last few years, so it was nice to see them open to tourists again. The quality of carving in the 5th

Dynasty tomb of Tjy (alternatively spelled "Ti") is superb, especially toward the back part of the tomb. Every strand of a woman's hair and every scale on a tilapia's body seem to be rendered with absolute precision. I am particularly fond of the fording scene, in which men try to lead a herd of cattle quickly across the river (Fig. 3). The herdsmen in skiffs try to allure the wading cows by towing a calf ahead of them, but a crocodile already lurks underwater near the calf. One of the men points to the crocodile and yells out to another herdsman, warning him about the dangerous creature that approaches unseen. Such tense atmosphere is rarely seen in ancient Egyptian art.

The New Kingdom tombs of Horemheb and Maya are also open to public after much restoration done by the Dutch team. Horemheb and Maya were the general and treasurer of King Tutankhamun respectively, and their tombs beautifully exemplify the delicate, well-proportioned art style of the Post-Amarna Period. The finely carved and partially painted relief decorations are now covered behind funny cupboard-like doors, but it is great to know that they are well-protected from elements. Much paint (dominated by vivid yellow) remains on the walls in Maya's underground burial chamber. Perhaps the most important monument to re-open this year is the Serapeum, the catacomb of the sacred bull Apis used from the 19th Dynasty to the Ptolemaic Period. The Apis bull was kept in Memphis



Fig. 2: Ruin of Monastery of Saint Jeremiah



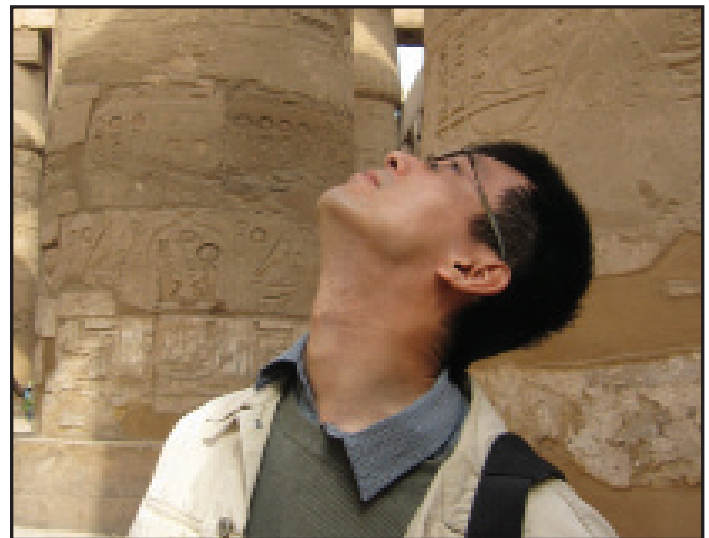
Fig. 3: Relief from the tomb of Tjy (5th Dynasty)

and worshipped as the herald of the god Ptah. When it died, a new bull was selected to replace the old one. The dead Apis bull was mummified in the special embalming place in Memphis and transported in a great ritual procession to the Serapeum in Saqqara. This underground structure was closed to the general public for many years due to major restoration, and it is only appropriate to re-open under the current Minister of Antiquities, Dr. Mohamed Ibrahim, who has researched extensively on the Serapeum. The vaults that contained the massive sarcophagi of the Apis bulls are now supported by steel beams, and the new wooden walkway gives easy access to the visitors as well as protects the ancient floor surface (Fig. 1). The underground corridors are lit just enough to allow visitors to walk around safely so that the solemn atmosphere of the catacomb is maintained. One can descend to one of the vaults and appreciate the immense size of the black granite sarcophagus. Hundreds of stelae dedicated to the Apis had been placed in niches carved into the bedrock. None of these stelae are still in situ, but they can be admired in various museums, particularly the Cairo Museum and the Louvre.

Getting off the beaten path, my friends and I also walked over to the pyramid of Sekhemkhet (Netjerykhet Djoser's successor) and the ruined Monastery of Saint Jeremiah. The latter was founded in the 5th century and remained occupied until the 9th century, as attested by many fallen marble columns, ubiquitous heaps of potsherds, and even some standing mud brick walls (Fig. 2). Overall, my trip to Saqqara was an exciting one, and I feel like I got to see a "new face" of Saqqara. The newly re-opened monu-

ments should give much incentive for all Egyptophiles to revisit Saqqara, even if they have already seen the usual Step Pyramid of Netjerykhet Djoser, the pyramid of Teti, the 6th Dynasty tomb of Kagemni, and the Imhotep Museum.

Friday was the main day of the festival, so many tourist destinations, including a number of museums, were closed. One part of Cairo least affected by Islamic holidays was Old Cairo. Also known as Coptic Cairo, this area around Mar Girgis metro station is home to the largest Christian population in Egypt. The Coptic Museum there has been going under several stages of renovation for the last few years. The museum houses many great treasures, including many ornately carved architectural blocks and colorful fresco paintings salvaged from the abovementioned Monastery of Saint Jeremiah at Saqqara. Other items of interest include rustic woven textiles, religious and secular writings, liturgical objects, and various household goods. All these items are displayed now in well-lit cases with labels and information panels written in clear English and Arabic. The new Coptic Museum, along with the Islamic Art Museum that also re-opened recently, showcases the rich and diverse cultural heritage of Egypt, beyond Pharaonic and Greco-Roman eras.



Kei Yamamoto is an Andrew W. Mellon Postdoctoral Curatorial Fellow at the Metropolitan Museum of Art. He received his M.A. (2002) and Ph.D. (2009) in Egyptian archaeology from the University of Toronto. He has been a trustee of the SSEA since 2004.

PLEISTOCENE PREHISTORY AND GEOARCHAEOLOGY: THE DAKHLEH OASIS PROJECT AND THE KHARGA OASIS PREHISTORY PROJECT Maxine R. Kleindienst

First, with regard to my own work on Pleistocene prehistory and geoarchaeology with the Dakhleh Oasis Project (DOP) and the offshoot Kharga Oasis Prehistory Project (KOPP), I should say that I was trained as a 'geoarchaeologist' long before anyone thought up that term. That is my main interest, although I have recorded and measured more stone artefacts than I care to remember. Second, any work on the prehistory of the Western Desert oases is totally a team effort¹.

I acted as a consultant to DOP in the early days, but was only able to do fieldwork in the oasis beginning in 1986. M. M. A.

McDonald, who made observations before that, then gratefully could concentrate on Holocene prehistory. In 1988, M. F. Wiseman joined me in the Pleistocene. Later, A. L. Hawkins conducted Ph.D. Research on the Aterian Dakhleh Unit and the Aterian Complex in the Western Desert². Understanding Pleistocene cultural evidence requires close collaboration with project environmentalists, earth scientists, and geochronologists, as well as between the prehistorians. Colleagues working on the Historic Periods and Physical Anthropology have also contributed their observations and collections. Conversely, the prehistorians have helped them over the



KOPP crew on survey, investigating deposits, Kharga Oasis

years in locating Old Kingdom outposts, and quarry sites for building materials. They also like to ask me to identify exotic raw materials, which, being a ‘rock hound’, I am sometimes able to do, such as beryl from the ‘emerald mines’ in the Eastern Desert.

Our first task was to determine what was there. The second was to determine the distributions across the modern landscape of both cultural evidence and raw materials. And then, the third is to find how that relates to the marked changes in the landscape over hundreds of thousands of years and shows changes in past human behaviours. This is a slow process in the desert, where pieces of the puzzle are widely scattered, and often unpredictable. Work requires much walking, always following the rule in Pleistocene archaeology of ‘go uphill’. We are doing ‘distributional’ rather than ‘site centered’ survey. Following Gardner and Caton Thompson, we use the term ‘locality’ rather than ‘site’, because most Pleistocene evidence lies where nature put it, not humans. Our understandings of landscape changes in Dakhleh have altered over the years as new information was gathered, and as old information could be related to that. Sometimes an observation long left in the ‘suspense account’ suddenly makes sense.

Work was extended to Kharga Oasis in 1987 with I.A. Brookes, aiming at reassessing the prehistoric sequence originally established by E. W. Gardner and G. Caton Thompson in the 1930’s. We only had permission for collecting geological samples. That work continued until 2000 with Wiseman, Hawkins and DOP geologists. Then the Supreme Council for Antiquities asked that I request a formal concession for our area of interest: the Pleistocene gravel-capped terraces at the foot of the steep escarpment faces, the escarpments leading up to the Libyan Plateau, and the margins of the plateau itself. KOPP first conducted archaeological survey in 2001. McDonald is now the concession holder and Director of KOPP. One original aim was to obtain chronometric uranium-series dating on the spring-deposited tufas along the eastern escarpment face described by Gardner and Caton Thompson. First sampling was with geochronologist H. P. Schwarcz in 1992, followed by my more detailed work with geologists R. Giegengack, K. Nicoll, J. R. Smith, J. M. Kieniewicz and K. A. Adelsberger. Geochronologists Schwarcz, Nicoll and Y. Asmerom have conducted U/Th dating of samples from the capping tufas at the original archaeological



C. S. Churcher (standing) and J. M. Kieniewicz, searching for fossil bone, Dakhleh Oasis;

localities found by Gardner and Caton Thompson; and this work established that the seriation of in situ Pleistocene artefacts proposed by Caton Thomson is correct³. However, based on field evidence we do discount two of her named units (“Acheulio-Levalloisian” and “Levalloiso-Khargan”). Dates range from >400,000 Uyrs for Earlier Stone Age (ESA) Upper Acheulian to ca. 100,000 Uyrs for her Middle Stone Age (MSA) “Upper Levalloisian” (KOPP Matana Unit)(see chart). Recently B. A. B. Blackwell and A. R. Skinner, specialists in ESR dating, have added more chronological information based on analyses of fresh water snail shells found in silts associated with the tufas, including Later Pleistocene dates that show water availability that would have allowed occupations by people making Khargan Unit artefacts between ca. 70,000 and 25,000 years ago⁴.

Chronometric datings at Kharga have aided in defining the Pleistocene sequence at Dakhleh. Displaced blocks of tufa in Pleistocene gravels showed that such spring deposits must have existed on the Dakhleh escarpment face. Some blocks were dated, constraining times of erosion and gravel deposition. Finally, in 2000, C. S. Churcher and I found some small remnants of tufa deposits on the central Dakhleh escarpment. Subsequently, Smith, Churcher and I found a few others. Dates on Dakhleh tufas range from >350,000 Uyrs to <120,000 Uyrs. These are congruent with the datings at Kharga, but unfortunately are not directly related to any artefacts.

Perhaps the more significant palaeoenvironmental findings at Dakhleh are: 1) that a large Middle Pleistocene lake, or at times lakes and swamps, covered the entire Dakhleh region from >200,000 years ago until at least 120,000 years ago, blanketing the area with thick lacustrine deposits; and 2) the verification of a catastrophic meteoritic event during that time. Churcher postulated some remnant deposits were lacustrine in the 1980’s, but we were only able to verify that in 1996 by his finding freshwater snails and faunal remains at an outcrop first noted by Wiseman. Subsequently, patient walking of the many scattered remnants of lake deposits by ‘Rufus’ and Bee Churcher, the archaeologists and others allowed Churcher to define the only African savannah-type Pleistocene fossil fauna known between southern Egypt and Cyrenaica⁵. Hence, both faunal and vegetal resources related to water

Approximate Age Years B.P.	Cultural Stratigraphic Units		Complex	Developmental Stages
	Dakhleh Oasis	Kharga Oasis		
4,000 6,000	Sheikh Muftah Unit	Yebsa Unit		'Neolithic'
7,000	Bashendi Unit	Baris Unit		
8000	Masara Unit	Midauwara Unit	Masara	Epipalaeolithic
10,000	?undefined	Aguz unit (2008)		cf. Later Stone Age (LSA)
25,000	Sheikh Mabruk Unit	Khargan Unit	Khargan	(Terminal, TMSA)
70,000	"318" unit	[undefined units]		
100,000	Dakhleh Unit	Kharga Aterian Unit(s)	Aterian	Middle Stone Age
125,000	[undefined units]	Mata'na Unit		(Younger, YMSA)
150,000	[undefined]	[undefined]		(Older, OMSA)
200,000	Teneida Unit	Refuf Unit	Refuf	
300,000	Gifata Unit			
400,000	Balat Unit	Dharb el-Gaga Unit KO10 unit	Balat	(Terminal, TESA)
1,500,000	[undefined units: surface and geological contexts]		Upper and Lower African Acheulian <i>sensu stricto</i>	Earlier Stone Age (ESA)
2,500,000	[no finds]	??	ct. Oldowan	(Developmental, DESA)

See Sources for chart description

availability would have allowed MSA human occupations, accounting for the many workshops using cherts found near the escarpment and the extensive surface MSA scatters across the oasis of different ages. Kieniewicz and Smith carried out detailed work on the extent and geology of the scattered deposits, confirming a lake/wetland area of at least 1,735 square kilometers in the Dakhleh area. The lake waters were provided by significantly higher regional precipitation, but also came from artesian springs discharging from the underlying Nubian Sandstone Aquifer. Modern rainfall is essentially zero, although occasional heavy rainfalls do occur. Eventually, Churcher and I found artefacts in place in the basal lakebeds, now assigned to the Older MSA Teneida Unit. We also found 'Dakhleh Glass' in the lake deposits.

In 1987, I discovered an unusual material with vegetal casts lagged on lakebeds in eastern Dakhleh that two geologists dismissed as anthropogenic 'slag' without any Historic Period cultural associations, but that Schwarcz identified as a natural glass in 1992. He subsequently demonstrated that the 'Dakhleh Glass' originated from melting of the lakebeds at high temperatures. Wiseman, Churcher and I found enigmatic 'splats' of the material spread over a wide area of Dakhleh, mainly associated with or in Pleistocene lakebeds or redeposited onto younger surfaces. After 2003, planetary scientists A. F. C. Haldemann and G. R. Osinski were recruited. They considered that such melting likely related to a meteoritic event, either an impact or an airburst. Their fieldwork

with Smith and Kieniewicz, and detailed laboratory analyses by Osinski confirmed the meteoritic origin. This event, that affected the lake/swamps, would have devastated the Dakhleh region for some period of time⁶. Preliminary argon analyses dated the glass to ca. 122,000 years; more precise dating by P. Renne places the event at 145,000 ± 9,500 years ago⁷. This provides a constraining date for Older MSA artefacts found in the basal lakebeds, as does an ESR determination on snail shells from the original outcrop of >190,000 yrs by Blackwell. We keep looking for a piece of glass including an artefact, or a fossil bone 'pyromorph', but so far, no luck. We can only say that Dakhleh was habitable at the time of the catastrophe. ESR dating of tooth fragments at Dakhleh by Blackwell and Skinner shows that the area was habitable for herbivores from before 200,000 years ago through to Holocene times. Given that they can only date teeth (and snail shells in deposits) that we are lucky enough to find, we are hard put to find evidence that Dakhleh was ever uninhabitable for humans as well as for fauna since the Middle Pleistocene, except perhaps after the meteoritic event. Even during arid times, artesian spring vents likely erupted, and various fossil vents include artefacts from ESA Upper Acheulian, Terminal ESA Balat Unit, Older MSA, Younger MSA, and the Terminal MSA Sheikh Mabruk Unit (see chart); vents have also discharged throughout Holocene times. Thus, the Dakhleh and Kharga sequences cover the time range from at least 500,000 years ago to Holocene times. One ESR determination at Kharga extends the sequence to over 2 million years, with a few possibly associated Oldowan-type artefacts⁸.

Wiseman undertook the task of investigating the enigmatic Late Pleistocene evidence after 1992 that we now term the 'Khargan Complex': in Dakhleh, this includes the Sheikh Mabruk Unit defined by Wiseman, and in Kharga, the Khargan Unit as originally defined by Caton Thompson, plus the finds at the small oases south of the plateau, and in the Nile Valley. Typological seriation and evidence for water availability place these cultural units between 70,000 and 25,000 years ago. Most other prehistorians working in Egypt have espoused the 'empty desert hypothesis'; i.e., no habitation anywhere in the Western Desert after 60,000 years ago until the early Holocene, ca. 10,000 years ago. Lacking any dateable materials, the existence of the Khargan Complex in that time range has been difficult to demonstrate, except through typology and contexts of artefacts. However, we concentrated our field efforts at Kharga in 2008 and 2011 on finding evidence for the complex. We found our first built stone structures associated only with Khargan artefacts in the northern area of the plateau south of Gebel Yebsa in 2008⁹. This confirmed earlier finds in the 1960's at the southern oases of Dungul and Kurkur that have been totally ignored since then. Also, I only realized in 2010, preparing for fieldwork, that enigmatic 'stone outlines' at a "Site J", excavated by Gardner in 1933 and reported by Caton Thompson as of unknown historic age, were also apparently associated with Khargan artefacts. In 2011, McDonald and Smith with A. Wreschnig and Inspector Makhmer Fathim, climbed the escarpment and with some difficulty relocated the site—a steep 5 km trek from where we could park the car. They quickly remapped and made a small collection of artefacts, one found in situ. As reported by Gardner, KOPP BQ-008 consists of seven stone features, with five others nearby. The only associated artefacts are Khargan Unit, easily identified by Wiseman as typical of Khargan. Unfortunately, as yet we have been unable to conduct further investigations of what appears to be the only MSA 'village' in all of Africa, although smaller clusters of two or three

Khargan features were reported at Dungul in 1963. It is perhaps the oldest known cluster of built stone features anywhere. KOPP members hope to work there in the future, and in DOP to continue the slow piecing together of the puzzles left to us from the Pleistocene time range in both oases. The Pleistocene prehistory of Egypt does bear on 'who' got 'out of' or 'into' Africa at different times, and especially on the movements of our 'anatomically modern' ancestors after ca. 100,000 years ago.

Finally, prehistoric research has only been possible with the support of the Chief Inspectors of the Antiquities Service at both Dakhleh and Kharga over the years, and that of the many Inspectors and Policemen who have trudged about with us and aided us in our work. And any successes in unraveling the Pleistocene record are also due to Tony and Leslie Mills who established the DOP field bases and the atmosphere at Dakhleh that enables multidisciplinary investigations.

Dr. Maxine R. Kleindienst received her PhD in 1959 in archaeology with a speciality in geoarchaeology from the University of Chicago. She was the first woman to receive her PhD in sub-Saharan archaeology. Dr. Kleindienst was a research associate at the University of Chicago (1961-1963), at the University of California Berkeley (1963-1964), at the Field Museum of Natural History in Chicago (1971), and at the Royal Ontario Museum, Toronto (1971-1996). She also worked as the Senior archaeologist of the Yale University Prehistoric Expedition to Nubia (1963-1964). Dr. Kleindienst was Chair of the Department of Anthropology (1978-1986) and Chair of the Programme Committee for Graduate Studies in Archaeology at the University of Toronto (1996-1998). Currently, she is Professor Emeritus in the Department of Anthropology, at the University of Toronto at Mississauga. She has been involved with the Dakhleh Oasis Project for many decades. She is the author of dozens of articles relating to the prehistory of Dakhleh and other Saharan and African sites.

Sources

1. Kleindienst, M.R., et al., *Geography, geology, geochronology, and geoarchaeology of the Dakhleh Oasis Region: An Interim Report*, in *Reports from the Survey of Dakhleh Oasis, Western Desert of Egypt, 1977-1987*, C.S. Churcher and A.J. Mills, Editors. 1999, Oxbow Books: Oxford. p. 1-54.

2. Hawkins, A.L., *The Aterian of the oases of the Western Desert of Egypt: Adaptation to changing climatic conditions, in Modern Origins. A North African Perspective*, J.-J. Hublin and S.P. McPherron, Editors. 2012, Springer: Dordrecht+. p. 157-177.

3. Kleindienst, M.R., et al., *Water in the desert: First report on Uranium-series dating of Caton-Thompson's and Gardner's "classic" Pleistocene sequence at Refuf Pass, Kharga Oasis, in The Oasis Papers 2. Proceedings of the Second International Conference of the Dakhleh Oasis Project*, M.F. Wiseman, Editor 2008, Oxbow Books: Oxford. p. 25-54.

4. Blackwell, B.A.B., et al., *Challenges in constraining pluvial events and hominin activity: Examples of ESR dating molluscs from the Western Desert, Egypt. Quaternary Geochronology*, 2012. 10: p. 430-435.

5. Churcher, C.S., et al., *The Quaternary faunas of Dakhleh Oasis, Western Desert of Egypt, in The Oasis Papers 2 The Second International Conference of the Dakhleh Oasis Project M.F. Wiseman, Editor 2008, Oxbow Books: Oxford. p. 1-24.*

6. Smith, J.R., et al., *Potential consequences of a Mid-Pleistocene impact event for the Middle Stone Age occupants of Dakhleh Oasis, Western Desert, Egypt. Quaternary International*, 2009. 195(1-2): p. 138-149.

7. Renne, P.R., et al., *Age of the Dakhleh impact event and implications for Middle Stone Age archeology in the Western Desert of Egypt.. Earth and Planetary Science Letters*, 2010. 291: p. 201-206.

8. Kleindienst, M.R., J.R. Smith, and K.A. Adelsberger, *The Kharga Oasis Prehistory Project (KOPP), 2008 field season: Part I. Geoarchaeology and Pleistocene Prehistory*. Nyame Akuma, 2009. 71(June): p. 18-30.

9. Wiseman, M.F., *The Khargan Industry revisited, in The Oasis Papers 6. Proceedings of the Sixth International Conference of the Dakhleh Oasis Project*, R.S. Bagnall, P. Davoli, and C.A. Hope, Editors. n.d., Oxbow Books: Oxford. in press.

Chart

Estimated time placements of cultural stratigraphic units and developmental stages recognized at Dakhleh and Kharga oases, based upon uranium-series and ESR datings as of 2012.

THE TORONTO ABYDOS VOTIVE ZONE PROJECT: NEW FIELDWORK AT THE CULT OF OSIRIS Mary-Ann Pouls Wegner, University of Toronto

Abydos has long exerted an irresistible attraction for visitors, pilgrims, and archaeologists. As the cult center of Osiris, the ancient Egyptian god of death and regeneration, the site drew people from all walks of life to participate in a festival that dramatized the god's successful post-mortem transformation, which served as a model for their own. The focal point of the Osiris festival was a procession in which statues of the god and his divine retinue, including Horus, his hawk-headed son and protector, were carried on the shoulders of priests in boat-shaped shrines across the desert landscape. The route led nearly a kilometer along a natural wadi from Osiris' temple dwelling to his tomb. Along the way, the god's murder at the hands of his enemies was dramatically re-enacted. In the subterranean tomb, priests carried out rituals over the inert, mummified body of the god that magically regenerated it. When Osiris emerged from the tomb to return to the temple, a roar of general rejoicing erupted from the assembled populace in celebration of this victory over his enemies and by extension, the triumph of the individual over death. The Osiris myth celebrated the successful transformation of the deceased into a spirit that existed eternally. Another level of meaning embedded in the myth involved patrilineal inheritance and kingship. In the primordial past of Egyptian memory, Osiris ruled Egypt. After his brother Seth

murdered and dismembered him, his wife/sister Isis re-assembled the scattered parts and re-animated the body of Osiris long enough to conceive a son: Horus, whom she raised in secret. When he was old enough, Horus challenged Seth and a divine tribunal judged Horus to be the rightful heir to the throne of Egypt. The story thus legitimates the succession of kingship from father to son. Abydos is the location of tombs and funerary monuments of the earliest kings of Egypt, dating back to 3200 BC, and it was one of these already ancient monuments that served as the notional tomb of Osiris for the local rituals. The presence of the monuments of the early kings at the site made it a powerful locus for the cult of the royal ancestors, in which the ruling kings expressed their veneration for preceding rulers. The famous kinglist in the nearby temple of Seti I, a crucial resource for understanding ancient Egyptian chronology, functioned in this context. For the New Kingdom pharaohs, building monuments at Abydos highlighted their own legitimacy as rulers. In their eagerness to secure their own access to the blessed afterlife and simultaneously to share in the process by which the office of his father was passed down to Horus, royal patrons and elites built offering chapels of mudbrick with emplacements for carved limestone stelae (monuments much like tombstones)

along the beginning of the processional route, in the area adjacent to the Osiris temple enclosure. Some placed funerary figurines or shabtis made of faience, shaped like mummies and bearing the names of their dedicators or deceased family members, near the god's tomb. Those with fewer resources set up simpler stelae with their names painted in ink on small flakes of limestone. Participants also brought food, drink, and incense offerings in coarse pottery cups. The traces of these votive offerings, stelae, and chapels preserved in the archaeological record of the site provide indications of the community that venerated Osiris, as well as clues to elements of popular religious practice that are not represented in the scenes and inscriptions carved on temple walls. Through them, ancient Egyptians emerge as tangible individuals who shared our fears of disease and suffering, and who sought to provide for their children and ultimately to transcend their own mortality.

The artefact-rich deposits adjacent to the Osiris temple enclosure drew treasure-hunters to the site long before systematic excavation became standard in Egypt. Many of the inscribed stelae found in museum collections all over the world came from this site, but virtually nothing is known about the original context of these artefacts. In the 1960s-1970s, excavations of the Pennsylvania-Yale Expedition revealed a small area that had escaped disturbance because it had been sealed under the stone floor of a later temple building (the 'Portal Temple,' begun by Seti I and completed by Ramesses II). A dense complex of offering chapels of many different sizes, some of which still had stelae and offerings in situ, provided a glimpse of what the original context of the votive material must have been. Aside from this protected area, the Votive Zone site presents a discouraging vista of jumbled pits and spoil heaps from centuries of digging. The Abydos Votive Zone project was launched in 1996, under the auspices of the Pennsylvania-Yale-Institute of Fine Arts Expedition, to investigate the site in a systematic way, beginning with detailed topographic mapping and archaeological survey, and carrying out selective excavations to clarify the phases of development and utilization of this complex area. Among the many surprises this disturbed site has presented, are the remains of a small, previously unknown and beautifully decorated limestone temple of Thutmose III, built around 1450 BC.

With the events of the 'Arab spring' still unfolding in Egypt, a small but intrepid crew from the University of Toronto set out for Abydos to resume work in the Votive Zone under the auspices of the Pennsylvania-Yale-Institute of Fine Arts, New York University Expedition. Recent Ph.D. Graduate Christina Geisen (epigrapher) and current graduate students Meredith Brand (ceramicist), Amber Hutchinson (site supervisor, small objects analysis), and Janet Khuu (site supervisor, osteologist) were integral members of the archaeological research team. Our colleagues in the Antiquities Ministry provided every possible assistance to the project, and we must particularly thank our Inspectors Mr. Ayman Mohamed Damarany and Mr. Barakat 'Eid Ahmed. Political uncertainties had discouraged most other projects from carrying out fieldwork in Egypt, and tourists were in short supply. The cumulative effect of this lack of foreigners in Egypt was a real economic hardship for the local population. The evacuation of two large archaeological teams from Abydos earlier in the spring had left the inhabitants of this rural region without the work they rely upon to supplement their meagre agricultural subsistence. Although the project could not hire all of those seeking work, it provided a much-needed infusion of resources into the community. Gaining a better understanding

of the development of the Votive Zone over time was the focus of the 2011 research, which was supported by funding from the Wenner Gren Foundation. Specifically, excavation was targeted to test the hypothesis that the boundaries of the processional route changed over the nearly 500 years between the Middle Kingdom and the New Kingdom, in response to the persistent encroachment of offering chapels along its margins. Egyptologists had long posited that the prime locations immediately adjacent to the processional route were accessible only to people of high socio-economic status for building, and that as these locations were filled in by the large monuments of elite individuals and associated clusters of small chapels built by their dependents in the intervening interstices, the zone gradually but inexorably expanded to the local south, into what had formerly been designated as sacred space off-limits to construction.

The discovery of a standing offering chapel of Middle Kingdom date (ca. 1850 BC) immediately adjacent to the edge of the processional way as it existed in the New Kingdom more than 400 years later effectively disproved the hypothesis that the boundary of the route shifted over time. This mud-brick monument, measuring 2.00 x 2.40 meters in area and standing to a height of 1.28 meters above its original floor level, was confidently dated to the Middle Kingdom on the basis of its orientation as well as analysis of the fabric and inclusions in the bricks and mortar used in its construction. The fact that the chapel was allowed to stand in the midst of subsequent constructions, including the small Thutmose III temple and a later wall that extended westward from it to delineate the edge of the processional route, attests to its continuing use and significance. Its importance may be related to the individual whom it commemorated, since other Middle Kingdom monuments in this prime area adjacent to the processional route had been razed to allow for new building. The large dimensions of the stele that was once embedded in its rear wall, long since removed but discernable from the impressions in the mud mortar that held it in place, corroborates the suggestion that the chapel's owner was a member of the high elite. More than 1500 years after the construction of the Middle Kingdom chapel, fragments of Ptolemaic period pottery recovered from the thick accumulation of deposits in front of the chapel indicate that offerings of food, drink, and incense were still being presented there. Later still, during the Roman period, an elite young man was interred in this area, again highlighting its continuing importance. His mummified head, without the mandible but still preserving the gilding that transformed his skin into that of a god, was found among the highly disturbed remains of his robbed grave.

To examine the horizontal development of the Votive Zone over time, a series of units were excavated in a line running perpendicular to the processional route. In this part of the site, thick mudbrick walls were visible on the surface, attesting to uncontrolled digging around a large structure that probably occurred in the 1860s. A spoil heap covered part of this area, and it was there that we focused excavations in the hope that the underlying strata would be undisturbed. The excavations revealed a monumental structure, more than 22.20 x 15.40 meters in area with mudbrick walls 2 meters thick, and still standing to a height of more than 3 meters, with intact mud plaster and whitewash. Large limestone blocks provide structural support at doorways and corners, and the doorways themselves were originally lined with limestone jambs. Numerous building phases are evident in the construction, but the plan of the building, with a transverse corridor and three long par

allel chambers, suggests that it was a temple. Its date is difficult to determine; none of the bricks bear the impressions of stamps that are sometimes found on state construction projects in the earlier New Kingdom, but the similarity in dimension and fabric of the bricks to the nearby 'Portal' temple suggest a Ramesside date.

It was inside this monumental building that some of the most remarkable artifacts were found. A remarkable wooden statue depicting a king was recovered from disturbed deposits associated with the structure, and stylistic analysis indicates that it predates the construction. It may have originally come from the nearby Thutmose III temple, or it may have been an already ancient artifact that was used in rituals carried out in the monumental structure. The statue belongs to a very rare category of wooden royal images, and its very survival in such an archaeological context is amazing. Although it had suffered insect infestation, the coniferous wood of which it was made resisted complete destruction. No inscriptional evidence associated with the statue identifies the king depicted, but the proportions of the figure suggest Eighteenth Dynasty manufacture. The very fragile state of this artifact necessitated extensive conservation efforts to clean and stabilize it, and the project is greatly indebted to our SCA colleague Mr. Mahmoud Hassan Mohamed for carrying out this important work that will preserve it for future study.

The statue probably derives from a wooden boat-shaped shrine of the kind used to transport divine images across the landscape. It may relate directly to another important artifact produced in the recent fieldwork: a wooden sculpture of a hawk's head that may have formed the aegis of just such a divine boat-shrine. Such objects are extremely rare, but images of the shrine of Horus that are depicted in the wall scenes of the Seti I temple at Abydos show that it featured hawk-headed terminals at both prow and stern. This artifact is highly significant as an element of ceremonial equipment almost never preserved in the archaeological record. Even more importantly, its context provides highly revealing clues to its utilization. The association of the object with human remains in an intact deposit adjacent to the tomb indicates that it was at some point housed inside the tomb. It may have been placed there for safekeeping. When the tomb was robbed, it was removed and discarded along with other material. The presence of diagnostic pottery sherds in the deposit indicates that the removal of material

occurred during or just after the Persian period, which spanned between 399 – 332 BC. The archaeological context of the Horus aegis may therefore attest to the last days of ancient Egyptian religion, when traditional practices were discontinued or transformed under the influence of the powerful cultures of Persia and Greece.

Perhaps 150 years after the initial construction of the monumental building, a vaulted tomb was built inside one of the long chambers that had earlier functioned as a sanctuary. The tomb had been robbed long before the 2011 excavations, but the plunderers had left behind numerous small faience funerary figures (ushabtis) that were provided for the deceased to perform any work that might be required in the afterlife. These figures not only allow the dating of the tomb to the Third Intermediate Period (ca. 950 BC), but also provide the name and titles of its owner. Later clay ushabti figurines also found in this context point to the subsequent re-use of the tomb, a common practice.

The Toronto project's work has highlighted the importance of the Votive Zone as a locus of both royal and non-royal construction activity associated with ritual practice, and confirmed that despite the complexity of the archaeological deposits and the long history of disturbance, systematic excavation at the site can produce a great deal of information about ancient Egyptian culture. Alongside the textual data that has long been the focus of Egyptologists, archaeological data has provided crucial insights into social organization, individual agency, landscape and the built environment, urbanism, and interregional interaction. The research has elucidated some of the ways in which people from a broad range of socio-economic levels of ancient Egyptian society contributed to the development of the ceremonial landscape of Abydos, and how their activities expressed and enhanced the relative status, power, and legitimacy of those ancient individuals.

Dr. Mary-Ann Pouls Wegner is Associate Professor of Egyptian Archaeology at the University of Toronto. She is also Project Director of the North Abydos Cultic Zone Project, University of Pennsylvania-Yale University-Institute of Fine Arts, New York University Expedition to Abydos. She has served as a member of the Board of Trustees since 2000. She received her Ph.D. in Egyptology (Egyptian Archaeology) from the University of Pennsylvania for a dissertation on the cult of Osiris at Abydos and has published numerous articles on many aspects of the site of Abydos.

THE DAKHLEH OASIS PROJECT 2011–2012 FIELD SEASON

The 34th season of the Dakhleh Oasis Project was in the field from mid November 2011 to March 2012. The following is a very brief summary of activities. This was a quiet season partly because not all permissions to work were received, probably as a result of changes in the political scene in Egypt. Colin Hope and his team from Monash University did come this year. Permission did not arrive in time for the Physical Anthropologists to work.

Overall Director Anthony Mills was unable to excavate at the Old Kingdom site of 'Ain el Gazzareen, but had a study season working on maps, notes and plans. However, Tony, Adam Zielinski and Laurence Blondaux were able to work at the Roman temple at 'Ain Birbiyeh, where they excavated in what may be a 6th century house. Professor Fred Leemhuis worked on texts from el-Qasr. He has published a set of 18th century financial documents. Significantly for the Dakhleh Oasis Project, this is the first to be published in Cairo in Arabic, by the Government Archives Department. He also excavated at the Roman town wall in el-Qasr with Paul Kucera and Maya Matkowski.

Dr. Roger Bagnall and his team from New York University continued work at the town of Amheida, ancient Trimithis, mainly in the temple of Thoth and in what may be a church. The replication of the Roman villa of Serenus is continuing by Dorothea Schulz and her team. Olaf Kaper continued his epigraphic survey at the temple of Deir el-Haggar, and the study of decorated blocks at Amheida. The prehistory team worked in the dig house on previously collected artifacts. The seventh Dakhleh Oasis Project Conference was held at Leiden University, the Netherlands from June 20 to 24, 2012. The many papers and workshops were well attended and further promoted collegiality amongst members. Further details may be learned from our website, which can be reached by link from the SSEA website.

2012 SSEA SCHOLARS' COLLOQUIUM

This year's Scholars' Colloquium was presented in partnership with the Friends of Ancient Egypt at the Royal Ontario Museum and held in the Eaton Lecture Theatre of the Museum. A record number of abstracts were submitted, more than enough for two full days of presentations, but travel issues and other problems led to a number of cancellations. In the end, however, the audience still saw two packed days of papers from speakers coming from Egypt, Canada, Uruguay, Germany and the United States. (The second day of presentations, which was officially the "Day of Papers in Honour of John S. Holladay" is the subject of a separate report, below).

The first speaker on Friday, November 30th was Mr. Edwin C. Brock, whose presentation *Merneptah Sarcophagi Restoration Project* has been featured recently in the media. The other speakers included Meredith Brand, (University of Toronto), *Pottery Production at Abydos: An Investigation of the Market Economy and Votive Practices in the New Kingdom and Third Intermediate Period*; Dr. William Cooney (National Archives of Canada), *Piye's Invasion an Egypt: reassessing the end of the Third Intermediate Period*; Dr. Beth Ann Judas, (American Research Center in Egypt-PA), *At the Edge of the World: The Keftiu as a Liminal People in Early New Kingdom Egypt*; Elizabeth Lang (Yale University), *Food Fit for a King? Revisiting the royal feasting scenes at Amarna*; Dr. Christian J. Bayer (University of Münster), *Nefertiti, or not Nefertiti – That is the Question!*; Prof. Sally Katary (Laurentian University), *Preliminary analysis of the types of cultivated land in the Wilbour Papyrus*; Prof. Steven M. Stannish (SUNY Potsdam), *Memnôn paragetai: Statue Base EN, PWN V at Kom el-Hetan and Egypto-Aegean Relations in the Late Bronze Age*; Prof. Peter Brand (University of Memphis), *All the King's Wives: Royal Polygyny under Ramesses II*; Sara Cole (Yale University), *New Kingdom Textual Motifs in the Famine Stele of Sehel*; Dr. Andrew D. Wade (University of Western Ontario), Barbara Lawson (Redpath Museum), Donatella Tampieri (Montreal Neurological Institute and Hospital) and Prof. Andrew J. Nelson (University of Western Ontario), *The Embalming Archaism: An Abdominal Incision Plate in the Late Roman Period*; Dr. Heather Lee McCarthy (New York University), *The Representation of Ramesside Royal Women in the Tombs of Contemporary Kings and Princes*; Prof. Sarah Symons & Cody Koykka (McMaster University), *Parallel lines in the sky: a comparison of astronomical observations near the celestial meridian in ancient Egypt and Mesopotamia*.

The Scholars' Colloquium Committee would like to thank those who submitted abstracts for their interest in our event, and all of those who spoke for their patience and effort in travelling to Toronto. Thanks also go to the Royal Ontario Museum for providing the venue and a/v.

38TH ANNUAL SSEA SYMPOSIUM "CITIES IN THE SAND: URBAN LIFE IN ANCIENT EGYPT"

Presented in partnership with The Friends of Ancient Egypt at the Royal Ontario Museum, our 2012 Symposium took place on December 1st, 2012 in the Eaton Lecture Theatre, Royal Ontario Museum, 100 Queens Park Cres, Toronto, Ontario from 9am to 5pm. This year's Symposium saw speakers from Austria, Canada, and the United States presenting on a variety of topics relating to urban life in ancient Egypt. Our keynote speaker was Prof. Kathryn Bard, Boston University, who gave us an overview of urbanism in ancient Egypt, *Royal cities and cult centers, administrative towns, and workmen's settlements in ancient Egypt*.

Prof. Bard, whose visit was sponsored by the Department of Near and Middle Eastern Civilizations at the University of Toronto, also spoke on Sunday in honour of Prof. Holladay. We would like to express our gratitude not only to the Dept. of Near and Middle Eastern Civilizations for their support, but to Prof. Bard for her consideration in changing her plans in order to attend this event.

The next speaker was Nicholas Picardo of The Giza Project, Harvard University. His paper was entitled *Digital Archaeology and Virtual Stratigraphy: Connecting Century-Old Excavation Records and Current Research in the Settlement Archaeology of the Menkaure Valley Temple at Giza*. He was followed by Dr. Miriam Müller of University of Vienna/Oriental Institute, Chicago with a presentation on *Household Archaeology and History in the Eastern Nile Delta and recent discoveries from Tell el-Dab'a/Avaris*. Dr. Müller was the Patricia Paice Fund (SSEA) Sponsored Speaker.

After lunch, the Friends of Ancient Egypt Sponsored Speaker, Dr. Nigel Strudwick of University of Memphis, offered us a presentation specially prepared for the SSEA Symposium *Living Thebes' in the New Kingdom*. Staying in the Theban area, Prof. Sally Katary of Laurentian University, spoke on *Pharaonic Village and Hellenistic City: Economic Life in Deir el Medina and Ptolemaic Memphis*. The Delta in the Graeco-Roman Period was the subject of the paper presented by Prof. Katherine Blouin, University of Toronto at Scarborough: *Moving Landscapes, Shifting Cities: The Case of Ancient Mendes and Thmuis*. The presentation of Prof. Ian Begg of Trent University, *Sands in the City: Gilbert Bagnani's films at Tebtunis, 1932-33*, was a unique blend of restored archival footage from the 1930s excavations at Tebtunis (much of it never before seen) and narration. The day ended with Dr. Krzys Grzymski of the Royal Ontario Museum taking us to *Meroe, Nubia's Royal City* for a look at this great capital of Egypt's neighbour, Nubia.

The organizers of the Symposium would like to thank the Royal Ontario Museum for hosting, the University of Toronto for their support and all the many speakers and volunteers who made this event a success.

A DAY OF PAPERS IN HONOUR OF JOHN S. HOLLADAY

The afternoon of Sunday, December 2nd was devoted to papers given in honour of Dr. John S. Holladay, Jr. The first speaker of the afternoon was Prof. Kathryn Bard of Boston University, who spoke on her excavations at The Middle Kingdom Harbor of Saww (Mersa/Wadi Gawasis) and Evidence of Foreign Interconnections. The next speaker, Prof. Juan José Castillos of the Uruguayan Institute of Egyptology, presented on *Early Rock Art in Egypt: From Naturalistic to the Appearance of Big Men, Chiefs and Kings*. Prof. Gregord Mumford (University of Alabama at Birmingham) followed with a lecture on Egypt's changing role in the Red Sea trade. Dr. Marcia F. Wiseman, who referred to Dr. Holladay as a mentor and role model, gave a paper entitled *The Khargan Cultural Complex: Egyptian Prehistory in the Dakhleh and Kharga Oases*. (An article by her partner in research, Prof. Maxine Kleindeinst can be read above). SSEA/SSEA Trustee Mark Trumpour spoke on Artefacts in several North American collections and a group of 19th-century Canadian travellers, a paper which touched on the origins of some of artefacts in the collection of the ROM. Amber Hutchinson (University of Toronto) also dealt with unpublished artefacts in a Canadian collection in *Shabtis, Scarabs, Beads, and Amulets: The Calverley Artefact Project (CAP)*. The day ended with a paper by this year's winner of the Steven J. Larkman Travel Award, Thomas Greiner. His presentation was *Lapiz Lazuli and Long Distance Trade in the Late Predynastic*.

CALGARY CHAPTER REPORT

James Morison

The Calgary SSEA has been off to a good year so far. At our first meeting we had Rosiland Park give a lecture to our members entitled, *Botanical Drug Use (and Abuse) of the Ancient Egyptians*. The talk was a very interesting, a survey of the use of botanical samples that were used by the ancient Egyptians in various capacities.

Julius Szekrenyes gave a lecture on the 'broad strokes' of the Middle Kingdom period (2055 – 1650 BCE). Our membership has been given these survey lectures to draw specific talks into the broader framework of ancient Egyptian history. Dr. Szekrenyes was able to illustrate the highlights of the Middle Kingdom through artistic representations and images of sites that were important during the period and we are sure that our membership has a better understanding of the period's developments and historical narrative as a result.

For our last talk of the 2012 calendar year we hosted Dr. Edwin Brock, who presented his restoration of the Merenptah sarcophagus lid in the Valley of the Kings. Dr. Brock was able to show the detailed steps that were needed to attempt such a project. It was definitely no easy task as the initial remains were literally clumps of rubble left over from ancient people trying to re-use the stone material. The results of his work (and his associates) are truly astounding. The reconstructed sarcophagi give an overall impression to the viewer of how large the king's coffins were as well as illustrating the representational motifs that adorned its interior and exterior.



Julius Szekrenyes and Dr. Edwin Brock

TORONTO CHAPTER REPORT

Christina Geisen

Greetings from the Toronto Chapter! We held our Annual Meeting of Ontario Members on October 29th, and the following board was elected: Christina Geisen (President and chapter representative; lecture series), Lyn Green (Vice-President; publicity, lecture series), Deirdre Keleher (Vice-President; social events), Zoë McQuinn (Vice-President; social events), Arlette Londes (Vice-President; hospitalities), Erin Kerr (Treasurer), Les O'Connor (Secretary), Amber Hutchinson (Member at Large), Sami Akhnoukh (Member at Large), Adriana Pincette (Member at Large), Meredith Brand (*ex officio*), and Jean McGrady (*ex officio*). Thank you to everyone who was involved and we are looking forward to another successful year.

Our lecture series is continuing with great presentations. In November and December we heard fascinating talks by Sherine El Sebaie on *The Titanic years and the Beginnings of Mass Tourism in Egypt* and Dr. Andrew Wade on *Examining the Evolution of Egyptian Mummification through the IMPACT Radiological Mummy Database*. In January and February, Meredith Brand spoke about *Microeconomics of Daily Life in ancient Egypt*, and Dr. Liam Cooney lectured on *Ancient Egypt's Encounters with the West: The Meshwesh*. We are looking forward to the upcoming lectures presented by Prof. Katja Goebis, and Sarah Schellinger.

We are also offering courses for our members again. The first one was given in November by Deirdre Keleher on *Practical Magic: A Beginner's guide to the practice of magic in ancient Egypt*, followed by Lyn Green, presenting the *Heretic pharaohs: Nefertiti, Akhenaten, Tutankhamun and the Amarna Age* in January and February.

Exciting events awaited and will await our members in December and April. We saw a life stream of Aida in HD at Cineplex Odeon, and in April we will travel to Montreal to visit Egyptian collections there. All the best from the Toronto Chapter.

MONTREAL CHAPTER REPORT *Jean-Frédéric Brunet*

The Montréal Chapter's fall 2012 season was bookended with public lectures presented, as previously, at the Egyptian Consulate's cultural affairs and education office. First came, on September the 27th, Moustafa Zayed, a History student at the Université du Québec à Montréal (UQAM), whose topic was about birds in Ancient Egyptian writing. The lecture was both Egyptological and Ornithological, highlighting not only the birds in themselves, but also the symbolism attached to each species by the Ancients. The assembly was amazed by the sheer number of them. Over two months later, the same venue welcomed Raphael Weyland, a PhD candidate from the Université de Montréal, with a talk entitled "Egypt as Alexander's colony". He explored the complex relations between the Ptolemies and their Egyptian subjects, explaining how what had been the new regime's greatest strengths already contained the seeds of its eventual downfall. All in all, two wonderful public lectures, followed each time by some appetizing hors-d'œuvre, complimentary offered by the Office's wonderful staff.

Another marvellous venue for our activities has once again been the Maison de l'Afrique Mandingo. Our first stint of the season there was to hold an interactive activity as part of the Culture days (September 28 and 29). Through a short lecture, images and a model of King Tut's tomb, onlookers and passers-by, including a thematically dressed young boy celebrating his birthday, were invited to discover the secrets of mummification and the rituals surrounding entombment. We reconvened to these great settings a few weeks later (November 7) for our first mini-lecture of the 2012-2013 year. Given by Dr. Rachad Antonius of the UQAM's Institut d'études internationales de Montréal, the lecture was about water and power in Ancient Egypt. Egypt was – and still largely is – a gift of the Nile. The majestic river remains the country's most impor-

tant water source, and unfortunately, its own sources lay outside of Egypt's national territory. Thus water had to constantly be on Pharaoh's mind. On the whole, we came out of this lecture with a whole new way of understanding the country's political history. In a much lighter mood, the annual funding supper was held on November 21, under the "Of Gods and Temples" theme. As usual, lots of games were played, many prizes were won (and once again your favourite reporter walked away with the wine!), tons of good food, by Jounieh, our official caterer, was ingested, and money flowed like honey in the Chapter's cash register. A most enjoyable evening!

The Chapter was also active at other locations this past season. Some went abroad and mingled with fellow members of all the Chapters for the Society's annual general meeting, scholar's day and symposium in Toronto. Much closer to home, our small Robert Chadwick library was, on the spooky evening of October 31st, the scene of our annual general meeting of the Chapter's members. This year's most important agenda item was the election of the Chapter's vice-president and of two members of the executive. Without surprise, Prof. Jean Revez was reinstated as vice-president; Marie Gagnon also saw her seat on the committee confirmed by the assembled members. Finally, Ms Cloé Caron (Welcome aboard, Cloé!!), history student at UQAM, was elected to fill the position left open by the untimely death of our dear Elizabeth Daimsis. Elizabeth had been a very active and devoted member of our Chapter. In fact, she may well have put even more of her tremendous energy and enthusiasm into our little Egypt lovers' community than she had put, a good many years earlier, eating fire in the streets of Bayreuth. Elizabeth, you will be sorely missed. Knowing her, though, she wouldn't want us to remain idle, and 2013 will be full of new and exciting activities. Come along and join us!

VANCOUVER CHAPTER REPORT

Thomas Greiner

The last time we spoke to you was when we told you about our upcoming workshop entitled '*Treading outside of Egypt*', where we presented several talks on Egypt's contacts with the outside (See our Fall 2012 #3 Newsletter for more details). Continuing on, we had the pleasure of welcoming Dr. Elizabeth Waraksa from Loyola Marymount University in Los Angeles, CA to speak on "*Female Figurines as Ritual Objects: Recent Evidence from the Mut Precinct at Karnak*". Her talk spurred a great discussion afterward and we are grateful for her engaging presentation. In February, we collaborated with Continuing Studies at SFU for an exciting talk in regards to the 2011 revolution in Egypt. Dr. Donald Reid (Emeritus, Georgia State University) spoke to us on the effects of the 2011 revolution on archaeology, tourism and culture. The talk showed us a side of Egypt that most of us don't hear about through the media as Dr. Reid reflected upon the latest happenings. Additionally, it was a very successful collaboration as we welcomed more than 130 persons to the event. In mid February, we also organized our first course on the history of Egypt, which happened at Waves Coffee, a small room destined for 10 people. It was an informal, yet intimate setting and the students attending learned about all aspects of Egyptian history. We started in the Predynastic and are finishing our survey with the demise of Cleopatra VII. Our final event of February was our first Ancient Egyptian Game Night, which we hosted at UBC geared towards the students there. It was successful as several of us played many rounds of Senet. Looking into the future for our chapter, we are hosting two lectures. In May, we will be holding our Annual Meeting of Members. Stay tuned with exciting details. You may always get further information by visiting our website at [http:// www.sseavancouver.com/](http://www.sseavancouver.com/).

EGYPTIAN LAPIS LAZULI FROM SAR-E-SANG, AFGHANISTAN?

Thomas Greiner



Fig. 2 - Map showing the location of the Badakhshan Mines (Adapted from Google© Maps)

It has long been held that the height of ancient Egyptian contact with the Levant occurred during the New Kingdom (1,550-1,069 BC). However, there have been recent studies by a variety of authors that have demonstrated that Egypt's contact with the Levant took place much earlier and that some of these interactions could be classified as extensive. The Nile and its floodplain are protected on either side by the desert, a situation that perhaps spurred on this belief. In the late 1980s, several hundred pottery vessels were unearthed at tomb U-J at Abydos by the German Archaeological Institute. These were thought to have contained wine and their origin to be in the Levant. Lapis lazuli can be examined similarly as it illustrates contacts between Egypt and the Levant and beyond.

Already in Classical times, the Roman author, Pliny, spoke in amazement of lapis lazuli, when he described the stone to be "refulgent with spots like gold"¹. It is a semi-precious stone, dark blue in color with specks of white (depending on its purity). It is first attested in Egypt in the Naqada I period (4,000-3,600 BC) (fig. 1). Lapis obviously becomes important by the Naqada II period (3,600-3,200 BC) due to its association with burials, usually in small quantities and in the form of jewelry beads. A connection to objects of foreign origin is also evident in a burial of an individual at tomb 836 in Naqada. There, a lapis lazuli bead was found amidst a group of carnelian and other stones by the head of a skeleton².

A copper dagger blade was found on the skeleton's hip. Petrie has associated this dagger's form to similar examples found on Cyprus, attesting to the grave's wealth of objects of foreign origin³. In a surprise discovery of a hoard of weapons at Kfar Monsah in the Levant, several daggers were found and Petrie's example at Naqada showed links to the daggers in this hoard⁴. This clearly illustrates the appearance of lapis lazuli next to objects of foreign origin.

Overall, the total number of lapis objects is barely greater than 300 and 91% of these are beads⁵. In conjunction with appearing next to artifacts of Levantine origin as well as the great distance of its source, the stone must have been considered valuable. This significance is further evident as the objects are found in a funerary context. At tomb 11 in Hierakonpolis, a shell and fly loop were discovered in connection with gold⁶. In later times, lapis lazuli symbolizes the night sky and, thus, gains a religious significance.

SOURCES OF LAPIS LAZULI

Identifying the source of lapis lazuli has proved challenging. The 12th century geographer al-Idrisi proposed a mine near the Kharga Oasis in Egypt's western desert. Needler follows similar reasoning to suggest there is another source at the Dakhla Oasis⁷. However, this possibility can be ruled out due to geological implications as no contact metamorphosed limestone is found in that area⁸. Casanova also discusses the possibility of a source within the Sinai Peninsula, but denies this due to the lack of geological confirmation⁹. There are several likely sources outside of Egypt: the Badakh

shan region in eastern Afghanistan, near Lake Baikal in Siberia, the Pamir range in Central Asia, the Chagai Hills in northern Pakistan as well as a possible source in Iran¹⁰. Its existence has been discounted by geologists due to a lack of metamorphosed limestones (see above)¹¹. Both the sources near Lake Baikal and in the Pamir Range are unlikely due to their poor quality¹².

THE BADAKHSHAN MINES

As the mines in the Badakhshan region in northeastern Afghanistan have been exploited already since antiquity, they are considered the likeliest source for the objects found in Egypt. Figure 2 shows the location of the mines in northeastern Afghanistan. The distance between Egypt and Afghanistan measures more than 4,000 km. Several scholars have investigated possible routes of lapis lazuli's path to Egypt and their work has demonstrated the need for further investigations into the subject¹³. In particular, some concerns have been raised previously on investigating the nature of trade routes purely on archaeological and epigraphic grounds¹⁴. Nevertheless, there have been several recent petro



Fig. 1 - Figure of a woman with lapis lazuli (from the Naqada I period.)

graphic studies aiming to establish the source of the lapis lazuli found in Mesopotamia conclusively. However, Herrmann already stated in 1968: “The archaeological evidence, defective as it sometimes is, has suggested a remarkably coherent pattern for the lapis trade from its inception to the Akkadian”¹⁵.

These aforementioned concerns regarding the archaeological and epigraphic data have led several scholars to conduct petrographic analyses to determine the exact source (see below).

SAR-E-SANG: SOURCE OF EGYPTIAN LAPIS LAZULI

Located in the far northeastern part of Afghanistan and over 200 km northeast of modern Kaboul, the Sar-e-Sang mines are found in the mountain range known as the Hindu Kush. With elevations reaching up to 5,500 m, the terrain is extremely inhospitable to the traveler¹⁶. Apart from the mine at Sar-e-Sang, there are three further mines located in close vicinity: Stromby, Chilmak, and Robot-i-Paskaran. Only Sar-e-Sang is being worked on in recent times¹⁷. The lapis lazuli that comes from there is regarded to be of superior quality, and despite the inaccessible nature of this mine, it makes for the world's largest production operation of lapis lazuli¹⁸.

There have been some recent petrographical studies done to determine the actual origin of lapis lazuli. Some arguments regard the Sar-e-Sang location as the likeliest due to its close location to Mesopotamia and Egypt and the early time, when it was first exploited. Yet, is Sar-e-Sang indeed the likeliest source for the lapis objects that are found within Egypt?

In the early 1990s, a study was conducted that focused on 29 archaeological samples found within Iran¹⁹. Their types were not specified, save their provenance: one from the site of Tepe Sialk and 28 from Shahr-I Sokhta. They in turn were subjected together with 21 further mining samples to Atomic Absorption Spectroscopy, using a graphite oven²⁰. It was expected that the archaeological samples could be correlated to their mining counterparts. The results for the Tepe Sialk sample may be regarded as inconclusive as they only showed weak links to the samples from Badakhshan and

SOURCES

- 1 Pliny referred to sapphire, which in Latin was the term for lapis lazuli; Bostock & Riley, *Natural History*, 432.
- 2 Petrie, Naqada & Ballas, 23.
- 3 Petrie, *Tools & Weapons*, 28. Also see pl. XXXIII, D3. The dagger at Naqada is in comparison to D41 of a Cypriote type.
- 4 Hestrin & Tadmor, *IEJ* 13, 283.
- 5 Greiner, *Lapis Lazuli*, 19.
- 6 Adams & Friedman, in Brink, *Nile Delta*, 334, fig. 17a-b.
- 7 Needler, *Predynastic and Archaic Egypt*, 112.
- 8 Ashton et al, in Nicholson & Shaw (eds), *Materials and Technology*, 39.
- 9 Casanova, in Jarrige (ed.), *South Asian Archaeology*, 49.
- 10 For the Chaigai Hills: Jarrige, *Les Cités*, 28.
- 11 Herrmann, *Iraq* 30(1), 27.
- 12 For Lake Baikal: . For the Pamir range: Herrmann & Moorey, *Reallexikon der Assyriologie*, 490. The Pamir range is also often included due to the many hazards and dangers in accessing the source.
- 13 See Herrmann, *Iraq* 30(1); Majidzadeh, *Paléorient* 8(1); & Bavay, *Archéo-Nil* 7. I have dealt with these issues extensively in my unpublished Masters dissertation

the Cha gai Hills. Though the majority of the archaeological samples from Shahr-i Sokhta showed strong links to the mines at Chaigai Hills and Sar-e-Sang, several samples also pointed to the Pamir and Lake Baikal mines. In contrast to identifying the Sar-e-Sang mines as the likeliest source as has been previously attempted, this recent study suggests that there is not simply one source for the lapis objects found within Iran.

In 2011, a team of Italian physicists conducted some studies on three samples from Afghanistan, four samples from the Pamir range and one sample from Siberia²¹. Using Scanning Electron Microscopy (SEM-EDX) and Cold-Cathodoluminescence (cold-CL) techniques, they aimed to investigate the micro-PIXE (Particle Induced X-Ray Emission) characterization of lapis lazuli and several markers for recognizing a provenance. In one aspect of the study, they tested their work on a ‘mystery’ object. Unfortunately, no information is given in regards to the type of artifact nor its context. This mystery object was found to be from the Afghan mines, but very close to the samples from the Pamir Range and Siberia²². They disregarded the Siberian source due this sample not containing any barium, whereas the Pamir range was excluded as it lacked the 700 nm luminescence in diopside – both characteristics, which the Afghan sample would have exhibited. The physicists were aware themselves that the sample pool was very limited and, hence, their conclusions must be regarded with caution²³.

The concerns that were earlier raised in regards to establishing trade routes based on only the archaeological and epigraphic evidence must now also include petrographic analyses. In addition, the limited number of mining samples employed in both studies affects a positive identification of a provenance and 300+ objects of lapis lazuli have come down since Predynastic times. Although the methods employed by the team of Italian physicists proved to be non-destructive, further petrographic analyses may not be of the same nature²⁴. In combination, 91% of the objects found in Egypt are beads, which may not provide the sampling pool of Egyptian archaeological samples required. In conclusion, no one single source has so far been conclusively established.

14 Casanova, in Jarrige (ed.), *South Asian Archaeology*, 49.

15 Herrmann, *Iraq* 30(1), 53.

16 Wyart et al, *Gems & Gemology* 17(4), 187.

17 Herrmann, *Iraq* 30(1), 24.

18 Krassmann, *Lapis Lazuli*, table 1.

19 Casanova unfortunately does not provide any further information on the archaeological samples, i.e. no information on the type of artifacts, their context and date.

20 These consisted of one sample from the Lake Baikal region, two from the Pamir range, two from Sar-e-Sang, five from Badakhshan, and 11 from the Chagai Hills.

21 Re et al, *Nuclear Instruments and Methods in Physics Research B* 269, 2374.

They do not specify the exact source in Siberia, but the Lake Baikal region is the likeliest. They also mention a source in Chile, which they exclude from their study as there is an already well established identification method.

22 Re et al, *Nuclear Instruments and Methods in Physics Research B* 269, 2376.

23 Re et al, *Nuclear Instruments and Methods in Physics Research B* 269, 2377.

24 Re et al, *Nuclear Instruments and Methods in Physics Research B* 269, 2373.

The opinions expressed in the Newsletter do not necessarily represent the views of the Society for the Study of Egyptian Antiquities. ARE YOU A MEMBER OF THE SSEA? The SSEA/SÉÉA has Chapters in Calgary, Alberta, Montréal, Québec, Toronto, Ontario and Vancouver, British Columbia. These Chapters host lectures and events on Egyptological topics. Full Individual and Student Membership in the Society includes a volume of the scholarly Journal of the SSEA and the SSEA Newsletter, and free or discounted admission to SSEA events. Associate Membership in the SSEA includes the Newsletter and free or discounted admission to events. Associate Membership is only open to members in provinces which have a Chapter. All categories of membership, excluding institutional members, are entitled to vote at the Annual General Meeting. To apply for membership, write to the address on the front of this Newsletter or email us at info@thessea.org For updates, schedule changes, and further information, see the SSEA Website at: www.thessea.org.