

PAST & PRESENT

THE ARCHAEOLOGICAL NEWSLETTER

No. 1: WINTER 2010




Chen Shen (left) is Bishop White Curator of Far Eastern Archaeology at the ROM, and Chair of the Friends of Archaeology. Here he is working on his major exhibition “The Warrior Emperor and China’s Terracotta Army”

FROM THE ROM

BY CHEN SHEN

If there is anything that you want to know about the PAST, archaeology is the way in which the PRESENT can link to it. Archaeologists from the Royal Ontario Museum (ROM) have brought the past from around the world to their home in Toronto. ROM archaeologists are able to present the treasures of great discoveries in galleries and exhibitions, and to telling the stories of the mysteries behind the objects unearthed, from something as small as a bronze age pin, to something as big as China’s Terracotta Army! ROM Archaeologists are able to do this because we love to bring the past to the present of a very special group of interested members who has a passion and curiosity about the archaeology.

The ROM’s Friends groups are members of the ROM who want to support specific areas of endeavour and research in

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FROM THE UoFT

BY MICHAEL CHAZAN

As I sit down to write these notes the vision of the Chilean miners being pulled from the ground is still fresh. What drew the world’s attention was the power of technology, and dedication, to pull life out of the depths. At the same time at the ROM we have the unique opportunity to view bodies that were pulled out from the earth, not living human beings but full sized sculptures that had been arrayed in the Royal Tombs at Xian. The excavations in Chile reached deep into the earth to pull life out of the darkness. As archaeologists we pull something precious from the earth, something that is not alive yet has the power to move us in a fundamental way. The passion that archaeologists bring to their work and the interest their discoveries excite leaves us with the question of what motivates this enterprise. I would suggest that while archaeologists do not recover living humans, nor do we face

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the ROM. The ROM's Friends of Archaeology was developed to further the support for, and understanding of, research in the discipline of archaeology, of any association or period, anywhere in the world. To achieve this we want to develop a community of individuals who will support archaeology and archaeological programming in the Toronto region. Members of the Friends of Archaeology will receive two of these newsletters each year, and be invited to special behind-the-scenes tours and lectures just for the Friends of Archaeology. Of course they will also hear first about the lectures and symposia organised by the ROM.

Michael Chazan continued... 

the potential tragedy of the loss of life, we do recover traces of humanity. In a sense archaeology shares with the Chilean rescue an attitude that defies death, by finding humanity among the physical remains of the past.

Archaeology today is a dynamic field of inquiry, a push to expand the limits of human knowledge that stretches from the laboratory to the seminar room and to research sites across the globe. Nowhere is there a more active group of archaeological researchers than the combination of the curators and staff of the Royal Ontario Museum and the faculty and students of the three campuses at the University of Toronto. I have the pleasure of directing the newly founded Archaeology Centre, which serves faculty, curators, students, staff, and members of the community as a hub for discussion, debate, and research. The key is building an environment of collaboration as we develop into an archaeological community that pulls together the wealth of archaeological activity at the University and the Museum. This newsletter and the upcoming activities will open this activity to the public and I encourage you to join the Friends of Archaeology. This is an exciting period for archaeology and for archaeological research based in Toronto. I hope you will join us as we plunge ahead.

Postscript: It is with sadness that I note that while our Newsletter was in preparation the archaeologist Ehud Netzer died at the age of 76 after falling six meters at the site of Herodium. Netzer was a leader in the archaeology of the Roman world and will be missed.



Michael Chazan (left) is Director of the University of Toronto's Archaeology Centre, and is a specialist in the analysis of prehistoric stone tool technology. He has worked on field projects in Israel, France, Jordan, and Egypt; and currently co-directs an interdisciplinary project on the Earlier Stone Age of the Northern Cape Province of South Africa. Here he is examining a chunk of specularite (iron ore) at the prehistoric mine of Blinkklipkop in the Northern Cape Province, South Africa. (photo: Lisa Milosavljevic)



Female human skull, plaster filled and modelled surface, painted, with shell inlaid eyes.

From Kathleen Kenyon's excavations in Jericho, 1955.

Pre-Pottery Neolithic 8500-7000 BC

13.3 cm high, 18.5 cm long, 13.5 cm wide

Accession no. 955.165.1

ICONS

NOTABLE OBJECTS FROM THE ROM

One of the most noteworthy cultural practices associated with the early Neolithic in the Near East, when people were first becoming village farmers, was the practice of removing skulls from dead bodies and saving them, sometimes elaborately decorating them.

The focus on Neolithic skull removal and its interpretation as an aspect of ancestor veneration originated in the discovery of curated human skulls, and especially carefully plastered and decorated skulls, at the site of Jericho. Garstang found one example of a “decapitated” burial at Jericho in the 1930s, but concluded that it was the accidental result of post-burial earthquake activity. Kenyon famously found many headless burials as well as isolated and grouped skulls, sometimes carefully decorated with plaster and shell, at the same site in the 1950s. She specifically related these to ancestor veneration, the skull belonging to a “venerated member of the community whose wisdom it was hoped to perpetuate”.

Since then, the idea that the skulls represented ancestors, or even specifically male elders, has been very popular, despite the rather frequent discovery of skulls, even plastered skulls of young men, women and even children, some of whom

were presumably no one's ancestors. This requires a very generalized notion of ancestors.

There also grew a popular conception that this “skull cult” was a “mechanism” for ensuring social solidarity or either perpetuating or challenging an “egalitarian ethic” at a time when the growth of large villages was presenting unprecedented challenges for people in the Near East. These interpretations, as championed by such scholars as Ian Kuijt at University of Notre Dame, place much less emphasis on prehistoric people's beliefs about death or emotions surrounding the death of loved ones than they do on how ritual practices “function” to “regulate” society. No doubt this is at least in part because of the difficulty, in prehistory, with validating any theories that have to do with emotion or belief.

However, the hypothesis of ancestor worship has not gone without challenge. Recently, the French anthropologist Alain Testart has revived a very old idea that Neolithic skull curation had to do with head-hunting. He suggests that a Late Neolithic wall painting from Çatalhöyük in Turkey showing vultures sweeping down on headless corpses should be interpreted, not as a depiction of a mortuary ritual involving exposure of bodies, but as referring to the treatment of defeated enemies. There are numerous ethnographic parallels for the practice of decapitating enemies and keeping their heads or skulls as trophies, of which the Dayak of Borneo are a

famous example. In addition, it is worth noting the fairly widespread practice (including at Çatalhöyük) of decorating houses with aurochs horns, wild goat horns and other possible animal trophies that could somewhat mirror the collection of human trophies.

That said, there are also difficulties with Testart's hypothesis. Most notably, evidence for interpersonal violence (such as trauma in the form of broken bones, piercing with projectiles, etc.) in the Pre-Pottery Neolithic is actually extremely rare. That doesn't mean that they were completely peaceful, but we might expect such evidence to be a lot more prevalent if trophy hunting and inter-community raiding were as culturally important as the ubiquity of skulls suggests. In addition, it is quite clear that the headless skeletons found below Neolithic house floors had their heads removed only after they had been buried for some time, as evidenced both by traces of the pit dug to retrieve the skull and by the fact that the mandible was usually left behind.

Michelle Bonogofsky has cast strong doubt on the "venerated elder" part of the ancestor worship hypothesis. As should have been obvious already, not only are the skulls not drawn only from deceased elder males, they include women and children, even quite young children. She has also disproven the hypothesis that teeth were intentionally removed from the skulls of younger individuals to give the illusion of considerable age; in fact, the skulls almost always retain their teeth.

Finally, it is interesting to note that the use of human skulls, including plastered ones, among various people of New Guinea, the place that partly inspired Kenyon's interpretation of the Jericho skulls, was actually much more complicated than simple ancestor veneration. As anthropologist Roger Lohmann has pointed out, despite the importance of ancestors to the Asabano of New Guinea, the curation of skulls and other bones had much more to do with the ongoing relationships of the living to particular deceased individuals. In many cases, this involved the attempt to gain some sort of advantage from the deceased, such as acquiring their particular skill or prowess in some activity. The treatment of bones could also involve their concerns over the potentially malignant activities of ghosts. Although some skulls or other bones could be relics of ancestors, others were thought to have practical uses for the living, including those who were not descendents of the deceased.

While we may never know the full meaning of skull treatments in the Near Eastern Neolithic, most likely it was associated with identity, memory, and the particular attributes of

the deceased. Cranial relics allowed continuing relationships with the deceased, but we should not be too quick to assume that these were always friendly ones.

Ted Banning is Professor of Archaeology in the Anthropology Department, UoFT. His research concentrates in the southern Levant, with current fieldwork at Wadi Ziqlab, in Jordan.



ROM IMAGES SPOTLIGHT

Kantharos, Etruscan,
c. 580-560 BC, Orvieto, Italy
918.3.66; 13.3 cm high



As the new galleries of Ancient and Roman Italy are being developed, new photography is being done, and the objects are being added to the ROM's online object database: ROM Images. Every issue of *Past & Present* we will have another new addition to ROM Images!

Go to <http://images.rom.on.ca/public/>

RESEARCH

X-RAY VISION AND PERUVIAN DEATH MASKS

BY APRIL HAWKINS

In 2008 and 2009, New World Archaeology at the ROM had the opportunity to conduct non-destructive tests on two Peruvian death masks with a portable X-ray Fluorescence Spectroscopy (XRF) device. These funerary masks were from the North Coast of Peru, and would have been placed over the face of a prominent, affluent person at the time of burial. The first mask was distinctively Sicán (900-1100 AD), a culture widely recognized as being at the zenith of gold-smithing in ancient Peru (Figure 1).



Figure 1. Sicán mask (935.78.2)

The second mask was a bit more enigmatic (Figure 2). The mask's style is Chimú-Inca and thus dates it to around the fifteenth century. Much of it is covered by red pigment and fragments of adhered textiles. We had taken special care of these amazing masks and we wanted to learn more about them. The masks, however, are far too fragile to handle so for years we have known nothing about what they were made from and how they were made. The XRF device (Bruker AXS Handheld Portable XRF Tracer III-V) was brought in by the ROM's metal conservator, Susan Stock. It was of interest to the museum community since it is entirely non-destructive and portable. We were interested in utilizing this technology because it could provide us with the elemental composition of our masks without even touching them.

Before we started our analysis of the Sicán mask, we suspected that the gold content would be much lower than it appeared. The people of the Andes had prided color over purity in metalworking, and most gold objects are actual-

ly alloys of gold and copper. Recent research on these alloys, derisively called "tumbaga" by the Conquistadors, has shown that these ancient metal objects could in fact have very little precious metal in them — sometimes as little as 3-10%. The Sicán metal-smiths were particularly good at bringing out the golden hue in their finished product using traditional technology (they used hand blown furnaces, for example, since there was no bellows in pre-Columbian Peru) and a unique method of depletion-gilding that used botanical acid compounds to etch out the copper from the surface. The object would then have an enhanced "gold" finish, with a largely copper core. If the Sicán mask appeared to be pure gold, the fifteenth century mask appeared to be pure copper. The surface was covered with green copper corrosion products and a red pigment. Peruvian masks (as well as the body of the deceased) were sometimes covered in cinnabar (composed of mercury and sulphur and quite toxic). The textiles adhering to the cinnabar were likely part of the mummy wrappings that were used to bundle the masked individual in a tightly flexed bundle.



Figure 2. Chimú-Inca mask (961.214)

Anxious to know more about the materials used to make the masks, we aimed the XRF at the masks. The X-Ray was silent, but the elemental spectra immediately blinked into existence on the laptop screen. The Sicán mask was comprised of gold, silver and copper; in that order. The copper was likely arsenic-copper and the ratio of silver to gold was significant, though there is in fact quite a lot of gold present in this mask (50-75%). The appliquéd nose portion was likely made at the exact same time since it had the exact same composition as the rest of the mask. The red on the fifteenth century mask was intentionally applied cinnabar pigment and the metal was composed of silver and copper. The textile residue tested positive for a whole suite of elements including

heavy metals. As often happens, these answers led to further questions: With such a high gold content, was the Sicán mask depletion-gilded? Or was the high gold reading on the surface a result of depletion-gilding? Might the reverse of the mask (it was too fragile to flip) produce a much lower gold reading than the outer, visible surface? How was the cinnabar related to the corrosion on the Inca-Chimu mask? Why are there heavy metals in the textile fragments? We don't yet have the answers to these questions, but the ROM now has its own XRF device. We can soon begin additional testing to sort out what can be learned about these and other amazing objects in our collection.

April Hawkins manages the collection of Human Remains for New World Archaeology at the ROM; here she is pictured with some non-human skeletal remains in Tanzania.



DESPATCHES

NEWS FROM THE FIELD

Robert Mason (ROM and Near and Middle Eastern Civilizations, UofT) took a sojourn from his fieldwork in Syria this season to examine the mediaeval pottery of Corinth, Greece. The site was probably the most important city in mediaeval and Byzantine Greece, and excavations there by the American School have been ongoing since the 1930's. During this time they have unearthed a lot of imports from the Middle East, and Mason went to identify them. There were surprisingly large numbers of examples of pottery, including some which were actually quite rare in the Middle East, but for some reason were especially popular with the Corinthians, such as drinking vessels. There were also a group of very early albarelli, or apothecary jars, from 11th century Egypt, found in the city's infirmary, that were previously unknown in the literature.

Gary Crawford (UTM Anthropology) just returned from China where he was lecturing at Shandong University and finalizing research on the palaeoethnobotany of the Late Neolithic Liangchenzhen and Early Neolithic Yuezhuang sites, both

in Shandong Province. Crawford has been a leading figure in the development of archaeobotanical research in China, a field that 10 years ago barely existed but today plays a significant role in most Neolithic archaeology in North China. Preliminary results of the Liangchenzhen project have been published in *Current Anthropology* and the initial results showed that, surprisingly, rice was a significant economic resource this far north and that the plant related subsistence was relatively specialized by 4000 BP, focusing on a narrow range of crops. Rice has a long history in Shandong, with rice also known to the Early Neolithic (8000 BP).

Gary Crawford in a field in Shandong Province, China (right).



PRESENTING THE PAST

RECENT PUBLICATIONS

EARLIEST NEOLITHIC SETTLEMENT IN CYPRUS

Survey and excavation at the site of Ayia Varvara has pushed the earliest Neolithic occupation of Cyprus back to 9,000 years BC (calibrated radiocarbon age). In presenting the results of the dating of Ayia Varvara, Sturt Manning and colleagues (including Sarah Stewart, the President of the Toronto Chapter of the Archaeological Institute of America) write that “the evidence for very Early Neolithic human presence on Cyprus highlights that long-distance maritime voyaging was a key human adaptation in the Near East and Eastern Mediterranean beginning with the Late Epipaleolithic.”

Manning, Sturt W., Carole McCartney, Bernd Kromer, and Sarah T. Stewart 2009. The earlier Neolithic in Cyprus: recognition and dating of a Pre-Pottery Neolithic A occupation. *Antiquity* 84: 693-706.

DATING PALEOLITHIC ORNAMENTS IN WESTERN EUROPE

Working with French colleagues at the site of Isturitz, France, Carolyn Szmids of the Archaeology Centre at the University of Toronto has succeeded in dating a level overlying a context that includes ornaments, a decorated artifact, and an amber pendant to 37,180 years ago (uncalibrated). This means that the age of the symbolic artifacts from Isturitz is greater than 37,000 years—a discovery of significance for determining when modern humans first arrived in Western Europe and for assessing the potential for interaction between Neanderthals and Modern Humans.

Szmids, Carolyn, Christian Normand, George S. Burr, Greg W.L. Hodgins, and Sarah LaMotta 2010. AMS 14C dating the Protoaurignacian/Early Aurignacian of Isturitz, France. *Journal of Archaeological Science* 37: 758-768.

EARLY BRONZE AGE IN THE WADI ZIQLAB, JORDAN

Kevin Gibbs and colleagues have published the results of the excavation of the site of al-Basatin, the latest chapter of Ted Banning’s long-term research project in the Wadi Ziqlab in Northern Jordan. The authors write that the location of the site might suggest a movement of people “into areas with potential for olive production or other forms of arboriculture.”

Gibbs, Kevin, Seiji Kadowaki, Adam Allentuck, and E.B. Banning 2009. Early Bronze I occupation at al-Basatin, in Wadi Ziqlab, Northern Jordan. *Bulletin of the American Schools of Oriental Research* 355: 31-50.

ART AND EARTHQUAKES IN A SYRIAN MONASTERY

Recent research at the Monastery of St. Moses (Mar Musa) in the Syrian desert shows that this important site was founded in the late 5th century and continued through the unpleasantness of the Crusades until it was finally abandoned in the 19th century. The church is particularly well-known for the cycle of frescoes, and it can now be seen that this was created to hide repairs from a late 12th-century earthquake.

Mason, Robert 2009. The Monastery of St. Moses the Abyssinian (Deir Mar Musa al-Habashi), Syria, *Antiquity* 83 (319): <http://antiquity.ac.uk/projgall/mason/>.



St. Barbara (patron saint of masons) fresco at the monastery of St Moses, Syria, dated 1209 AD.

BIOARCHAEOLOGY IN SOUTH AFRICA

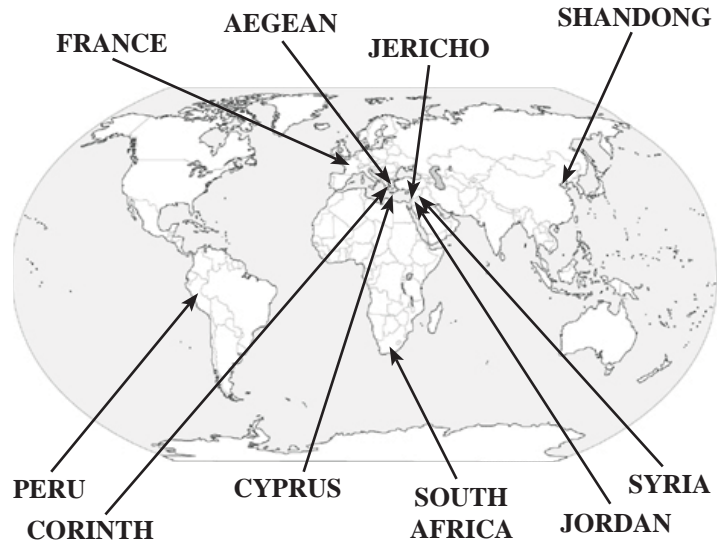
The relationship of bioarchaeology to descendant communities is a critical area of archaeological ethics and practice. Susan Pfeiffer has recently published on the value of bioarchaeology for the descendants of Khoesan peoples of Southern Africa. Pfeiffer writes that “descendants deserve to know and feel pride in their ancestors’ remarkable ability to sustain themselves through much greater time and space than relatively brief Eurocentric history describes.”

Pfeiffer, Susan 2009 The incorporation of bioarchaeology into Khoesan studies. *South African Archaeological Bulletin* 64: 193-196.

MODELLING AEGEAN INTERACTIONS

Working with Tim Evans and Ray Rivers, Carl Knappett has developed a mathematical model for the interactions between Middle Bronze Age sites in the Aegean. The authors write of this effort that “we are just at the beginning, but we hope nonetheless to have shown how the use of techniques from physics offers new means of assessing the various kinds of networks that have long preoccupied the social sciences.”

Knappett, Carl, Tim Evans, and Ray Rivers 2008. Modelling maritime interaction in the Aegean Bronze Age. *Antiquity* 82(318): 1009-1025.



LECTURE NOTICES

EXHIBITING ARCHAEOLOGY: A DISCUSSION WITH ROM CURATORS.

Thursday 17th February 2011 - 7:00 PM
Free Public Lecture by ROM Friends of Archaeology
ROM Staff entrance, Classrooms 3&4

Get the background story to the recent archaeological exhibits at the ROM and an advance look at projects in development. ROM curators will talk about how exhibits are developed and some of the challenges and successes they have experienced. To register, visit www.rom.on.ca/whatson or call 416.586.5797

ARCHAEOLOGICAL VAULTS: BEHIND THE SCENES TOUR OF ROM ARCHAEOLOGY DEPARTMENTS

Tuesday April 5th 2011 - 7:00 PM
Exclusively for Friends of Archaeology Members
ROM Staff entrance

Join ROM archaeologists as they show you what happens behind the galleries in this tour of the store-rooms of the various archaeology departments. See the hidden treasures, and find out why they aren't on display! To register, visit www.rom.on.ca/whatson or call 416.586.5700.

ROYAL ONTARIO MUSEUM FRIENDS OF ARCHAEOLOGY

The ROM Friends of Archaeology exists to develop a community of people who are interested in the archaeology of the world, and wish to support archaeological research and programming at the ROM. The group provides a biannual Newsletter and two events for members each year, and organises other events such as an annual symposium, public lectures, and contributes to family programming at the ROM.

For more information:
<http://www.rom.on.ca/members/fa.php>
Telephone 416.586.5700

UNIVERSITY OF TORONTO ARCHAEOLOGY CENTRE

The Archaeology Center at the University of Toronto brings together archaeologists from across the campus and the Royal Ontario Museum to share resources, create an intellectual community, and develop opportunities for collaboration and enhanced student training opportunities.

For more information:
<http://www.archaeology.utoronto.ca>