

Boston University Center for Archaeological Studies

CONTEXT



American soldier on guard in front of Neo-Assyrian relief at Baghdad Museum opening, July 3, 2003 (see page 14 below).

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Mosquito Coast Revisited: the 2003 Season of the Xibun Archaeological Research Project in Belize

by Patricia A. McAnany, Eleanor Harrison-Buck, and Steven Morandi

Ever wish that you could visit the set of a Hollywood movie that had starred glitterati such as Harrison Ford? Do you have a desire to view, first hand, the destruction wrought by a stupendous on-set explosion filmed in real time without the aid of computer graphics? We did, once upon a time. But the relics of Hollywood that we found during our archaeological field season in 2003 have convinced us otherwise. Here, we reveal our discoveries of the season and how this experience has expanded our knowledge of the history of the Sibun, but also caused a change of heart with regard to Hollywood.

With hybrid funding from Boston University's Division of International Programs and the National Science Foundation, it began as a routine field season. The goal of furthering our knowledge of the deep history of the Sibun River Valley and its role in the political economy of chocolate production defined the focus of our field research. (On early colonial maps, the name of the river is spelled Xibun, hence the name of our project.) Two of us-Ellie Harrison-Buck and Steve Morandi-were collecting dissertation data and David Buck (University of Florida at Gainesville) was back to run the GPS units and expand the continued on page 2



Field crew of the 2003 season of the Xibun Archaeological Research Project with the Maya Mountains in the background (photo by P. A. McAnany).

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limits of our archaeological survey. Graduate student Satoru Murata joined the project for his first season of field work in the Maya lowlands and three students from the 2001 season had been invited back as staff members to supervise the field lab and excavations: Christa Cesario, Jessica King, and Emily Hall. Tori Saneda from The Ohio State University also joined the project, hoping to collect magnetometry data for her dissertation. Six undergraduate students from Boston University had matriculated into the springsemester, field-school program-Lauren Bateman, Keri DeVerna, Wallis Lord, Keith McIntosh, Kevin Mitchell, and Donna Yates-in addition to Katherine Belzowski from Cornell University and Alyson Thibodeau from Amherst College.

The stage was set to expand our excavations at a number of sites within the Sibun Valley, especially at a place called Cedar Bank that had yielded a surprisingly rich collection of seventeenth century Spanish-Colonial artifacts in a test excavation conducted during the final hours of the 2001 season. From archival



Spanish-Colonial hand-cut metal star (seventeenth century) from the site of Cedar Bank, Belize (photo by P. A. McAnany).



Satoru Murata (left) and Steve Morandi preparing an excavation grid in the cohunepalm forest of Cedar Bank (photo by P. A. McAnany).

records, we knew that Spaniards had built a chapel in the valley and gained control of the cacao production. Before testing Cedar Bank, however, we had not found any artifacts dating to that tumultuous period when European incursions dramatically and forever altered the universe of indigenous American peoples. In retrospect, Cedar Bank seemed a likely place to build a small church as it is located at the point where the mangrove estuaries of the lower river course give way to higher ground. The locale is further marked by prominent limestone hills that rise on both sides of the river and signal the beginning of the Sibun-Manatee karst—a forbidding landscape of tower and cockpit karst formations punctured by underground caverns. A curious, hand-cut metal star-still shiny after 400 years—and a respectable sample of Spanish glazed ceramics known as majolica left little doubt in our minds that Cedar Bank deserved additional investigation. Steve Morandi crafted a dissertation proposal and planned to head up this portion of the project.

After we set up our field camp and lab at nearby Monkey Bay Wildlife Sanctuary, we set out to visit Lance Usher, a local resident of Cedar Bank and head of the town council. Together, we toured the site and looked for signs of a buried chapel.

Composed of elongated earthen mounds grouped around two plazas originally constructed around A.D. 800, the site seemed like a sanctuary—protected by a canopy of towering *cohune* palms. When asked why some of the mounds bore scars of bulldozing and exhibited strange divots on their apices, Lance replied that it was the result of movie set construction and the large holes had been dug for camera scaffolding. "After all," he said, "this is where *Mosquito Coast* was filmed."

Shot in the mid-1980s, Mosquito Coast is not considered the best film of Harrison Ford's career, but it is known for its beautiful river scenes set against a backdrop of lush, tropical forest. Making a mental note of Lance's comments and not finding any obvious chapel foundations, we decided to expand our 2001 excavation, employing the tried-and-true archaeological technique of moving from the known to the unknown. During the weeks to follow, this locale continued to yield Maya Postclassic (ca. A.D. 1100-1500) and Spanish-Colonial artifacts in addition to late eighteenth and nineteenth century Anglo-Colonial material such as pipe stems and case bottles. Our historical archaeologist, Daniel Finamore (Peabody Essex Museum) had found an old map in the London Public Record Office that showed an

eighteenth century land-holding in this vicinity. A logger named William Tucker claimed that the land and the debris likely marked the location of his camp—an historical reoccupation of a Maya mound.

We tested several locales at Cedar Bank and although the sample of Colonial artifacts continued to swell, we found no structural remains or burial grounds that could be attributed to a chapel precinct. Wishing to leave no stone unturned, we decided to procure a bootlegged video of Mosquito Coast and view it with several residents of Cedar Bank who were assisting us with the excavations. Most of the local men had been hired to build sets or play small roles in the movie. Only by viewing the film did we realize the full meaning of the term "shot on location." Harrison Ford's idyllic village (his escape from "decadent" civilization) had been constructed directly on top of the archaeological site of Cedar Bank. A boardwalk linked the village with the so-called ice-house which blows up (in real time) during the climax of the movie. Hollywood produced a literal explosion that scattered debris over a hundred-meter radius and polluted the Sibun River for weeks to follow. During our current survey of the Cedar Bank area—twenty years later—Dan Finamore found movie-set debris from the conflagration lying in the shallow eddies of the river sideby-side with nineteenth century artifacts associated with mahogany logging. We cannot demonstrate that the film crew destroyed the chapel foundation during set construction, but conditions for heritage preservation certainly were not enhanced by these activities. The byline for the Mosquito Coast movie asserts that Allie Fox (Harrison Ford's character) "went too far." We concur.

In contrast to Cedar Bank, where the heavy hand and long reach of Hollywood had caused such damage, other sites within the Sibun Valley exhibit spectacular preservation even though they may be located on land that is actively farmed. Such is the case for the Augustine Obispo site, named after its owner, an elderly Creole man who had planted avocado



Ellie Harrison-Buck exposing the wall of the circular structure at the Augustine Obispo site. Stela can be seen in the right foreground; white bags cover a line of conch shells (photo by P. A. McAnany).

and citrus trees on the site and allowed his small herd of cattle to graze on the underbrush. This site had been designated for further investigations because of the presence of an uncarved stela or limestone monument, positioned in front of a small stone structure that appeared, on the surface, to be more circular than rectangular. Most Maya architecture is quadrilateral but, at selected locations, circular shrines were built between A.D. 800 and 1500. We had already found and excavated two round structures at sites farther up river and Ellie Harrison-Buck was ready to document a third as part of her dissertation research. The circular structures in the Sibun Valley appear to date to the Terminal Classic period (A.D. 830-950) and indicate that the valley was thriving at a time when elsewhere the influential dynasties of the Classic period were collapsing. Somewhat enigmatic as to function, circular shrines often are associated with the feathered serpent in his guise as the wind deity. On the island of Cozumel in northern Yucatan, well preserved shrines have been documented that were covered with a coat of plaster into which conch shells (wind trumpets) had been pressed. Similarly, a line of beautifully preserved conch shells was recovered from excavations just outside the circular wall of the round structure at the Obispo site, alluding to the shrine's association with the powerful wind deity. In tandem with excavation of the round shrine, Emily Hall examined a nearby residential mound for evidence of contemporaneous deposits in an effort to understand better the community that built and utilized the circular shrine complex. She found that, during an earlier phase of construction, a mortuary interment (likely of an elite resident) had been placed directly on the central axis of the domicile.

Since we are curious to know what types of plants were processed, consumed, or burned as firewood in the Sibun Valley sites, we implemented an aggressive program of water flotation by collecting a sediment sample from each context. Once analyzed by Kirsten Tripplett (University of California, Berkeley), this information may shed light on cacao or chocolate processing that took place at Obispo and other sites within the Sibun Valley. Such archaeobotanical studies, along side pollen analysis, assist in a major goal of the research project—to create a reconstruction of past environments in the Sibun Valley. Pollen is preserved in the perennially wet oxbows of the Sibun River. Palynologist John Jones (Washington State University) has extracted several cores from the oxbows in order to reconstruct ambient forest composition. Once this step is accomplished, we will be able to evaluate whether the massive deforestation that characterized the Classic Period in the Petén also occurred in central Belize. Cacao continued on page 4

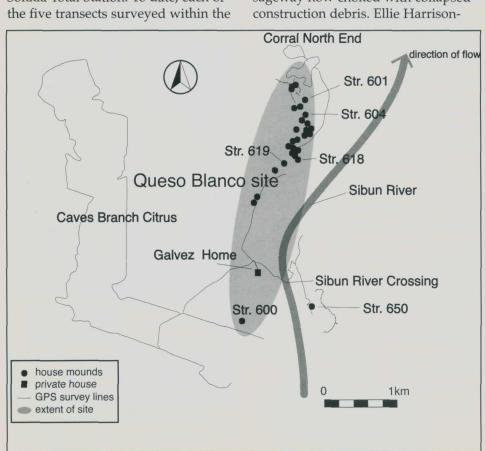
continued from page 3 is a shade-loving plant. If indeed grown in the Sibun Valley as we surmise, we would expect to see pollen evidence that largely reflects forested environments throughout the valley.

Our excavations came to a close in the lower part of the Sibun River valley in the middle of March, and we moved our camp upriver to an idyllic location called Yam Wits ("space between the mountains" in Yucatec Mayan). The camp is situated at the base of the Sibun Gorge, where the river cuts a deep incision through the foothills of the Maya Mountains. From our base at this beautiful locale, we expanded our survey into the unknown area of Transect 2, a block of land about 5 by 6 km that straddles the Sibun River. Here, Satoru Murata, Steve Morandi, and David Buck discovered a site composed of 28 residential house platforms and named it "Queso Blanco" after a locally produced cheese. A planimetric map of the site was compiled utilizing differential GPS; excavated areas were mapped in topographic detail with a Sokkia Total Station. To date, each of

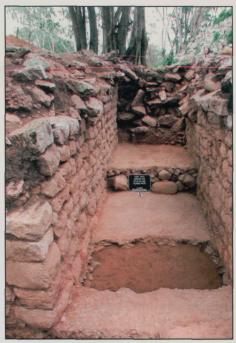
Sibun Valley have yielded evidence of substantial Maya settlement that was previously unknown.

The Hershey site—located in Transect 1 at the base of the Sibun Gorge—features the largest complex of monumental architecture in the Sibun valley. With two pyramidplazas that are aligned along a northwest-southeast axis, the Hershey site also contains two 15-meter-long mounds that were constructed in a parallel configuration in the shadow of the main pyramid. Excavation of an east-west trench placed between the two mounds, performed by Jessica King, revealed sloping sidewalls and confirmed our preconceived notion that the two structures formed a ball-court complex. The political significance of the site is enhanced significantly by confirmation that this competitive athletic event—evocative of the Underworld, death, and renewal—transpired at Hershev.

The ball court was linked to the main plaza of the Hershey site by means of a narrow, stone-lined passageway now choked with collapsed construction debris. Ellie Harrison-



Queso Blanco map compiled from GPS readings (prepared by Satoru Murata).

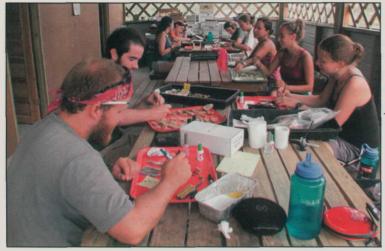


Passageway to the main plaza of the Hershey site after removal of the fragmentary human remains (photo by P. A. McAnany).

Buck and Christa Cesario supervised the excavation of the passageway and found a dense scatter of human bone at the contact between the construction collapse and the ancient floor surface. The bones are associated with ceramics that Sandra L. López Varela (Universidad Autónoma del Estado de Morelos) has identified as Terminal Classic and include the remains of both adults and children. An adult incisor with a jadeite inlay suggests that the remains are those of high-status individuals. Clearly disarticulated prior to deposition, this discovery is suggestive of ritual sacrifice and may be a reflection of the unsettled political conditions of Terminal Classic times in the valley and throughout many parts of the Maya area.

Simultaneous to the passageway excavation, Steve Morandi examined the second pyramid complex that is situated less than 100 meters from the west bank of the Sibun River.

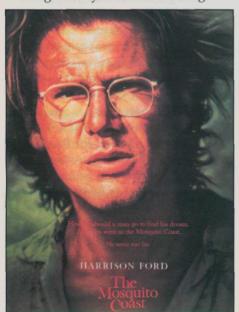
Exposing the front face of a 7-metertall pyramid, Steve determined that several building phases underlay the pyramid's final phase of construction, not an unusual situation in Maya architecture. In the debris of the final



XARP members hard at work in the laboratory at the Yam Wits field camp.

architectural phase, Steve found a sherd decorated with a finely incised fragment of a hieroglyph that likely is part of the Emblem Glyph of a site called Naranjo. An ancient Maya capital that straddles the modern Guatemala-Belize international boundary, Naranjo was the gateway to the rich resources of Belize—including cacao—and it is highly significant that reference to Naranjo has been found in the Sibun Valley.

The proximity of the monumental complexes of the Hershey site to the river and their lack of appreciable elevation above the floodplain have spurred us to investigate the geomorphology of this situation. Thomas F. Bullard (Desert Research Institute, Reno, Nevada) is an expert in tropical fluvial geomorphology and is conducting a study to assess the long-



Movie poster of Harrison Ford advertising the Mosquito Coast movie.

term dynamics of the Sibun River. One question being investigated is whether or not this area experienced massive drought toward the end of the Late Classic period and if increasingly drier conditions encouraged the establishment of the Hershey site on a low-lying floodplain.

The 2003 field season moved us a little closer to piecing together the deep history of the Sibun River Valley. The season yielded new and exciting archaeological finds, but no stay in Belize is complete without a nocturnal visit to the Belize Zoo where, in the blackness of the night, howler monkeys roar and jaguars pace. One night, as our group entered the zoo, we were confronted with photos of Harrison Ford, who is a staunch supporter of efforts to preserve Belize's wild life and rainforests. No doubt, the time he spent on the untamable Sibun River played a role in cultivating this worthwhile activism. Of all the roles we have seen Ford play-eccentric, adventurer, archaeologist with dubious ethics—his best role by far is the one he plays in real life. In this mission, neither he nor anyone else can "go too far" to protect the endangered tropical species of The Mosquito Coast and the archaeological remains that are housed within it.

Patricia A. McAnany is an Associate Professor in the Department of Archaeology and Director of the Xibun Archaeological Research Project in Belize. Eleanor Harrison-Buck and Steven Morandi are graduate students in the Department.

Faculty/Research Fellow News

Faculty News

Mary Beaudry was honored with a Benjamin Meaker Visiting Fellowship at the University of Bristol, England for two weeks in the fall of 2003.

Clemency Coggins has been working with ICOM (International Council of Museums) on a "Red List" of seriously endangered Cultural Property of Latin America, ancient and colonial. The listing will be disseminated to all museum members, customs services, diplomatic services, international agencies, and other bodies that deal with cultural property. Coggins met with representatives from ICOM and Latin American countries in Bogota, Colombia, in April 2002, and with the editorial board in Mexico City in July 2003, and was charged with developing the categories: Maya polychrome ceramics and Maya sculpture.

Ricardo Elia, who received a \$40,000 grant from the National Endowment for the Humanities to support his sabbatical research in 2003-2004, was elected a Visiting Scholar at Harvard University's Anthropology Department June 1, 2003 through June 30, 2004.

Paul Goldberg has received an Alexander von Humboldt Stiftung Research Award in recognition of his past accomplishments in research and teaching. The award, one of the highest academic honors conferred by Germany, makes it possible for him to do research in Tübingen during the spring 2004. In March 2003, Professor Goldberg participated as the geoarchaeologist on the Mossel Bay Archaeological Project in South Africa and again spent part of June and July, 2003 at Palaeolithic site of Pech de l, Azé, in Dordogne, France. He was invited to present with Trina L. Arpin (Ph.D. candidate) a paper entitled "Micromorphology, Sediments, Artifacts," at the Fryxell Symposium in honor of George "Rip" Rapp during the 68th Annual Meeting of continued on page 6

continued from page 5 the Society of American Archaeology held in Milwaukee, Wisconsin, in April 2003. He taught for two weeks during July 2003 at Boston University's Field School in Menorca, Spain, focussing on geoarchaeological aspects of the site and environs, as well as petrographic study of the pottery and the deposits, both currently underway. The pottery is being studied and analyzed by Boston University archaeology senior, Amanda Burns, who is taking an independent study course with him during the academic year 2003-2004. Goldberg also organized an International Workshop on Soil Micromorphology at Boston University's Sargent Camp in October 2003 (see his article, page 30 in this issue of Context).

Norman Hammond has been elected a Visiting Fellow of All Souls College, Oxford University, where he will spend his sabbatical leave during Spring 2004. During the summer of 2004 he will be a Visiting Fellow at Clare Hall, Cambridge University's center for advanced study, and also at the McDonald Institute for Archaeological Research in Cambridge. In the Fall 2003 he was an invited lecturer at Dartmouth College and Vanderbilt University, and participated in a Dumbarton Oaks workshop on Remote Sensing in the Maya Lowlands. He also presented a paper (with Gair Tourtellot, Research Fellow) entitled "Serendipity, Settlement, and Seibal," at the 68th Annual Meeting of the Society of American Archaeology held in Milwaukee, Wisconsin, in April 2003, and he served as a discussant during the Palenque session at the same conference. A French-language edition of his book on ancient Maya civilization, Mayas: les cités de la forêt, has appeared in simultaneous French, Belgian, Swiss, and Canadian editions in the series Les Grandes Civilisations published by Sélection de Reader's Digest. A German edition will follow in December 2003.

Professor Hammond has been invited by the British Academy to give the Reckitt Archaeological Lecture for 2006. The Reckitt Lecture

is the Academy's biennial presentation by a distinguished scholar; recent lecturers have included Lewis R. Binford. Professor Hammond's lecture, which will be on some aspect of Mesoamerican archaeology, will be published in the *Proceedings of the British Academy*. He was elected a Corresponding Fellow of the Academy in 1998.

Patricia McAnany has been awarded a National Science Foundation Grant for her research on the political economy of chocolate production in the Sibun Valley of Belize, Central America. The grant for the year 2004 is the fourth year of funding for an interdisciplinary archaeological project that includes archaeological survey and excavation as well as geomorphological, botanical, and palynological research.

McAnany, on behalf of her research team, was invited to deliver a paper on research in the Sibun Valley at the 2003 conference on Belizean Archaeology held in Belize City during the first week of July. The conference was well attended by archaeologists, tour guides, and Belizean press and Professor McAnany gave interviews for local television and radio stations.

Professor McAnany delivered a paper, entitled "Social Memory Materialized in Ritual and Work," at the annual meeting of the American Anthropological Association in Chicago during November 2003. In the paper she discussed the means by which ancient Maya residents at a site called K'axob generated and maintained social identity in the face of a changing political environment. She also presented a commentary on the papers delivered in a AAA session entitled "Mesoamerican Ritual Economy."

Grace Lin, an English/Journalism major at Boston University and webmaster for Professor McAnany's research website, has embarked on an exciting new design for the web page that includes images and updates on McAnany's research teams. In the near future, visitors to the website will be able to download interim reports as pdf files. Visit the site at www.bu.edu/tricia!

During the past year, Robert Murowchick was named an Honorary Associate, Needham Research Institute (East Asian History of Science Trust, Cambridge, U.K.), and Visiting Research Fellow, Gudai Wenming Yanjiu Zhongxin (Research Center on Ancient Civilizations), Chinese Academy of Social Sciences, Beijing, China. His numerous public lectures included the keynote address for the inauguration of the Tong Enzheng Memorial Library, Mansfield Freeman Center for East Asian Studies at Wesleyan University, Middletown, CT (April 10, 2003); and an invited lecture at the Department of Art and Archaeology and the Tang Center for East Asian Studies, Princeton University, entitled "Bulls, Snakes, and Drums: Changing Perspectives on the Archaeology of the Dian Culture in Yunnan, Southwest China" (April 3, 2003). Grants received during this past year included a Humanities Foundation grant for the preparation of a special issue of The Journal of East Asian Archaeology on "Archaeology in Viet Nam;" a grant from the Asian Cultural Council (New York City) to support archaeological research programs in Viet Nam; a planning grant from the Andrew Mellon Foundation to support the development of ARC/Base, a multi-lingual web-based bibliographic database of Asian archaeology; and a three-year grant from the Henry Luce Foundation to support the research and writing of the Non-Ferrous Metallurgy volume of the series, Science and Civilisation in China (Needham Research Institute and Cambridge University Press).

Curtis Runnels was honored last April when he won the Frank and Lynne Wisneski Award for Excellence in Teaching, which was presented by the College of Arts and Sciences at Boston University. In addition to his duties as Editor of the *Journal of Field Archaeology*, Runnels has continued with a program of fieldwork and publication. In May he co-directed, with Eleni Panagopoulou of the Ephoreia of Palaeoanthropology and Speleology (Athens, Greece), a survey of Mesolithic sites near Nauplion, Greece. Runnels and Research Fellow



Professors Norman Hammond (left) and Curtis Runnels examine a Palaeolithic handaxe found at Hoxne (England) by John Frere in 1797. The handaxe is now in the collections of the Society of Antiquaries of London.

Priscilla Murray, along with graduate students Susan Allen and Kevin Mullen, took part in the survey. The team discovered fourteen new Mesolithic sites, several of them very rich, with more than 10,000 artifacts, and doubling the number of known sites from this period in Greece. In June, Runnels and Murray were in Albania conducting research on Palaeolithic and Mesolithic sites in the Mallakastra region as part of survey research directed by Professor Jack Davis (University of Cincinnati) and Muzafer Korkuti (Institute of Archaeology, Tirana). This survey has documented sites from ten thousand years ago back to the last interglacial period, more than one hundred thousand years ago. Their research continues, but the results of their study of the survey and excavation data from the Mesolithic site of Kryegjata in the same area has been accepted for publication by the Journal of Mediterranean Archaeology. Other recent publications by Professor Runnels include: "The Origins of the Greek Neolithic," in Albert J. Ammerman and Paolo Biagi, eds., The Widening Harvest: The Neolithic Transition in Europe. Boston: Archaeological Institute of America, 2003; "The History and Future Prospects of Paleolithic Archaeology in Greece," in John K. Papadopoulos and Richard M. Leventhal, eds., Theory and Practice in Mediterranean Archaeology: Old World and New World Perspectives. Cotsen Advanced Seminars 1, The Cotsen Institute of Archaeology, University of California at Los Angeles, 2003; (with Mehmet Özdoğan), "The Palaeolithic of the Bosphorus, NW Turkey," Journal of Field Archaeology 28 (2001): 69-92; with Tjeerd H. van Andel, "The

Early Stone Age Prehistory of the Nome of Preveza (Greece): A Palaeoenvironmental and Archaeological Study of Landscape and Settlement," and with Evangelia Karimali and Brenda Cullen, "The Early Upper Palaeolithic Site of Spilaion and Its Implications for the Study of Artifact-Rich Surface Sites," in James Wiseman and Konstantinos Zachos, Landscape Archaeology in Southern Epirus, Greece, Vol. 1, American School of Classical Studies at Athens, Hesperia Supplement 32, 2003

James Wiseman was elected a Foreign Member of the Macedonian Academy of Sciences and Arts in May 2003. He will present an inaugural lecture in the coming year at the Academy in Skopje, capital of this former republic of Yugoslavia. Wiseman co-directed excavations at Stobi, a city of ancient Macedonia and capital of a Late Roman province, from 1970 to 1981.

From mid-march to mid-April, Wiseman was based in Athens,

Professor James
Wiseman and Lucy
Wiseman, Managing
Editor of Context, on
the pier at Saranda,
Albania, following a
visit to ancient
Buthrotum in April.
Jim gave lectures for the
Archaeological Institute
of America and the
Explorers Club on the
cruise.

Greece, as recipient of a grant from the Alexander S. Onassis Foundation for research on the Nikopolis Project, an interdisciplinary survey of southern Epirus, Greece, which he codirected with representatives of the Greek Archaeological Service from 1991 to 1996. During his stay in Athens he gave the following lectures: "Results of Surface Survey in the Region of Nikopolis: From the Period of Roman Domination to Mediaeval Times," for the Institute for Byzantine Studies, National Hellenic Research Foundation, and "Archaeology, Geology, and Remote Sensing in Southern Epeiros, Greece," for the Alexander S. Onassis Foundation Scholars Association in the lecture hall of the Onassis Foundation. He also gave a talk on methodology and documentation of fieldwork in landscape archaeology for a research group organized by Professor Evangelos Chrysos, Director of the Institute for Byzantine Studies, at the National Hellenic Research Foundation.

In April Wiseman gave lectures for groups from the Archaeological Institute of America, the Explorers Club, and Harvard University on a cruise that visited Venice and Ravenna, Italy, cities on the Dalmatian coast of Croatia, the ancient city of Buthrotum in Albania, and numerous sites in Greece. Lucy Wiseman, Managing Editor of Context, also participated in the trip as co-host, as did Faanya Rose,

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Free Flight: A Short Memoir

by Al B. Wesolowsky

Today we are accustomed to aerial photography taken with radio-controlled cameras suspended beneath unmanned helium balloons-graceful, aerodynamic vessels ghosting in preternatural silence over the landscape, obediently following a ground tether. These white and silver beauties, elegant, economical, and simple, require helium or hydrogen for lighter-than-air flight. If these gases are not available, there is propane cheap, widely available, and relatively safe. The problem with propane is that you have to set it on fire, as was the case with an unruly, complicated, hot-air contraption that lurched aloft on a summer morning in 1973. We were in our fourth season at Stobi, an hour north of the Greek border in what is now the Republic of Macedonia, an ancient city that had seen Alexander's successors, the legions of Rome, and its eventual doom in the approach of northern barbarians. Now it was going to be seen from aloft, by cameras, in a view that would reveal the city to archaeologists in a novel way.

That was the theory. Everything works in theory.

Huge by today's postmodern standards, the Stobi Project involved a dozen or more archaeologists, scores of workmen, several nationalities, and excavations in a half-dozen diverse areas: Christian basilicas, a Roman theater, extramural cemeteries, a city gate, and disparate residential areas. That year we were joined by the Whittleseys, Julian and Eunice, of Wilton, Connecticut, balloonists and photographers.

Julian was a small, slender, weathered Norman Rockwell type of fellow, with pure white hair and an inability to suffer fools. Eunice, his wife, resembled a matching Mrs. Rockwell but was slightly more tolerant of us. Julian's long career as an architect and urban planner was complemented by an interest in archaeology and applications of technology for photography and remote sensing. He had

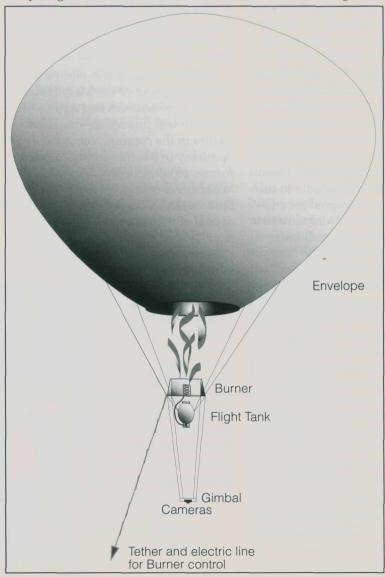
worked in Greek archaeology before WW II and by the early 1970s his Whittlesey Foundation was developing and applying air-borne imaging technology for use on archaeological sites.

Since his apparatus, mostly custom-built, was expensive, few excavations could afford it and none had the training to use it. Julian and Eunice would pack the gear into a small station wagon and, like a pair of elderly gypsies, drive from site to site in the Mediterranean area. Each summer they would have an itinerary and dig directors, such as Jim Wiseman at Stobi, were to have a plan of targets to be photographed and several tanks of hydrogen on hand.

Since no hydrogen was available in the Stobi area, Julian was unable to deploy his simple, spherical hydrogen balloon. His backup plan was the hotair balloon fueled by propane. "It's more complicated," he said. "It has to carry a fuel supply which becomes depleted during flight. Fuel runs out, the balloon crashes. Have to keep track of time aloft. Should work, though."

"Should work?" someone asked.
"Should. We've never used it in the field before." But surely we could manage a technology that had been around since the Montgolfier brothers in 1783. Hot air goes in, balloon goes up.

Since there were only the two Whittleseys, a few of the excavation staff were seconded to them. We purchased several tanks of household propane, each about 80 cm tall with a valve and fitting for a short hose that



Schematic of the hot-air balloon. Fully inflated with all risers extended, it was about 15 m from the top of the Envelope to the cameras. The fuel regulator on the Burner was controlled by a thin electrical wire that was loosely wrapped around the Tether. Even at full bore, the actual gas flame was no longer than a meter, but the hot air so generated was a torrent.



The hot-air balloon in the Theater, moments before its Free Flight. The Envelope is fully inflated, the fuel supply now coming from the Flight Tank, and the crew is checking the Gimbal and cameras. Crew (l to r): Tom Eals, Julian Whittlesey (back to camera), Chuck Ehrhorn, and Al B. Wesolowsky. Spectators: Virginia Anderson-Stojanović, Eunice Whittlesey, and (walking to left) Carolyn S. Snively.

would normally supply the burners on a kitchen stove, a common domestic arrangement in the Balkans. One of these tanks was going aloft with the rest of the apparatus.

The balloon had several components. The Envelope was made of a bright red flame-resistant fabric and when ready for flight stood nearly 8 m high. Suspended beneath it, from top to bottom, were the Burner, the Flight Tank of propane, and a Gimbal frame that held two radio-operated cameras (color and black-and-white) to be fired in tandem. A flexible hose fed gas from the Flight Tank through a preheater coil and then to the nozzle of the Burner. A solenoid regulator on the gas line had two settings. "Low," the default, gave only a small,

pilot-light flame for the other setting; "full-bore open" produced a roaring flame that sent a plume of hot air up into the Envelope.

For inflation, the balloon was unrolled and ground crew held open the base of the Envelope with outstretched arms. The Burner, for the moment connected not to the Flight Tank but to a Ground Tank, was aimed parallel to the ground and at the opening of the Envelope. Hot air inflated the Envelope and it would sway upright, tugging at the risers and lifting the Burner off the ground where it could be held in place for final preparations. The Burner hose was quickly disconnected from the Ground Tank and reattached to the Flight Tank, the Flight Tank valve was opened, and the flame was reignited with a welder's sparker. This ensured as full a tank as possible for the flight itself, but required quick work with wrenches and fittings lest the air in the Envelope cool and the balloon collapse on Burner, Flight Tank, and ground crew. Finally, the cameras would be attached and the whole affair would ascend on a tether.

Once aloft, buoyancy was maintained by periodically opening the regulator which produced a bellowing flame that sent more hot air into the Envelope. The solenoid regulator was operated via an electrical wire loosely wrapped around the Tether and connected to a manual switch and dry cells mounted on a carrier held by Eunice. The balloon would ascend with the switch held at full bore; once at mission altitude, the switch would be released but engaged periodically to replenish the hot air and keep the balloon at the proper altitude.

Once at altitude, the balloon would be "steered" by the Tether rope that had one end made fast to a stanchion on the Burner frame by the Tetherman. That person would pay out the Tether until the correct altitude was achieved and then guide the craft simply by walking towards the target, towing the balloon after him. When observers judged the balloon, with its cameras suspended beneath it, to be over the target (a particular trench, say, or a building) they would call out and the cameras fired by radio control. A conventional strobe flash was mounted facing down with the cameras. Its discharge, visible from the ground, signaled that an exposure had been made. The strobe was not intended to illuminate the target; it was much too high for that. So, flying a mission, as Julian called it, required teamwork and coordination. An efficient route was mapped out to pre-selected targets. The Tetherman and Eunice had to walk briskly over uneven ground, scrambling over bits of ancient walls and around excavations, keeping one eye on the balloon and the other on their footing.

Once the balloon was aloft we had continued on page 10

continued from page 9

to keep track of the time and tug the apparatus back down to earth before the Flight Tank ran dry. Should the air in the Envelope cool off, the balloon would accelerate in an uncontrolled descent, likely smashing expensive cameras and tearing the Envelope on trees and shrubs.

The two cameras had motorized advance mechanisms and were fitted into a custom-made Gimbal frame that ensured that the focal plane was always parallel with the earth below. All told—Envelope, Burner, Flight Tank, Gimbals, and cameras—the apparatus was worth thousands of dollars and countless hours of development and refinement.

At Stobi we had the additional complication of a military base and artillery range immediately across the Vardar, one of the two rivers that bordered the site. This was during the Cold War and while Yugoslavia was not a member of the Warsaw Pact, it was plenty communist and took its security seriously. The military authorities were less than thrilled with the prospect of aerial photography by foreigners but Jim negotiated a reluctant agreement with them. They insisted, however, that military observers be with us during all flights and present in the on-site darkroom while the black and white film was developed. The observers were told that we needed to fly immediately after sunrise in order to have calm, windless conditions and strong raking shadows for the aerial views.

We assembled in pre-dawn gloom in the orchestra of the Roman theater. Apparatus, equipment, supplies—all in order. But there was no sign of the military observers. Julian decided to begin pre-flight procedures.

He selected for the post of Tetherman Chuck Ehrhorn, an architect, who also happened to be a sailor and knew all about ropes and knots. What better person to be in charge of rigging the Tether to the Burner platform and to handle the line? I helped Julian with the Burner during inflation, with my chief task to disconnect the Burner hose from the Ground Tank at the right moment and reconnect it to the Flight Tank. I was given

a 15 mm open-end wrench to keep handy in my pocket. Others stood ready to hold open the Envelope during inflation. Still no observers. Julian, not a patient man in the best of circumstances, chafed at the prospect of delay as the sun rose above the horizon.

"Let's get it inflated," he said. We had the Envelope up in short order, switched over the fuel supply, and connected the Gimbal to its risers. Tom Eals, that season's photographer, secured the cameras in their frame and unlocked the swivels. The Envelope was full, the flame was roaring, the balloon was ready for flight, held back only by my grip on the Burner roaring and tugging over my head. Eunice was working the Burner switch, Chuck had one end of the Tether fast around his middle and the coiled line ready in his hands. Tom reported that the cameras were good to go. Still no observers. Julian decided that this was somehow Jim's fault and glared at him."Jim! We can't wait!" Julian barked.

Jim looked back towards the site entrance out by the road. Nobody. He took a deep breath, sighed, and nodded assent. Julian gave the order for liftoff.

It was majestic. From the marbled arcs of the Theater up she went, calm and stately. The brilliant red Envelope rising in the clear morning sky, the sound of the Burner diminishing as it gained altitude. Chuck paid out the Tether. The cameras swung delicately some five meters beneath the Burner. It's working, we thought. This thing is actually going to work. How about that!

The Tether was graduated with small red flags that indicated that the balloon was nearing its planned mission height of 150 m. Godlike, serene, the balloon floated far above us wondering mortals on the floor of the Theater, in the shadow of the Earth. At altitude, the day's young sun made the red fabric of the Envelope glow against the soft, blue sky.

Chuck ceased to pay out the line and gripped it firmly. Then he made a small, strangled sound that might have been "Oops." We turned to him and watched in stupefied horror as 150 meters of line cascaded over him, looping in tangles onto his shoulders. "That's not right," Julian said.

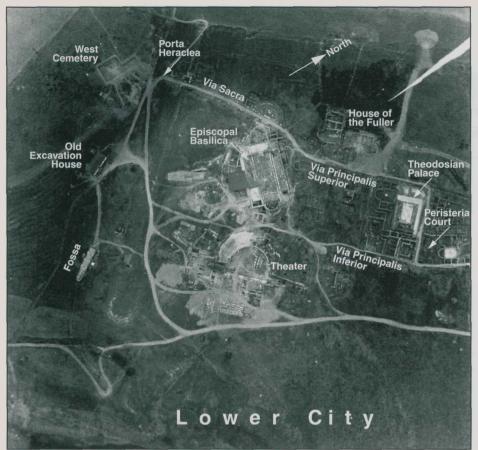
The Tether had come untied. The sailor's knot had failed. There was now an untethered balloon over our heads in free flight. The thin electrical line for the Burner regulator snapped and joined the Tether in a pile on ground. We looked up, gawping nestlings watching our parent fly away, straight up. And up. And up. Until it became the merest speck in the sky.

Julian turned to Eunice and said "Might as well start shooting pictures. I'd never dare to send it that high deliberately." We could just barely see the strobe flashing away as the balloon ascended to perhaps 1000 m. Later, Jim said that he was wondering what the tardy observers were going to make of this. "What if the balloon drifts over the army base? They have artillery! They'll view this as a hostile act and shoot it down." Our modest foray into remote sensing now had "international incident involving gunfire" written all over it.

Julian turned to Tom, Jim, and me and explained quickly. "The Burner regulator is now stuck in low. When the air in the Envelope cools off everything will drop quickly. The cameras will hit the ground first. If that doesn't wreck them, getting hammered by 30 pounds of Flight Tank and Burner will.

"Tom, you catch the cameras before they hit. Then move out of the way. Jim, Al, you keep the rest of it from braining Tom." No general facing catastrophe ever made a quicker plan than did Julian in that instant.

We stared straight up, trying to gauge any movement of the balloon in the still morning air. The silence grew. Was the balloon getting larger? Hard to tell. Yes, it was descending. It was also drifting to the east and south with a soft breeze. Some workmen sitting on a nearby fallen column enjoyed the spectacle. Later, Ginny Anderson-Stojanović reported that they began a chorus. "Oooh, look! It's going towards the river! It's going to fall into the river!" If it passed over the river it would be in military airspace.



Aerial view of the western sector of Stobi with selected toponyms. The Free Flight originated in the Theater and ended somewhere beyond the bottom of the photograph. The white streak in the upper right is the Tether. Dirt paths, such as the one looping around the Theater and going up to the Porta Heraclea, are especially visible.

We took off, galloping across broken terrain to the southeast. We sped across fields and through brush, leaping the berm of a buried city wall, trying to keep up with the balloon as it sank more and more swiftly. We would look up at the balloon to correct our course, then down at the ground to keep from breaking a leg, then back up, all the time running. Julian and others formed a posse that streamed out of the Theater after the three of us.

We saw that it was going to hit just a little ahead of us. Jeeze, this thing is really coming down fast!

Short of the river, good, but it was going to land very hard. It had drifted perhaps 300 meters from the Theater, well into the rough ground of the Lower City. It was going to crash a few steps in front of us.

We put on a final burst of speed. So did the balloon. I was right behind Tom when he grabbed the Gimbal at chest level. He kept running for a few

meters on. A second later I grabbed the Burner and kept it from slamming into the ground as Jim caught the Flight Tank. Then the world became a red, smothering haze as the Envelope collapsed atop Jim, me, and some bushes. Jim released the Flight Tank and backed away with his arms lifted, trying to keep the Envelope from snagging on the shrubs. The gas was still burning in the low setting, threatening the fabric. I jammed a gloved hand over the nozzle. Ouch! Hot! But the fire's out. I jerked my hand away and raw propane began spewing out from the nozzle, permeating the air beneath the Envelope. I groped beneath the Flight Tank for its shutoff valve.

It's got to be down here somewhere. Let's see...right-hand thread, upsidedown... must go...um...? No, won't turn. Maybe the other way...? Yes!

By then the posse had arrived. I could hear Julian. "Tom! You saved

the cameras? You others, help Jim with the Envelope! Lift it off the bushes gently! Al? Where's Al? Al, are you in there?"

"Yes! Yes!" I croaked, exhaling raw propane. "Don't anyone light a match, okay?"

I stood still while the others untangled the balloon from the shrubs and lifted away the Envelope. The apparatus was undamaged. The Envelope was gathered into a long, bundled strand and carried back to the Theater atop the heads of a file of bearers. I followed with the Burner, Jim followed me with the Flight Tank, and Tom was at the rear of the procession with the Gimbal rack. Julian carried the cameras himself. Could be he didn't trust us.

The military party arrived about this time and our Yugoslav colleagues filled them in. The officers were unhappy with our unauthorized launch but seemed to relax when told about the near-disaster. "These foreigners cannot be spies," they may have thought. "We have nothing to fear from this mob of bunglers."

We quickly prepared for another flight and this time Chuck's triplechecked knot held. The experience gained during the Free Flight gave us confidence, oddly enough. Nothing worse could happen to us, and the flights went smoothly and with good photographic results. The film from the Free Flight was truly remarkable, showing the entire site and a good part of its surrounds from an altitude that the hot-air balloon was never intended to have reached. The military observers looked at the film, decided we represented no threat to anyone except ourselves, and drove off, never to reappear.

In subsequent seasons more missions were flown, using hydrogen balloons and air foils, with the Whittleseys and with other balloonists. All those craft proved well-behaved, simple, even disappointingly tame once you've chased a hot-air balloon in Free Flight.

Al B. Wesolowsky is the Managing Editor of the Journal of Field Archaeology and is working on a novel set in the Aegean. Not surprisingly, archaeology is involved.

Student/Alum News

The Editors thank Polly Peterson for gathering much of the news about student, faculty, and research fellows for this issue of Context.

The following students received fellowship/grant awards for dissertation research.

Susan Allen was awarded a grant of \$15,027 from the Wenner-Gren Foundation for Anthropological Research, Inc. to aid her research on "A Living Landscape: Palaeoethnobotanical Research at the Bronze and Iron Age Site of Sovjan, Albania".

Irina Harris was awarded a fellowhip from the Social Sciences Research Council to supplement the fellowship awarded by the International Research & Exchange Board. She is studying the nomadic Khazar Empire of the Eurasian Steppe between the 10th and 7th centuries A.D. Through foot survey, remote sensing using multi-spectral images, and test excavations she will examine the nature of war, trade, and cultural exchange between the Khazar Empire and the Islamic Caliphate in the area known as the Black Sands in the republic of Kalmykia, northwest of the Caspian Sea.

Ilean Isaza was awarded \$12,000 by the National Science Foundation for her dissertation research on "The Ancestors of Parita: Pre-Colombian Settlement Patterns in the Lower La Villa River Valley, Azuero Peninsula, Panama."

Alexia Smith was awarded \$12,000 by the National Science Foundation for her dissertation research on "Agricultural and Environmental Change in Syria during the Bronze and Iron Ages."

Christopher Dayton, Ph.D. candidate, was awarded an "Outstanding Teaching Fellow Award" by the College of Arts and Sciences for the 2002-2003 academic year. The awards are based upon recommendations from each individual's departmental faculty. The honor carried with it a gift certificate to Barnes and Noble Bookstore for \$100.

Boston University's Department of Archaeology was well represented by



At the awards ceremony, Chris Dayton (center) listens as Norman Hammond (left), Acting Chair of the Archaeology Department, speaks with Dr. Jeffrey Henderson, Dean of Boston University's College of Arts and Sciences.

68th Annual Meeting of the Society of American Archaeology held in Milwaukee, Wisconsin, in April 2003. Presenters are listed here with the titles of their papers. Susan Allen (Ph.D. candidate), "Prehistoric Wetland Agriculture at Sovjan, Albania." Trina L. Arpin (Ph.D. candidate), "Taphonomy of a Pre-Pottery Neolithic A structure at Dhra'. Jordan," which was co-authored with Ian Kuijt (University of Notre Dame) and William Finlayson (London Museum of Archaeology). Margo Muhl Davis (M.A. 2001, Ph.D. candidate), a poster entitled "Anatomy of a Red Ochre Feature from Quincy, Massachusetts." David Manuel Carballo (B.A. Boston University, Ph.D. candidate at UCLA) and Heath Anderson (B.A. 1999; Ph.D. candidate at Pennsylvania State University) with Jason Patrick De Leon (Pennsylvania State University), presented "Technology and Access: Chipped Stone from Middle Formative Tlaxcala, Mexico." Francisco Estrada-Belli (Ph.D. 1998. Assistant Professor at Vanderbilt University), on "In the Land of Cival and Holmul: Investigation of Preclassic to Classic Maya Geopolitics in Northeastern Peten" and "New Data on the Early Classic in the Holmul Region: The La Sufricaya Murals," with John Tomasic (Vanderbilt University). Elizabeth Gilgan (M.A. 2000; Archaeological Institute of America), on "An Archaeological Heritage Management Plan: Belize as a Case Study." Shannon Plank (Ph.D. 2003), "Questioning 'Mul Tepal' at Chichen Itza: Evidence for Political Hierarchy

from the Dwellings of the Gods."

current and former students at the

Jeffrey Rose (M.A. 2000; Ph.D. candidate at Southern Methodist University), "Station One: An MSA Bifacial Foliate Industry in Northern Sudan." Daniel Welch (M.A. 2001; Geophysical Survey Systems, Inc.), "Missionary Work: GPR and its Place in Public Archaeology." Carolyn White (Ph.D. 2002), "Buttons, Buckles, and Beads: Visual Identities and the Construction(s) of Personal Appearance at the Sherburne Site, Portsmouth, New Hampshire." Dr. White also chaired the session. Terressa Davis, Boston University undergraduate archaeology major, spoke about her field experience last summer in a talk entitled, "Temples and Tourists: The Economic Potential of Cambodian Archaeology." Her illustrated talk was hosted by the International Center for East Asian Archaeology and Cultural History on November 5, 2003. Terressa is currently working on her senior thesis, in which she explores the



Terressa Davis and Stephen Acabado (archaeologist at the University of the Philippines) take in the view at Angkor Wat, Cambodia.

interplay of economics, tourism, and historic-site preservation in Cambodia.

Irene Good (B.A. 1985 and M.A. 1986) is the recipient of a Guggenheim Fellowship for the 2003-2004 academic year. Her project is entitled "A Social Archaeology of Textiles." During this fellowship year, she will conduct archaeological textile research on mummies from the Tarim Basin in Xinjiang, China, and publish her work. Good is a research and curatorial Associate at Harvard University's Peabody Museum of Archaeology and Ethnology. She received her Ph.D. from the University of Pennsylvania in 1999. In her doctoral thesis, "The Ecology of Exchange: Textiles from Shahr-i Sokhta, Eastern Iran," she examines traces of textile evidence in the archaeological record ranging from a detailed study of impressions in plaster, to textile-craft-related objects and small finds with their context, to actual textile and fiber analysis of extant remains. This work has revealed over a millennium of prehistoric wool fiber development (that is, from ca. 3100-1800 BCE) in the deserts of Seistant in the Indo-Iranian borderlands, in what are, to date, the earliest traces of sheep's wool in the world. Good has also worked on other archaeological textile projects, including a study of



Irene Good

early silk outside of China and preliminary studies of the textiles and clothing of the Tarim Basin mummies. Her current work at Harvard University's Peabody Museum has focused on the large and important textile collection from the Andes, as well as on materials from Central Asia and Iran.

Astrid Runggaldier (M.A. 2003) presented a paper in Spanish entitled "Investigaciones Preliminares en el Conjunto Palaciego "Tigrillo", San Bartolo" at a conference held at the National Museum of Archaeology and Ethnology in Guatemala City, July 21-25, 2003. The paper focused on the results from the first season of excavation of a Maya palace complex at the Maya site of San Bartolo, directed by Dr. William Saturno (University of New Hampshire), where some Preclassic murals have been found. She has worked on the staff of the excavations since the beginning of the project two summers ago.

Polly Peterson (M.A. 2001) was the recipient of a 2003 Boston University Graduate Student Organization Travel Grant to present a paper on "The Identification of Cave Formations in Archaeological Contexts" at the the 68th Annual Meeting of the Society for American Archaeology held in Milwaukee, Wisconsin, in April 2003. She was an invited participant in a symposium on the Maya Underworld at the same conference. In her doctoral research she seeks to shed light on ancient Maya exploitation of caves in the Sibun River Valley, Belize. The paper, co-authored with Allan Cobb (Archaeological Consultants of the Pacific), highlights the many occurrences of stalagmites, stalactites, and other speleothems in ritual deposits in surface architecture excavated by the Xibun Archaeological Research Project (see the Xibun article beginning on page 1 of this issue of Context) and calls for more intense investigation of the complementary relationship between ceremonial activities in natural caverns and in man-made temples within settlements. Polly is a Ph.D. candidate in the Department of Archaeology and is the Administrator in Boston



Polly Peterson presenting her paper "The Identification of Cave Formations in Archaeological Contexts" at the the 68th Annual Meeting of the Society for American Archaeology.

University's International Center for East Asian Archaeology and Cultural History.

Nancy S. Seasholes (M.A. 1984, Ph.D. 1994) has published a book entitled Gaining Ground: A History of Landmaking in Boston, The MIT Press, Cambridge, Massachusetts, 2003. She presented an illustrated lecture investigating why and how Boston was transformed by landmaking at MIT on November 6, 2003. Nancy taught a course based on her book at Harvard University Extension in 2002 and will teach the course again in spring 2004. She is also a contributing author to Alex Krieger and David Cobb, eds., Mapping Boston, Cambridge, MA, The MIT Press, 1999, which Nancy says is a coffee-table book of historical maps of Boston. Nancy also serves on the Boston Redevelopment Authority's History Advisory Committee for the development of the Surface Artery parks and heads her own consulting business, mostly devoted to various history projects in Boston.

Donna Yates, undergraduate archaeology major, attended the Boston University field school in Belize during Spring 2003 and spent May excavating in the protoclassic tombs of Building B, Group II at Holmul, Guatemala. She has worked for the past two years as a research assistant in the Center for Archaeological Studies. She will graduate from Boston University in May 2004, and she plans to continue her studies in archaeology on a graduate level.

Nine Days in Baghdad

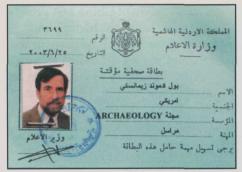
by Paul Zimansky

June 26, 2003

Driving across Iraq's western border is one of my least favorite recurrent adventures. The isolated outpost at Trebail disfigures a stretch of desert already so ugly that it is actually improved by vistas of wrecked cars and mile-long lines of idling trucks. Most of the excitement here comes in the form of anxiety. One used to wait for hours in traffic and in crowds standing before desks, waiting for permits which appeared in what seemed like random order. Somehow, one muddled through. When you finally drove off—still many hours from any conceivable destination like Baghdad, Damascus, or Amman—a certain euphoria was apt to bubble up at having made it through once again, but while you were there it was no fun at all.

As I approached Trebail from the Jordanian side on the morning of June 26, 2003, however, I was more curious than apprehensive. I had not been here since 1992, and the border guards, customs officials, and procedures of the old days were gone. So was the whole Iraqi government.

I had three companions on this trip: my wife, Elizabeth Stone of Stony Brook University, Zainab Bahrani of Columbia University, and a driver, whom we met for the first time at 4:00 a.m. that morning when he picked us up from the American Center for Oriental Research in Amman. Elizabeth had been to Iraq in May with a National Geographic team and was appalled by the devastation she saw. She had promised to return in a month with supplies to help the Iraq Museum get back on its feet. At the time, she had no idea where the money would come from, but it proved to be no problem at all. The looting of the Museum during the conquest of Baghdad was met with an international outcry and many people, ourselves included,



Paul Zimansky's Jordanian-issued press credentials, which proved to be unnecessary for getting into Iraq.

were desperate to do something to help. The Andrew Mellon foundation and private donors immediately came forward with offers to purchase computers, cameras, satellite phones, and office supplies.

In April and May there was considerable confusion about how much damage the Museum had actually sustained. The initial press reports claimed that the Museum's entire collection had been carried off, and appeared to be validated by pictures of empty galleries, shattered statuary, and broken cases. The Museum was secured by the US military on April 16 and on April 24 Col. Matthew Bogdanos and his team began an

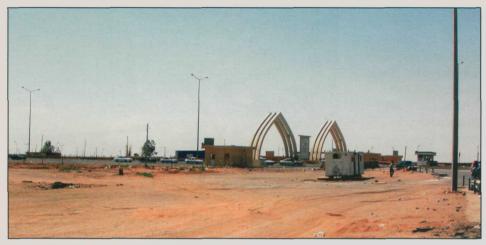




investigation. The story of total pillaging proved, fortunately, to be a considerable exaggeration. Most of the portable objects in the galleries had been removed to a secret location by the Museum staff before the siege of Baghdad began. There had been some looting of storerooms, and certainly a great deal of vandalism, but the all-important cuneiform tablet collection was untouched. The number of famous display pieces known to have been stolen was in the dozens, not thousands. With their offices trashed and electricity lacking, the Museum staff lacked the basic tools for taking an inventory of the storerooms so that a comprehensive assessment of the damage was retarded. What is more, no one in those insecure days was willing to specify where the bulk of the collection actually was. In reaction, some reporters then swung to the other extreme, contending that only a few objects were missing, and ignoring the thousands of pieces taken from the storerooms. The accounting is still going on today, and although the losses are considerable—particularly in the category of easily smuggled and clandestinely marketable cylinder seals—they are not as bad as they could have been.



(1) Top Left: Trashed teaching museum of the Baghdad University Archaeology Department. (2) Bottom left: Smashed statuary in the Museum galleries. Photo courtesy of Zainab Bahrani. (3) Top right: Smashed bottles in Museum storeroom. Photo courtesy of Zainab Bahrani.



Trebail border post from Iraqi side.

Efforts to recover stolen materials have also enjoyed a remarkable measure of success.

In any case, our mission was put on a much higher level a few weeks before we set out. The David Packard Foundation had offered the State Department a million dollars to help rebuild the Museum, but the State Department was having difficulty working in Iraq. This was partly because, despite having taken over the country, we had no diplomatic relations with it, and where there is no ambassador, there is no formal way for the State Department to operate. The Defense Department controlled the CPA (Coalition Provisional Authority), so the best way for the State Department to get things to Iraq was to use outsiders, like ourselves, as subcontractors.

We met with Dr. Bonnie Magness-Gardner of the State Department in Amman, and went on one very big shopping binge. It's an adventure spending a million dollars in a couple of days, and we found we weren't really up to it. A lot of the things we wanted to buy were simply unavailable, because of other shoppers for Iraq in recent weeks. We went to the Toyota dealer, where we were greeted with open arms by the manager, but were told that the nearest vehicles were on a ship in Aqaba, the Jordanian port on the Red Sea.

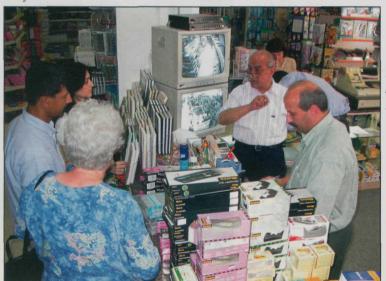
"Don't go to Iraq," the manager told us grimly. "It's a bad time to go to Iraq."

Thus we were feeling a trifle vulnerable as we approached Trebail, but

the border crossing itself was an anticlimax. As we came to the Iraqi side, a young American soldier peered in the window and rather forlornly asked, "Is there anyone in this car who can speak Arabic and English?" Zainab, who had been born in Baghdad and had lived there until she was eleven, volunteered her services. "Boy am I glad to see you," he said. "Can you help me with these people? I can't seem to make them understand." He pointed to a group of Iraqis standing a short distance away. They were attempting to walk across the border, and the rule was that you had to go in a car. The soldier explained this to Zainab and she explained to the Iraqis. As far as I know, that was the only rule at the border that day. We needed no visa, carnet, customs inspection, or stamp in our passport. The soldier simply waved his hand and we were on our way.

The eight-hour trip from Trebail to Baghdad was suspenseful, but ultimately uneventful. Our driver kept pulling up beside other vehicles on the three lanes that led toward our destination, conducting some sort of dialogue with their drivers by hand signals. Eventually we became a group of three cars, not going exactly in tandem, but sticking pretty close together. This was the way drivers defended themselves from robberies and car-jackings on the dangerous stretch of the road. Meet some people who look trustworthy as you move along, drive three abreast occupying all the lanes so that nobody can drive around and block you, and forge ahead.

The dangerous stretch was felt to be between Ramadi and Falujah. As we approached, the driver said he had a good hiding place for valuables in the car and we should give him all our money. We thought about it, decided what the hell, pulled out our money belts, and gave him ten thousand dollars or so. Everyone carries lots of cash into Iraq since it is strictly a cash economy with no banks, checks, or credit cards. The driver hid all this and we moved on. Although he was clearly on edge, the landscape did not look particularly threatening, with clear views in all directions. We saw helicopters over Falujah, but there was no visible patrol of the highway, which is the primary link between Iraq and the rest of the world. As soon as we passed Falujah, continued on page 16



Buying office supplies in Amman, Jordan.

continued from page 15 the driver broke out into a broad smile and extracted our money from the hiding place.

We reached Baghdad and drove by the square where the statue of Saddam had been ceremoniously pulled down, noting a new abstract artwork in its place. Someone struggling with a spray paint can and the English language had written "job donne, go home" on its pedestal. We soon found ourselves comfortably installed in the Petra Hotel, a small establishment just off Sadoun Street, not far from the Palestine and Sheraton hotels where reporters had congregated during the war. There was no electricity or air conditioning when we arrived, but the manager assured us that there soon would be. They had their own generator, but liked to turn it off in the afternoons to give it a rest. There was a working restaurant in the hotel, but the aromas of a lake of sewage in the street curbed our appetites. Across from the hotel was a "supermarket" the size of a seminar room which sold goods we only dreamed about before the Gulf War, like Egyptian beer. We could pay for things with dollars, which was just as well, since we had not had time to buy any dinars.

June 27

The Museum was shut today, as Friday is the "weekend" in Arab countries. After a good twelve-hour sleep I went for a walk around town with my camera. Photography was always viewed with a certain suspicion in the Saddam regime, even if it was only of statues in public parks, so this isn't something I had done before. In a park near the Tigris, I saw a man and his elegantly dressed wife digging beside a lamp post. Were they recovering something they stashed there? It all seemed peaceful, but I wasn't quite sure how to read things. As I returned to the hotel, I heard a man shouting to his wife to get off the main street—people were stealing handbags at gunpoint. I didn't see anybody doing that, but with no police and nobody to whom one might report a holdup, what was to

"Every man did that which was right in his own eyes." Street vendors and traffic congestion in Baghdad in our initial attempt to reach the Museum.



stop them? On the other hand, we were able to walk to the Sheraton and check our e-mail. Even with power disruptions and unstable connections we were more in touch with the rest of the world than we had ever been in Baghdad before. We had lunch at Candles, a restaurant that used to cater to the western-oriented. Its bar had been removed and the wooden booths replaced by linoleum-covered tables, but the food was still wonderful. We tried to go there again for dinner, but learned that restaurants are not open in the evenings—it is too dangerous for anyone to go out.

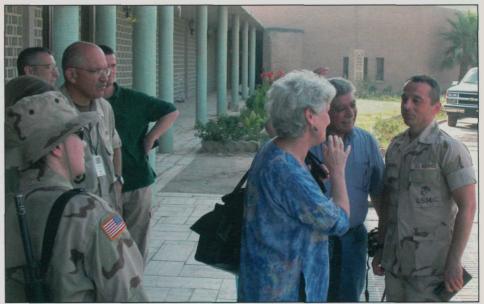
June 28

In our drive to the Museum, our chauffeur got lost immediately, snarled us in a swirling mob of pedestrian traffic, tried to convince us that we really wanted to go to the Baghdad City Museum (an institution

we had not known existed), and refused to believe the directions we gave him. Driving in Baghdad was exciting enough without this sort of thing: there were no working traffic signals, no police, no firm convictions about which side of the road one should drive on, and at each intersection "every man did that which was right in his own eyes" (*Judges* 21. 25). It was, in fact, total anarchy.

There was an armored personnel carrier at the Museum gate, and an extraordinarily tall and friendly American soldier told us that they had been expecting us to appear. We asked him if he was hot in all that combat gear, and he admitted that getting posted to Baghdad wasn't the best thing that had ever happened to him. All the time we were there, a group of soldiers was quartered in a building on the Museum grounds.

We were ushered into a meeting of the principal administrators of the



Elizabeth Stone and Donny George greeting Colonel Matthew Bogdanos in front of the Iraq Museum. Sergeant Pinero is the tallest figure on left.

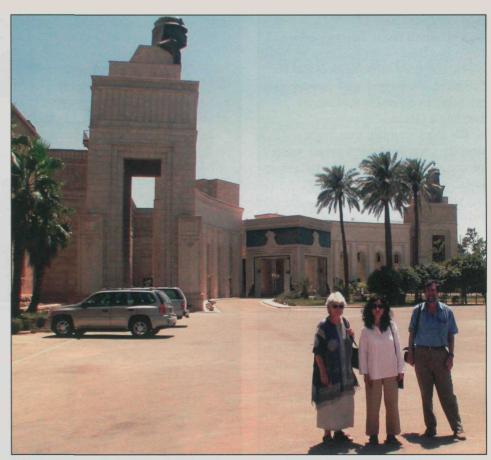
Museum and the Department of Antiquities, and then taken through the Museum by Lamia al-Gailani Werr, an expatriate Iraqi who had returned as a representative for the CPA. The galleries were still mostly empty except for the really large and immovable pieces of sculpture, many of which were still covered with large sheets of foam rubber for protection against bombs. We were shown where looters rolled the huge bronze disk of the Basetki statue down a staircase, smashing each stair as it went, and the hole in the side of the building through which they absconded with it. Although things had been cleaned up since the looting, there were still broken cases and shattered sculptures scattered about. We went into one group of basement storerooms, which actually looked quite neat. The thieves had gone straight for the numismatic and cylinder seal collections, which were kept in locked cases, since these are easy to transport and sell on the illegal antiquities market. They had keys but apparently dropped and lost the ones for the coins. Thus they had to content themselves with the seals, more than five thousand of which are still missing and remain the most serious losses to the Museum's collections.

June 29

Rabiah al-Qaisy, the acting Director of Antiquities, invited us to lunch at a restaurant in the elegant Mansour district. Our driver said he could not park there because there were too many car thefts, so he arranged to reappear after an interval to pick us up. As we were leaving the restaurant, a group of American soldiers in combat gear came in and sat down at a table to order a meal. They looked uncomfortably out of place, and the Iraqis told me it was getting more unusual to see them in this kind of informal interaction with civilians.

June 30

Sergeant Pinero, one of the team working on recovering objects stolen from the Museum, invited us for lunch at Saddam's largest palace,



Elizabeth Stone (left), Zainab Bahrani (center), and Paul Zimansky at Saddam's Republican Palace, now headquarters of the CPA.

which now serves as the headquarters of both the CPA and the military. Parts of it had been bombed during the war, but plenty was left. The mess hall now occupied the room where Saddam's cabinet used to meet around a huge polygonal table, but we took our plates of hot dogs and French fries into the hall and ate them under some ornate inscriptions carved in marble. They looked like quotes from the Koran, but Zainab told me they were actually the wisdom of Saddam himself. After lunch Pinero took us on a tour of the building, which was all similarly lavish and in bad taste. Saddam built scores of palaces during the embargo, and wound up with something like seventy-nine of them all told.

In the afternoon, we visited the United Nations headquarters to see if we might be allowed to fly back to Amman on one of their flights. It all came to nothing because there was no plane on the day we wanted to travel. I am haunted by the thought that many of these kindly and dedicated

people may have been killed when the building was bombed a few weeks later.

July 1

The truck with our supplies had just pulled up when we reached the Museum in the morning. Although a group of young Iraqis decked out in Midas Furniture Company red hats and t-shirts came to help set up the furniture, the offices hadn't been refurbished and there was no point in assembling the furniture until they were.

When it came time to drive back to the hotel, our driver failed to show up. The general feeling was that cabs were not safe and the hotel was several miles from the Museum, so we were at a bit of a loss. With no telephones it is hard to figure out what is going on in such circumstances. We later learned that the car had broken down. Sergeant Pinero generously offered to take us to the hotel. This

contined on page 18

continued from page 17 was no small favor. Driving around town is a hazardous business for soldiers, and they do so armed and on full alert. We were acutely aware that we were in a vehicle that might become a target.

We slept soundly that night, despite what we later learned was a prolonged gun battle in the neighborhood.

July 2

In the years immediately before Saddam's invasion of Kuwait, Iraqi archaeologists discovered a series of queens' tombs dug below rooms in the Neo-Assyrian palace at Nimrud. The spectacular collections of gold and jewelry they contained were put on display briefly in 1990, and then were put into a vault of the National Bank for safekeeping during the Gulf War. Apparently they stayed there, although those of us outside of Iraq did not know this and worried very much about their fate during the looting of the city in April. The CPA decided that the world needed to be reassured that the treasures were safe and still in Iraq, so they planned an exhibit of the gold to which the press would be invited.

When we reached the Museum this morning, the box containing the gold had just arrived under heavy guard. Normally an exhibition takes weeks or months to set up, and this was all being done on the spur of the moment. The box with the gold was too big to sit flat in the back of the vehicle that was used to transport it, so they had tipped it on one end. The conservators were aghast. I was very impressed with all the firepower that was being brought in to protect it. A squad of soldiers was detailed to spend the night in the Museum while the gold was there and they had weapons that were a good deal heavier than the customary infantry M-16's.

Elizabeth and I spent most of the day on a task that was unrelated to the Museum, which was totally tied up in preparing the exhibit anyway. In early June, USAID had put out a request for American universities to



Nimrud gold exhibit on July 3. Elizabeth Stone is talking to Lamia al-Gailani Werr in photo at left.

Exhibit case with some of the Nimrud gold, below.



propose cooperative projects with Iraqi universities. Stony Brook, Elizabeth's institution, decided to enter the competition with a project that included both public health and archaeology, the latter being specified by USAID as an area of interest. In order to strengthen the proposal, we visited two Medical Schools and Baghdad University's Archaeology Department and obtained agreements of cooperation with Iraqi scholars.

We were greeted by pretty much the whole faculty of Baghdad University's Department of Archaeology, which was in session to make up for classes missed during the war. They had almost nothing to work with. Their library had been destroyed, their classrooms burned, and their teaching museum trashed. There were no slide projectors. The department never had more than one computer, and that one had been stolen. The contrast to the Museum, which had received international attention and into which aid was now pouring, could not have been more stark. We came away with the feeling that this was a place where a little money would do a lot of good.

July 3

At ten a.m. a throng of reporters, camera crews, staff members, diplomats, soldiers, and even a few erstwhile thieves poured into the Museum for the Nimrud gold exhibit. It was a media circus, with everyone



Army patrol returning to the grounds of the Iraq Museum.

interviewing everyone else. At one point I noticed a particularly large mob, and saw that it had formed around Donny George. Ahmed Chalebi walked by with a rather sinister-looking bodyguard, and Paul Bremer, head of the CPA, put in a brief appearance. The exhibit lasted exactly two hours, after which the gold was taken back to the bank vault. A real opening is probably still years away, and will depend on the restoration of Iraq's civil society.

July 4

Donny George and Lamia, who were on their way to a convention in London, had offered us a ride to Amman in a hired car and the feeling was that we should get off as early as possible. Donny's family dropped him at our hotel at six a.m., but the driver had misunderstood his instructions and we had to wait hours before he and Lamia showed up. Once again, with no telephones, we had no idea what was going on. Trebail had changed since we last saw it, turning back into something like its old self. There were now many more soldiers and long lines of waiting traffic on the Iraqi side. We pulled up to the end of a triple line of cars and waited for about an hour during which nothing much happened—priority seemed to go to trucks. Finally Lamia and I decided to see if we could do something, and walked up to the sergeant who was guarding the intersection of

the truck line and the car line. I told him we were CPA and State Department, and he sent me on to another sergeant, who summoned a third from the old customs building. Lamia showed him her CPA identity card, and I mentioned that Elizabeth and I were contractors to the State Department. I told him I knew that probably wouldn't cut any ice with the Defense Department, but he said it cut ice with him. "Where are you from?" he asked. "Iowa," I said—it seemed like the most innocuous choice among places I am from in one way or another. "You guys sure gave us trouble last year," he said. "I'm from Ohio State." It took me a couple of seconds to realize he was talking about football, and I hope I didn't let on that I hadn't given a hoot about the Hawkeyes in years. In any case, he waved us to the head of the line, someone stamped our passports with a stamp that said "exit", and we were across the border into Jordan. There, Donny George wandered off and found the head of customs, whom he had come to know on a previous trip, and once again we were whisked through the formalities. Our driver too had his contacts, and was able to get clearance for the car in record time. Had it not been for these tricks, we might well have spent six or eight hours at the border. It looks like that is going to be the rule from now on.

We left Iraq with the impression that the Museum was actually in pretty good shape. Supplies were flowing in and stolen artifacts were being recovered. But the Museum won't really function again until Iraq emerges from anarchy, and we were not encouraged by what we saw on that score—it was hot, dirty and dilapidated, with people downright angry about the lack of electricity, communications, gasoline, and security. American soldiers, while absolutely essential to keep what order there was, stuck out as an alien presence. We will be going back into this mess frequently over the next couple of years and feel strongly that we must do everything possible to see that the reconstruction does not fail. It would be a very great pleasure actually to be able to work there again, piecing

USAID Grant Zimansky and Stone Return to Iraq

Professor Paul Zimansky has been granted a period of leave from teaching at Boston University to join a team which has been awarded a U.S. government grant of \$4,100,000 to develop academic programs in Iraq in archaeology and public health. The one-year award—made by the U.S. Agency for International Development (USAID) in support of the Coalition Provisional Authority's overall reconstruction efforts in Iraq—is designed to provide tools for Iraqi universities to develop modern academic programs and curricula in the two areas. Professor Zimansky will work alongside his wife, Professor Elizabeth C. Stone of SUNY Stony Brook University and a Research Fellow in Archaeology at Boston University, who is the Project leader. The team, which includes faculty from Columbia University in New York and Oxford University in England, will also have Iraqi partners in Baghdad University and Mosul University.

The award for the project was announced in October 2003, with the prospect of renewal for two more years for a total award of nearly \$11 million. The project specifically involves teaching workshops for Iraqi scholars who have been cut off from academic literature for more than a decade, restoring libraries and teaching facilities in Iraq, and bringing Iraqi graduate students to the United States for

advanced training.

Professor Zimansky will be reporting back on their experiences in a future issue of Context.

together the remains of an ancient civilization, rather than a modern

Paul Zimansky is a Professor of Archaeology at Boston University.

Christopher Roosevelt Appointed Assistant Professor

Christopher Roosevelt was appointed Assistant Professor in the Department of Archaeology, effective September 2003. Professor Roosevelt received both his M.A. and Ph.D. degrees from Cornell University in the History of Art and Archaeology. His Ph.D. thesis (May 2003) was entitled "Lydian and Persian Period Settlement in Lydia."

From 1995 to 2002, Professor Roosevelt served as an excavation supervisor at Sardis, Turkey, where he also participated in geophysical survey of the unexcavated areas of the site. He was a regular member of the American School of Classical Studies in Athens, Greece, in 1998-1999, and during the spring he supervised an excavation area for the School's excavations in Corinth. Professor Roosevelt has also conducted numerous geological surveys. In Honduras, he surveyed marble and limestone sources for the Ulúa Style Marble Vase Project, under the direction of Dr. Christina Luke. As an undergraduate at Colby College, he participated in a palynological study and collected marsh-cores as part of the Bermuda Palynological Project. Most recently, he conducted an extensive archaeological survey of the region of Lydia in Western Turkey and developed a GIS of Lydian and Persian period settlements and burial mounds. It was this field work on which his dissertation was based.

Before coming to Boston University, Professor Roosevelt had teaching experience at Cornell in Classical Archaeology and Art History. While at Cornell, Roosevelt assisted in the Aegean Dendrochronology Project, helping to create accurate chronologies for eastern Mediterranean archaeological sites. From 2000 to 2002, he worked in the Manisa Usak Museum in Turkey, conducting inventory, analysis, and comparison of Lydian and Persian artifacts. He was a visiting scholar at Turkey's Ege University in the Department of Protohistory and Near Eastern Archaeology 2000-2001.

Recent papers he has presented are: "Tumulus tomb complexes, distribution, and significance in Lydian and Persian period Lydia" (AIA, New Orleans, LA, January 2003) and "Looting Lydia: the destruction of an archaeological landscape in western



Chris Roosevelt in the Turkish village of Koyundere, near the borderlands between Lydia and Mysia, during extensive survey of tumuli, or burial mounds, 2001."

Turkey" (World Archaeological Congress, Washington D.C., June 2003).

His primary areas of interest are Greek and Roman art and archaeology, cities and topography of Asia Minor, Bronze and Iron Age Anatolia (especially Lydian, Persian, and Greek interactions), and GIS applications in archaeology. During the Fall Semester 2003, Professor Roosevelt taught AR 330 Greek Archaeology and AR 331 Etruscan and Roman Archaeology. In the spring, he will be teaching AR 100 Great Discoveries in Archaeology and AR 730 Seminar in Old World Historical Archaeology.

Accompanying Professor Roosevelt to Boston is Dr. Christina Luke, his wife, who has been appointed a Research Fellow in the Department of Archaeology. Dr. Luke specializes in Mesoamerican archaeology, in particular the archaeology of Honduras and the Yucatan peninsula. She has worked for the U.S. State Department as a member of the Cultural Property Committee.

Congratulations

Christopher Roosevelt and Christina Luke on the birth of Noah Luke Roosevelt on December 3, 2003. Noah weighed in at 8 pounds, 12 ounces, and was 22 inches long.



Noah Luke Roosevelt

And to Maria Sousa (Senior Program Coordinator in the Department) and David Sousa, proud parents of AJ (Joseph), who was born on August 27, 2003. Harley Sousa, AJ 's big sister, tells us that he weighed in at 10 pounds, 5 ounces and was 22 inches long.



AJ Joseph Sousa

Archaeology Commencement 2003



Before and
After
Left: before the ceremonies begin, students review programs. Right: after the ceremonies, a group photograph of faculty and students was taken.





The smile on Jennifer Anne Boerner's face shows how happy she is to be holding her diploma. L-R: Professors Patricia McAnany, Paul Zimansky, and Clemency Coggins share in her happiness.



Dru Evan McGill with Professor Ricardo Elia.



Susan Marie Mentzer receiving her diploma from Professor Patricia McAnany.

Bachelor of Arts

Victoria Alvarado

Jennifer Anne Boerner, magna cum laude Department Prize for Excellence Meredith Allison Carroll, magna cum laude Jonathan Ian Chaiken

Double major with Biochemistry
Molecular Biology
Michelle Charest, cum laude
Sumra Shahin Khan, magna cum laude
Wallis Jennings McSherry Lord

Evageline Manias, cum laude,
Double major with Classical

Civilization

Dru Evan McGill, summa cum laude $\phi *$ — Susan Marie Mentzer, summa cum laude * —

College Prize for Excellence Double major with Earth Science Hillery Midkiff

Double major with Anthropology Kevin Michael Mitchell Karena Kate Phelps

Mandy Ranslow, magna cum laude Michelle Roberson, cum laude

Alejandro J. Rodriquez Richard Sullivan

Ana Tam

Triple major with Philosophy and Religion

Jelane Marie Wallace, cum laude

Andre Zakari Kathryn L. Zmrzlik

φ Phi Beta Kappa

* Independent Work for Distinction

—Trowel Award for Achievement

Master of Arts

Karin Dunwoody Astrid Runggaldier

Doctor of Philosophy

Alexandra Chan Chantal Esquivias Britt Hartenberger Shannon Plank





Shannon Plank (top right) with Professor Norman Hammond and Alexandra Chan (bottom left) with Professor Mary Beaudry show off their new doctoral gowns after the College of Arts and Sciences' Ph.D. hooding ceremonies.



Britt Hartenberger poses with her family after the College of Arts and Science's Ph.D. hooding ceremonies.

Center/Department Activities

The Center for Archaeological Studies and the Department of Archaeology co-sponsored several lectures and other events during the spring and fall, 2003. There were also archaeological field schools held in the Sibun River Valley in Belize and on Menorca, Spain (see pages 1-5 and 24-30, respectively). Several of the events are included below.



Dr. Valeri I. Guliaev, Professor of Archaeology and Historical Sciences at the Russian Academy of Sciences, Moscow, lectured on March 18, 2003, on "The Scythians: New Archaeological Discoveries in the Middle Don area of Southwestern Russia."



In April 2003, Dr. Mary Miller of Yale University lectured on "Reconstructing the Maya Murals of Bonampak, Mexico." At the reception held in her honor after the lecture, she chats with Professor Ian Graham of Harvard University who is an expert on Mayan inscriptions.









Faculty, staff, and students enjoying the "Welcome Back" reception held by the Department of Archaeology at the beginning of the fall semester, 2003. Top: (l-r) Professors Mary Beaudry and Christopher Roosevelt; Professor Curtis Runnels, Trina Arpin and Priscilla Murray. Bottom (l-r) Eric Vrba and China Shelton; Ghazale Jamsheed and Professor Rafique Mughal.



Dr. Ofer Bar-Yosef (left) shares information with Professor Paul Goldberg during his visit to Boston University on March 25, 2003, to lecture on "New Views on the Origins of Agriculture in the Near East." Dr. Bar-Yosef is the MacCurdy Professor of Prehistoric Archaeology at Harvard University.



Dr. Dougald O'Reilly, Faculty of Archaeology, Royal University of Fine Arts, Phnom Penh, Cambodia, presented a lecture on "The Origins of Angkor: Research on the Cambodian Iron Age" at the International Center for East Asian Archaeology and Cultural History in October 2003.



Professor Fred Kleiner lectured on "Searching for What Can't Be Found: The Problem of Lost Monuments and the History of Ancient Art" for faculty and students. The speaker (left) is shown in post-lecture discussion with three members of the audience, Professors Clemency Coggins, Norman Hammond, and James Wiseman.



In October 2003, Dr. Jianjun Mei (left), Post-Doctoral Fellow of The Needham Research Institute, Cambridge, U.K., discusses central asian metallurgical techniques with first-year archaeology student, Brook Abdu. Dr. Mei's talk was entitled "Issues in the study of Bronze Age and Iron Age Cultures in Xinjiang, China," and hosted by the International Center for East Asian Archaeology and Cultural History at Boston University.





At a reception held in her honor, Professor Amalia Pérez-Juez, Assistant Director of Boston University's Madrid Program and Co-Director of the Field School in Menorca, chats with Urbain DeWinter, Associate Provost, Division of International Programs, and Christopher Roosevelt, Assistant Professor of Archaeology. At the same reception, hosted by Professor and Mrs. Wiseman, Erik Goldstein, Professor of International Relations, speaks with Professor Jeffrey Henderson, Dean of the College of Arts and Sciences.





As part of the Alexander Papamarkou Lecture Program of the Cycladic Art Foundation of Athens and New York, Dr. Alexander Mazarakis Ainian of the University of Thessaly, Greece, presented two lectures at Boston University in November 2003: "Inside the Adyton of an Archaic Greek Temple: Excavations at Kythnos (Cyclades)" and "Excavations at Homeric Graia (Oropos)." At receptions held for him, Professor Hugh Sackett, Groton School, and Mrs. Sackett discuss Greek archaeology with the speaker (on right in photo at left). On the right, Dr. Mazarakis Ainian speaks with Professor Julie Hansen, Chair of the Department of Archaeology, and Professor Fred Kleiner, Departments of Art History and Archaeology.

Archaeology and Social History

From Prehistory to Mediaeval Times at Torre d'En Galmès on Menorca

by Amalia Pérez-Juez, James Wiseman, Paul Goldberg, Kevin Mullen, and Simón Gornés

The monumental remains of a large Iron Age settlement distinguish the archaeological site of Torre d'En Galmès (Fig. 1) on Menorca in the Balearic Islands of Spain (Fig. 2). The history of the occupation of the site, however, covers more than 2500 years, from some time in the Bronze Age of the second millennium B.C. to the Christian conquest of the island in 1287 A.D. The long history of the site includes periods of abandonment, spatial expansion, and changes in material culture that reflect the social and political



Figure 1. Aerial photograph of Torre d'En Galmès. North is at the top of the photo. Photo: Museu de Menorca.

changes attendant upon the succession of different cultures that came into control of the island. In order to contribute to the study of those changes, Boston University archaeologists undertook a new project at Torre d'En Galmès in 2002. Our stated aim has been "to investigate residential and community life in the settlement over time" (Wiseman and Pérez-Juez 2001/2002:4), and we have focused on a Talayotic residence, designated Building 2, with a large open area adjacent on the west (Fig. 1), which may have served some communal needs. Our continuing work on Building 2 provides us the opportunity to study the use of domestic Talayotic architecture over some two millennia, and to investigate how different people reused this space and adapted it to their own cultural needs and way of life.

Such an investigation requires not only a rigorous system of data collection, but also one that is broad-based, drawing on written sources and laboratory analyses. The investigation also requires the application of scientific techniques/tools as aids in the field and in the lab, especially for the recovery and analysis of geomorphological and palaeoenvironmental data. Examples of many of these will be presented in this report on the first two seasons of work at Torre d'En Galmès, the summers of 2002 and 2003. In all phases of the research we have involved students of the Boston University Field School in Menorca, thereby aiding in the training of a new generation of researchers into the human past.

Background: The Site

Pottery and other artifacts of the Pretalayotic period found by earlier excavators in various parts of Torre d'En Galmès indicate that the site may have been first settled at the beginning of the second millennium B.C. What is more, caves and rock-cut tombs of the Pretalayotic period were later reused in the Talavotic settlement (ca. 1200-100 B.C.), and the best preserved Pretalayotic dolmen tomb on the island, Ses Roques Llises ("The Smooth Rocks"), is located just south of the settlement (Fig. 3). Unfortunately, radiocarbon dates are lacking, so neither Ses Roques Llises nor the Pretalayotic finds at Torre d'En Galmès can be closely dated. On the other hand, radiocarbon dates and recent excavations at other sites have now pushed back the date of the

Figure 2. The Balearic Islands extend NE from near the Spanish coast. The two

largest islands are Mallorca (from Latin "Major" = "greater") and Menorca (from Latin "Minor" = "lesser"). Ibiza and Formentera, smaller islands originally forming the Pityusae Islands, lie closest to the Spanish coast. Map adapted from Enciclopèdia de Menorca X (2000), Fig. 43, p. 52.



Figure 3. Ses Roques Llises in 2002; views with field-school students, from south (right) and west (below). Jelane Wallace stands beside the tomb entrance in the photo at right, and Charles Chapin examines the rear vertical slab in the photo below.





earliest inhabitants of Menorca towards the middle of the third millennium B.C. (Calvo Trias and Guerrero Ayuso 2002:57–78).

Torre d'En Galmès is situated in the south-central part of Menorca. With an area of about 5 hectares, it is one of the three largest Talayotic sites on the island, along with Trepucó, about 4.85 hectares) in the southeast and Son Catlar, approximately 3.75 hectares, near the western end of the island (see Fig. 5) (Plantalamor Massanet 1991:251-257). The three towns may have exercised some control over their respective regions of the southern part of the island, as some scholars have argued on the basis of their size, relative prosperity, and location (discussion in Catalan in Enciclopèdia de Menorca IX (2001), pp. 52–60). Three talayots, the monumental stone structures, often conical in shape, from which the cultural group takes its name ("talayot" is derived from the Arabic word for "watchtower,"), rise from the highest point of the ridge (Fig. 1). These are among the earliest structures of the Talayotic settlement, and other early structures

surrounded the group. A *taula* (= "table" in Catalan, the language of Menorca), a religious precinct distinguished by a central vertical stone shaft crowned by a stone horizontal member, lies at the southern foot of the central, largest talayot (Fig. 4). The taula was partially excavated in

the 1940s and re-excavated in the 1970s (Rosselló-Bordoy 1986). A bronze statuette of Imhotep, an Egyptian deity, was discovered during the latter excavations, and helped to confirm the hypothesis that the taulas of Menorca served a religious function. The statuette, which has a hieroglyphic inscription on the back, probably dates to the fourth century B.C.

The settlement expanded downslope south of the taula, where a number of ruined structures have been visible since antiquity (Fig. 1); only a few have been excavated. Residential architecture is represented by circular houses, most of which were probably built between the fourth and second centuries B.C. Other structures and spaces include streets, industrial areas, communal areas of undetermined function, and hypogaea and natural caves for funerary use.

By the fourth century B.C., Torre d'En Galmès was a flourishing town, perhaps the central power among the smaller communities and rural settlements of the south-central part of the island. During this period strong commercial pressure was coming from outside the island. Manufactured products arrived from Ibiza (see Fig. 2), Iberia, Italy, and from parts of the Eastern Mediterranean. The

continued on page 26



Figure 4. Taula at Torre d'En Galmès. View looking south from the central talayot. The central clearing visible downslope is the possible communal area west of Building 2.



Figure 5. Topographic map of Menorca. Roman towns are indicated by red dots; selected other sites mentioned in the text are indicated by yellow dots. The map was adapted by Kevin Mullen from Enciclopèdia de Menorca IX (2001), Fig. 16 on p. 41.

continued from page 25 increase in trade provoked a change in the local economy and created significant social tensions, which may have consequently increased the hierarchical structure of the society.

Menorcans were doubtless among the thousands of slingers, famed in antiquity, who served as mercenaries in the Carthaginian armies against not only the Greek cities of Sicily in the fifth and fourth centuries, but also against the Romans in the three Punic Wars, which eventually resulted in the destruction of Carthage itself in 146 B.C. The islands, indeed, gained their Latin name, Baleares (from the Latin ballein = "throw") from the slingers; they had earlier been called the Gymnasiae (the "Naked Isles") by the Greeks, because, it was said, the natives went about naked in the summer (Diodorus v.17). We know of no immediate retribution against the islanders after the demise of Carthage, but in 123/122 B.C., claiming that Balearic Islanders were pirates, Q. Caecilius Metellus at the head of a Roman fleet conquered the islands, winning for himself the surname Balearicus (Florus xliii). The Carthaginian towns of Mago and

Iamo, at the eastern and western ports respectively, became Roman urban centers, and in 73 A.D. were made municipia, receiving a formal Roman constitution. A third port on the north side of the island was also developed and a town established, Sanisera (Fig. 5). The Balearic Islands thereafter remained under Roman control until the late fifth century A.D.

Boston University's excavation in Building 2 near the south end of the town (see Fig. 1) is revealing evidence for continued occupation, or reoccupation, after the Roman conquest until perhaps the third century A.D. There is little evidence here for the later Roman period (third -sixth century A.D.) or for early Mediaeval times, but there is a significant amount of pottery dating to the period of Muslim domination of the island in the upper deposits of Building 2, and it seems likely now that the building was modified by the inhabitants of that time.

Menorca during the Muslim Period

In 711 A.D. an Islamic army of Berbers crossed from Morocco into

Spain, captured Seville and Córdoba, smashed through the rest of Spain, toppling the Visigothic Kingdom, and even pushed into southwestern France. The expansion northward was only brought to an end in 732 when the Muslim army was defeated near Poitiers by the Franks under Charles Martel. A large part of Spain, however, continued under Islamic control for almost eight hundred years. The new state, called Al-Andalus, first with Seville and, from 717, Córdoba as its capital, was consolidated in 756 under an Umayyad prince, Abd al-Rahma ibn Mauwiya. The Ummayyad state, which began as an emirate, became the Caliphate of Córdoba (912-1031 A.D.).

Although there had been some early contact between the Muslim mainland and the Balearic Islands, mainly in the form of raids, the conquest of the Balearic Islands did not occur until 903. Between this date and the Christian re-conquest by Alfonso III of Aragon, in 1287, there were almost four hundred years of Muslim control of the islands. These four centuries of Muslim domination left a deep imprint in the archaeology and toponymy of the islands.



Figure 6. Kevin Mullen, Teaching Assistant, supervises removal of rock debris by crane from Building 2 in 2002.

According to G. Rosselló-Bordoy (1968), the Arabs were not only interested in the strategic location of the islands, but also in their great agricultural wealth and close commercial ties with the Spanish Peninsula. Historians of the tenth and eleventh centuries also recorded interesting comments about the beauty of the islands. The chronicle of Ibn al-Faradi (962-1013), for instance, describes the Balearic Islands:"... the island of Menorca is small but fertile, with abundant cereal and fruit of all types, especially vineyards. The meat is good, with an excellent flavor, much better than in many other places. The oxen stand out, but there are also sheep, although in less number. In summary, Mallorca is good for its industrial and agricultural production, Menorca for its animals and Ibiza for the salt and the wine."

In the early eleventh century the Caliphate of Córdoba disintegrated into independent kingdoms, or Taifas, such as Zaragoza, Seville, and Badajoz. One of these petty kingdoms, the Taifa of Denia (ancient Dianium, on the mainland opposite Ibiza; see Fig. 2), developed into a powerful state under Muyahid (1015-1044), eventually becoming a large maritime empire. A few years after its development, once consolidated as a maritime power, Denia conquered the Balearic Islands, which were renamed the Oriental Islands of Al-Andalus. Menorca shared a brief period of independence in 1086-1115 as part of the Muslim Kingdom of the Balearic Islands, and was governed thereafter from the declining Muslim

power in Spain, by the Almoravids (1115–1203) and their successors, the Almohads, from 1203 until Alfonso III of Aragon reclaimed the island in 1287. On the mainland, the last of the Taifas, the Kingdom of Granada (which also included Andalusia and Malaga), continued from 1238 until 1492.

On Menorca, under the new rulers from Al-Andalus, the old Carthaginian town and Roman municipium of Iamo was renamed Medina Minurga (now Ciutadella), and became the capital and only urban center of the island. The fort defending the port at ancient Mago was occupied, but the city, now Mahón, evidently was not. Besides the tower of the cathedral of Ciutadella, the most impressive architecture surviving from the entire period of Muslim domination is the castle on top of Santa Agueda, the third highest elevation (245 m) on the island (Gomila 1998:22-25, 38-39).

The native population of Menorca, in the meantime, accepted Islamic culture. The inhabitants adopted the new language (Arabic), clothes, religion, food, and even the new types of pottery. And yet, some of these people began to reuse the prehistoric buildings in which their ancestors had lived during Talayotic

and Roman times, as evidenced at Torre d'En Galmès.

Preliminary Results, 2002-2003

To discuss excavations at the site we must first speak of rocks, because Torre d'En Gaumès was a town built mainly of rocks. Some of the rocks were small and others medium-sized, but many were large enough to deserve the designation "megalithic." What is more, the rocks were usually only roughly shaped, when shaped at all, even when they served as wall facings, or jambs and lintels, or piers; even the roofs consisted in part, or mainly, of stone slabs, covered with wood or earth. The masses of rock that result from the collapse of such structures are staggering—literally, if one tried to move them all by hand! We were aided in that task, both in 2002 and in 2003, by a large crane and several skilled workmen (Fig. 6).

Building 2 is a typical Talayotic house of the later phases of the period, as we now can see after excavating the upper deposits of the western side of the structure. It is very similar to its contiguous counterpart to the east, Building 1, which is being excavated by a team from the Amics del Museu de Menorca, "Friends of the continued on page 28



Figure 7. Building 2 from the north room showing its entryway; the courtyard area; an enormous stone pier in the west wall of the courtyard (on right) and the south entrance at the top of the photo.

continued from page 27

Museum of Menorca," at Mahón. It is a circular structure with an entrance facing south, and the inner space is organized around an open courtyard. Access to the house was through a corridor of large stone blocks and a doorway into an open patio where, in

deposits been reached that contain no Muslim pottery, and those may be near bedrock; the floors of Talayotic buildings were frequently below the level of the exterior. One such deposit with sherds of Roman, Talayotic, and Punic pottery, which lay immediately west of the main entrance to the

west of Building 2 for evidence of human activity (Fig. 9). Some kind of communal activity had been suspected because there was no visible evidence of structures, and also because of the unusual and controversial nature of the area immediately to the south. Rosselló-Bordoy had excavated

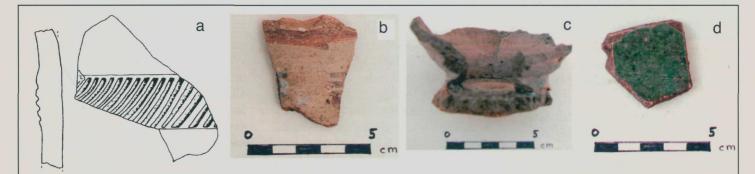


Figure 8. Muslim pottery sherds from Building 2, Stratigraphic Unit (SU) 3001, surface deposit. a) Drawing of body sherd (H. 11.4 cm) with incised lines in a band 4.1 cm wide. Inv. No. TG03-556. b) Body sherd with three painted wavy lines, a typical motif on Muslim pottery. Inv. No. TG03-143. c) Base and lower body of small jar, mended from several pieces. Traces of a green glaze typical of Muslim-period pottery. Inv. No. TG03-310b. d) Sherd with well preserved green glaze. Inv. No. TG03-256.

other excavated examples, a hearth was located. Different rooms, which would have been roofed, were built around the courtyard, and those on the west have now been partially excavated. On the north side of the courtyard there is an entry to another room built at a slightly higher level that could be reached by a short stairway (Fig. 7). The eastern part of the house is still under piles of rocks, which will be removed in the 2004 excavations.

The house underwent some transformation during the Muslim period: some of the openings were closed and new walls were built, thereby reshaping the interior space for different needs. The discovery of a number of terra cotta roof tiles, alien to Talayotic structures, indicate a different kind of roof for at least part of the structure the Muslim period. Sandstone hand mills of typical Talayotic form were reused in several walls, and eight have so far been documented.

The upper deposits of Building 2 contained large quantities of pottery from the Muslim period, often mixed with earlier pottery, especially in the courtyard, where there may be only post-occupational debris. Only in the area west of the courtyard have

building, also contained ash, charcoal, and slag—evidence for metal-working in the vicinity. But so far, use levels in Building 2 have been elusive. The great range of the earlier material, however, including Roman, Punic, Greco-Italic, Ampurian, Campanian, Iberian, and Talayotic, verifies that during all those periods the Menorcans had off-island commercial relationships.

The recovery of a very important collection of material from the poorly known Muslim period has allowed us to draw a complete typology of pottery from the time in which the island was ruled by the Taifa of Denia to the last century of the Arab domination, that is, the eleventh-thirteenth centuries (Fig. 8). In general, we have recovered large bowls and containers (known as ataifores and orzas), which would have been used to prepare the food as well as to eat from. They are large and heavy dishes with very little decoration (string or incised lines in horizontal bands), and were probably made locally. There are also jars, almost all of them with painted decoration, including zigzags, horizontal and vertical lines, and waves.

Ground-penetrating radar was used to test parts of the vacant area

a complex of shallow, rock-cut basins that were connected by shallower channels among deeper rock-cut chambers, including a re-used Pretalayotic tomb (Rosselló-Bordoy 1986). The excavator interpreted the complex as a water-collecting system, which seems unlikely to some of us, since only rainwater could be so collected, and the arrangement seems overly elaborate for that purpose: an



Figure 9. Chris Dayton with Ground Penetrating Radar in field west of Building 2.



Figure 10. Professor Julie Hansen (right) and student assistant Chandra Gioiello sorting through material recovered in water sieving in 2002.

industrial function of some kind seems more likely. GPR, however, revealed no evidence for walls, cisterns, or other constructions in the area west of Building 2, and subsequent test excavations revealed only eroded bedrock. GPR was used with greater success in an open area along the east side of the taula, where a large subterranean cavity was indicated in the analysis of the data. Such

underground areas are known at some other taulas (e.g., at Talati de Dalt, the Talayotic site near Mahón, where Boston University excavated in 2001). Our current permit, however, does not include excavation at the taula, so confirmation must await future investigation.

Palaeoenvironmental studies began in 2002 when Professor Julie Hansen, a Co-Director that year, set up a water-sieving operation at the site (Fig. 10) to recover especially small organic specimens for analysis. She will expand the palaeoethnobotanical program in this coming summer field campaign. A number of slices of stratified deposits were taken within Building 2 by one of us (Professor Paul Goldberg) in 2003, and those samples are now being analyzed in the department's micromorphology lab to inform us about the nature of the deposits and site formation processes. Goldberg and Amanda Burns, one of the field school students in 2003, have also completed a thinsection analysis of several classes of pottery from Building 2, and are now preparing a report. The site grid was developed with Foresight software by Kevin Mullen, Assistant Field Director and Teaching Assistant, who has also begun to include in our EDM survey other buildings at

Torre d'En Galmès. Other senior staffmembers, in addition to the authors, were: in 2002, Christopher Dayton, GPR Survey; China Shelton, Teaching Assistant and Excavation Area Supervisor; in 2003, Professor Norman Hammond, Co-Director; Dr. Amanda Clarke (Research Fellow in Archaeology, University of Reading, U.K.), Lecturer; and Eric Fries, Teaching Assistant and Excavation Area Supervisor.

The Field School program was intended not only to immerse the students in the research activities of the Boston University Project at Torre d'En Galmès, but also to introduce them to the history and culture of Menorca. In addition to field work at the site and work in the lab, therefore, students attended lectures throughout the six-week program, including presentations during visits to several of the important archaeological and historical sites on the island. The photo of students and staff (Fig. 11) with which we close this report was taken in 2003 at Sanisera, near the Roman port, which we visit annually.

Acknowledgments

We express our sincere thanks to the Ministry of Culture of Spain, owner of the site, and the Consell Insular for their authorization to excavate and do research in Torre d'En Galmès. We thank the Amics de Museu and the Museu de Menorca in Maó for their cooperation and the use of various facilities and equipment in 2002. For the use of laboratory and other facilities in 2003, we thank the Universidad de las Islas Baleares in Alayor (Menorca), especially Francèsc Castellà and Antoni Pardo. We acknowledge with thanks the help and cooperation of Peter Joyce of B. L. Makepeace Co. in Boston and Tripod Data Systems, maker of Foresight surveying software. We are grateful also to Marta Ostovich, Ashley Mcintosh, and Donna Yates, of the Center for Archaeological Studies for their help with images and documentation.

Figure 11. Students and staff in 2003. Port of Sanisera in background. Front row: Jackie Veninger, Rob Atkins, Marta Ostovich (Teaching Assistant), Casey Roche, Kate Ramey, Alaina Macauley, and Professor Simón Gornes. Middle Row: Maria Tennyson,

Amanda Burns, Katie Etre, Allie Shartle, Kevin Mullen (Teaching Assistant), Professor Amalia Pérez-Juez. Back Row: Professor James Wiseman, Teaching Assistant Eric Fries, Tracy Spurrier, Krystal Chan, Robin Kao, Nick Limerick, and Professor Norman Hammond.

Amalia Pérez-Juez, Assistant Director of Boston University's Program in Madrid continued on page 30

continued from page 29 and Adjunct Assistant Professor of Archaeology at Boston University, is Co-Director of the Menorca Field School and the Archaeological Project at Torre d'En Galmès with James Wiseman, Director of the Center for Archaeological Studies and Professor of Archaeology, Art History, and Classics. Paul Goldberg, Professor of Archaeology, currently (spring 2004) holds a Humboldt Fellowship and is doing research in Tübingen, Germany. Kevin Mullen, Ph.D. candidate in archaeology at Boston University, is Assistant Field Director and Teaching Assistant in the Menorca Field School. Simón Gornés is Associate Professor of Archaeology at the University of the Baleares, Mallorca.

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Workshop in Soil Micromorphology

by Paul Goldberg and Trina L. Arpin

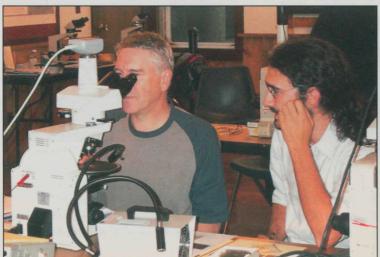
An international workshop in soil micromorphology was held at Boston University's Sargent Center in southern New Hampshire, October 10-11, 2003. Trina L. Arpin, Ph.D. candidate, and Professor Paul Goldberg, both of Boston University's Department of Archaeology, and Dr. Sarah C. Sherwood, University of Tennessee, Knoxville, organized the workshop. Its purpose was to provide a forum for researchers to exchange their ideas and data in an informal setting and to have the opportunity to examine thin sections from other sites and depositional environments.

Micromorphology is a technique used to study archaeological soils and sediment that makes use of thin sections of undisturbed materials. Because of the intact nature of the sample, micromorphological analysis permits the identification not only of the constituents of the material (e.g., mineral and rock fragments, bone, pottery, etc.), but also their physical arrangement. Micromorphology is a valuable tool in geoarchaeology in that it permits us to isolate and understand the complex succession of geological and human processes that are responsible for the build up of archaeological sites and landscapes. The technique has been effectively used at sites from all corners of the world and from all archaeological time periods, ranging from Lower Palaeolithic sites in Africa through

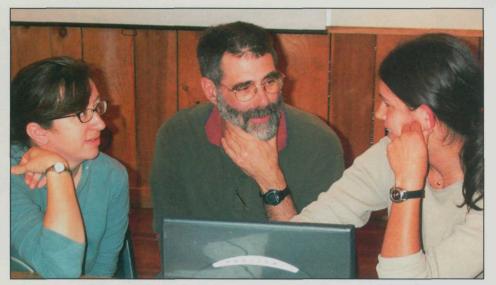
historical-period sites in New England. This technique is frequently used in Europe, and workshops in micromorphology are held there twice a year. New World researchers have been much slower to adopt this technique and Boston University's workshop was the first of its kind to be held in North America.

The workshop opened with an introductory lecture by Dr. Richard I. Macphail (University College London and Archaeology Research Fellow at Boston University), which highlighted some of the goals, methods, and applications of soil micromorphology in archaeology and Quaternary studies. The remainder of the meeting was broken down into morning and afternoon sessions. Mornings were composed of short oral presentations of individual research projects, accompanied by photographs or posters. The rest of the time was spent by participants in analyzing thin sections, accompanied by ad hoc group discussions about specific or general topics.

Participants came predominantly from the United States, but international representatives included researchers from Australia, Canada, Italy, Spain, and the United Kingdom. Several of the participants have a current or past affiliation with the Archaeology Department of Boston University. These include Susan Mentzer (B.A. 2003), Cristiano Nicosia (exchange student from the



Dr. Richard I.
Macphail,
Research
Fellow (left),
and Cristiano
Nicosia examining thin sections from
Bronze Age
sites in Italy.



Trina L. Arpin, Paul Goldberg, and Meredith Hardy discussing the applicability of micromorphology to various sites.

University of Padua 2002/2003), and Heidi Luchsinger (former graduate student).

The talks covered a variety of topics that ranged from issues of soil formation to the use of space at archaeological sites. Laura Roskowski (MSc. student, University of Calgary), for example, used micromorphology to analyze weakly developed soils at the Below Forks site in Saskatchewan. Heidi Luchsinger (Ph.D. student, Texas A&M University) studied site formation of Paleoindian sites in Central Texas, including the important Gault site.

A number of participants are using the technique to identify occupational surfaces. Carolina Mallol (doctoral student at Harvard University) is attempting to delineate living floors at the Lower Paleolithic site of Atapuerca, Spain, using the technique. Dr. Mike Hilton (U.S. Forest Service, California) characterized the microstructure of weakly defined living floors from sites in coastal Alaska. A similar approach was taken by Lara Homsey (Ph.D. student, University of Pittsburgh), who used micromorphology to examine features and floors from the Paleoindian/Archaic site of Dust Cave, Alabama. Another study of anthropogenic deposits was presented by Miranda Semple (Ph.D. student, University of Cambridge) from the Bronze Age site of Chagar Bazav in Syria. She is trying to infer the function of buildings at the site.

As can be seen from this partial list of topics, the technique has wide applicability to archaeological sites and contexts. The organizers hope that future workshops in archaeological micromorphology will attract an even greater number of participants who envision the usefulness of the

technique. The next workshop will likely take place in 2005, although a venue has yet to be determined.

Acknowledgments

We would like to thank a number of persons and organizations for helping to make the workshop so successful. Dick Jones of Micro Video Instruments (Avon, MA) supplied Nikon microscopic equipment and a digital camera, along with valued advice. Professor Ethan F. Baxter, Boston University Earth Sciences Department, arranged for the loan of petrographic microscopes, without which the workshop could not have functioned. Finally, the cooperation and help of Mark Wilson and his staff at the Sargent Center were instrumental in making the workshop a comfortable and enjoyable experience in a beautiful setting.

Paul Goldberg is Professor of Geoarchaeology and Trina L. Arpin is a Ph.D. candidate, both in the Department of Archaeology at Boston University.



Participants at the Boston University Archaeology Soil Micromorphology Workshop: (back row, left to right) Lara Homsey, Miranda Semple, Cristiano Nicosia, Anne-Maria Hart, Mike Hilton, Richard Josephs, Richard I. Macphail, and Paul Goldberg; (center row, left to right) Susan Mentzer, Meredith Hardy, Carolina Mallol, Julie Stein, Laura Roskowski, and Scott Moore; (front row, left to right) Trina Arpin, Sarah Sherwood, Dan Cabanes, Heidi Luchsinger, and Holly Moyes.

Faculty News continued from page 7 former President of the Explorers Club. In May-June Wiseman was codirector of the Boston University project and archaeological field school at Torre d'en Galmès on the Balearic Island of Menorca (see article above, pages 24-30.

Wiseman is co-editor with Konstantinos Zachos of Landscape Archaeology in Southern Epirus, Greece. Vol. 1, which was published in spring 2003 by the American School of Classical Studies at Athens as Hesperia Supplement 32. Volume 2 is in preparation for the same publisher. Other recent publications include "Archaeology As an Academic and Discipline," The SAA Archaeological Record (May 2002) 8-10, and, as coeditor with M. Forte, P.R. Williams, and F. El-Baz, The Reconstruction of Archaeological Landscapes through Digital Technologies (BAR International Series 1151: Oxford 2003). The latter publication includes papers presented at an international conference/workshop held at Boston University in November 2001, sponsored by the National Research Council-Institute of Technologies Applied to Cultural Heritage of Rome, Italy, and the Center for Archaeological Studies, the Center for Remote Sensing, and the Department of Archaeology at Boston University with the collaboration of NASA. The conference was made possible by grants from the J. M. Kaplan Fund in the U.S.A. and the National Research Council, Italy.

Paul Zimansky received a Certificate of Teaching Excellence from the Honors Program at Boston University. In November 2003, he presented a "standing room only" brownbag lunch lecture entitled "Piecing together the present: a summer mission to the Iraq Museum" (see his article above, pages 14-19).

Research Fellows

Two Research Fellows of Boston University's Department of Archaeology presented lectures at the 68th Annual Meeting of the Society of American Archaeology held in Milwaukee, Winsconsin, in April 2003: Laura Kosakowski with Nicole



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Faculty/Research Appointments in the Department of Archaeology (2003):
Professors Clemency C. Coggins, Paul Goldberg, Norman Hammond, Fred S. Kleiner, Mohammad Rafique Mughal, Curtis N. Runnels, James R. Wiseman, Paul E. Zimansky. Professor Emeritus Creighton Gabel. Associate Professors Kathryn A. Bard, Mary C. Beaudry, Ricardo J. Elia, Julie

Little (MURR) and Robert Speakman (University of Missouri at Columbia) on "Characterization of Mayan Pottery by Complementary Methods: INAA and MD-ICP-MS," and Lauren Sullivan (University of Massachusetts, Boston) with Dana Anthony on "The Middle Preclassic to Late Preclassic Transition at Colha: Excavations at the Main Plaza."

M. Hansen, Patricia A. McAnany. Assistant Professor Christopher H. Roosevelt. Research Associate Professor Robert E. Murowchick, Director of ICEAACH (International Center for East Asian Archaeology and Cultural History). Visiting Assistant Professor Kirsten Tripplett. Lecturers David Cohen, Magaly Koch. Adjunct Professor Anna Marguerite McCann, Adjunct Assistant Professors Michael C. DiBlasi, Amalia Pérez-Juez. Research Fellows Ihsan Ali, Mary Lee Bartlett, Miriam Chernoff, Lauren Cook, Rudolph H. Dornemann, Francisco Estrada Belli, Chantal Esquivias, Rodolfo Fattovich, Lorinda Goodwin, Britt Hartenberger, Donald Keller, Laura Kosakowsky, Christine Lovasz, Christina Luke, Richard I. MacPhail, Karen Metheny, Michele Miller, Priscilla Murray, Akin Ogundiran, Shannon Plank, Sheldon S. Sandler, Nancy Seasholes, Joanna Smith, Lauren A. Sullivan, Elizabeth C. Stone, James Symonds, Gair Tourtellot, Tjeerd H. van Andel, Daniel Welch, Howard Wellman, Al B. Wesolowsky, Carolyn White. Associated Faculty: Farouk El-Baz, Research Professor of Remote Sensing and Director of the Center for Remote Sensing; David R. Marchant, Assistant Professor of Earth Sciences.

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