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THE LAST LAIR OF THE LEOPARD

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Cover

Three subspecies of leopard once prowled the Arabian Peninsula. Now only *Panthera pardus nimr* remains, inhabiting the most remote mountains in populations numbering in the dozens. This photograph was made using an infrared trip-line camera. Photo by David Willis.

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President and Chief Executive Officer
Ali A. Abuali

Director Public Affairs
Mohammed A. Al-Maghlouth

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Editor
Robert Arndt

Managing Editor
Dick Doughty

Assistant Editor
Arthur P. Clark

Administration
Karim Khalil
Sarah Miller

Circulation
Edna Catchings

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Herring Design

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Address editorial correspondence to:
The Editor
Saudi Aramco World
Post Office Box 2106
Houston, Texas
77252-2106 USA

Back Cover

"The Hawking Party," by Henri-Emilien Rousseau, was auctioned recently by Christie's. Most popular today are those Orientalists whose work is historically accurate, and whose style avoids kitsch, condescension and voyeurism. Courtesy of Christie's.

Saudi Aramco, the oil company born as an international enterprise more than seventy-five years ago, distributes *Saudi Aramco World* to increase cross-cultural understanding. The magazine's goal is to broaden knowledge of the cultures, history and geography of the Arab and Muslim worlds and their connections with the West. *Saudi Aramco World* is distributed without charge, upon request, to a limited number of interested readers.

The Beginning of the End for Hunter-Gatherers

Written by Graham Chandler
Photographed by Ergun Çağatay

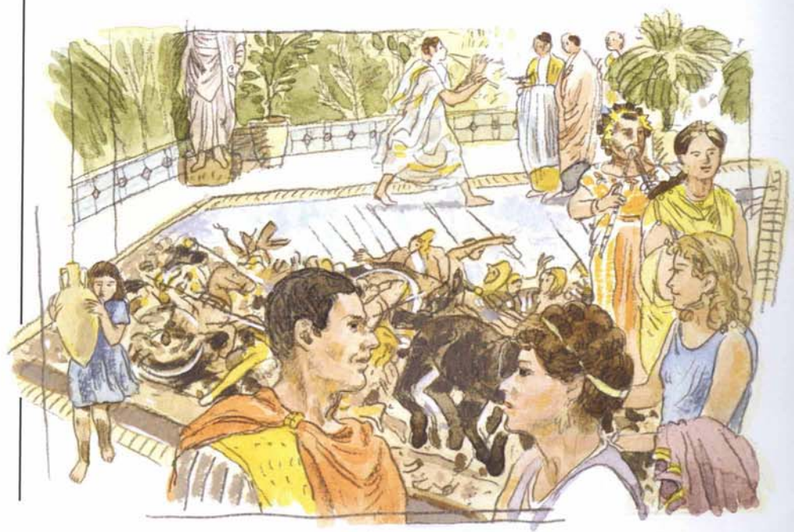
Circles of Stonehenge-like megaliths, recently excavated in southeastern Turkey, are the world's oldest known monumental art—and maybe more: They appear to have been ritually buried around 10,000 years ago. Why? Were the new agriculturalists eager to signify the passing of hunter-gatherer ways?

I
WITNESS HISTORY

10 I, Mosaic Masterpiece

Written by Frank L. Holt
Illustrated by Norman MacDonald

I'm the orphan son of mixed artistic marriages. My millions of tesserae were laid down to record Alexander's historic defeat of Darius at Issus in 333 BC, more than two centuries earlier—and more than four centuries before I found myself broken and buried in the ruins of my Pompeii home. Today, I'm that lost city's most celebrated survivor.



16: ARTHUR MELVILLE, "AN ARAB INTERIOR" / TATE BRITAIN; 24: DAVID WILLIS; 32: ROCKEFELLER FOUNDATION

Behind Orientalism's Veil

Written by Juliet Highet

When European painters of the 19th and early 20th centuries put Middle Eastern and North African subjects on canvas, their art became known as "Orientalism," a genre as much attacked as appreciated. But now, Orientalism is fetching record prices at auction, and the buyers are often from the very Middle Eastern and North African countries depicted.

The Last Lair of the Leopard

Written by Anna McKibbin

Leopards once abounded in the mountains of the Arabian Peninsula, but their predations on livestock induced herders to hunt them almost to extinction. Living remotely in diffuse populations, they are difficult to study, but in Oman's Jabal Samhan Nature Reserve, researchers have picked up a fresh trail.

32 A Circle of Care

Written by Josie Glausiusz

In the 1980's, early in the HIV/AIDS epidemic, Wafaa El-Sadr, MD, devised patient care for New York City that embraced social as well as medical treatments. Now her methods are used in 14 countries across Africa—and beyond.

Morocco's Trilobite Economy

Written and photographed by Andrew A. Sicree

Geology lifted a 245- to 570-million-year-old seabed to near the surface of Morocco's Anti-Atlas Mountains. Once teeming with early species, it's now a leading source of fossils and display-quality minerals for museums and private collectors worldwide.

Each slab taller than a person and sculpted with diverse animal images, the 11,600-year-old megaliths of Göbekli Tepe are arranged in circles—four have been excavated so far. Their T-like shape is believed to be a human effigy, with the crossbar representing the "head," and "arms" made up of carving down the sides. The carved lion, left, is a uniquely three-dimensional sculpture.

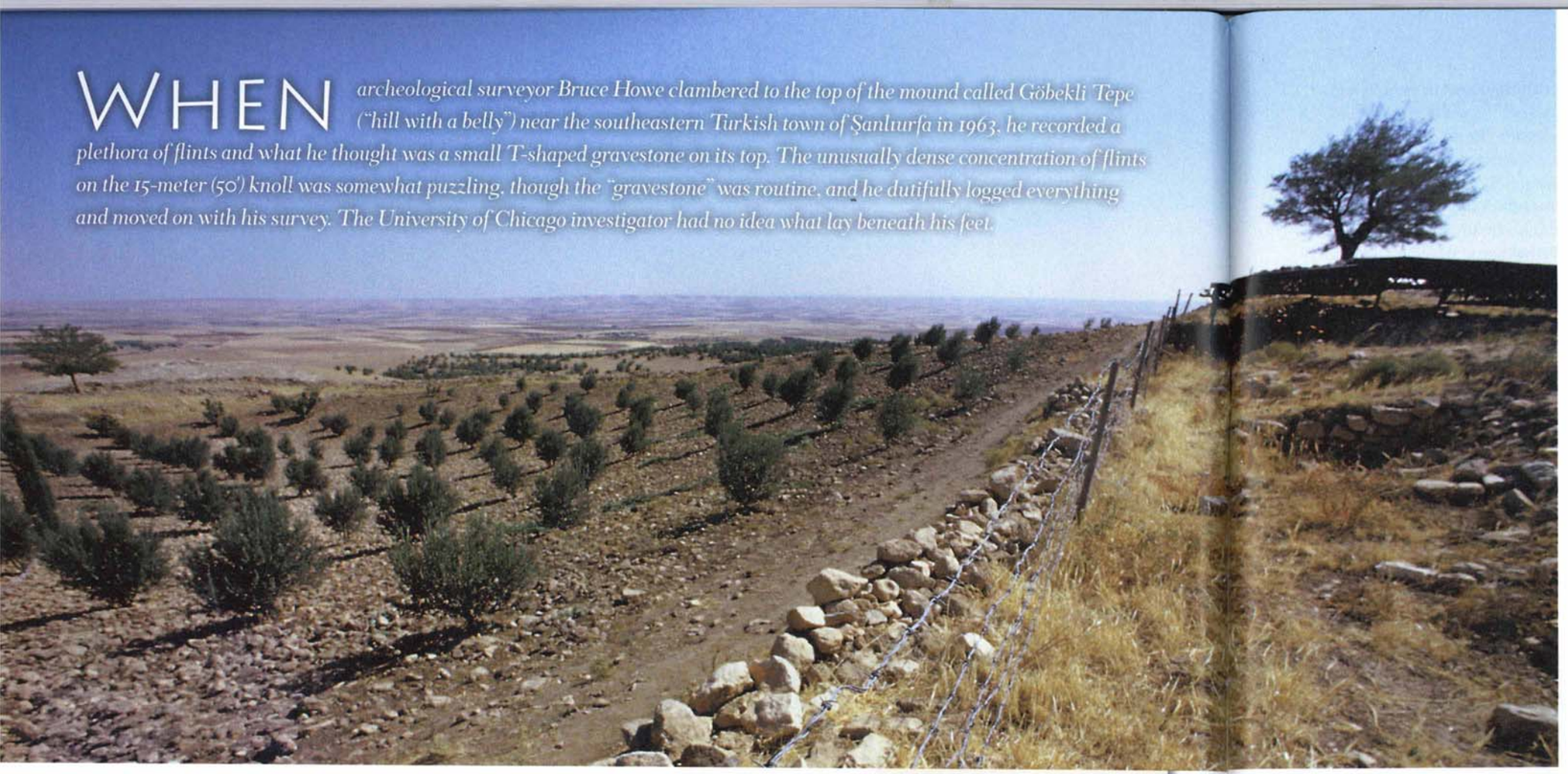
THE BEGINNING *of* THE END *for*

HUNTER-GATHERERS

Written by GRAHAM CHANDLER ▲ *Photographed by* ERGUN ÇAĞATAY

WHEN

archeological surveyor Bruce Howe clambered to the top of the mound called Göbekli Tepe ("hill with a belly") near the southeastern Turkish town of Şanlıurfa in 1963, he recorded a plethora of flints and what he thought was a small T-shaped gravestone on its top. The unusually dense concentration of flints on the 15-meter (50') knoll was somewhat puzzling, though the "gravestone" was routine, and he dutifully logged everything and moved on with his survey. The University of Chicago investigator had no idea what lay beneath his feet.



The stone circles lie on the north side of the "Hill with a Belly" ("Göbekli Tepe"), where the south side, above, **is planted with young olive trees. To the right of the barbed-wire fence, ground-penetrating radar hints that as many as 20 more stone circles may lie buried.**

Sprawled before us today in the thirsty mid-morning heat of early September are dozens of megalithic monuments two to three meters high (6½–10'), arranged Stonehenge-like in four separate circles 10 to 30 meters (33–100') across. In the center of each stand two taller monoliths, their flat and faceless heads staring southeast over the vast Mesopotamian plain, where, it is generally accepted, the planet's first agriculture bloomed. Sculpted onto most of the monuments are effigies of foxes, bulls, vultures, snakes, boars and spiders; one bears a highly artistic rendering of a feline resembling a lion. Chair-high rock benches link most of the standing stones and there are bowl-sized depressions in front of a few of the stones, possibly for offerings.

What is truly remarkable–and eminently arguable–is that these limestone pillars and their artwork may have been created by hunting-and-gathering peoples around 11,600 years ago, before the first fields of domesticated crops were planted anywhere in the world. However, no settlements that old have been found near the mound. Compounding the intrigue, the megaliths were intentionally–and perhaps ritually–buried under tons of fill 1500 years later, about the time the agricultural revolution was radically altering millennia-old ways of life in southeastern Anatolia.

Klaus Schmidt, a German archeologist who has been leading excavation work at Göbekli Tepe for 15 years, believes that what's been uncovered here represents the world's earliest known temple and its earliest known monumental art, neither of which has been previously associated with a hunter-gatherer way of life. Many prominent archeologists argue that only a settled farming culture could have mustered the resources and the large, organized work crews necessary to build the temple, but Schmidt thinks otherwise. "They were hunter-gatherers," he contradicts affably. Schmidt, 53 years old and dressed in a long-sleeved shirt over loose jeans and dusty sandals, has been project director here since 1993, when he discovered what Howe had overlooked 30 years before. Affiliated with the University of Heidelberg and the German Archaeological Institute, he speaks about the place with an understated passion.

His ardor is no surprise. Back in 1993, Schmidt was fresh from excavating the site Nevali Çori, 30 kilometers (19 mi) to the northwest, a rescue project now underwater behind the giant Atatürk Dam on the Euphrates. It had captivated him with its collections of T-shaped stones and he was soon on the hunt for more. When he came to Göbekli Tepe, he instantly recognized that the "gravestone" spotted by Howe was a larger version of those he had unearthed at Nevali Çori. Two other clues made him euphoric that day. Judging from the makeup of the soil at its top–clearly different from what lay below–the mound looked manmade; and it was covered with millions of flints and flint chips. That could mean only one thing: There was something spectacular beneath it.

"I knew then and there," he recalls, his white headscarf flapping in the hot breeze, "that I had but two choices–go away and tell no one, or spend the rest of my life here." Fortunately for academia, the world and Schmidt himself, he opted for the latter. After all, groundbreaking discoveries come to few archeologists in their lifetimes.

But he had to act fast–the mound was on private farmland. As evidenced by scrapes on the tops of some of the standing megaliths, farmer-owner Mahmut Yıldız had already started plowing.

But he signed a lease and Schmidt, under the auspices of the German Archaeological Institute and the Şanlıurfa Museum, set to hiring 50 workers from the village of Örencik just down the hill. Excavations began in 1994.

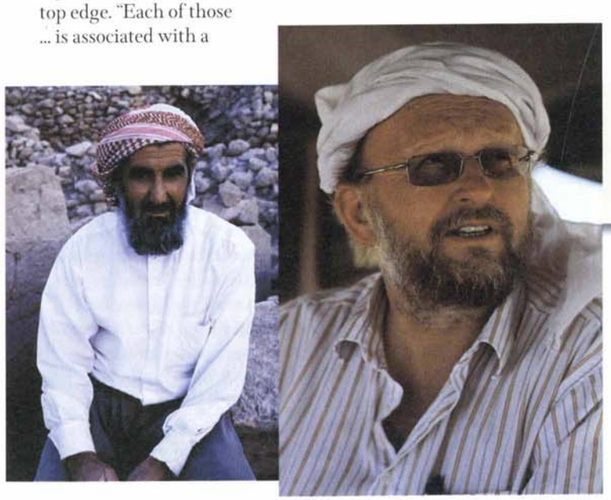
Schmidt paints a picture suggested by the stones' shapes and their animal carvings. Supported by other leading researchers, he interprets the stones to be human effigies: The capitals form their heads, and arms are carved down their sides –similar to what he'd seen on later statues like those excavated at Nevali Çori. Quarried about a hundred meters (320') away, the giant, seven-ton limestone slabs (one of which still lies there, unfinished) were likely shaped with flints, dragged to the site, carved and erected. Broken flints are so ubiquitous it's impossible to walk without treading on them.

By carbon-dating the layer of humus that has accumulated over the site since its intentional burial, and considering the tiny calcium-carbonate stalagmites on the stones, Schmidt has put that event at 10,800 to 10,000 years ago. But 1500 years prior to that, when the stones were erected, "there was a human and animal population explosion here," he says. "It was the end of the Ice Age."

Walking gingerly atop the baulks that separate each excavation unit, we arrive at a stone that Schmidt finds particularly intriguing. A busy scene is pecked into its west-facing side, and it seems to tell a complex story. "See these three images with the rounded tops?" the archeologist asks, pointing to a row of shapes along its top edge. "Each of those ... is associated with a different element." Sure enough, the first depicts a bird, the second an unidentified four-legged beast and the third a frog. "Air, earth and water," says Schmidt convincingly. The story appears to continue below. A vulture, clearly identifiable by its hooked beak and claws, plays with a ball. "That's the sun," Schmidt continues. Summing up, he says the story represents the creation of the cosmos: the sun and three earthly elements. "At least, that's our interpretation so far.

"There's no doubt that it was religion that brought people together here," Schmidt says, looking at the assemblies, which predate Stonehenge by some 6500 years. "It's the first place that images of deities are seen." He tells me that earlier art depicted natural things like animals and people. But here, he points out, there are three levels of symbolism: the human heads forming the capitals of the stones; the animals carved on their sides; and some non-human, non-animal symbols: an H-shaped icon and a round image with a quarter-moon shape beneath. But, he admits, "We really have no idea" what they mean overall.

Schmidt expects to find burials beneath the benches, much like those at Çatal Höyük, 120 kilometers (75 mi) to the west. He's been cautious about digging so far, however. "As soon as you do that, you destroy a structure," he says. The first look will probably come in this spring. Burials are a feature Ian Hodder, director of the Çatal Höyük project, would like to see, too. "It's certainly possible they have burials," says the Stanford University professor. "From my point of view, it would be nice if there were ancestral burial places because I think that's what fits into what we're finding at Çatal Höyük." There, scores of burials have been found beneath benches in long-buried houses.



Klaus Schmidt, left, **has been excavating annually at Göbekli Tepe for 15 years, after he leased the land from its owner Mahmut Yıldız,** far left.

Most of the stones at Göbekli Tepe present hunting scenes. As with the "creation" scene, one stands out. Crunching over the ever-present flints, Schmidt shows me the "poison"-themed pillar. Several snakes, aligned with the penis of what looks like a fox, are wrapping themselves around the monolith; spiders crawl; and what Schmidt interprets as a poisonous centipede–the 42-legged version found in this part of Turkey –frames the scene.

What was going on here? Animal images from the Neolithic period frequently correlate with early religion, researchers say. "In tiered, shamanistic cosmologies, wild animals frequently come from god or a Lord of the Animals," write David Lewis-Williams and David Pearce in *Inside the Neolithic Mind: Consciousness, Cosmos and the Realm of Gods*. "Hunting is therefore more than meat-acquisition .... It entails interaction with and acquisition of supernatural potency...."

Hunting and potency are seen as an underlying theme of the Göbekli Tepe images by other prominent Neolithic scholars. Hodder interprets the imagery as symbolizing danger, wild animals and male sexuality. "It's a very sort of male/sexual/wild animal type of world," he says.
He links it with Çatal Höyük

When Schmidt inspected the site in 1993, he found "millions" of flints and flint chips, right, **which to his eye indicated that he could "go away and tell no one, or spend the rest of my life there."** Far right: **Work begins at 6:00 a.m. during each year's dig season.**

"in the sense that there may well be rituals in which male prowess was associated with killing wild animals and giving feasts. Social status was built in that way."

And it was rituals and feasting that led to the first temple-building and crop domestication—not viceversa—argues another leading prehistorian. Brian Hayden, professor of archeology at Simon Fraser University in Canada, describes such feasting as "economically based competition," which he says was a fundamental characteristic of all complex hunter-gatherer societies. Once established, "an entire array of prestige technologies develop to display the successful production and deployment of surpluses," Hayden writes. "These include megaliths and massive architecture." He argues that competitive feasting provided the conditions that required the investment of extra energy in the production of special foods. "Feasts were opportunities to vaunt one's successes and were predicated on surpluses," Hayden says.

This one-upmanship extended to hunting, Hayden adds. He thinks hunter-gatherers of the Upper Paleolithic (the period that immediately preceded the Neolithic) may have especially relished the meat of difficult-to-obtain wild cattle, either for its taste or its spiritual powers. Schmidt wouldn't argue with that: He tells me the most prevalent bone remains found in the Göbekli Tepe fill are those of aurochs, an extinct species of ox and the progenitor of domesticated cattle. "Of all the species we've identified, aurochs are the only ones that required a communal effort to hunt—they needed the most complex techniques," Schmidt says.

As for plants, Hayden contends that it's not a big step from gathering to tending and selecting plants for desirable feasting properties. Of course, agricultural food production was much more labor-intensive than obtaining it from the wild. Since agriculture required clearing and spading ground, weeding, protection, harvesting and storing seed, the earliest domesticated plants were probably not used for everyday meals but reserved for special occasions like feasting.

From the mound's windy top, Schmidt shows me what's just on the other side to the north. There are more megaliths buried here, as yet untouched. The archeologist figures the entire site covers up to 36 hectares (90 acres), of which he's dug just five percent. On this side, farmer Yıldız has already planted new fig and mulberry trees in two low-lying areas. Schmidt tells me that ground-penetrating radar and ground-resistivity tests in these bowls have revealed up to 20 more buried circles. But their excavation is some time off. "We still need another 10 years on what we've already found," he says with a sigh.

Could even complex hunter-gatherer societies have organized the manpower to erect such a vast array of temple stones? "You don't necessarily need a very large concentration of people to put these things up," argues Andrew Moore, dean of graduate studies at Rochester Institute of Technology and an eminent prehistoric archeologist. He led excavations at the massive Neolithic site Abu Hureyra in northern Syria. "You can either have a lot of people working for a short period of time or relatively few people for a long period of time. That goes for other large projects as well, such as Stonehenge, the Pyramids or the Easter Island statues."

Even so, Moore thinks it inconceivable that a megalithic site like Göbekli Tepe could have been built purely by hunter-gatherers. "It's much more likely that they were also doing some grain-growing and stock-raising," says Moore, who has dated grains of domesticated rye back 13,000 years at Abu Hureyra. "I imagine that there are settlements yet to be found in the [Göbekli Tepe] region within comfortable walking distance. Sites like this require some sort of base relatively nearby."

Schmidt claims it would have been possible to raise a large workforce here without fixed farming settlements. "Hunter-gatherers wouldn't have to range very far," he says. "This was a very rich area for game. There was probably a high density of hunter-gatherers around." Moreover, he figures there was likely a semi-permanent settlement where present-day Şanlıurfa sits, which he thinks would have been the closest significant water source. "That's only 10 kilometers (6 mi) as the crow flies," he says. "And we're only a few days' walk from Mureybet [a similarly dated Neolithic settlement on the Syrian Euphrates]," he adds with a sweep of his arm to the southeast. "They were hunter-gatherers, they were in top physical condition, and they could easily have come here regularly to build this temple and to work."

Schmidt makes a good point. Several affluent sedentary hunter-gatherer cultures existed in prehistoric times that never developed agriculture, even though conditions would readily have permitted it—those of the coastal and riverine areas of Australia, California and British Columbia are among the examples.

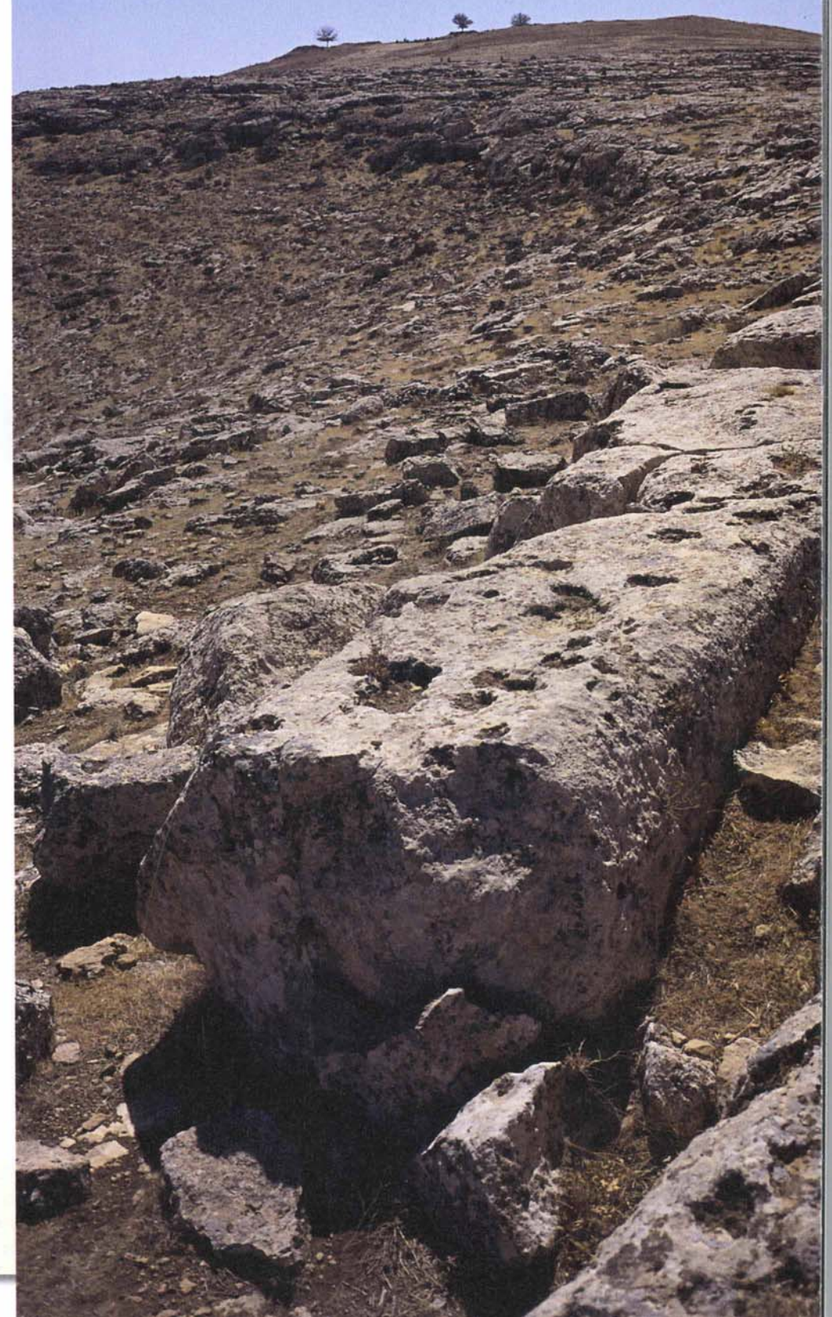
It's one of those long-standing arguments in archeology: the right conditions for agriculture are generally agreed upon, but how and why it started independently in different parts of the world are not. Along with the Fertile Crescent of Southwest Asia, agriculture blossomed independently in at least four other regions: the Yangtze and Yellow River basins of China, the interior highlands of New Guinea, the tropical regions of the Americas, and the eastern woodlands of the US. Strong evidence for farming also comes from central sub-Saharan Africa and southern India.

Climatic conditions were clearly favorable for the development of agriculture in southeastern Anatolia when Göbekli Tepe was built. About 11,500 years ago, the weather in much of the world became warmer, wetter and more consistent. Here in Turkey's Urfa Province, the land was well-vegetated; it sloped to the south, ensuring maximum sun exposure; hot, dry summers followed by wet winters made it ideal for farming.

Did farms evolve around this magic mound before, during or after its heyday? Ofer Bar-Yosef, MacCurdy Professor of Prehistoric Archeology at Harvard University, holds that farmers were here first. The development of domesticated crops was a long drawn-out process, he argues: "Early farming was based on wild plant species cultivated every year for at least a thousand years before 60 to 80 percent of the plants in a given field were domesticated. Even the earliest published carbon-14 dates for Göbekli fall after several centuries of established farming had already taken place in southeastern Turkey."

Bar-Yosef differs from some theorists on the critical mass needed for the Göbekli

The Neolithic period brought revolution for humankind not only in technology and ways of life, but also psychologically and spiritually, as expressed in new religious symbols: In that regard, Göbekli Tepe was at center stage.



Broken, too large, or just abandoned, a seven-meter (21') unfinished megalith lies where it was quarried, not far from the stone circles of Göbekli Tepe.

Why was Göbekli Tepe buried about 1500 years after it was constructed? Did farms evolve around this mound before, during or after its heyday? There are at present no clear answers, only hypotheses.

workforce. "You have to have a large population to build such a thing," and that's predicated on farming, he says. "You have to have someone allocating the jobs, tending the people, feeding the people and so on. So this is a good indication for a social society that built it."

Indeed, recent microscopic studies of how cereal ears break apart naturally and the different way they shatter during harvest have provided a way to tell cultivated from uncultivated grains, and confirmed that several varieties of wheat had been domesticated at nearby Çayönü, a Neolithic site to the northeast, by the second half of the ninth millennium BC—the oldest convincing signs of cultivated wheat. Schmidt acknowledges that cultivation may have been under way at the time that religious ceremonies associated with Göbekli Tepe were unfolding, but he is uncertain as to its extent. He directs my gaze to a range of low hills to the northeast, the Karacadağ Mountains, where Çayönü is nestled. Einkorn, the earliest species of cultivated wheat, is found there in both wild and domesticated form, he explains. One theory, in line with that of Simon Fraser University's Hayden, is that people traveling to the Karacadağ Mountains to gather einkorn dropped some near Göbekli Tepe, where religious revelers noticed it sprouting. This led them to think about growing einkorn there rather than traveling so far to find it.

Traditionally, theories of the origins of food production have been based on human need: response to population pressures or other causes of resource imbalances. But as studies have advanced, no evidence of resource stress or malnutrition has been found in places where farming has bloomed, fueling new theories and debates.

But there's little debate that the Neolithic period was truly a time of revolutionary change for humankind, not only in technology and ways of life, but religiously and spiritually. Jacques Cauvin, the late director emeritus of research at the Centre National de la Recherche Scientifique in Paris, a leading scholar of the early Neolithic period in the Near East, called it a complete restructuring of human mentality, expressed in new religious ideas and symbols. Göbekli Tepe was front and center in that timeline.

The Neolithic revolution saw both highly developed religious ideology and mixed farming take a firm hold throughout the Middle East. Cauvin viewed the finds at Göbekli Tepe and the later sites of Çayönü and Nevali Çori as evidence of rooted communities with a religious bent. "We encounter for the first time simultaneous evidence for public buildings and for the collective ceremonies of a religious character that took place in them. These must have served as a strong cement for the psychological cohesion of these sedentary human groups," he wrote in *The Birth of the Gods and the Origins of Agriculture*. "It is also quite probable that they were addressing ... a personal divinity."

As agriculture took root, it had a powerful impact on these religious themes. "It seems probable that at sites such as Göbekli Tepe and 'Ain Ghazal [an early Neolithic village in Jordan], myths featured protagonists who mediated the hunting/farming dichotomy...," write David Lewis-Williams and David Pearce.

The switch from pure hunting and gathering to farming was surely a profound change. Says another Neolithic researcher, Peter Bellwood of Australian National University, "There are obviously many aspects of mobile hunter-gatherer society that are antithetical to adoption of the sedentary lifestyle of the cultivator. On top of this, we have the attitudes of the farming and pastoralist societies themselves, often ranked and status-conscious, with whom some of the ethnographic hunter-gatherers have come into contact and by whom many have eventually been encapsulated."

So far, each slab's design is unique: Still half-buried, this one appears to sprout the very leaves that could symbolize the onset of a plant-based food economy, a recognition of the slow transition, over millennia, that humans would later name "the Neolithic Revolution."

Schmidt holds that such differences led to the loss of the idyllic hunting-and-gathering way of life around Göbekli Tepe and the laborious ritual burying of the site. Harvard's Bar-Yosef disagrees, although he acknowledges the events may be related. Like Andrew Moore at the Rochester Institute of Technology, he believes that farming and hunting were carried out simultaneously at Göbekli Tepe. "They were already farmers, and farmers go hunting," he says. "It's something so natural to humans, so they were not terminating this [when they buried Göbekli Tepe]. They were terminating different things, related ... to their own society in the social structure and in the belief system." With the onset of domesticated crops, the real gods may have changed —perhaps to those of the rain or of the land. "So they got rid of all the old ones," he says.

Hodder says that fits in very well with what his team has found at Çatal Höyük and what has been observed at Çayönü and a number of other sites: "It's a very careful ending and filling in and rebuilding, either on top or somewhere else. It's all about creating continuity and building histories through time. They were obviously very fascinated with creating continuities through time so the ending and beginning of something is very important—they have very elaborate processes of filling in and starting again."

At Çatal Höyük, houses were buried at the end of their lifespan when they were no longer useable. "I don't know whether [the pillars at Göbekli Tepe] would have had lifespans or not, whether the roof would fall off, or they would become too small for their purpose or what it might be," Hodder says.

Whatever spelled the beginning—and the end—of Göbekli Tepe's temple, it was epic. "This is a very spectacular discovery," says Moore. "One day, once we better understand what's going on here, we're going to look back and say this extraordinary find really did transform our ideas about the early stages of the Neolithic Near East."

Popularity Versus Protection

In the winding cobblestone streets of old Şanlıurfa, too narrow for cars, little has changed since medieval times. Halfway up a street named Nabi Sokak, a low door leads to the stone courtyard of the house that belongs to Klaus Schmidt and his wife, and which doubles as the Göbekli Tepe project dig house. Schmidt's marriage to Turkish archeologist Çiğdem Köksal parallels the project: They met at Göbekli Tepe during the first year of excavation and she has become an integral part of the project, especially in liaising with local tourism authorities.

A few years ago, Şanlıurfa's Culture and Tourism Directorate picked up an idea from a story in Germany's *Der Spiegel* newsweekly: It was about how the two central statues in each circle at Göbekli Tepe represented Adam and Eve in the Garden of Eden. The directorate decided to use the theme to attract tourists to the site.

"It was an absolute fabrication," asserts Schmidt over our starter of *mercimek çorbası*, a savory lentil soup. "We don't support it at all—there's no connection whatsoever." Köksal-Schmidt says she has convinced the authorities to forget the idea of publicizing such an interpretation of the site.

Schmidt agrees that the world-class status of the temple warrants its promotion as a tourist attraction, but he wants it to happen in a controlled way. An application to UNESCO to make Göbekli Tepe a World Heritage Site is already under way. "I don't want to turn Göbekli into a Disneyland," says Schmidt, who has been pressured to excavate faster to get the attraction up and running for tourists as soon as possible. He and his wife have had to deflect this as well. "Excavation cannot be hurried," Schmidt says. "The site needs protection. We can't have people tramping around the site unsupervised."

Already, buses roll up to Göbekli Tepe regularly to unload tourists and guides. Schmidt says he'd rather have an interpretation center with regular hours set up a few kilometers from the site itself, perhaps with reproductions of the stones.

Earlier in the day, he had shown me how. We walked past a stone that was shielded with black cloth: A crew was laser-scanning the monument. The digitized data are fed to a rock-carving machine that can chip out faithful reproductions of the stone in any size. "We have already done three of them," Schmidt says. The reproductions have been shipped to the Şanlıurfa Museum, but it's not yet certain where the museum plans to set them up.

Free-lance writer **Graham Chandler** (www.grahamchandler.ca) focuses on topics in archeology, aviation and energy. He received his doctorate in archeology from the University of London and lives in Calgary, Alberta.

Writer and photographer **Ergun Çağatay** lives in Istanbul. He is the co-editor and photographer of *The Turkic Speaking Peoples: 2,000 Years of Art and Culture from Inner Asia to the Balkans* (Prestel).

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'Ain Ghazal: N/D 85
Atatürk Dam: S/O 98
Çatal Höyük: S/O 02

WITNESS HISTORY

I, MOSAIC MASTERPIECE

WRITTEN BY FRANK L. HOLT ILLUSTRATED BY NORMAN MACDONALD

WHEN THE DUST FINALLY CLEARED FROM MY 39 EYES, I COULD SCARCELY BELIEVE WHAT THEY SAW. STRANGELY DRESSED PEOPLE SHOVELED AROUND ME, POINTING AND PRODDING AMID THE WRECKAGE OF ONE OF THE ROMAN WORLD'S FINEST HOUSES.

I struggled to comprehend the disaster, wondering where the great roof had gone, why all the housewares lay smashed and smothered under mounds of debris, and how long I had been sprawled unconscious beneath it all. I knew I was injured, but not how badly: I could not feel many of my arms and legs. Dazed and confused, I slowly realized that my rescuers were talking *about* me, but not to me. Did they know that I was alive? I strained to hear what they were saying, but nothing made any sense. Not a word sounded remotely like Latin or Greek. I tried to move, first a finger and then a hoof, but I remained hopelessly paralyzed. I pleaded silently for their help as I watched concern contort their faces. What on–or under–earth had happened to me? If only I could clear my heads and remember....

Even now, 178 years later, there are as many holes in my memory as there are in my ravaged body. They tell me that I was discovered in that mangled mansion on October 24, 1831. I was in such fragile condition that it took a dozen years to rush me to this ward of the Museo Archeologico Nazionale in Naples. I am the prized patient here, where millions of well-wishers visit me annually. Some gaze in wonder; others wince. The massive wounds that disfigure my otherwise muscular frame will never heal, and there seems little hope that I will ever be walked on again. I am not the mosaic I used to be–but I am nonetheless the most celebrated survivor of the volcanic eruption that buried the city of Pompeii more than 1900 years ago.

I am the orphan son of mixed artistic marriages–a mosaic pavement laid down from sketches drawn of a painted scene. No one really knows where I was born. My features suggest an eastern heritage, probably Greek and perhaps even royal. My earliest ancestor may have been a famous painting by Philoxenus of Eretria, made in the fourth century BC. King Cassander, one of Alexander the Great's successors, commissioned this picture (hailed as "second to none") showing a battle between Alexander and Darius, the ruler of Persia. Although it is long lost, like nearly all ancient paintings, I am nevertheless connected to it, according to some experts in DNA–which means, in this case, the "derivative nature of art." Those experts see in me possible traces of Philoxenus's trademark style. He allegedly economized by artfully abbreviating crowded scenes, just as I hint at vast numbers of unseen troops by showing their upraised spears in the background. Other experts hint that I might descend from a different lineage going back to a painting of Alexander's victory at Issus reportedly done by Helen, the daughter of an Egyptian resident named Timon. But whether Helen's painting was truly my grandmother or Philoxenus's my grandfather, I cannot say; I never met either of them. (Though I did get close: Helen's canvas, four centuries old, was displayed in the Roman forum within weeks of my misfortunes in Pompeii.) Needless to say, the next generation–my sketchbook parents–did not live long beyond my birth, but I suspect they were very proud of their ephemeral place in my family tree. I preserve the essence of all these ancestors not in tinctures but in stone. That is why I am (mostly) still here and they are not.

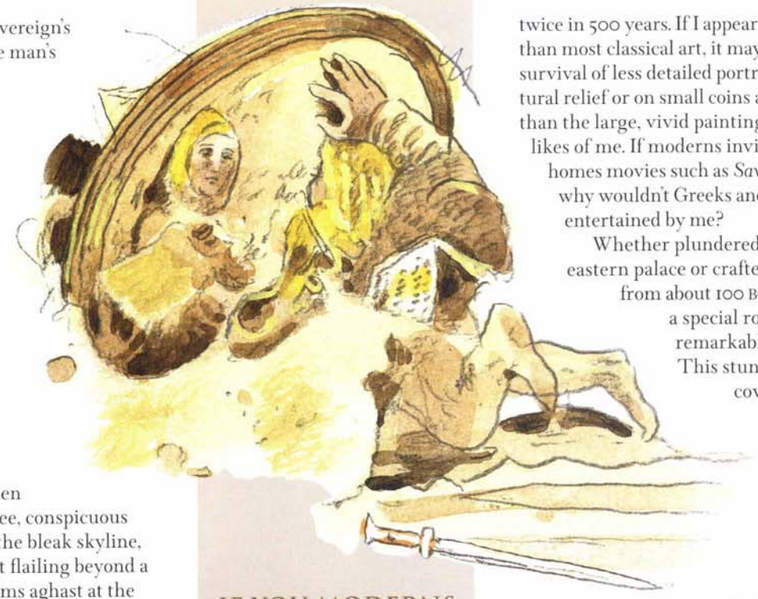
Take a good look at me. Can you imagine the skill and dedication necessary to bring me into this world? I can offer a hint: In 2003 a team of master mosaicists spent 16,000 hours making a copy of me, a task considerably easier than my own birth since

they left out those huge areas now missing from my body. Full grown, I cover an area of 18.2 square meters (196 sq ft), the size (not coincidentally) of a large room. Within that space, meticulously selected and positioned one by one, are *millions* of tesserae—tiny cubes of limestone shaded red, yellow, black or white by natural mineralization. True to my inheritance, I retain the illusion of undulating brushstrokes in a mosaic technique called *opus vermiculatum*, meaning "wormy work."

This painstaking process produced in me a haunting vision of a pivotal moment in history. I bear witness to a furious battle at its bloody climax. From the left (where, unfortunately, I am most mutilated) rides King Alexander at the head of his Macedonian army. The young conqueror has lost his fancy helmet (just visible among the fallen weapons that litter the foreground), but this accident only renders his grim expression more evident. Grimmer still, emblazoned on Alexander's breastplate is a snake-haired Gorgoneion, one of the mythical monsters like Medusa whose stare turned everything to stone. Her image was meant to petrify, in every sense of the word, a warrior's enemies. Here I like to think that she has done her work too well, and that I am the rock-hard result of her sweep across the battlefield.

Fossilized by my scary godmother's gaze, a skewered officer convulses at the lethal impact of Alexander's lance. The victim's horse fares no better, its last breath caught foaming in a pool of blood. A broken spear protrudes from the animal's breast and a gruesomely severed hoof lies on the ground. Too late to save his comrade, a Persian horseman raises his sword against Alexander, who is momentarily vulnerable without a helmet or defensive weapon in hand. Meanwhile, to the right of this crucial drama, the rest of the Persian army reacts. Already the driver of Darius's great chariot has turned the vehicle and whipped its terrified horses into flight. The Great King of Kings leans back toward the fray, loathe to leave his men at the mercy of the Macedonians. He reaches desperately for his friends, with eyes wide and mouth agape. At this critical moment, he has no more arrows for his bow. All is lost. Around him, others share his agony. The young fellow on foot, perhaps managing the stallion on which Darius would eventually make his escape, flinches away from Alexander's assault. Farther back, one Persian rider clasps his head in utter disbelief while two others signal the retreat.

Several poor souls face an ironic death at the hands—or rather, the feet—of their own forces; they writhe helplessly on the ground, brutally trampled in the rout. In a bizarre tableau, one struggling Persian tries in vain to ward off the wheel of his sovereign's chariot as it crashes by. The man's melancholy expression, as reflected on a burnished shield, mirrors his doom: We are watching him watch himself die. Similarly eerie vignettes have been embedded elsewhere in the bedlam: Men walking among the cavalry with gaping head wounds gushing blood; the rear of a horse hovering legless at the center of the scene; snippets of a white steed stampeding ghostlike through the team that is pulling the chariot. And then there looms that curious tree, conspicuous though quite dead against the bleak skyline, its human-like arms almost flailing beyond a freakishly long spear. It seems aghast at the carnage around it.



Even I do not know what to make of myself. Did any—or all—of this really happen, or do I exhibit the telltale signs of some horrible, inherited psychosis? Over the years I have endured endless therapy sessions conducted by well-meaning analysts who insist that my troubling images manifest the deep-seated psychodramas of ancient battle art. Some diagnose an unhealthy infatuation with Alexander, whose martial prowess I am said to accentuate above all else. Others counter that I dote too much on Darius, who rises literally and likably above the battle. Amid all the suffering, the Persian king shows endearing compassion whereas his Macedonian opposite merely sneers contemptuously. Am I conflicted about who *should* win? Or is my secret hero the impaled rider who has sacrificed himself to divert Alexander's lance from Darius? A few experts have even tried to explain everything in sexual terms: phallic spears, and so on. But I suppose most of my doctors have focused their analyses on that enigmatic tree as if (for those of you who know movies better than mosaics) it had "Rosebud" painted across it. They ask if the lean of my tree betrays whose side I subconsciously favor. Does the lance across its barren trunk deliberately prefigure the death of Alexander below? Do the branches orchestrate the actions around them, so that you recognize in the tree the shapes of Darius's arm and hand, the forelock of Alexander's warhorse Bucephalus, the charioteer's busy lash, and the horseman's upraised sword between the rival kings? Maybe. Then again, sometimes a tree is just a tree.

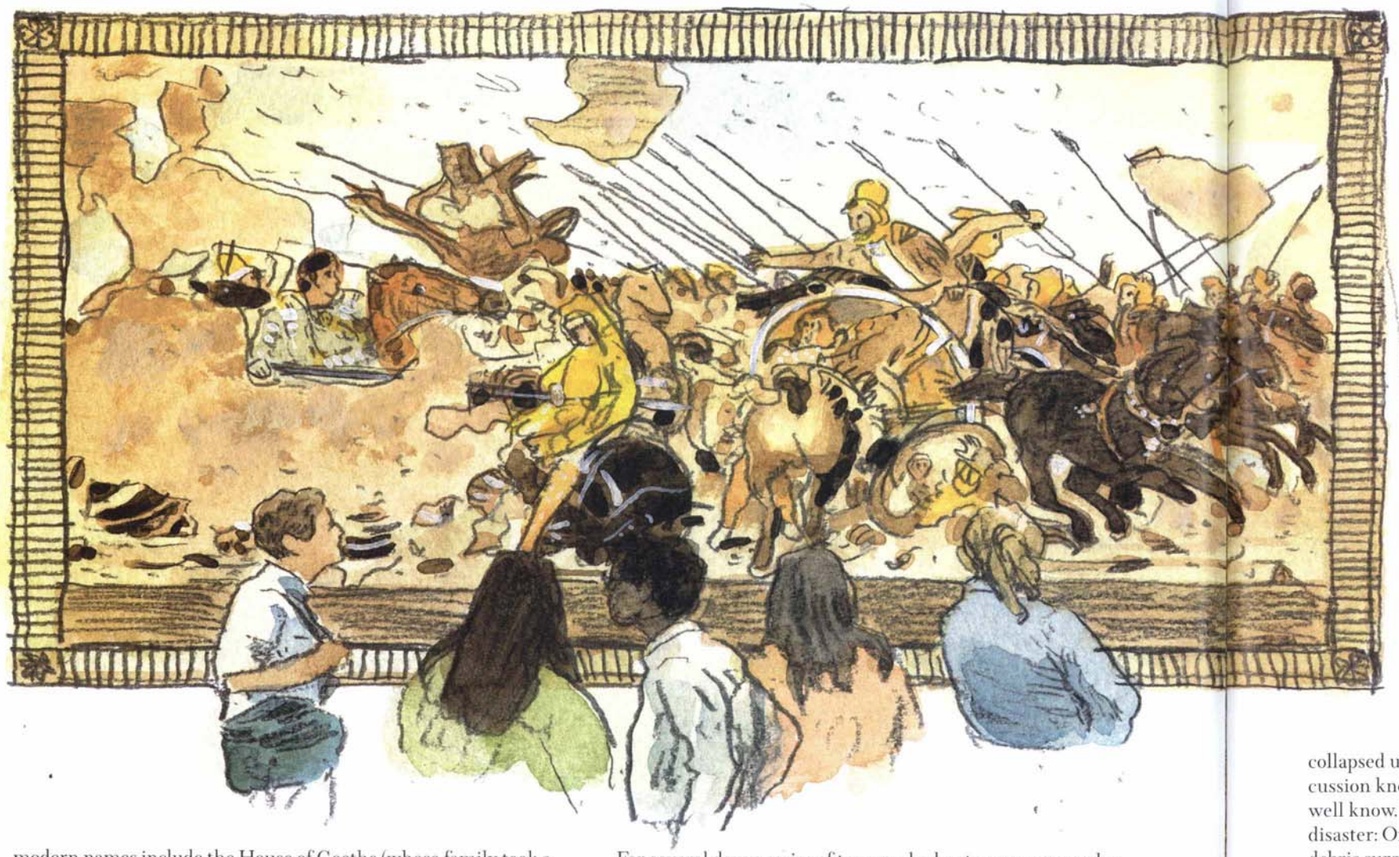
I cannot remember what those who knew me in ancient Pompeii had to say about any of this. Back then I spent all my time on the floor, not on the figurative couch of some future Dr. Freud. Perhaps the ancients were less concerned about such things. I grew up, after all, in a militaristic world where war was more normal than peace. The Greeks often put time limits on treaties and truces, knowing that hostilities would erupt again anyway; the Romans officially acknowledged an end to hostilities only twice in 500 years. If I appear more gruesome than most classical art, it may only reflect the survival of less detailed portrayals in sculptural relief or on small coins and vases rather than the large, vivid paintings that bred the likes of me. If moderns invite into their homes movies such as *Saving Private Ryan*, why wouldn't Greeks and Romans be entertained by me?

IF YOU MODERNS INVITE MOVIES ABOUT WAR INTO YOUR HOMES, WHY WOULDN'T GREEKS AND ROMANS BE ENTERTAINED BY ME?

Whether plundered from some eastern palace or crafted on the spot, from about 100 BC onward I paved a special room within a remarkable private home. This stunning mansion covered an entire city block of nearly 3000 square meters (about 32,000 sq ft, or roughly two-thirds the size of a football field). It was the ancestral residence of a distinguished old Oscan family, and no house in Pompeii rivaled its refined architecture or rich decoration. Appearances mattered in ancient Italy, where competitive aristocrats upheld their status by letting others see them living well. Every morning I could hear the din at the front door caused by the crowd of my owner's clients gathering to ogle the house and to pay their respects in an obligatory ritual called the *salutatio*. As these free dependents filed over a mosaic welcome mat that read *HAVE* ("Greetings") in tall letters, they entered a museum-like world of old masterpieces displayed tastefully on the walls and floors. There were statues, frescoes and, best of all, many mosaic "carpets" depicting 3-D geometric patterns or such subjects as marine life, lions, doves raiding a jewelry box, a pouncing cat, an Egyptian landscape teeming with exotic creatures (cobra, hippo, crocodile, ibises) and then me—the *pièce de résistance*.

Visitors lucky enough to get near me were most often evening guests of higher standing, peers of the master invited to an expensive dinner party (*cena*), rather than his humbler morning well-wishers. The latter normally got only as far as the main atrium (a skylit expanse with a rainwater pool) and the *tablinium* (an elaborate reception hall where my owner accepted the salutations of his clients and dispensed favors in return). From the tablinium, longing eyes might look north across a sunny interior garden to catch a glimpse of me on the floor of my open chamber, its wide rear window facing out to a second peristyle, or columned, garden beyond. Situated deep in the house, but with a direct sightline to the main entrance 50 meters (165') away, my room was reserved for fine conversation and special events, not to mention art appreciation; ordinary banquets could be hosted in any of the five other dining rooms located elsewhere on the premises.

In my honor, this dwelling has sometimes been called the House of the Large Mosaic or the House of the Battle of Alexander; other



modern names include the House of Goethe (whose family took a special interest in the site) and the House of Arbaces the Egyptian (popularized by the melodramatic novel *The Last Days of Pompeii* by Edward Bulwer-Lytton). Most people now refer to the place as the House of the Faun because excavators found in the main atrium a statue of this mythic deity of wild animals (whence your word *fauna*). I'm not jealous, of course: Let the little goat-tailed fellow have his taste of fame. He knows the truth: Privileged visitors hustled past him to gawk at me, just as patrons of the Louvre ignore whole galleries every day on their way to see the "Mona Lisa."

Life was good in that house for about 160 years. Then suddenly, on February 5 in the year 62, a ferocious earthquake shook the place apart. The peristyle columns collapsed, walls buckled, and –to their great peril–mosaics moved. Some of my scars resulted from that upheaval, including the enormous void that nearly swallowed Alexander with the rest of his men. Healers skilled enough to treat my wounds could not be found, so plasterers merely filled the gaps. I fumed at my deformity, but secretly I felt the suffering of others. Visitors spoke of the widespread devastation throughout the region. Whole buildings disappeared, people wandered scared and witless in all directions, and nearby a flock of hundreds of sheep perished. This turned out to be a sad rehearsal for the greater calamity to come on August 24, 79. Unfortunately, I remember that day all too vividly.

MY ROOM IN THE HOUSE OF THE FAUN WAS USED FOR FINE CONVERSATION AND SPECIAL EVENTS.

For several days a series of tremors had put everyone on edge about the possibility of another massive earthquake. No one realized that these shocks were really the awakening of Mt. Vesuvius, whose sleepy summit gave no hint of the historic disaster building beneath its cone. A rising column of explosive magma set off the eruption at about 1:00 in the afternoon, catching us all by surprise. My master's morning salutatio was long over and he had gone to the town forum to tend to his affairs. He may already have departed for the public baths, as was a nobleman's custom, but he would enjoy no solace that day. Nor would we at home. Cassia, our mistress, bustled through the corridors, courtyards and rooms in a frantic effort to manage the panic among her servants. Ghostly ash powdered the once-green gardens on either side of me, and then the fallout thickened into a darker hail of dense and dangerous debris. Through my window northward I caught glimpses of the towering column of tephra belching from Vesuvius a few miles away.

The house continued to shake while a steady rain of pumice and ash poured through the atrium skylights and crept into every corner. As the pumice accumulated hour by hour, the household cowered under groaning roof beams and begged for the gods' mercy in the choking darkness. No one seemed to know what should be done–whether to flee into the madness of the streets for a chance of reaching safety somewhere beyond Pompeii, or to trust the stately old mansion to endure the catastrophe. I wasn't going anywhere, but that was the wrong choice for everyone else in the house. I could hear the two cows bellowing in the service wing along the east side of the residence, until their creepy silence signaled that their suffering had finally ended. On a laurel bush out in the peristyle garden, a nesting dove refused to abandon her eggs; the bones and unborn brood of that poor bird would not be disturbed for the next 18 centuries.

THERE I LAY, PORTRAYING THE HORRORS OF HUMAN SUFFERING WHILE ALL AROUND ME LIFE –AND DEATH– IMITATED ART.

I heard more than saw the last agonies of desperate Cassia, whose remains would be identified in modern times by the signet ring still on her finger.

Too late, she grabbed her valuables and stumbled toward the front door. Perhaps she could not find her way out in the dark, or the pandemonium on the other side of the portal turned her back to her doom–her muffled sounds were not easy to follow, so I cannot be sure. In 1831, diggers followed a trail of her spilled jewels and coins leading back to the tablinium, where her skeleton seemed to be holding back chunks of the falling ceiling.

Sometime during the night, the entire roof collapsed under the weight of the deepening pumice. The concussion knocked me unconscious for a very long time, as you well know. Thankfully, I lay oblivious to the worst phase of the disaster: On August 25, avalanches of superheated gases and debris surged down the side of Vesuvius and cauterized the dying city. These so-called pyroclastic flows, some of them racing across the ground at 100 kilometers per hour (62 mph), gradually vented the volcano's fury and left it exhausted in the midst of a desolate landscape. Pompeii had vanished.

Exactly 1752 years and two months after the eruption, rescuers pulled the rubble off me and I awakened in a world unimaginably transformed. In quieter moments here at the Museo, I ponder the meaning of it all. I try in vain to remember myself whole, with every man and horse still intact, before time rendered me more artifact than art.

I cringe at the irony of my life–an image of disaster saved by disaster. There I lay in that house, openly portraying the horrors of human suffering while all around me life–and death–imitated art: People falling, crushed in the panic; men grabbing their heads in utter disbelief; poor Cassia struggling to hold back the ceiling as if it were the chariot of Darius bearing down on her. And all of this misery frozen in time as though the fiery mountain made a mosaic of all Pompeii to mock my self-importance. Maybe I suffer a bit from survivor's guilt.

I know that one of the object lessons of history is that every object thinks it shaped events in some powerful way, but I hope that is not true. I want no part in making history. When I look back, I'd rather see a thousand rolls of the dice rather than one whiff of inevitability. What if Cassia had made a different choice when she hesitated at the front door, or if that dove had not clung to such high hopes for eggs that would never hatch? What if I had still been home in Cassia's house when, in 1943, Allied planes bombed the place? Rewind history and chance would make something else of us all: a humbler obelisk that never got off the ground, a forgotten pot-crumb that languished in the trash, a ship that sank where no one could find it, or the survival of a different mosaic–one perhaps showing an alternative history in which Darius still had one more arrow left to shoot down Alexander and save the Persian Empire. That's all it would take to tilt the dead tree in the other direction.

Frank L. Holt (fholt@uh.edu) is a professor of history at the University of Houston and most recently author of *Into the Land of Bones: Alexander the Great in Afghanistan*. He is writing another book on ancient Afghanistan. This is his sixth article in the "I Witness History" series.

Norman MacDonald (www.macdonaldart.net) is a Canadian freelance artist who specializes in history and portraiture. "It is very humbling copying a masterpiece," he writes. "I've done it many times in sketchbooks, for myself. This time I felt like a pianist playing Bach in public."

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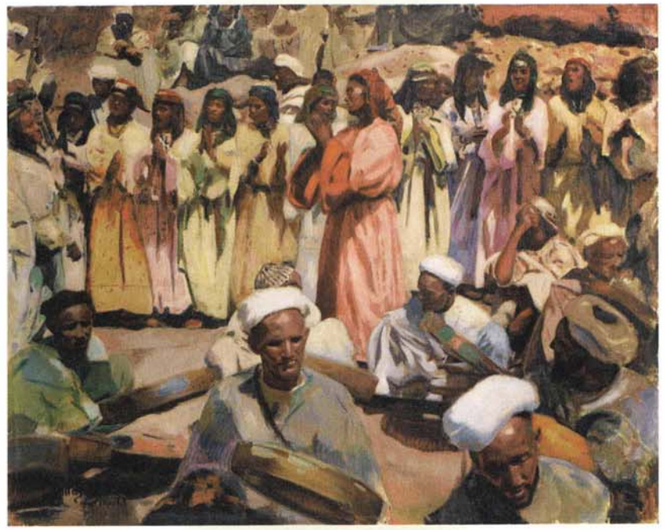
LOWER AND OPPOSITE: CHRISTIE'S; TOP: SOTHEBY'S

WRITTEN BY JULIET HIGHET



BEHIND *Orientalism's Veil*

Is it just growing nostalgia for a vanished, pre-industrial past that made 2008 a year of record prices for Orientalist art? Or is there more to it? The sophisticated buyers—now located mostly in the lands depicted in the paintings—know well that these paintings are much more than simple pictorial memories. The experts see in them part of the dynamic, historic dialogue between East and West. As the Middle East invests in new museums, art and educational institutions as well as tourism, Orientalism is increasingly perceived as a valuable part of Middle Eastern countries' national heritage.

In July 2008, Orientalism brought £21.4 million to Christie's in London, "the highest total ever achieved for this category," says Alexandra McMorrow,

Above: **"Femme Circassienne Voilée," painted in 1876 by Jean-Léon Gérôme, sold in 2008 for more than two million pounds sterling.** Top: **"L'Aouche," by Jacques Majorelle, one of few Orientalists to move toward abstraction.** Opposite: **"David Street, Jerusalem," by Gustav Bauernfeind, who first visited Jerusalem in 1880.**

director of 19th-century European art for the prestigious auction house. This included world record prices for seven artists; "bidders from North Africa, the Middle East, India, Europe and America competed fiercely," she adds. The top seller, "Femme Circassienne Voilée" ("Veiled Circassian Woman"), by the French painter Jean-Léon Gérôme, fetched just over two million pounds.

Not far away from Christie's, the Tate Britain's major summer exhibition was titled "The Lure of the East: British Orientalist Painting." And more telling still are the subsequent venues hosting the 120-painting show: Istanbul in the fall, and Sharjah, in the United Arab Emirates, in the winter. Raficq Abdulla, a poet and art writer, was among a number of cultural figures whom the Tate invited to post comments at the

exhibit. Rather than letting a superficial relationship between "colonizer" and "colonized" be the sole lens through which we today can understand how British (and other) Orientalists represented their subjects, understandings of Orientalism have become more complex and nuanced, he wrote, "a focus, a module upon which people of different cultures can exchange perspectives and prejudices, becoming more aware of who they are–and who they are not–in a fast globalizing world."

These shifts are part of a larger, gradual, mostly sympathetic reevaluation that has been taking place over the past few decades of much 19th-century European art. For the Orientalists, the first signs of renewed appreciation came with the early oil boom of the 1970's, when the Mathaf Gallery opened in London following the 1975 World of Islam Festival, marking the first specialist venue for the sale of Orientalism since the genre's demise in the 1930's. Mathaf was aimed particularly at the new market in the Middle East.

Since then, interest in Orientalist art has been led by the cognoscenti of the cultures depicted–mostly in the Arabian Peninsula, followed by North Africa. "The majority of my sales are still to Arab clients," says Brian MacDermott, the gallery's director. Controversy over the genre "has actually fueled a lot of interest," he says–but not all controversy: "Naturally there's a desire for accuracy relating to customs and traditions." Even so, most of the paintings in an exhibition called "Enter the Harem" were bought by clients from the Arab world.

And not long ago, that would have been surprising, because the harem was a defining motif of European Orientalism, and one of the most culturally sensitive at that. Though its basic meaning was "family quarters," the word *harem*–derived from the Arabic word *haram*, meaning "forbidden"–was a kind of metaphorical screen onto which European male artists imagined the lives of the women they could not see, and what they projected was at best inaccurate and kitsch and at worst lurid, voyeuristic and demeaning.

Top: **Renowned German Orientalist Rudolf Ernst exhibited his work regularly in Paris, including "The Manicure." Like many Orientalist interiors, Ernst's evoke both realistic domesticity and mild voyeurism.** Above: **Jean-Léon Gérôme has often been accused of voyeurism, too, which restricts the modern popularity of his work: "*Rustem Pasha Mosque*" is more accurate architecturally than in its casual depiction of Islam.**

But men were not the only ones to paint "harem scenes." Amid the most revealing and riveting of the paintings in the "Lure of the East" exhibition is "A Visit: Harem Interior, Constantinople," *1860*, by Henriette Browne, who was able to come and go in the women's quarters. It depicts an austere, almost empty hall to which the visitors have even brought their own cushions, where a child clings uneasily to its mother. It is an ordinary moment amid polite but obviously tedious rituals and family matters.

Other Orientalist renderings of daily life in Arab lands tend to show two main settings: cities and deserts. The cities, however, are seemingly "medieval" or "timeless" vernacular scenes that exclude evidence of modernity. These include at times carefully observed traders and craftspeople (of pre-industrial pursuits), as well as the interiors and courtyards of homes, whose overwhelming detail and ornamental excess is rendered with meticulous draftsmanship. In these paintings, the brush lingered on tiles and textiles, carpets and architecture as the artist distilled a stereotypical, often languid atmosphere. But did those painters really paint–or even sketch–*en plein aire*, right

TOP: CHRISTIE'S; LOWER: SOTHEBY'S; OPPOSITE: TATE BRITAIN

"A Visit: Harem Interior, Constantinople," by "Henriette Browne"—a pseudonym of Parisian artist Sophie Boutellier.

What is "Orientalism"?

Orientalism is a category of fine-art painting done by western artists, primarily Europeans, who painted people and places in the Middle East, Turkey and North Africa. The term "Orientalist" was first popularized in 1893, at the first salon of the Société des Peintres Français Orientalistes in Paris, though the genre had existed since the early 19th century. While some Orientalist painters worked from careful firsthand observation, others created fantasies in their studios; some devoted themselves to realism, others to romanticism. Most worked the region in between.

Orientalist paintings sold well enough to stimulate an abundance of production and, inevitably, much second-rate work. By the late 19th century, Orientalists had defined themselves not only by their subject matter, but also by clinging to representational painting when impressionists were taking the avant garde toward abstraction. (One partial exception among the Orientalists was Jacques Majorelle.) As a result, Orientalist painting had fallen out of fashion by the early 1930's. Prices plummeted. The genre became so marginalized and devalued that many museums and private owners sold off part or all of their collections.

The "Orient" of the Orientalists was defined largely by the era of steam travel, the time when European tourism first flourished around the Muslim Mediterranean. Like many of the archeologists and scholars who also flocked to the region in that era, many of the Orientalist artists developed respect and liking for the peoples and cultures among which they traveled, and some settled there permanently. Later Orientalists, notably Jean-Léon Gérôme, Ludwig Deutsch, Rudolf Ernst and John Frederick Lewis, produced portraits that today appear every bit as sympathetic to their subjects as they would have been to fellow Europeans.

in the bazaars, with the flies and dust and hubbub? Some did, but others worked from photographs. Similarly, the interiors of most mosques–Orientalism's second most popular motif–were off-limits at that time to non-Muslims, which raises more questions of accuracy in the minds of modern viewers and buyers.

The desert imagery draws on fascination with the traditional Bedouin ways in the Sahara and the Arabian desert. Here there are countless affectionate equestrian scenes of horsemen and cameleers watering their mounts, resting with them beneath oasis trees and even enjoying (almost certainly imaginary) dancing maidens. The Italian Orientalists, who depicted such scenes with charm and wit as studio painters, not travelers, even painted the women's hairstyles and shoes with a noticeably fashionable Italian air! Many a hazy sunset landscape is depicted, and sometimes a legendary city like Petra appears on the skyline. Women are shown collecting water, trailing appealing children. In the "desert action" subgenre, Orientalists painted dramatic fantasias of men galloping on horse or camel across the sands, often to attack a trade caravan or raid a rival tribe's camp.

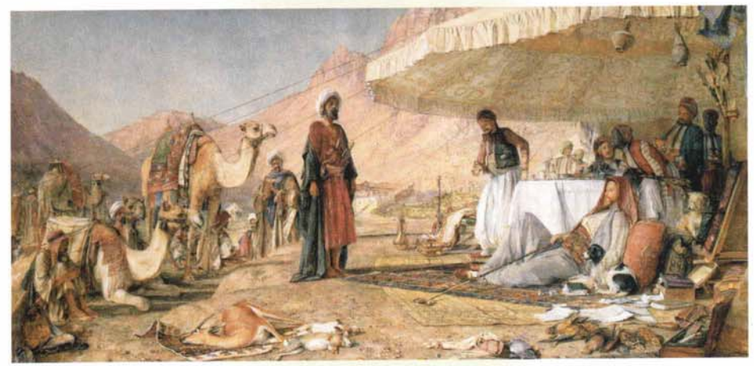
"The Road to Bizerte, Tunisia," (1909), by Tadeusz Ajdukiewicz, top, **and "The Camel Race" by Alberto Pasini,** above, **exemplify the Orientalist subgenre of desert landscapes, usually inhabited by Bedouin.**

Other types of more controversial subjects–such as slave markets and nudity–are being bypassed by today's buyers. Christie's Alexandra McMorrow comments tactfully that such subjects are "not seen by our clients as genuine." Mathaf's MacDermott says that such work would turn off his clients. As art and culture critic Rana Kabbani notes, "This is someone else's story; someone else's Orient."

The experience of being looked down on, being looked at from a position of greater power–which is often how these paintings appear to modern Arab buyers–is referred to in academia as "the gaze," shorthand for the relationship between the painter and the subject of the painting. Analysis of the "gaze" has framed much of the scholarly discussion of Orientalism and has led to generalizations about western perceptions of the East during the 19th century. (Academics point out that there were no Middle Eastern artists painting scenes of western society.) Orientalism, says Kabbani, "has always rested on the peculiar premise that the West knows more about the Orient than the Orient knows about itself," and thus the paintings embody a mixture of acquired knowledge and prejudice.

But this, too, may be changing. "I get bored with this 'gaze' business," declares Raficq Abdulla. "You *are* different, so you will get looked at. But *how* you are perceived is vital." If you are objectified, he continues, "it is indecent and demeaning, though most Orientalism is not so offensive." Abdulla maintains that it is important for the Arab–Muslim world to transcend the notion that it is a victim of such western perceptions. He suggests that some commentators react negatively to Orientalism because they have been hurt by their colonial experience. "Palestine," for example, he says, "remains a wound."

Most famously, the Palestinian–American intellectual Edward Said put a torch to debate over Orientalism in 1979 with the publication of his book *Orientalism*. In it he argued that the West's imaginary artistic and literary notions of a static, passive and even morally degenerate East abetted Western colonialism, no matter how benign the apparent intentions of the paintings or the literature. He held that the "Grand Tour memorabilia" aspect of Orientalist painting was politically inexcusable, if not actively racist. Still today, no discussion of Orientalism is complete without consideration of Said's critique.



Top: **Scenes such as "The Gate of the Great Umayyad Mosque," (1890), by Gustav Bauernfeind are increasingly valuable as historical records.** Above: **"A Frank Encampment in the Desert of Mount Sinai," was painted in 1856 by English painter John Frederick Lewis, who lived in Cairo from 1841 to 1850.**

"But if it's cultural imperialism, why are the majority of buyers Middle Eastern?" retorts MacDermott, whose gallery had its own 2008 exhibition, "The British Orientalists: Eastern Views, Western Eyes."

At Sotheby's, Senior Vice President Ali Can Ertuğ responds by choosing his images carefully. "Certain images of Turkey honor me as a Turk. They are incredibly honoring of our heritage. They are historically important documentation for us because they are scenes we have not recorded, whereas in Europe that's taken for granted. It's lovely to have the earliest, sometimes the only, images of things that we have lost–like street-sellers, parts of Istanbul that have burned down, landscapes that have changed so radically, like panoramic views of the Bosporus. I find the Orientalists' genuine interest flattering and valuable. I presume that people from Damascus and Cairo would be similarly honored."

Like his colleagues, Ertuğ stresses historical accuracy in the Orientalist art market, which now affects price. For example, some Orientalists painted worshipers wearing shoes in mosques–something that is universally forbidden and that indicates the artist was painting from fantasy. "Those artists who are truthful get better prices at sales," says Ertuğ.

The leading Orientalist artists who pass muster, says Christie's McMorrow, include such well-known ones as Rudolf Ernst, Ludwig Deutsch, Alberto Pasini, John Frederick Lewis, Gustav Bauernfeind and portraits by Jean-Léon Gérôme–but not his large canvases, which, as Ertuğ points out, "eroticize the Middle East and can be erroneous, and are therefore questioned by Middle Eastern buyers."

TOP: MATHAF GALLERY; LOWER AND OPPOSITE; TOP: CHRISTIE'S; OPPOSITE, LOWER: TATE BRITAIN

along with accuracy, ever-important matters of provenance—who has owned the painting previously, how was it obtained, how much has been paid for it—are now supplemented by a condition report—repairs to the canvas, relining and restoration—in determining the value of an Orientalist painting in today's market.

Interestingly, women have become very important buyers in their own right in the last decade. In much of the Middle East, women tend to be the leading decision-makers in matters relating to the home, and they have been instrumental in buying Orientalist art. "Oils for the *majlis* [the room where guests are received], something more decorative upstairs," says Brian MacDermott. He recently advised an audience of 50 women on collecting Orientalism at the Abu Dhabi Cultural Foundation, he says, and he lectures university and A-level students in Dubai, including sensible advice for these future collectors.

"I emphasize very much the dangers of forgeries. But what really encourages me is that most collectors, particularly in the Arab world, have bought for the right reason—because they like the painting, as opposed to viewing it as an investment. If it happens, as it has happened, that they've made a lot of money when they've sold it, they're even more pleased. But very few of these paintings come back on the market. People who've bought them hold onto them."

Another market shift is being driven by the burgeoning museum culture of the Gulf. Each of the Gulf countries has been gradually building national collections, and several of them contain important holdings of Orientalism, the only genre that depicts customs and traditions long forgotten or disappeared. One such new museum is the huge Sharjah Art Museum, hosting the last leg of "Lure of the East" tour. In Dubai, Sheikh Maktoum has set up his own museum, and the Qataris have also been collecting assiduously for their new museum. Ali Can Ertuğ adds that Turkish museums have also been buying Orientalism extensively. Alexandra McMorrow comments that "cultural awareness now in the Middle East is feeding into the boom in museum investment."

Often obscured by its own veils of stereotype and history, Orientalism remains a cultural legacy that inspired not only undisputed technical excellence but also complex understanding of the relationships among western and Arab worlds. For the largely Arab clientele who now find it so attractive, the visual poetry and unabashed nostalgia of Orientalist paintings are often pleasing respites in a rapidly changing world—much as their creators originally intended them to be.

Top: **"Jeune Fille Egyptienne," by Jean-Léon Gérôme is regarded today as sensitive and individualized—much as the artist might have portrayed a European.** Above left: **As his 1866 "The Afterglow" shows, English Pre-Raphaelite William Holman Hunt was known for strong colors and symbolism.** Above right: **"An Arab of the Desert of Sinai," by John Frederick Lewis.** Opposite: **"The Jewellery Box," by Rudolf Ernst.**

Writer, photographer and editor **Juliet Highet** is a specialist in Middle Eastern heritage and contemporary arts. Her book *Frankincense: Oman's Gift to the World* was recently published by Prestel. A second book, *Design Oman*, is in preparation. She lives in Surrey.

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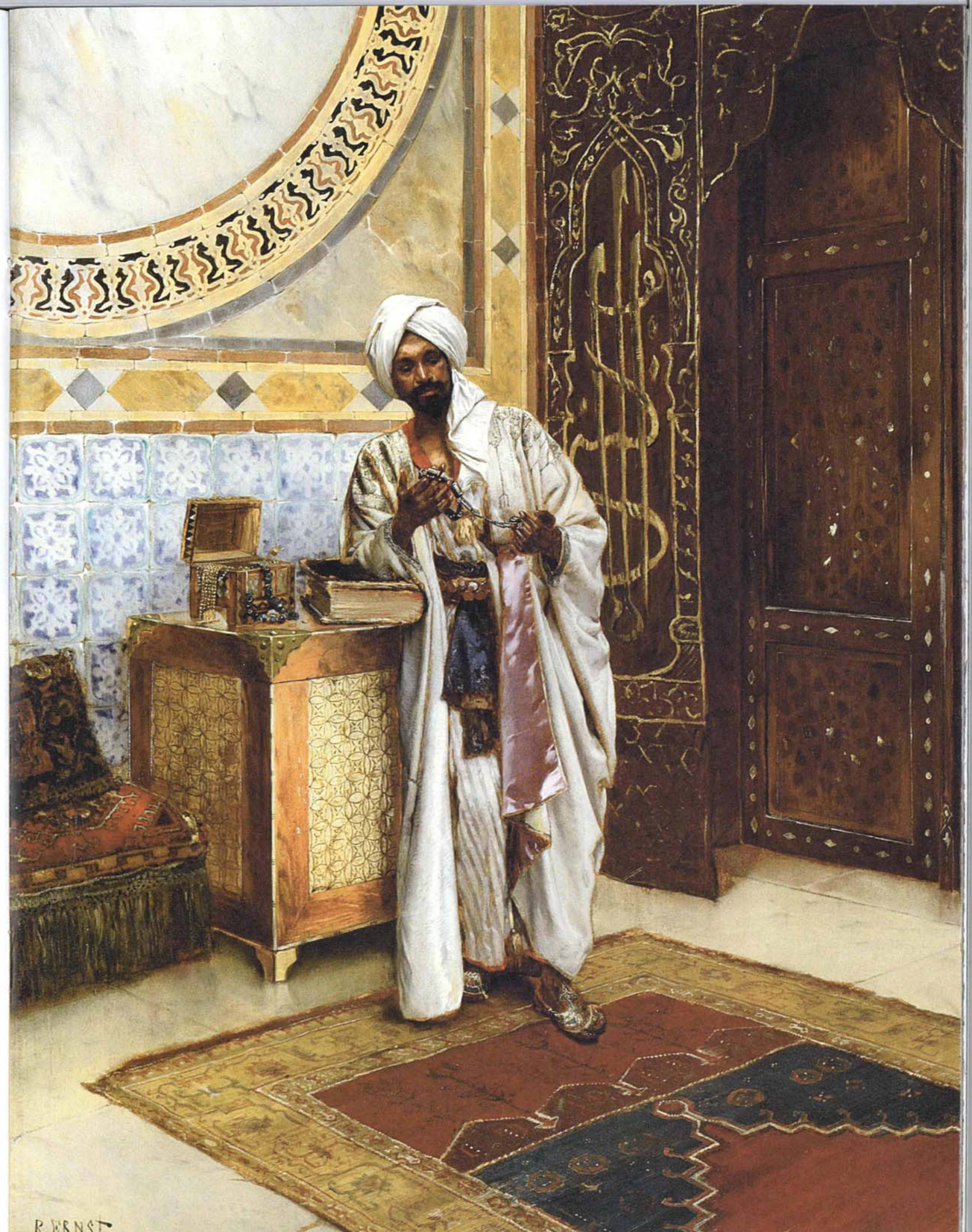
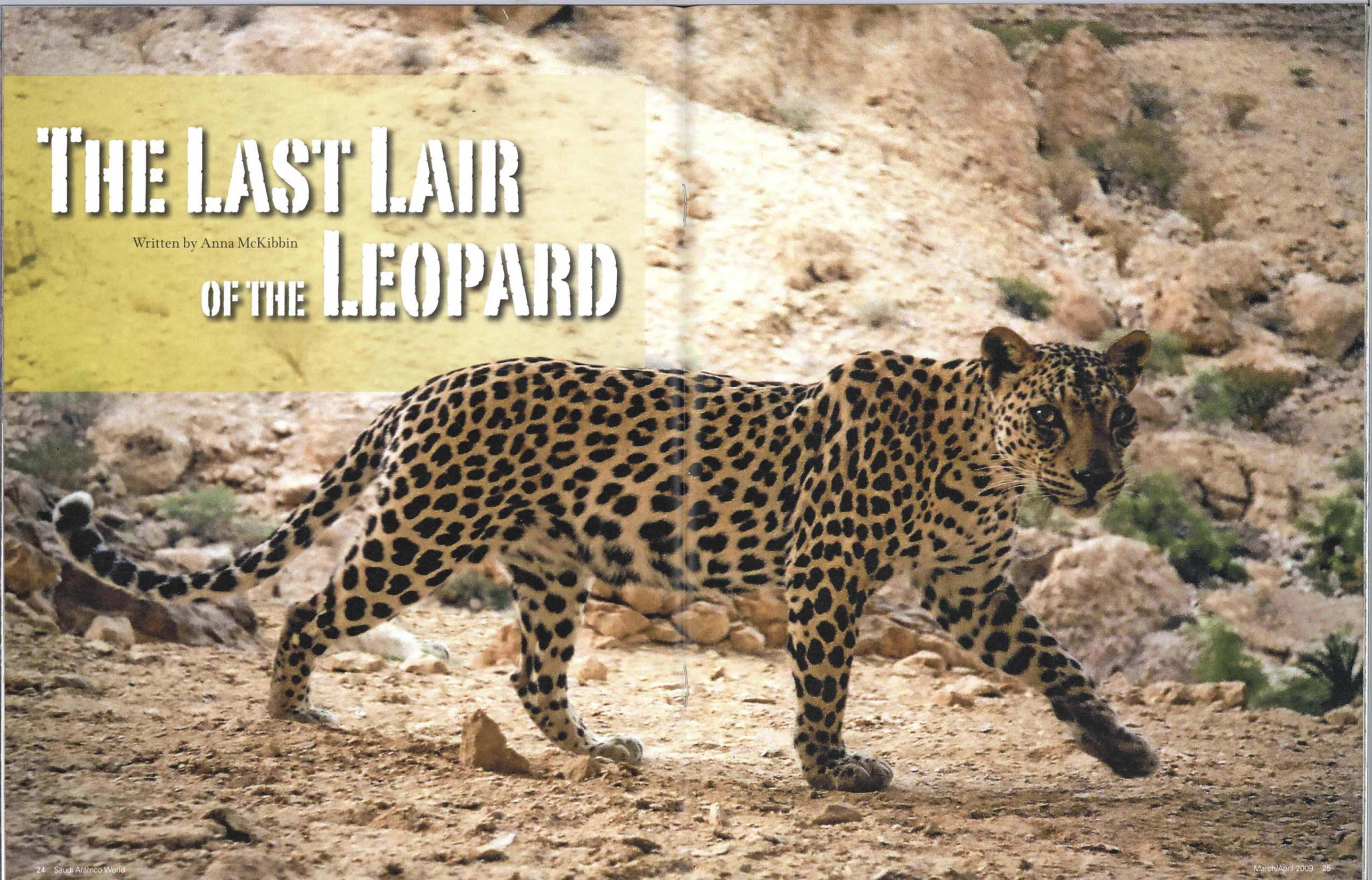
Orientalist painting: N/D 74, M/J 94
World of Islam Festival: M/J 76
New national museums: J/F 09

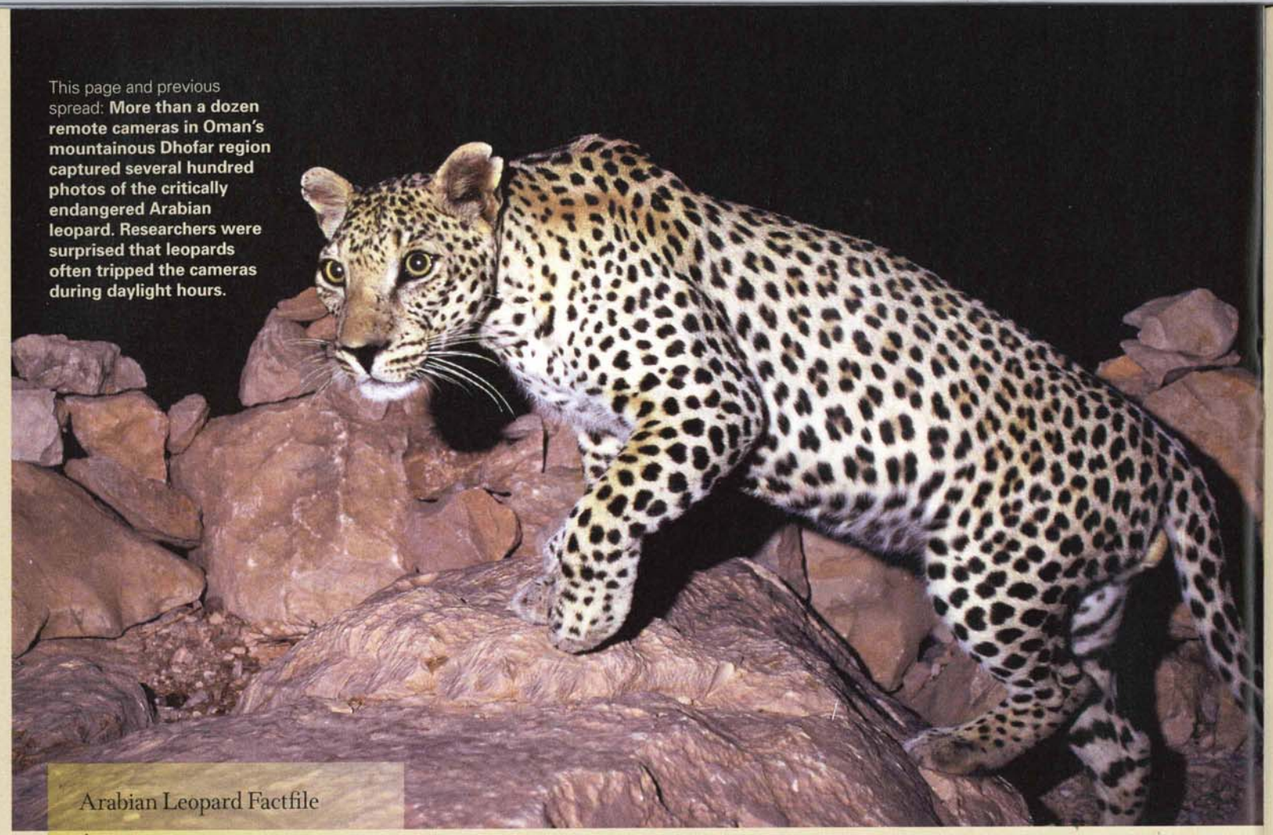


TOP, LOWER RIGHT AND OPPOSITE (3): CHRISTIE'S; LOWER LEFT: TATE BRITAIN

THE LAST LAIR OF THE LEOPARD

Written by Anna McKibbin





This page and previous spread: **More than a dozen remote cameras in Oman's mountainous Dhofar region captured several hundred photos of the critically endangered Arabian leopard. Researchers were surprised that leopards often tripped the cameras during daylight hours.**

Arabian Leopard Factfile

Scientific name:
Panthera pardus nimr

Head and Body Length:
1.3 meters (4' 4")

Weight: Male 30 kilograms (66 lbs), female 20 kilograms (44 lbs)

Habitat: Mountainous areas with forest/scrub, preferably with permanent water sources

Prey: Gazelle, ibex, hyrax

Threats: Persecution, poaching, habitat loss, prey depletion

Behavior: Generally thought to be nocturnal, but this is now in question. Marks territory using scrapes, scent marking and defecation.

Our quarry emerges from beneath an overhanging rock, its pale coat camouflaging it against the dusty background on Jabal Samhan, a rugged mountain range rising to 2100 meters (6990') in southern Oman. Positioning itself in front of a vertical rock face, the leopard lifts its tail stiffly and sprays the rock with a pungent calling card. Then it sniffs the boulders for evidence of other visitors and slinks off down the trail, leaving us awestruck by its casual majesty.

It's hard to absorb the significance of what we've just witnessed, and perhaps even harder to picture the Arabia of ancient times when sights like this were commonplace. Big wild animals were once plentiful here and encounters with them weren't so welcome. "The pasturage ... supports flocks and herds of all sorts...," wrote the Greek geographer and historian Agatharchides in the second century BC. "Crowds of lions, wolves and leopards gather from the desert, [and] against these the herdsmen are compelled to fight day and night in defense of their flocks."

These days, things are different. Travelers to Arabia have more reason to marvel at the cities than the wildlife, and more reason to fear cars than carnivores. It's hard to imagine that animals we associate with the African savannah might coexist with so much man-made progress—and sadly, for the most part, they don't: The lions disappeared many centuries ago; the wolves are now few in number. But somehow, largely forgotten by the human population with whom it shares this unforgiving landscape, the leopard has managed to linger. Jabal Samhan, a hyper-arid network of rocky plateaus and nearly impenetrable gullies, a place where June shade temperatures regularly top 46 degrees Centigrade (115°F), is one of the last lairs of the elusive Arabian leopard.

Unlike Agatharchides, however, I still haven't seen an Arabian leopard in the wild. Very few people have. After all, this is one of the rarest animals on the planet, classified by the International Union for Conservation of Nature as "critically endangered," meaning that it faces an extremely high risk of extinction. Though once it roamed the mountains of Jordan, Saudi Arabia, the United Arab Emirates and Yemen, as well as Oman, this feline phantom has now all but vanished. The individual we monitored this morning was an image on our video screen, captured in a remote-filming operation designed to help save what could be the last viable population of Arabian leopards, deep in the south of Oman.

ABOVE AND PREVIOUS SPREAD: ANDREW SPALTON

HADI AL HIKMANI

For many years it wasn't clear whether the leopard still existed in the mountains of Dhofar. There are few visitors to this difficult terrain. Nomadic herdsmen occasionally pass through with livestock, and frankincense harvesters pay brief visits in the spring and fall. But few linger. And even if they did, the odds of a chance encounter with an animal wary of man and supremely well adapted to its environment are next to nil. The only tangible evidence of the leopard's continued survival was the occasional goat seized from a settlement on the edge of the territory, often followed by the discovery of a leopard carcass bearing a lethal gunshot wound.

The leopard has enjoyed formal protection in Oman since 1976. In 1997, further safeguards were introduced when an area of 4500 square kilometers (1740 sq mi) comprising Jabal Samhan was declared a protected area. But was it too late? Had the leopard already edged too far toward extinction? It wasn't clear—until one man took up the challenge to photograph the cats.

"It started in 1989," explains resident wildlife cameraman David Willis. "I was interested in filming ibex and heard that in Jabal Samhan you could see herds of up to 40 animals. One night while camping we heard a leopard calling. I'd heard them before in Africa but didn't think it was possible to encounter them in Oman. Then, over the next few days, we saw the tracks."

Willis decided to try to photograph the animals using a homemade system of remote 35-mm cameras, installed in locations where he had found signs of leopards, such as footprints and "scrapes" made by pawing the ground. Each camera was linked to a carefully disguised pressure plate—a plywood platform which would trigger the shutter when it was stepped on. He left the setup in the mountains and went back to his home in Oman's capital, Muscat, some 1000 kilometers (620 mi) away.

I still haven't seen an Arabian leopard in the wild. Very few people have.

"It was an experiment," he explains as we leaf through his collection of big-cat mug shots. "When I recovered the film three months later and saw that 15 frames had been shot, I assumed they would be pictures of dogs and donkeys—maybe the occasional camel." It was only when Willis had the film developed in Muscat that the success of his experiment became clear. There, among the dogs and donkeys, were eight pictures of an animal few had ever seen in the wild: likely the first-ever images of the Arabian leopard.

Pre-monsoon winds off the Arabian Sea brush clouds across the tops of the hills in the Jabal Samhan Nature Reserve, where leopards have enjoyed official protection since 1976. Rugged terrain and fierce summer temperatures keep human visitors to the region few.

Studying the images he places in front of me, there's no denying that the Arabian leopard is a magnificent beast. Once, three subspecies of Arabian leopard prowled this peninsula. Now only one remains: *Panthera pardus nimr*. Its coat is a creamy-buttermilk color, its rosettes (the technical name for the spots that pepper its lean frame) a dark inky black, rendering it virtually invisible in its rocky hideout. Although smaller than its African counterpart, this is a powerful predator—though clearly not one averse to a little fun: One series of shots shows a leopard in a variety of airborne poses, returning repeatedly to bounce on the spring-loaded pressure plate. In the face of such joy for life, I find it easy to sympathize with Willis's broader focus: to save the leopard from demise in the wild.

Luckily, I'm not the only one convinced of that necessity. In 1995, Dr. Andrew Spalton, adviser for Conservation of the Environment to Oman's Diwan of Royal Court—the sultan's cabinet—heard about Willis's work and immediately recognized its potential. Soon after that, Oman's Arabian Leopard Survey was born.

Studying rare wild animals is difficult at the best of times, but tracking the Arabian leopard is a monumental task. It was clear that studying the animals by direct observation was not an option; even setting and maintaining camera traps turned out to be a lesson in patience and perseverance. The first problem was getting to the survey site. Jabal Samhan has no roads and few sources of fresh water. An expedition into the interior starts by boat from a port on the Indian Ocean such as Salalah, and then requires several days of hiking with supplies and technical gear. Finding anything here—even finding the same spot twice—is difficult enough. Finding a feline version of the Scarlet Pimpernel is not a task for the easily frustrated.

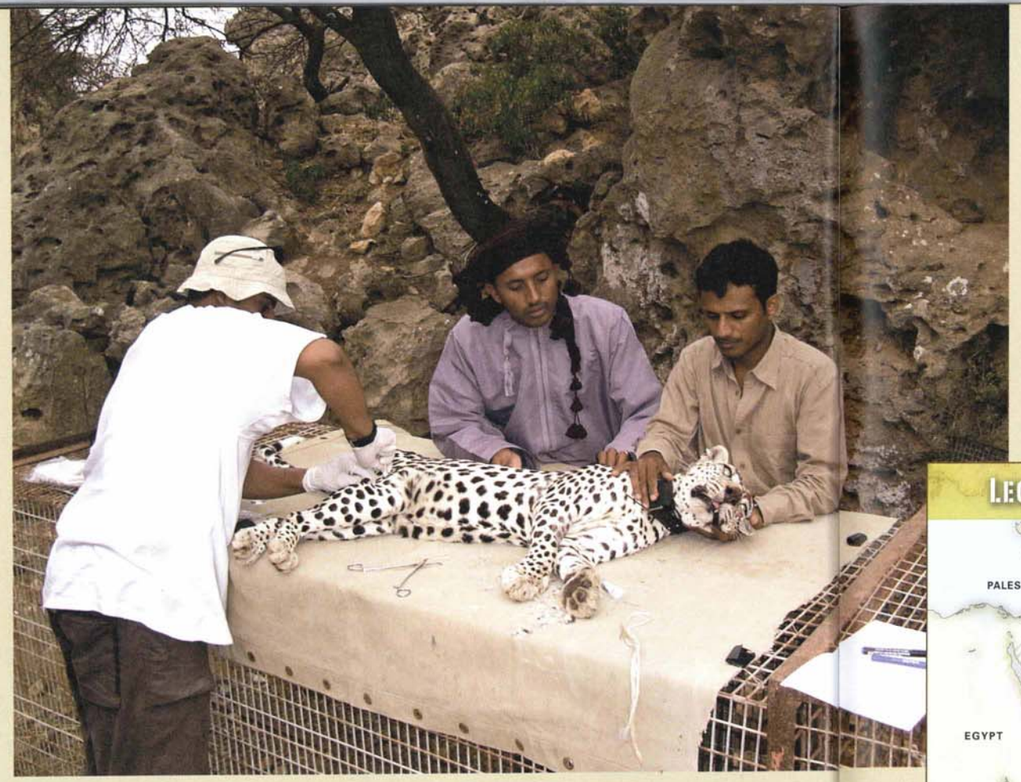
Research Methods

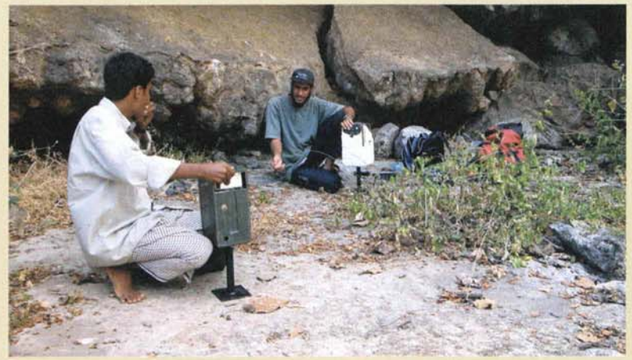
Researchers on Oman's Arabian Leopard Survey employ a variety of techniques to learn more about their subject.

Ground surveys: Researchers comb the area for signs of leopard presence: territorial scrapes, scats or urine, scent sprays and evidence of kills.

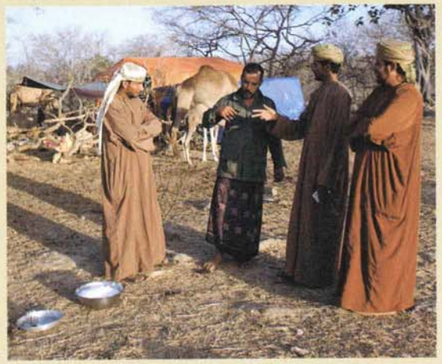
Camera trapping: A weatherproofed camera is sited next to routes known to be used by leopards. The camera may be triggered either by a pressure plate or an infrared beam. Researchers can use the resulting images to identify individual leopards.

Satellite tagging: Leopards are trapped, sedated and fitted with collars carrying satellite tags. Although expensive, the collars can provide detailed information about the leopards' movements and behavior.





Four years of treks to set up and recover the remote cameras resulted in more than 200 images of leopards—and many more of donkeys, dogs and camels.



Above: **Using goats as bait, researchers in 2001 trapped four leopards and fitted them with satellite tagging collars. This allowed real-time tracking of their movements: One leopard covered 476 kilometers (295 mi) in 55 days.** Right: **A Jabal Samhan Nature Reserve ranger talks to local residents in an effort to persuade them that the economic benefits of leopard preservation can outweigh the risks of livestock predation.**

"We suffered endless technical issues," explains Spalton. "Our equipment overheated, leopards scent-marked the cameras by rubbing against them, donkeys knocked them over, mice chewed through the cables." Even when the camera-traps worked, the results were less than reliable. "Having mounted a major expedition to recover films and reset traps, we could get entire films full of nothing but donkeys. From a total of 13 cameras, we might get one leopard image," he says. Nonetheless, the patience of Spalton and Willis and their small team eventually paid off. Between 1997 and 2000, a total of 251 photos of Arabian leopards were obtained, and the scientific analysis could begin.

It is actually scientifically true that leopards never change their spots. The shape and pattern of rosettes on each leopard's coat are unique, rather like a human fingerprint. Analysis of the camera-trap images revealed 17 individuals: 16 adults (nine females, five males and two of unknown sex) and, most exciting, a cub. The results suggested a total population of around 50, confirmed that they were breeding and offered invaluable information about leopard behavior.

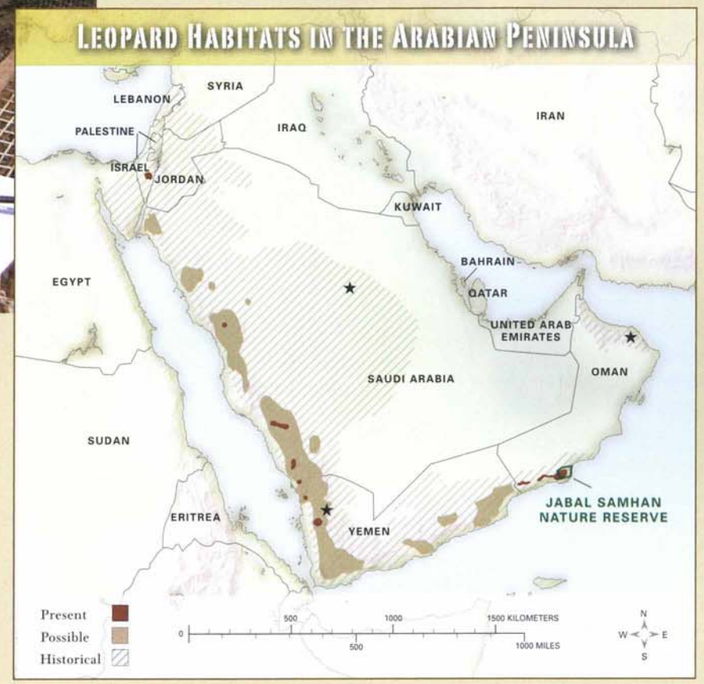
Leopards are widely considered nocturnal animals. However, in one of the three monitoring areas, the leopards were most active from six to nine in the morning and three to seven in the evening, with some 70 percent of their activity in daylight hours. "This could be due to the different environmental conditions in this area," offers Spalton. "It includes a steep-sided gorge with permanent water and plenty of shade. For much of the day, the leopards don't have to deal with high temperatures and water loss." But a more important factor, he suggests, is the absence of human activity here. Leopards will avoid humans, at least during daylight, but with humans absent the leopard can adjust its activities to suit environmental conditions.

The camera-traps recorded vital information about some of the leopard's habits, but could only provide snapshots from which behavior could be surmised. In 2001, Spalton led the team on an even more ambitious project to gather data on the behavior and range of individual animals by capturing leopards and tracking them using satellite collars. It was a military operation, requiring plenty of equipment.

"We had lots of help from the Royal Flight and the Royal Air Force of Oman," says Spalton. "They used helicopters to fly us in and left us there for 60 days. We used cage-like traps baited with goats, withdrew several kilometers and waited, monitoring the traps with high-frequency radios." It was an exciting field trip. Camping out in the jabal area, the researchers encountered a number of its other inhabitants: striped hyenas (*Hyaena hyaena*), Arabian wolves (*Canis lupus arabs*) and Verreaux's eagles (*Aquila verreauxi*). But would they find any leopards?

"We had a couple of false alarms," Spalton recalls. "A signal on the radio meant the trap had been triggered. We would rush over to see what we had caught and find a partridge or a wolf. Then one morning, about 10 days into the trip, we raced over in response to a signal and found two leopards—one in the trap and one outside. It was a breathtaking sight." Here, finally, in the flesh, was the creature Spalton and Willis had spent so much time pursuing—and it was about to share some of its secrets.

Satellite tagging is one of the most powerful tools available to wildlife researchers. Animals are captured, sedated and fitted with collars carrying small GPS devices. The collars used by Spalton's team store data for three months and then drop off. Despite some technical hitches, four collars have now been recovered and the data they contained reveal some astonishing information about the leopards' movements, for some travel long distances. Indeed, one covered 476 kilometers (295 mi) in a 55-day period.



Close Cousins: Other leopard subspecies around the world

Leopards are among the most adaptable animals in the world. They occur in habitats ranging from the jungles of Southeast Asia to the high, cold mountains of the Himalayas and from the deserts of Arabia to the bush of Africa. The Arabian leopard is one of nine subspecies of leopard (*Panthera pardus*):

Indo-Chinese leopard (*P. pardus delacouri*) in mainland Southeast Asia

Indian Leopard (*P. pardus fusca*) in India, southeastern Nepal and northern Bangladesh

North Chinese leopard (*P. pardus japonensis*) in China

Sri Lankan leopard (*P. pardus kotiya*) in Sri Lanka

Javan leopard (*P. pardus mela*) in Java

Amur leopard (*P. pardus orientalis*) in the Russian Far East, northern China and the Korean Peninsula

African leopard (*P. pardus pardus*) in Africa

Persian/Iranian leopard (*P. pardus saxicolor*) in Southwest Asia

Arabian leopard (*P. pardus nimr*) in the Arabian Peninsula.

TOP: KHALID AL HIKMANI; LOWER: ANDREW SPALTON

ANDREW SPALTON (2)

DAVID WILLIS

P. pardus nimr: Distribution and Status

Formerly common throughout the Arabian Peninsula, the Arabian leopard now remains in only a few scattered populations.

Oman: Leopards were once present in the Musandam Peninsula and the Al Hajar Mountains in northern Oman and in the Dhofari Mountains in the south. They are now thought to be extinct in the Al Hajar Mountains. A 2007 survey found some evidence of leopards in Musandam, but this population may comprise only a few animals. The Dhofar population could comprise 40 to 50 animals.

Saudi Arabia: Small, isolated populations are thought to exist in remote parts of the Hijaz and the Sarawat Mountains in the west. There have been no confirmed sightings since 2002.

United Arab Emirates: Leopards may once have used the UAE as a corridor between Musandam and the Al Hajar Mountains. There is evidence of leopard killings by locals during the 1990's and in 2001, but no data has been acquired since. Experts have estimated the population in the northern Emirates and Musandam to be as few as five to 10.

Yemen: The presence of leopards was recently confirmed in the northern part of the western highlands. They have also been recorded in the central part of the western highlands, in the southwest and south, and in the east close to the Oman border, but their status is little known. They face severe persecution in wild, and it is suspected that many animals have been poached for private collections.

Jordan: The last confirmed sighting was in 1987. Recent field surveys have been unable to confirm subsequent reports.

Israel: Recent survey work using DNA extracted from feces confirms the existence of small numbers of Arabian leopards in the Judean Desert and Negev highlands.

That is some trek by any standards, but here such distances are not difficult to explain. Though it is an apex, or top-of-the-food-chain, predator, the game available to the Arabian leopard is very sparse. The energy in every ecosystem starts with the primary producers, the green plants–and the few dusty specimens that survive the hyper-arid conditions of Jabal Samhan can only support a sparse population of the herbivores that leopards eat. To survive and breed, the leopards need to patrol a vast territory to find their prey. In fact, data gathered by the survey team suggest that male leopards in Jabal Samhan have an average annual home range of 180 square kilometers (70 sq mi), while leopards living in lush grasslands, which support a higher concentration of prey, may have a range of only 50 square kilometers (19 sq mi) or even less.

The need for a large territory has forced the leopard to adapt its behavior in other ways. Much of the jabal is accessible only by well-defined pathways. This forces leopards to share territory, which is very unusual for such solitary creatures. It is thought that leopards manage this by leaving signals to warn others from occupying the same area at the same time–urine spraying, feces deposition, cheek rubbing and making scrapes. These techniques may also help males and females find each other to breed.

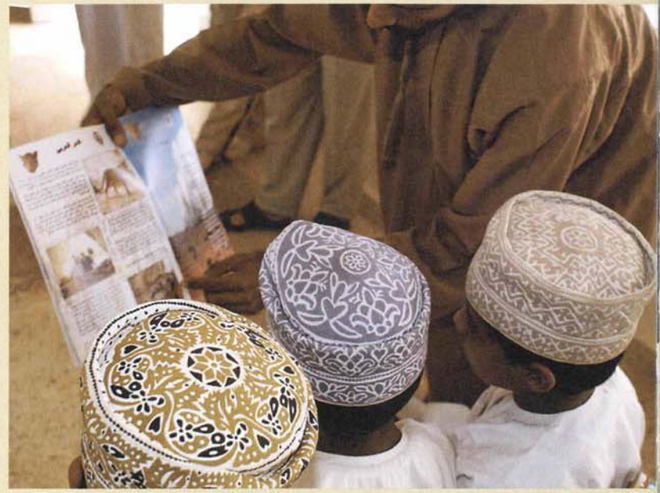
The leopard's need for food, and its large range, has also brought it into conflict with another apex predator: humans. The relationship between the Arabian leopard and the human population with which it shares its territory is complex. Hadi al Hikmani became involved with the Arabian Leopard Survey as a guide, providing camels for some of the expeditions mounted by Spalton and Willis. He comes from a *jabali* family–nomadic tribesmen who keep camels in these hills, bringing them down to lower pastures when the *khareef*, the southwest monsoon, brings rains. "In some ways my parents regarded the leopard as an enemy to be feared, as it kills livestock," says al Hikmani. "But if we heard the leopard calling when we sat round our camp at night, everyone would get very excited. It was regarded as a good omen. The older men said it would be a good year ahead."

These days, al Hikmani is employed full-time by the project and helps bridge the gap between the local population, many of whom still view the leopard merely as a livestock killer, and the Omani government, which seeks to protect an endangered predator. "The main conclusion of our scientific work is that there is a breeding population of leopards here in Oman and that it's potentially viable," says Spalton. "This probably represents the last opportunity to conserve the Arabian leopard in the wild. We established the Arabian Leopard Survey to find out more about the leopard, but given what we now know, we want to use ongoing funding to address real conservation methods. This is where the real work starts: There are many more challenges ahead."

One of the biggest issues facing the Arabian leopard in Oman is persecution by the local population in response to livestock losses. Spalton is keen to demonstrate that preserving the leopard can bring economic benefits, partly through the introduction of carefully controlled, low-impact tourism projects. However, as old conflicts are resolved, new ones are created. As the satellite-collar data indicate, the leopards need huge territories in order to survive.

Yet development creeps ever closer in the form of new roads, houses and hotels. Once, the survey team caught and tracked leopards outside the Jabal Samhan Nature Reserve in mountainous areas near Yemen–possibly part of a separate population that ranges across the border. However, they have already noticed a decline in the number of animals that have their pictures taken on camera-traps in this area.

So what does the future hold for the shadowy leopard of Oman's Jabal Samhan?



ANDREW SPALTON

Local schools, too, are teaching that leopards are not just large pests, but integral to the southern Omani ecology.

> "To keep its place in the mountains, the leopard needs to find a place in people's hearts and minds."

I ask Spalton how the sultanate will shoulder the responsibility of protecting what may be the last sustainable group of wild Arabian leopards. "We have to keep the leopard on the public radar," he replies. "It's all about people." And this is where al Hikmani again has a role to play, for the Diwan of Royal Court recently commissioned David Willis to make a film about the Arabian leopard, following al Hikmani and his work, in the hope that this flagship species will become a source of pride for Omanis and its plight an issue of national concern.

"To keep its place in the mountains, the leopard needs to find a place in people's hearts and minds," Spalton says. Having adapted its habits to survive the 2200 years since it was witnessed by Agatharchides, the leopard may be able to succeed in making this further critical last leap. If it can't, the only place the next generation will see this mysterious mammal is on film.

Find out more:

To find out more about the Oman Arabian Leopard Survey, visit www.oryxoman.com/leopard_main.html. Volunteer researchers are being recruited through Biosphere Expeditions for field work associated with the Arabian Leopard Survey in Musandam. See www.biosphere-expeditions.org for details.

Freelance nature correspondent **Anna McKibbin** (anna@digital-diaspora.com) is fascinated by the wildlife of the Middle East. "Its wilderness guards secrets we haven't yet begun to understand," she says. This is her second article for *Saudi Aramco World*. She lives in England.

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Frankincense harvest: M/J 00
Ibex: S/O 95

WRITTEN BY JOSIE GLAUSIUSZ

A Circle of Care

"I grew up in an environment of thinking that your career had to have some meaning."
—Wafaa El-Sadr, MD

At a simple medical clinic in Lesotho last November, Wafaa El-Sadr saw the fruits of nearly three decades of unstinting toil. Row upon row of colorfully clad women, pregnant or with babies in their arms, sat waiting for HIV treatment at the one-story Qoaling Filter Clinic in Maseru, the capital of this landlocked, mountain-ringed southern African country. A few years ago, these women could expect little or no treatment for the disease, which infects one quarter of Lesotho's population. Today, the majority of them receive comprehensive care for themselves and their children: a full range of antiretroviral drugs, testing for mothers and infants, and long-term follow-up and counseling. "It is the most beautiful complete model you could imagine," El-Sadr says. *"It was miraculous."*

That this miracle exists is largely thanks to El-Sadr, the director of the International Center for AIDS Care and Treatment Programs (ICAP), which supports the Maseru clinic as well as 26 others in Lesotho and some 400 more in 14 other countries across Africa. Born in Egypt in 1950, El-Sadr is a physician of unusual zeal and passion who has been treating people with HIV and AIDS since the earliest days of the epidemic in the 1980's. She is now chief of the Division of Infectious Diseases at Harlem Hospital in New York, professor of clinical medicine and epidemiology at Columbia University and, most recently, recipient of a 2008 MacArthur Fellowship "genius award." Her impressive resumé belies a disarming modesty: At times it seems she credits every achievement to her colleagues, community workers and patients. "She really is enormously accomplished on a rather grand scale," says her collaborator Elaine Abrams, a professor of pediatrics at Columbia who works with El-Sadr on programs to prevent mother-to-child transmission of HIV. "She totally understates her gifts and her brilliance. She is always more than willing to share responsibility for the good or the accomplishments."

Of the care provided by the Lesotho clinic—a place she describes as "buzzing, full of life and energy"—El-Sadr says simply that it is "impeccable." A staff of two nurses tends patients in an old building without fancy equipment, yet the all-encompassing care they provide—based on a community model developed by El-Sadr in Harlem and adapted to Africa by ICAP—is a radical improvement on the past. Characteristically, she insists that accolades be directed to the local staff and medics. "It's their work," she says. "We just helped them to make it happen."

Draped in her own colorful shawl, her jet-black hair framing a kindly face and warm brown eyes, Wafaa El-Sadr betrays barely a hint of the inner force that drove her to implement such sweeping change. She was born into a family of physicians: Both her parents were doctors, and they imbued her with an ethos of public service. "I grew up in an environment of thinking that your career had to have some meaning," she says, her conversation punctuated by the rat-a-tat-tat of drilling from the construction site beneath her compact, spartan office at Harlem Hospital in New York City. For women in Egypt, she explains, the medical professions were not unusual choices, and more than half of El-Sadr's class at Cairo University was female. "People here think that women are oppressed and deprived of education" in her home country, she says, and they are often surprised to learn that women have practiced medicine in Egypt for generations.

It was El-Sadr's turn to be astonished in 1976 when she arrived in the United States and learned how women in this country had, in earlier decades, struggled to enter medical school. As a newly minted doctor, she came to New York to study infectious diseases, believing that later she would return to Egypt. Her plans changed in 1981, when AIDS began its cruel advance on the population of her adopted city. "It was a scary, intense, incredibly fulfilling time, even though we didn't know what caused AIDS and lots of people were dying," she recalls. Fulfilling because "part of the biggest joy for me as a physician is the interaction with the patient. Because of how profoundly HIV affected people's lives, because of its isolating nature, the tragedies and the triumphs, it motivates a very special and deep connection with patients."

Perhaps because of this connection, El-Sadr realized early in the epidemic that existing care was often not well-tuned to her patients' needs. Many of them came from ruptured families, or families with more than one infected member—a spouse or a child. Some also were infected with tuberculosis (TB); others were drug-addicted. All had to deal with the social stigma branding people with HIV and AIDS.

"When we looked at people affected by HIV and TB in the community here in Harlem, they were largely very poor, largely disenfranchised economically and socially. They had very weak social-support networks, and they were often alone," El-Sadr explains. "It crystallized in my own mind the importance of thinking about not just the person with HIV or TB but the context in which they existed: the societal context, the community context, as well as the family context."

Out of this realization arose El-Sadr's standard of care: Holistic, multidisciplinary, family-focused, it addressed not just patients' medical needs, but also their economic and psychosocial needs. She formed teams of health care workers—including a doctor, nurse, nutritionist and social worker—who offered patients and their families psychotherapy and nutrition counseling, as well as assistance in finding housing, financial benefits, soup kitchens and drug treatment. Patients would be "enveloped in this team."

It is this model that ICAP, based at Columbia's Mailman School of Public Health, has introduced across sub-Saharan Africa. Since 2004, ICAP's community-based treatments have transformed hundreds of clinics that serve people not so different from those in Harlem: poor, disenfranchised and stigmatized. Thanks to PEPFAR (President's Emergency Plan for AIDS Relief, launched by US President George W. Bush in 2003), which largely funds ICAP, the organization now can provide services that were unimaginable five years ago. According to Abrams, more than half a million HIV-positive people in Africa now receive care with aid from ICAP.

Like Lesotho, Tanzania, too, is a "remarkable" success story, says ICAP country director Amy Cunningham. In 2003, fewer than 500 people in Tanzania were being treated for HIV. Today, ICAP supports or provides care for 40,000 people at 220 sites—hospitals, clinics or dispensaries—using the community-based model devised by El-Sadr. In addition to direct financial aid, Cunningham explains, ICAP provides training, on-site mentoring, financial management, counseling and testing to prevent mother-to-child transmission of HIV as well as lab equipment, solar panels, water supplies and even new buildings.

One other innovation El-Sadr introduced in Harlem that ICAP applies widely is the training of people with HIV to become peer educators in their communities. It's all part of her commitment to empowering the people who live at the heart of the epidemic: Indeed, of 700 staff employed by ICAP in the US and Africa, most are African. Among them are Bola Oyeledun, who directs the ICAP-Nigeria program. Nigeria, she says, is a country with more than three million people infected with HIV, and health care is often rudimentary. At first, ICAP teams often had to help clinics install lights, electricity and even water. Oyeledun found herself asking, "Can I really do this?" But for El-Sadr, nothing seemed insurmountable. She told Oyeledun, "Yes, you can, you can really do it. We're here to support you," the Nigerian doctor recalls. "She believed in my ability to get it done, and that gave me the confidence to build the program."

ROCKEFELLER FOUNDATION

ICAP

It's at the clinics in Africa where she finds her most creative ideas—by listening.

"Wafaa," Oyeledun adds, "really loves what she's doing. She doesn't see numbers. She sees people, each person, each individual, each child." Which could explain why, despite her exalted status, El-Sadr still sees her own patients once a week back in Harlem. These days, thanks to antiretroviral drugs that keep HIV in check, their medical problems are much more likely to be the sort of illnesses that afflict people who don't have HIV. ("I tell my patients, 'We're growing old together,'" El-Sadr says.) She also continues to conduct her own research: Most prominently, she was a lead investigator in the 2006 SMART trial, which found that breaks from antiretroviral treatments significantly increased the risks of opportunistic infections and death among HIV-infected patients.

She also travels often to Africa, sometimes as frequently as twice a month. It's where she claims she finds her ideas, by listening. "What's stunning to me is how creative the teams are," she says. "That's why I love to visit. I go, they've identified an issue, they've worked together on a solution, and it's remarkably creative and it's different from country to country. I love to give them the space to do that." Her unwavering instinct to credit others could explain why she maintains her low-key demeanor in spite of her newfound renown as a MacArthur winner. Recently, says Cunningham, "We were over at her house for a country director meeting. And Wafaa's in the kitchen scrubbing up the dishes. We said, 'Wafaa, you just won a genius award—sit down!' She said, 'No, no, I just want to get it all sorted out.'"

As for how she intends to spend the half-million-dollar, "no-strings-attached" award—which came "completely out the blue"—El-Sadr says she doesn't know yet. Whatever it is, it's likely to be innovative. "I love being part of something creative and new and evolving," she says. Or, as Elaine Abrams puts it, "I always saw the MacArthur as this acknowledgment of individuals who had the courage to think outside the box, to think about good things for the world," she says. "This is not just academic with Dr. El-Sadr. It *is* about making the world a better place."

Josie Glausiusz (josiegz@earthlink.net) is a journalist and editor specializing in science. Her articles have appeared in *Nature, Wired, Discover, The Wall Street Journal, Scientific American Mind,* and *OnEarth.* She is the co-author, with photographer Volker Steger, of *Buzz: The Intimate Bond Between Humans and Insects* (Chronicle, 2004). She lives in New York City.

Morocco's Trilobite Economy

Written and photographed by Andrew A. Sicree

In 1916, French geologist Louis Gentil walked across the newly constructed airfield at Casablanca, picked up a fossil trilobite and kicked off a century of European and American fascination with the fossils and minerals of Morocco.

Growing slowly at first, fossil and mineral exports expanded so rapidly beginning in the late 1980's and early 1990's that today more than 50,000 Moroccans earn their livelihoods in the fossil and mineral specimen mining and export business. Collecting, especially among youngsters, has gone worldwide, and the US market is the largest.

Fossil exporter Brahim Tahiri of Alnif has built an enterprise that supports scores of families in the rural Tafilalt region of southeastern Morocco—where, he notes, "there are no other jobs." Tahiri got his start in the fossil business when he was still a student, working for his older brother Ali. After Ali died in a car crash in 1999, Brahim stepped up to fill his shoes. Today, the business he runs with his brothers Mohammed and Yousif provides work for about 65 fossil-diggers throughout the Tafilalt region, with an additional two dozen workers employed in the family's fossil-preparation "factory" near Erfoud, about 115 kilometers (70 mi) northeast of Alnif. Fossils "prepped" by Tahiri's employees are sold

Left: **At the Tucson Gem and Mineral Show, high school students Vianca Somoza, Eliezer Montes de Oca and Rebeca Montane examine Moroccan fossils and minerals for sale.** Opposite: **Trilobites, like the ones fossilized here, emerged more than 500 million years ago in what's called "the Cambrian explosion," a period when large numbers of novel species with skeletons, eyes and limbs evolved with remarkable suddenness. Trilobites are so called because of the three parts, or lobes, of their bodies.**

The squid-like nautiloid *Orthoceras* ("straight horn") is a classic of Moroccan fossil-hunters, often found in vast numbers in black limestone. The largest specimen here is 60 centimeters (2') long.

throughout Europe, the United States, Australia and Japan.

Fossil- and mineral-diggers have made Morocco famous for its trilobites and its *Orthoceras*-rich limestones. Polished slabs of black limestone streaked with cone-like *Orthoceras* fossils are sold as curios or fashioned into coffee tables, ornamental sinks and even bathtubs. Finely prepared Moroccan trilobites can be found in the collections of museums great and small, as well as in the homes of innumerable amateur paleontologists. And the country's colorful minerals, such as bright-red vanadinite and silvery skutterudite, are also the pride of many a great collection worldwide.

Mining normally evokes visions of men digging deep underground for gold, huge trucks hauling iron ore or limestone boulders being crushed to manufacture cement. Tonnage is valued in ordinary mining; delicate crystals and pristine fossils are not.

Moroccan specimen-mining is a delicate, labor-intensive enterprise: The goal is to find and produce attractive samples that can be sold as scientific curiosities, or perhaps even as works of art—so the miner strives to harvest his treasures from the ground undamaged. Dynamite is seldom used. For the teams of men who work in the small pits and trenches that mark the fossil fields, shovels, picks and chisels, and perhaps a backhoe, are the tools of choice. It's hard, dusty work. Many miners are Berber tribesmen whose families have deep roots in the region.

Once specimens are cut from the earth, local men clean and prepare them for sale. In Erfoud, middlemen gather every Thursday and Sunday to buy the output of the numerous diggers and "preppers." Around a hundred different export outfits batch the bulk of Moroccan fossil and mineral specimens; these are purchased by dealers at the world's major fossil and mineral shows, such as those in Tucson, Arizona and Munich, Germany. Then they are sold in lots of dozens or hundreds to gift shops in museums and malls.

It is impossible to estimate how many young fossil collectors have been inspired to take up careers in science by their collections of Moroccan trilobites. What is certain is that specimen-mining is big business in Morocco. In 2000, *The New York Times Magazine* reported that the fossil trade alone was worth $40 million annually in Morocco, although—as in most similar industries—middlemen and retailers see much more profit than diggers and preppers. American geologist Douglas Shakel has aptly described Morocco's booming specimen-mining industry as the "trilobite economy."

> The fossil trade is worth some $40 million annually in Morocco.

Most Moroccan specimen exporters are often away from home. Tahiri, for instance, spends one month a year at European exhibitions and two months in the US, principally in Tucson. There, in late January and early February each year, some 50 different exhibitions take place in hotels and tents throughout the city.

Family heritage plays a big role in the export business, says Ahmed Bouabidi, a fossil and mineral exporter from Midelt, about 200 kilometers (125 mi) north of Erfoud. Bouabidi's father, a retired miner, worked in the Mibladen lead mine near Midelt and fostered his son's early interest in minerals. The younger Bouabidi earned a geology degree at Moulay Ismail University in Meknes and got into the specimen-export business in 1992, working with his cousin. Bouabidi's expertise as a geologist enables him to answer customers' questions about the fossils and minerals he sells at shows in Tucson; Turin, Italy; Sainte-Marie-aux-Mines, France; and Munich and Hamburg. "Mineral and fossil sales are great for Morocco's economy," he says.

For Laheen Boutahar of Beni Mellal, on the edge of the High Atlas Mountains southwest of Midelt, mineral-specimen exports are a welcome addition to his family's regular mining business: Golden State Mining Company, or GSMC. He and his brothers Ahmed, Mohammed, Aziz and Hassan operate five mines in the High Atlas Mountains and the Middle Atlas to the north. They produce lead, copper and zinc ores, aragonite (used in cement manufacture), selenite (also called gypsum and used to make plaster) and fluorite (used as a flux in the steel industry). While working at the mines, diggers also harvest and prep a variety of mineral specimens for sale to collectors. All told, the family's mining- and specimen-exporting operations employ about 60 workers.

GSMC has two California offices and markets an array of mineral specimens in America. The list includes bright-green malachite and deep-blue azurite, silvery cubes of galena, and crystals of calcite, selenite, aragonite and fluorite.

Of course, European, American and Asian importers also benefit from Morocco's trilobite economy. Many have developed a personal fascination with the country's fossils and minerals while meeting the demand for specimens at home, and have come to cherish the Moroccan people and the country itself.

Most have Moroccan partners; some have Moroccan spouses. Bill Barker, who owns the Sahara Sea Collection in Tucson, works with Brahim Tahiri of Alnif. Brian Eberhardie, a major importer of Moroccan fossils and owner of Moussa Direct in Cambridge, England, is married to a Moroccan named Mina.

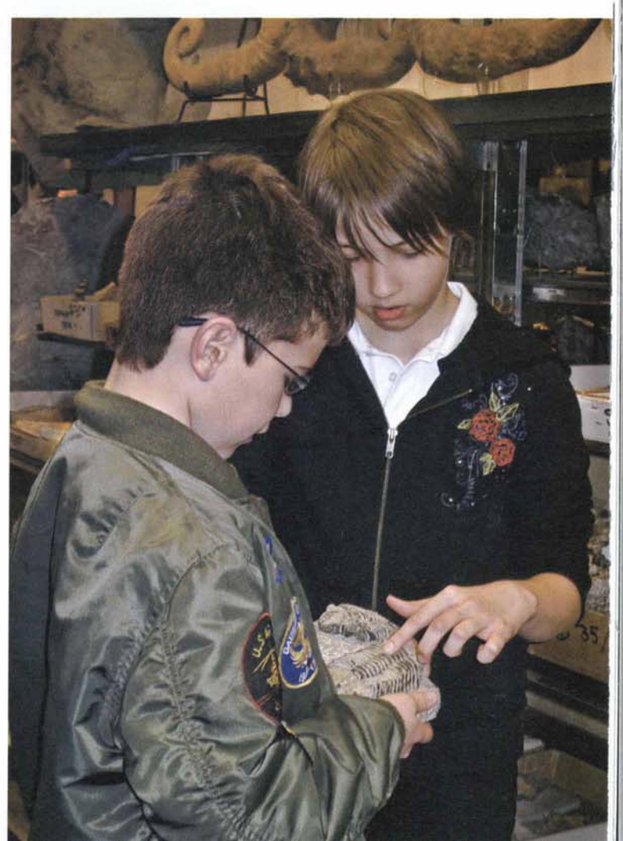
> Paleontologists have identified hundreds of species of trilobites in Morocco, all buried on the limy seabed between 245 and 570 million years ago.

Eberhardie does more than import fossils. When an unusual trilobite specimen comes to his attention, he contacts a paleontologist such as Professor Richard Fortey of the Natural History Museum in London. One of Eberhardie's discoveries, a trilobite with highly unusual, tower-like eyes, is named after him: *Erbenochile erbeni*. Fortey says that Morocco is home to "three or four hundred" trilobite species. The Natural History Museum has about a hundred specimens, but hopes to acquire more.

A few scientists worry that specimen-mining "exploits" Morocco's paleontological heritage. Others note that paleontologists have identified hundreds of species of trilobites—many new to science—from finds by miners working the country's Paleozoic limestones, which were laid down 245 to 570 million years ago. Without markets to support Moroccan diggers, a large number of these species would never have been discovered.

Some Moroccan exporters have also made significant contributions to science. In addition to exporting fossils, Brahim Tahiri operates the only private fossil museum in Morocco. The Tahiri Brothers' Museum of Fossils and Minerals near Erfoud preserves and displays scientifically important specimens to promote geological education. Brahim Tahiri's efforts have been recognized internationally as paleontologists do: They have named a trilobite, *Asteropyge tahiri*, in his honor. (He also has the honor of having a non-trilobite fossil arthropod, *Eoduslia brahimtahiri*, named after him.)

Erfoud lies in the heart of Morocco's fossil beds, and the Paleozoic strata south



Kyle Skipper and Natia Copeland shop at the Tucson Gem and Mineral Show for a specimen of *Drotops*, a 416-million-year-old Moroccan trilobite genus. Most trilobites are 2.5 to 10 centimeters (1–4") in length, but they can range from one millimeter to 70 centimeters (.04–28").

MOROCCAN GEOLOGY: COMPLEXITY AND ABUNDANCE

Specimens photographed by John Passaneau
From the collections of John Passaneau and William Tatu

A brief glance at the geology of Morocco shows why the country is so rich in trilobite fossils and colorful minerals.

Moroccan geology spans a vast period of time. Rock types range from Precambrian granites, gneisses and marbles, formed more than 570 million years ago, through the Paleozoic limestones, to Quaternary volcanics formed within the past million years. In the north, Mediterranean Morocco has a geology that is part of the vast European Alpine system, while the central and southern portions of the country have uniquely complicated "African" geologies.

Much of Morocco's Anti-Atlas Mountains in the far south are built of Paleozoic rocks, dating back 245 to 570 million years, and Cambrian, Ordovician, Silurian and Devonian limestones abound. When these rocks were deposited, a warm, shallow sea teeming with life covered the region. Trilobites scuttled along the seafloor, and huge schools of *Orthoceras*, squid-like nautiloids with cone-shaped shells, swam above. When these creatures died, their shells were preserved in the limy mud of the seafloor.

Morocco's complex geological history makes its rocks host to a variety of economically important minerals. Morocco is the world's leading exporter of phosphate rock, used to produce phosphoric acid and fertilizers, and —mainly thanks to phosphate mining—the country's mineral industries are the largest foreign-exchange–earning sector of the economy.

Mining also yields a wide range of other valuable mineral products, including antimony, barite, coal, cobalt, copper, feldspar, fluorspar, iron ore, lead, manganese, salt, silver and zinc. Gold is mined at Lourim in southern Morocco.

Collectible mineral specimens are a by-product of the mining industry. Long after a mine has closed, marketable specimens can be recovered from the spoil heaps and old workings. For instance, world-class specimens of bright-red vanadinite, a vanadium mineral for which Morocco is famous, still come from the Mibladen lead mine, near Midelt in the Atlas Mountains. To the delight of collectors, other old mines continue to produce specimens of aragonite, amethyst, malachite, azurite and a host of other minerals.

Morocco is also famous for mineral specimens including, clockwise from top left, **cerussite, embedded in iron-stained barite crystals; blue-green fluorite encrusted with white calcite; phosgenite (the large transparent crystal), in a matrix of galena; skutterudite, a cobalt arsenide, named for the town in Norway where it was discovered; and vanadinite, an important ore of vanadium.**

of the highway between Erfoud and Alnif are a prime hunting ground for diggers. Kilometer after kilometer of shallow trenches have been hand-dug by Berber miners following productive horizons in their search for trilobites. Diggers crack open rocks and, when they break into a trilobite fossil, save both halves. Broken trilobites are taken to prep labs like Brahim Tahiri's facility in Erfoud, where they are glued back together. Preppers then painstakingly chip out the trilobites. Their preferred tool is a micro-sandblaster.

Few trilobites are found in perfect condition and prepping usually involves some degree of restoration. Trilobite replicas can be made from plaster, plastic or auto-body putty, and it can be hard for amateurs to tell real fossils from replicas.

The price that a trilobite fossil will fetch in the marketplace depends upon its rarity and condition, the hours spent preparing it and the quality of the workmanship. In the US, trilobites may retail for anything from one or two dollars to several thousand, and some unusual high-quality pieces have sold for more than $20,000. A similar range of prices applies to mineral specimens.

Morocco's mineralogical endowment is as unique as its paleontological heritage. Mines in the world-famous Bou Azzer district, in the center of the Anti-Atlas Mountains south of Ouarzazate, produce cobalt and nickel arsenate ores and colorful mineral specimens favored by collectors. The district lies in a patch of Precambrian rocks that geologists call a *boutonnière* ("buttonhole" in French). Rocks here are very old and have a very complicated geological history. Immense heat and pressure resulted in the deposition of ore and mineral veins.

Before the onset of modern mining in the 1930's, Berber tribesmen in the Bou Azzer region chipped out small amounts of arsenic-containing rocks from the cobalt-nickel veins to sell in the Marrakesh *suq* as rat poison. French prospectors came across the veins in 1928 and the Bou Azzer Mine opened soon after that. As it played out, prospectors identified other ore veins nearby, which were also mined. The region's rich geological history produced such stunning mineral specimens as erythrite, a violet-red cobalt-arsenate, and skutterudite, a bright silvery cobalt arsenide. More than 120 different mineral species have been found at Bou Azzer, and the district even has an arsenic mineral named after it: bouazzerite.

Who benefits most from Morocco's mineral-specimen mining and its trilobite economy? Thousands of Moroccans earn a living in the industry. But the results of their work bedazzle and educate collectors, especially schoolchildren, around the globe. "Children know only about cartoon dinosaurs," says Houcein Mribiha, who hails from Khenifra on the edge of Morocco's Middle Atlas mountain range and enjoys selling fossils in America. "But, if their parents buy Moroccan fossils, they can learn about geology firsthand."

OPPOSITE: D.W. SHAKEL

Beyond the tire tracks is one of Morocco's many trilobite mines, which are typically hand-dug trenches, two to three meters deep. This one continues along the mountainside for 50 kilometers (30 mi).

Dr. Andrew A. Sicree (sicree@verizon.net) is a professional mineralogist who has served as director of a mineral-science museum. He carries out research for mining companies, teaches university geology classes, designs science-education programs for middle and high schools, and writes about science. He lives in Pennsylvania but—four generations back—his family is from Morocco.

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Morocco: M/J 98, N/D 98, M/J 01
Geology: M/A 00, M/A 06
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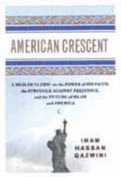
Suggestions for Reading

Readers of *Saudi Aramco World* who want to range more widely or delve more deeply than a bimonthly magazine can do will find interesting material, most of it recently published, in this list. Without endorsing the views of any of the authors, the editors encourage varied and omnivorous reading as a path to greater understanding. The books listed here are available online, in libraries, from bookstores—we urge our readers to patronize independent bookstores—or from their respective publishers; International Standard Book Numbers (ISBN) are given to facilitate ordering. Please do not order books from *Saudi Aramco World*. The full-text electronic archive of "Suggestions for Reading" from 1993 to the present can be found on the magazine's Web site at www.saudiaramcoworld.com.

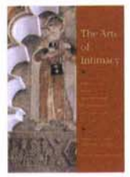
Al' America: Travels Through America's Arab and Islamic Roots. Jonathan Curiel. 2008, New Press, 978-1-595-58352-9, $25.95 hb.

Jonathan Curiel has conducted a rigorous and insightful investigation into what is Arab and Islamic in the history and culture of America. His focus runs from the serious (upward of 20 percent of the slaves brought to America were Muslims) to the sublime (the supposed invention of the ice-cream cone by a Syrian–American ice-cream vendor at the St. Louis World's Fair). Curiel's discoveries are fascinating: He makes a strong case that what's known as Spanish Colonial Revival architecture should more properly be called Islamic Revival, pointing out the Moorish origins of New Orleans's iconic ironwork and even the Alamo's several Moorish design components. He documents the country's infatuation with such "absurdist orientalism" as Shriners' fezzes, camels and faux-Turkish buildings; looks into the lasting appeal of *The Arabian Nights*; and even analyzes Elvis Presley's lifelong admiration of Lebanese–American poet and writer Kahlil Gibran. Curiel brings his inquiry up to the present with a post-9/11 portrait of Arab–American lives. Writing with a scholar's thoroughness, Curiel also shows the reflectiveness of a cultural critic, his role at the *San Francisco Chronicle*. —ANN WALTON SIEBER



American Crescent: A Muslim Cleric on the Power of His Faith, the Struggle Against Prejudice, and the Future of Islam and America. Hassan Qazwini and Brad Crawford. 2007, Random House, 978-1-4000-6454-0, $26.95 hb.

As head of the largest and oldest Shi'ite mosque in the US (in Dearborn, Michigan), Hassan Qazwini has a unique, ground-level view of the problems and possibilities American Muslims face. Growing up in Iraq in a family of clerics gave him an almost genetic ability to be evenhanded; as a spokesman for American Muslims, he has endured such standard false criticisms as the view that Muslims can't be loyal Americans. While he bristles at ignorance, he criticizes coreligionists—he calls them "hummus Muslims"—who he feels use Islam to promote non-Islamic, culturally influenced bad habits. An immigrant who enrolled in community college soon after his arrival, Qazwini says the challenges he faced strengthened his Islamic faith. His book is a light and welcome treatment of a weighty issue. —ASMA HASAN



The Arts of Intimacy: Christians, Jews and Muslims in the Making of Castilian Culture. Jerrilynn D. Dodds, Maria Rosa Menocal and Abigail Krasner Balbale. 2008, Yale, 978-0-300-10609-1, $40 hb.

In this original, thoughtful study, the authors show how cultures interact and cross-fertilize in spite of themselves. The tolerance of Umayyad Spain, and the cultural efflorescence it produced, lived on for centuries after such Muslim-ruled cities as Córdoba, Seville and Toledo were conquered and assimilated by Castile and its allies. We are familiar with the Christian religious paranoia and doctrinal rigidity that led to expulsion of the Jews from Spain in 1492 and removal of Muslims and Moriscos over the next century. Less well known is how the evolving culture and arts of Castile, particularly from the 11th to the 14th century, were influenced and molded by the achievements of Spanish Muslims and Jews. Alfonso VI, conqueror of Toledo, styled himself "king of the two religions" (Christianity and Islam). His most difficult task was governing not Muslims, the backbone of the city's economy, but rather the Mozarabs, local Arabized Christians who chafed under the control of clergy sent by Rome. He admired Muslim culture–the surviving Christian architecture, with its Muslim features, reveals as much. Centuries later, Alfonso X, the Wise, promoted the translation of great Arabic works for European scholars. This book is impressively illustrated and features an in-depth bibliographic essay. —ROBERT W. LEBLING

Besa: Muslims Who Saved Jews in World War II. Norman H. Gershman. 2008, Syracuse, 978-0-81560-934-6, $39.95 hb.

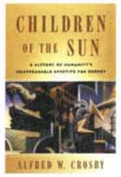
Besa is a code of honor deeply rooted in Albanian culture and incorporated in the faith of Albanian Muslims. Simply stated, it demands that an honorable person take responsibility for the lives of others in their time of need. In Albania and Kosovo, at grave risk to themselves, Muslims sheltered not only the Jews of their own cities and villages but thousands of others fleeing the Nazis from other European countries. Over five years, photographer Gershman collected the stories of individual and collective heroism; his book reveals a hidden period in history and shows the compassionate side of ordinary people.

Blood Test. Abbas Baydoun. Max Weiss, tr. 2008, Syracuse, 978-0-81560-912-4, $16.95 pb.

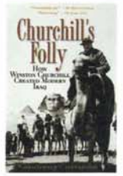
Baydoun is well known as a poet, journalist and critic; this is his first novel, infused with the culture and politics of his native Lebanon. In it, he recounts the efforts of a young man to explore his own history and identity through his encounters with family and friends, and through pursuit of the physical and psychological traces left behind after his father's sudden death. The search for a sense of belonging and rootedness leads him forward and back as the narration spans two continents and several generations. *Blood Test* won the 2007 Translation of Arabic Literature Award from the King Fahd Center for Middle East and Islamic Studies.

Children of the Sun: A History of Humanity's Unappeasable Appetite for Energy. Alfred W. Crosby. 2006, Norton, 0-393-05935-9, $23.95 hb.

The eminent global historian describes how we have always obtained from the sun the energy to do work or have work done, to think, to hunt and

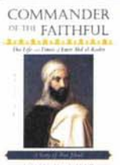


sow and harvest, to build, and to power automobiles and computers. Eating plants, and animals that fed on plants, was the first step; cooking was the next; agriculture and domestication of animals followed. And except for windmills, watermills and sailing ships, there was little further progress till recent centuries, when we began using fossil sunlight. In the last third of the book, Crosby turns his attention to fission, fusion and other energy sources, and wonders whether we are on the verge of another quantum leap, "like Paleolithic hunter-gatherers scratching wolf puppies behind the ears." In his long view, "humankind's unappeasable appetite for energy makes the solutions ephemeral and the challenge permanent."



Churchill's Folly: How Winston Churchill Created Modern Iraq. Christopher Catherwood. 2004, Carroll & Graf, 0-7867-1351-8, $26 hb.

This narrative of post–World War I British diplomacy adopts a familiar point of view: colonial powers as history's actors and native people as those acted upon. Catherwood strains to fit his own opinions between those of two sets of dueling experts, sympathetic advocates for either the colonizers or the colonized. He sees Churchill primarily as a well-intentioned imperialist tailoring a new set of Middle East boundaries to fit his empire's pinched economic circumstances. In a telling anecdote, the author notes how Churchill often had to remind his Colonial Office to call this artificially bounded country, a creation of that very same office, by its new name–Iraq–rather than "Mesopotamia," as if that right, along with much else, was purely at the discretion of the European overlord. —LOU WERNER

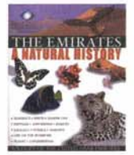


Commander of the Faithful: The Life and Times of Emir Abd el-Kader. A Story of True Jihad. John W. Kiser. 2008, Monkfish, 978-0-979-88283-8, $28.95 hb.

John Kiser has brought a revered historical figure out of hiding: the tribal leader Abd el-Kader, who fought the colonization of Algeria for 17 years, winning worldwide admiration for his resistance and resilience against the powerful French empire. A town in Iowa, Elkader, was even named after him in 1846 to commemorate his steadfastness. Kiser's biography reminds readers that it was the deep Islamic and multi-faith outlook of this Algerian George Washington, known for treating prisoners of war magnanimously, that made Abd el-Kader a remarkable man. After his surrender to the French and his exile in Damascus, he took up arms again to save thousands of Christians from a Turkish pogrom in 1860. In exile, Abd el-Kader won the praise of even those he had fought against for years. This is a riveting and enjoyable read. —ASMA HASAN

Danger Pay: Memoir of a Photojournalist in the Middle East, 1984–1994. Carol Spencer Mitchell. Ellen Spencer Susman, ed. 2008, University of Texas, 978-0-292-71882-1, $24.95 hb.

The author covered a turbulent decade in the Middle East for a long list of top US newspapers and newsweeklies. What saves this moving memoir from being merely retrospective is Mitchell's growing conviction, as she worked, that the western media's portrayal of conflict in the Middle East actually helps fuel that conflict. Her experiences forced her to "re-examine the way images are created, scenes are framed, and how 'real life' is packaged for specific news stories"—processes that are of continuing concern as we rely increasingly on visual and virtual media.

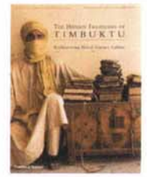


The Emirates: A Natural History. Peter Hellyer and Simon Aspinall, eds. 2005, Trident Press, 1-905486-02-2, £65 hb.

This big, beautiful book is billed as the most comprehensive reference work ever on the wildlife of the United Arab Emirates, with more than 400 pages of articles by 34 experts. Over 3000 species are described, many illustrated with stunning color photos. The book's three main categories are geology (including fossils), habitats (land, shore and sea) and wildlife (from plants to insects to marine life to land animals). Readers learn that four-tusked elephants lived in Abu Dhabi six to eight million years ago, and discover that the colocynth, or desert gourd plant, survives the blazing summers by sweating, as humans do. We get a fascinating look at the brief lifespan of the clam shrimp, a freshwater creature that survives for years in the desert as a hard-shelled cyst, coming to life for a few weeks when winter rains create an ephemeral pool of water. The book also explores human interaction with nature–the sustainability of harvesting, traditional uses of desert plants, commercial and pelagic game fisheries, agriculture and plantation and even humans' encounter with mangroves. Publisher Peter Vine is a well-known marine biologist and mariculture expert with more than 20 books of his own, including some highly regarded works on Red Sea marine life. —ROBERT W. LEBLING

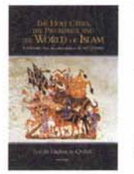
Green Gold: The Story of Lebanese Olive Oil. Sabina Mahfoud. 2007, Turning Point, 978-9953-0-0026-8, $35 hb.

Journalist Sabina Mahfoud embraces Lebanon's loving and reverential regard for its olive trees and the oil produced from them. Her husband carries Lebanese olive oil with him when he travels, emulating his grandparents, who left behind most of their possessions when they emigrated from their village in northern Lebanon but took along several gallons of precious oil. Mahfoud drives the countryside–where an estimated 20 percent of Lebanon's cultivated land is planted with 13 million olive trees, the oldest more than 1500 years old–and writes engaging portraits of the people devoted to olive cultivation. She explores every aspect of the olive, from its deep roots in Canaanite and Phoenician trade to its use as a symbol of fertility and triumph, and from modern methods of cultivation to the types and tastes of different oils. The second half of this visually beautiful book is dedicated to recipes featuring olives and olive oil, with luscious depictions of the classics from hummus to tabbuli to moussaka. —ANN WALTON SIEBER



The Hidden Treasures of Timbuktu: Rediscovering Africa's Literary Culture. John O. Hunwick and Alida Jay Boye. 2008, Thames & Hudson, 978-0-500-51421-4, $50 hb.

This is a coffee-table book of the best kind, one that wants to be read as well as seen. Its accessible text was co-authored by the longtime champion of Timbuktu's ancient manuscripts, and it features sumptuous photographs of the city's people, its physical setting and, most important, the manuscripts themselves–in their states of both calligraphic glory or worm-eaten loss. Hunwick and Boye tell of the near-miraculous recovery of this most precious patrimony, the Sahara's written word, whether locally composed and copied or imported from the glittering Arab capitals to the north. They give most credit to the town fathers who helped establish modern conservation libraries for what were once oftmistreated family heirlooms. —LOU WERNER

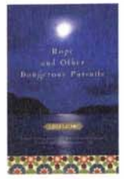


The Holy Cities, the Pilgrimage and the World of Islam: A History: From the Earliest Traditions till 1925 (1344H). Sultan Ghalib al-Qu'aiti. 2007, Fons Vitae, 1-8877-5289-7. $49.95 hb, $29.95 pb.

The British-educated author was the last Qu'aiti ruler of Yemen's Hadhramaut. He left the sultanate in 1967, when it became part of the People's Democratic Republic of [South] Yemen, and has resided in Saudi Arabia since then. He has produced a rich history of Makkah and Madinah and their role as holy cities and pilgrimage sites, using a wealth of Arabic, Persian, Turkish and Urdu source material unavailable to most scholars, as well as eastern and western diplomatic records. The sacred sites of Madinah hinge on the life of the Prophet Muhammad, who made it his base and second home. Makkah's holy precincts, however, long predate Islam; its original sacred house, or Ka'bah, was built by Adam directly below the heavenly throne of God, Muslims believe, and the second was constructed by the Prophet Abraham. The author begins with these earliest accounts and moves at a comfortable pace through the era of Muhammad, the Umayyads, 'Abbasids, Fatimids, Mamluks and Ottomans, and on to the rise of 'Abd al-'Aziz Al Sa'ud, the founder of Saudi Arabia. Sultan Ghalib walks the reader through the many episodes of building, rebuilding, expansion and renovation of Makkah and Madinah, putting the changes in understandable context. He keeps his story human,

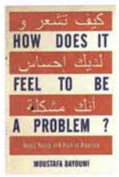
presenting warts and all, and thus maintains both his credibility and the reader's interest.

—ROBERT W. LEBLING



Hope and Other Dangerous Pursuits. Laila Lalami. 2005, Harvest, 978-0-156-03087-8, $13 pb.

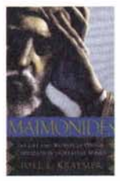
Readers looking for gritty stories of Morocco's poor that only an insider could tell will enjoy this tightly woven book. Laila Lalami follows four would-be emigrants on a risky run aboard an overloaded boat across the short stretch of water separating Morocco from Spain, and then traces their lives in chapters that flash to earlier—or later—parts of their lives. She details the daily grind that pushes them to a desperate bid to escape their homeland, and what they retain or lose on their trips. For some, the "hope" in the title is ephemeral; for others, it blooms in unexpected ways. Lalami, an émigré herself (she now teaches creative writing at the University of California Riverside), puts a sensitive finger on the pulse of Morocco. Her book helps explain what drives people to search for better lives and what makes the expensive and dangerous trip north across the Mediterranean the only route out of misery for so many.



How Does It Feel to be a Problem? Being Young and Arab in America. Moustafa Bayoumi. 2008, Penguin, 978-1-59420-176-9, $24.95 hb.

The author, who teaches English at Brooklyn College, City University of New York, explores the dilemmas and doubts of being young, Arab and American in detailed "portraits" of seven college-age Arab-American Brooklynites, shining a light on a community which, according to the 2000 census, had the largest Arab-American population in the US. Faced with prejudice in American culture, the interviewees are depicted as constantly bottling up their frustrations. Rasha (all interviewees' names are fictitious), writes Bayoumi, was unfairly imprisoned along with her family for months after the 9/11 attacks. High-school sophomore Yasmin bloomed as a leader after she was elected student-council secretary, only to be pressured into resigning because she refused to attend school dances for religious reasons. Palestinian-American Akram dreams of teaching English in Dubai, which he envisions as a modern Arab society. Though the book is not a cheerful read, the grimness of young Arab-American life is lightened by Bayoumi's poetic writing.

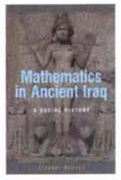
—ASMA HASAN



Maimonides: The Life and World of One of Civilization's Greatest Minds. Joel L. Kraemer. 2008, Doubleday, 978-0-385-51199-5, $35 hb.

When Muslims and Jews are at violent loggerheads, both sides might learn lessons from the life of Musa ibn Maimun, or Moses Maimonides. The 12th-century lawgiver, physician, philosopher and scientist was one of the great thinkers of his era. He was fluent in Arabic, Hispano-Romance and Hebrew. He wrote in classical Arabic for his Muslim readers, as in the case of his medical works, and in Judeo-Arabic (Arabic dialect with Hebrew letters) for his coreligionists, as in his famous philosophical work, *The Guide for the Perplexed*. Born in Córdoba, in Islamic Spain, and educated in Fez, Morocco, Maimonides eventually moved to Egypt, where he became head of the Jewish community under the Fatimids, known for their tolerant rule. He spent the rest of his life in Cairo, and his reputation flourished to the point that he was named court physician to the Ayyubid sultan Saladin, celebrated nemesis of the Crusaders. (He had been offered a similar position in the royal court of Christian-ruled Jerusalem, but declined.) This book is a definitive account of the life, works and times of Maimonides, based on a trove of original source documents, including his own manuscripts and letters, found in the Cairo Genizah. The author brings fascinating insights to the story of this great man.

—ROBERT W. LEBLING



Mathematics in Ancient Iraq: A Social History. Eleanor Robson. 2008, Princeton, 978-0-691-09182-2, $49.50 hb.

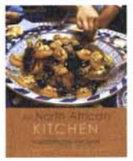
This book traces the origins and development of mathematics in Mesopotamia from the fourth millennium BC to the second century BC, when the region's cuneiform culture was abandoned. The author, a senior lecturer in the history and philosophy of science at Cambridge University, explores her subject in its religious, political, social and economic contexts, and as a tool for ensuring justice, patriotism and piety. Mathematics in ancient Iraq arose to meet such practical demands as surveying, astrology, measuring, quantifying and weighing, and relied on a place-value system based on 60 and its factors and multiples. Tables and exercises on surviving clay tablets show that it reached a high degree of sophistication. This book has few precedents because mathematicians interested in the field often did not have access to translations of tablets that provided context (and exercises and texts on wax tablets or papyrus did not survive) and linguists did not understand the underlying calculations.

—CHARLES SWEENEY

The Muslim Next Door: The Qur'an, the Media, and That Veil Thing. Sumbul Ali-Karamali. 2008, White Cloud, 978-0-9745-2456-6, $16.95 pb.

Muslim mom, Islamic law scholar and former practicing attorney Ali-Karamali answers almost every question you wanted to ask about Islam. In an exhaustive and impressive display of knowledge, she covers patriarchy in Islam, violence in the Qur'an, controversial Qur'an interpretations, poor media coverage of Islam and much more. She doesn't apologize for Muslims, either, calling out the Muslim community on several subjects. If Ali-Karamali cannot allay your concerns about Islam and Muslims, it's unlikely anyone can. This is an excellent introduction to Islam for the average American reader and a nice, dialogue-sparking book for American Muslims.

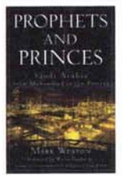
—ASMA HASAN



The North African Kitchen, Regional Recipes and Stories. Fiona Dunlop. 2008, Interlink, 978-1-5665-6712-1, $29.95 hb.

Fiona Dunlop embarks on a "voyage of gastronomic discovery" with eight cooks serving as guides into their private kitchens in Morocco, Tunisia and Libya. "It is hard to find a more promiscuous cuisine," Dunlop says of the North African range of fares, and her lush, well-appointed book—with warm, evocative photographs by Simon Wheeler—supports her claim. Each section opens with a mini-profile, as the cooks share their culinary approaches and backgrounds. One learns, for instance, that Fassi women (women from Fez, Morocco) traditionally learn cooking not only from their mothers, but also in "apprenticeships" with their aunts, each of whom has a different specialty dish. Dunlop's selection of recipes adroitly balances the different with the doable, from simple, lovely appetizers like carrots with orange and cinnamon or honeyed tomatoes, to full-bore, masterful productions like seven-vegetable couscous or classic Fassi sweet pigeon pie. The reader-cook also learns the culinary range of the region, such as five different recipes for lamb *tagine*, including prune, almond-ball, saffron and quince variations.

—ANN WALTON SIEBER



Prophets and Princes: Saudi Arabia from Muhammad to the Present. Mark Weston. Wyche Fowler, forw. 2008, Wiley, 0-4701-8257-1, $35 hb.

Many books about Saudi Arabia are researched and written far from the kingdom, but writer/lawyer Weston lived and worked in Riyadh as a visiting scholar. Aimed primarily at American readers, his book is a strong argument in favor of the special relationship between the US and Saudi Arabia. Weston does not whitewash Saudi Arabia, saying the kingdom has "serious shortcomings," but he is also convinced that Saudi Arabia is America's most important ally in the Middle East. The book combines history, current events, sociology and commentary in a crystal-clear narrative. One of its strengths is its early history of Islam in Arabia, from the Prophet Muhammad to the Umayyad caliphs—helpful for context and a good introduction for newcomers. Regrettably, the millennium between the late seventh century and the first Saudi state is given short shrift—barely two pages—with the explanation that the Arabs' role during those years was "marginal." Surely it is a mistake to dismiss the Arab Abbasid dynasty (among others) in a few paragraphs, given its long-term influence on world culture, science and thought. The author compensates with a colorful, compelling account of Saudi history—the transformative movement of Muhammad ibn 'Abd al-Wahhab, the fate of the first two Saudi states, the rise of King 'Abd al-'Aziz Al Sa'ud and Saudi Arabia's entry into the modern era. He writes sensitively about the post-9/11 era and the powerful forces of change sweeping the kingdom.

—ROBERT W. LEBLING

Running for All the Right Reasons: A Saudi-Born Woman's Pursuit of Democracy. Ferial Masry and Susan Chenard. 2008, Syracuse, 978-0-8156-0911-7, $24.95 hb.

Makkah-born Ferial Masry ran for a seat in the California State Assembly in 2004, the first Saudi-American to run for US political office. She lost, went back to teaching government and history in a Los Angeles high school, and ran again in 2008—losing to the incumbent by a much narrower margin. This is her account of her life and her motivations.

Spectacular Egypt. Mohamed El-Dakhakhny, ed. Zahi Hawass, intro. 2002, Hugh Lauter Levin Associates, 0-88363-844-4, $75 hb.

Egyptophiles, be warned: Though another oversized photo book might collapse your swaybacked coffee table, you may want to make room for this exceptional volume, now available worldwide. Photojournalist El-Dakhakhny, who also published the Cairo-based quarterly *1000 Words and Pictures*, chose its more than 150 images—including eight gatefold panoramas—with eyes equally skilled in art and documentary. The result favors reality and social context over idealization and selective focus on famous monuments. For example, the opening panorama shows the iconic pyramids of Giza set on the edge of the 21st-century metropolis; later, the Meidum pyramid at Saqqara rises surrounded by fields, with telephone wires in the background. The result is a detailed appreciation of historic and natural riches rooted in a modern nation.

Thomas Barclay (1728–1793): Consul in France, Diplomat in Barbary. Priscilla H. and Richard S. Roberts. 2008, Lehigh, 978-0-9342-2398-0, $62.50.

Thomas Barclay was the first US consul to serve overseas and became the first American diplomat to die in a foreign country. An Ulster immigrant who became a prosperous Philadelphian, Barclay played secondary but not unimportant roles in the American revolution. Congress sent him to Europe in 1781, where he worked in Paris and Holland with Franklin and then with Jefferson. In 1786, Jefferson and John Adams sent Barclay to negotiate a treaty with Morocco's sultan, Sidi Muhammad, who had grown weary of waiting for the US to acknowledge his recognition of the new nation in 1777—Morocco was the first country to do so—and had seized an American merchant ship. Barclay negotiated the treaty in a little more than four weeks in 1787. One of this book's strengths is the window it opens on the struggles of US officials to formulate policy and carry it out in a time when news traveled at the speed of a horse-drawn coach. Another is the authors' attention to detail as they recreate 18th-century life, particularly the story of Sidi Muhammad's rise to power and the relationships among the Barbary states (Morocco, Tripoli, Tunis and Algiers) and the Ottoman Empire. Barclay died in Lisbon in 1793, en route to Algeria. By illuminating his life, the authors shed new light on better-known figures and contribute new understanding to the beginnings of the relationship between Morocco and the US.

—KYLE PAKKA

The Turkic Speaking Peoples: 2,000 Years of Art and Culture from Inner Asia to the Balkans. Ergun Çağatay and Doğan Kuban, eds. 2006, Prestel, 3-7913-3515-4, $90 hb.

The 150 million or so Turkic-speaking people of southwestern Asia are linked by deep transnational relationships, cultures and encounters over several millennia, with roots in the Siberian–Mongolian borderlands. This lavish volume stands alone in its coverage of their histories and cultures, from the nomadic to the modern age. Readers are treated to a vast gamut of topics, from art and architecture to cuisine and social games. The hundreds of photographs are treasures, and together they represent a work of passion and dedication by the award-winning Turkish photographer Ergun Çağatay, who has published widely in Turkey and abroad, including a stint for Time-Life in New York. Editor Kuban pulls together more than 30 academic specialists in everything from the Turco–Chinese cultural relationship to Turkic oral epic poetry, though sadly there is no listing of their qualifications or institutions. Comprehensive but often heavily scholarly, the text is not an easy read, but the volume remains a landmark in the study of its subject.

—GRAHAM CHANDLER

Unterwegs am Golf: Von Basra nach Muscat. Along the Gulf: From Basra to Muscat. Annegret Nippa, Peter Herbstreuth, eds. Hermann Burchardt, photographer. 2006, Schiler, 978-3-899-30070-3, €58 hb.

A modest inheritance freed Hermann Burchardt from the family business and, after studying Arabic at the Berlin School for Oriental Studies, he took the road less traveled. In 1893, he visited the Siwa Oasis; later trips took him to Persia, Mesopotamia and Central Asia. He made several journeys to Yemen, where he was murdered in 1909. In 1911, a family member donated Burchardt's 2000 photographs of his travels to a Berlin museum. This book focuses on the 100-day journey that Burchardt and a Syrian companion made from Basra to Muscat in late 1903 and early 1904. The photos appear in chronological order and the text, in German and English, is drawn from Burchardt's diary and a lecture he gave at the Geographical Society of Berlin. It also includes historical commentary about such related subjects as pearling, falconry, seaports, tribes, dhows, caravans and forts. Burchardt's straightforward visual style captures the isolation and harshness of life in the region, but there are also moments of stark beauty in photographs of the Omani coast and Muscat, of camel caravans in the desert and a stunning four-image panorama of Hofuf on market day, offering rare views of a region much altered in the intervening century.

—KYLE PAKKA

Windows of the Soul: My Journeys in the Muslim World. Alexandra Avakian. 2008, National Geographic Focal Point, 978-1-4262-0320-6, $40 hb.

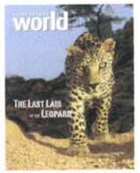
I first saw Fatima Al-Abed's dove years ago in *National Geographic*. In the photograph, Fatima, on the roof of her house in the Gaza Strip, holds the dove up. The bird's head obscures the girl's mouth as if Fatima were saying, "Speak for me, dove," and the black pebble of its eye is a tiny window into the soul of all who yearn for peace. That photo is on page 32 of this heartfelt, gut-wrenching, honest book, together with images selected from years of assignments in Palestine, Israel, Iran, Somalia, Central Asia, Lebanon and the US. Many of Avakian's photos show the perpetrators and victims of conflict, and the book risks perpetuating the prejudice that Islamic lands are predisposed to violence. But Avakian does not allow conflict to define her subjects. Her own roots are in Armenia, and though she declared her goal of shooting for *National Geographic* at age nine, there were other roads for her to travel: "I came to understand the horrors my ancestors had experienced," she writes. "More than ever I felt the need to photograph refugees, uprisings, fights for freedom." The soul into which this book is the clearest window, in the end, is Avakian's own, and we can be grateful that, along the trail of her past, she so bravely illuminates this chapter of our present.

Wolves of the Crescent Moon. Yousef al-Mohaimeed. Anthony Calderbank, tr. 2007, Penguin, 978-0-1431-1321-8, $14 pb.

Three damaged souls search for peace and personal salvation in contemporary Riyadh in this dreamlike novel. Turad, the Bedouin and former highwayman, is in a Riyadh bus station, looking to escape the city that has humiliated and broken him, but—like all postmodern heroes—realizes there isn't really any place to go. His mind roams through memories of his past and his friendship with Tawfiq, who was captured in Sudan as a child and sold into slavery. The third character, Nasir the orphan, blooms from Turad's imagination after he reads a clutch of official documents that he finds in a folder. Each of the characters suffers a physical disfigurement: Turad is missing an ear; Tawfiq is a eunuch; Nasir is missing an eye. They belong to the "unacknowledged and indefinite." All three characters struggle to claim a place in the society that has deserted them, and the author uses their intertwined stories to shine a light on the gritty reality facing outcasts in a culture where identity is often defined by membership in the extended family of tribe and clan. There are glimmers of hope in the novel, in delicate imagery and dashes of black humor, and in the infrequent and fragile connections made between various characters. *Wolves of the Crescent Moon* is a fascinating look inside today's Saudi Arabia, a nation that also seeks to find its place in the modern world.

—KYLE PAKKA

Classroom Guide



FOR STUDENTS
We hope this two-page guide will help sharpen your reading skills and deepen your understanding of this issue's articles.

FOR TEACHERS
We encourage reproduction and adaptation of these ideas, freely and without further permission from *Saudi Aramco World*, by teachers at any level, whether working in a classroom or through home study.

—THE EDITORS

WRITTEN BY JULIE WEISS

Julie Weiss is an education consultant based in Eliot, Maine. She holds a Ph.D. in American studies. Her company, Unlimited Horizons, develops social studies, media literacy and English as a Second Language curricula, and produces textbook materials.

Teachers' Workshops: Teaching About Islam. The Center for Muslim–Christian Understanding at Georgetown University is offering a new series of full- and half-day professional-development workshops for teachers from elementary through high school. Outreach centers, school districts, civic organizations and educational institutions may select from a variety of content modules correlated to national and state academic standards and curriculum frameworks for teaching about Islam and other world religions. These modules link to many broader subject areas such as math, literature and the arts; modules on Islamic Spain and Islam in the media are included. For further information or to schedule a workshop (25 participants minimum), visit www1.georgetown.edu/sfs/acmcu/about/educationaloutreach/, contact susand@cmcuworkshops.net, or call 703-442-0638.

CLASS ACTIVITIES

Several articles in this issue touch on the theme of "uncovering," and so this month's Classroom Guide is organized around that theme. Three articles look at "uncovering" in a literal sense: How have archeologists gone about uncovering monuments and mosaics, and how have geologists gone about uncovering fossils? Another article looks at how scientists are "uncovering"—in the sense of revealing what was hidden—the Arabian leopard, an animal that has survived by concealing itself from, and eluding contact with, humans. But the articles go to a deeper level, too. In a more figurative sense, one article asks a more profound question: How can we uncover the truth?

Theme: Uncovering

How do people uncover objects that have been buried? How do they uncover (find) animals that don't want to be found?

Divide the class into three groups. Assign each group one of these articles to read: "Morocco's Trilobite Economy," "I, Mosaic Masterpiece" and "The Last Lair of the Leopard." Assign each group the task of presenting to the rest of the class the content of its article. For now, focus on the act of uncovering. Later you'll have a chance to think about what becomes of objects once they're uncovered. Your presentations should include answers to these questions:

1. What was concealed?
2. Who uncovered it?
3. How did they uncover it?
4. What challenges did they have to face to do so?

Keep in mind that, in the case of "The Last Lair of the Leopard," you'll want to think about "uncovering" as more of a metaphor for finding something that is hard to find rather than literally uncovering something that is covered.

When you're done reading, answer the four questions with your group. To help you with questions 3 and 4, make a chart to look more closely at how people solve problems. For each problem and solution, make and fill in a graphic that looks like this:

Problem	>>	Solution
Problem	>>	Solution

When all the groups have presented, everyone in the class should be able to answer all the questions about all the articles. As a class, discuss any generalizations or conclusions you can draw about solving the problems involved in uncovering what has been hidden.

Why do people go to the trouble of uncovering something when doing so is difficult?

Turn your attention to this last question. As a class, discuss what motivates people to do the kind of work that the trilobite diggers and David Willis (the leopard seeker) have devoted themselves to. Contribute to the discussion based on the article you read. Then think about your own interest—or lack of interest—in what is concealed. Would you be sufficiently interested in any of the "uncoverings" you and your classmates have read about to devote yourself to them the way the people in the articles have? What might be the rewards of doing so? What might be the sacrifices involved?

How can people uncover the truth about what happened in the past?

"The Beginning of the End for Hunter-Gatherers" is also about uncovering. On one level, the uncovering is similar to the situations you read about already: Archeologists are uncovering large monuments. But the uncovering you're going to look at now is a different kind. It involves uncovering the truth, if it's possible to know it. Read the article. Notice, as you do, that it might contradict what you expect to find in a magazine article. You probably expect to read something by someone who's either an expert on a subject, or who has interviewed people who are experts on that subject. You probably expect them to give you some good, hard information. But sometimes there *isn't* any good, hard information to give. Or, to be more precise, there may be objects to look at and pieces of data to report—like the age of the soil or the shapes chiseled on a stone. But what do they mean? Often there's nothing certain about what the evidence tells you. Often the way to interpret the evidence is up for grabs.

That's what you'll find when you read "The Beginning of the End for Hunter-Gatherers." In the second and third paragraphs, writer Graham Chandler describes a controversy among archeologists. What question does he say the monuments at Göbekli Tepe raise? Write the question at the top of a piece of paper. Then read the article, circling the names of four scholars who offer answers to the question. Write the four names on the piece of paper under the question. Go back through the article with a partner and find how each of the scholars answers the question. Write his answer under each man's name. Then write, for each, the evidence or information he used to come to that answer.

With your partner, discuss which of the answers you agree with and why. To make your decision, focus on what information the scholars used to reach their conclusions. Is it credible? Is it concrete or speculative? Once you have decided, find another pair who have reached the opposite conclusion and sit down as a group of four. Explain to the other pair how you reached your decision. Listen to them explain how they reached their decision. Do you find the other pair's argument plausible, even if you don't agree with it?

Then step back and think about the bigger picture: how scholars gather and interpret data. Have a class discussion that addresses these questions: Why might it matter whether agriculture preceded or followed the building of the monuments at Göbekli Tepe? Why do scholars find it important enough to debate? What do you think it will take for one or the other of the answers to become widely accepted?

Once artifacts are uncovered, what do people do with them?

Having delved into questions of truth, turn your attention back to the objects that people uncover. The response to the question "Once artifacts are uncovered, what do people do with them?" is different for each of the artifacts you've looked at. Let's consider them one by one.

- What becomes of the trilobites that fossil diggers uncover? Although the article never directly states an opinion about trilobite digging, what attitude about the excavation of trilobites do you think underlies the article? What makes you think so? For a different opinion, consider this: In 1906, the United States passed a law that prohibited people from excavating fossils from government-owned land. Read the Antiquities Act online. Why do you think the United States passed that law? Does knowing about the law affect your thinking about what becomes of the excavated Moroccan fossils? With a partner, role-play a conversation between someone who opposes excavating fossils and a Moroccan businessman who sells excavated trilobites.
- Where is the mosaic called Battle of Issus? What was done with it once it arrived at its destination? What are the benefits and drawbacks of the mosaic's being at its current location?
- The situations at Göbekli Tepe and with the Arabian leopard are somewhat different. Neither the monuments nor the leopards are going anywhere. But there's talk of bringing people to them. Why? Do you think it's a good idea? As a class, debate the issue of making prehistoric sites into tourist destinations, and opening for tourists the land where endangered species live. Do some research on your team's point of view. You might want to read, for example, about the history of Yosemite National Park in California, where early tourism was quite controversial; or about the development of historic sites like Colonial Williamsburg in Virginia.

VISUAL ANALYSIS

When you look at a photograph, it can be hard to tell how big an object in the photo actually is, especially if it's a picture of something you've never seen before. Try it out by making a cardboard frame or using a cell phone or camera to "frame" a picture. Say you're going to photograph a fly, and you zoom in close so that the fly takes up the whole frame. Then imagine showing the photo to someone who has never seen a fly. How big might they think the fly was? Then try "framing" a picture of the fly differently, maybe showing it on the edge of a desk or on someone's arm. Notice how creating a context for the fly lets the viewer know how big or small it is. Now look at the photos of the monuments at Göbekli Tepe that appear on pages 2 and 3. How big do you think these stones are? What makes you think so? Then read about them on the next page to find the answer.

Next, find an image online of a trilobite. How big do you think trilobites can be? How small? Then look at the photo of the trilobite on page 35. Now how big do you think this one is? Is the actual size different from what you expected? How does the hand help clarify for you the size of the trilobite? How else might the photographer have helped you get a sense of the size of the trilobite? (Maybe you've seen other approaches when you were looking for images online.) Then turn to page 6 for another picture that uses a hand to give you a sense of the size of an object. What is the object? Read about it in the text of the article. How does knowing its size affect your understanding of what you've read about it? Again, how else might the photographer have given viewers a sense of the size of the object?

Now look at the photo on page 8. What orients you to the size of the monument? How does seeing this photo complement the sense you got of the objects at Göbekli Tepe when you looked at the photos on the opening spread? Look through other magazines or at other images online to find photographs where the presence of people helps the viewer understand how big or small an object is. How could you manipulate such a picture to give people an incorrect sense of the size of something? Why might someone want to do that?

Events & Exhibitions

Muslim Voices: Arts & Ideas

is a 10-day multi-venue arts festival and conference celebrating the extraordinary range of artistic expression throughout the Muslim world. More than 100 Muslim artists and speakers from as far away as Asia, Africa and the Middle East—and as near as Brooklyn—will gather for performances, films, exhibitions, talks and other events, ranging from the traditional (calligraphy, storytelling and Sufi chanting) to the contemporary (video installations and Arabic hip-hop). Festival presentations and programs aim to present multiple perspectives from the Muslim world and will take place throughout the city. World-renowned singer Youssou N'Dour opens the festival at the Brooklyn Academy of Music (BAM) June 5 at 8 p.m. In addition to the mainstage offerings and complementary education and humanities events from the Asia Society, BAM and the NYU Center for Dialogues, there will be festival programs taking place at the Austrian Cultural Forum New York, the Brooklyn Museum, the Museum of Contemporary African Diasporan Arts, the Metropolitan Museum of Art and the New York Public Library. For a full list of festival events, visit www.muslimvoicesfestival.org. Tickets from www.bam.org or http://tickets.asiasociety.org or (212) 517-ASIA or 718-636-4100. **New York**, June 5–14.

CURRENT March

Arabesque: Arts of the Arab World is an international festival showcasing the varied cultures of 22 Arab nations. From the Arabian Gulf to the Levant to North Africa, the region features extraordinary diversity in geography, traditions, landscape, religion and contemporary esthetics, and the three-week festival brings together artists, many of them making their US debut, in performances of music, dance and theater, and also presents art installations, a sound-scape and a marketplace, as well as displays of fashion, cuisine and more to unwrap the cultural treasures of the Arab world. Kennedy Center for the Performing Arts, **Washington, D.C.**, through March 15.

Five Centuries of Indonesian Textiles: Selections from the Mary Hunt Kahlenberg Collection highlights Indonesia's rich and diverse textile traditions with more than 90 works dating from the early 15th through the 20th century, including extremely rare pieces radiocarbon-dated to as early as 1403. The cultural origins and influences of the varied ethnic, linguistic and religious groups inhabiting the many islands of Indonesia show a dazzling array of abstract, figurative and geometric design motifs. **Los Angeles** County Museum of Art, through March 15.

Babylon: Myth and Reality. For 2000 years the myth of Babylon has haunted the European imagination. The Tower of Babel and the Hanging Gardens, Belshazzar's Feast and the Fall of Babylon have inspired artists, writers, poets, philosophers and filmmakers. Over the past 200 years, archeologists have slowly pieced together the "real" Babylon—an imperial capital, a great center of science, art and commerce. And since 2003, our attention has been drawn to new threats to the archeology of Mesopotamia, modern-day Iraq. Drawing on the combined holdings of the British Museum London, the Musée du Louvre and the Réunion des musées nationaux, Paris, and the Vorderasiatisches Museum Berlin, the exhibition explores the continuing dialogue between the Babylon of our imagination and the historic evidence for one of the great cities of antiquity at the moment of its climax and eclipse. British Museum, **London**, through March 15.

Beyond Babylon: Art, Trade, and Diplomacy in the Second Millennium BC focuses on the extraordinary art created as a result of a sophisticated network of interaction that developed among kings, diplomats, merchants and others in the Near East during the second millennium BC. Approximately 350 objects of the highest artistry from royal palaces, temples and tombs —as well as from a unique shipwreck—provide the visitor with an overview of artistic exchange and international connections throughout the period. From Syria, Mesopotamia and Egypt in the south to Thrace, Anatolia and the Caucasus in the north, and from regions as far west as mainland Greece all the way east to Iran, the great royal houses forged intense international relationships through the exchange of traded raw materials and goods as well as letters and diplomatic gifts. This unprecedented movement of precious materials, luxury goods and people resulted in a total transformation of the visual arts throughout a vast territory that spanned the ancient Near East and the eastern Mediterranean. Many of these works have either only recently been excavated or have never been shown abroad. Metropolitan Museum of Art, **New York**, through March 15.

Byzantium 330–1453 highlights the splendors of the Byzantine Empire, exhibiting around 300 objects including icons, detached wall paintings, micro-mosaics, ivories, enamels and gold and silver metalwork. Some of the works have never been displayed before. The exhibition begins with the foundation of Constantinople in 330 by the Roman emperor Constantine the Great and concludes with the capture of the city by the Ottoman forces of Mehmet II in 1453. Along the way it explores the origins of Byzantium; the rise of Constantinople; the threat of iconoclasm, when emperors banned Christian figurative art; the post-iconoclast revival; the remarkable crescendo in the Middle Ages; and the close connections between Byzantine and early Renaissance art in Italy in the 13th and early 14th centuries. Royal Academy of Arts, **London**, through March 22.

Iraqi Marshlands Then and Now: Photographs by Nik Wheeler. The marshes of southern Iraq, formed by the Tigris and Euphrates Rivers, once constituted the largest wetlands in western Eurasia, inhabited since at least Sumerian times in the late sixth millennium BC. As recently as the 1970's, they encompassed 15,500 square kilometers (6000 sq mi) and supported a thriving community of 250,000 to 400,000 indigenous inhabitants—the so-called Marsh Arabs. In that decade, photographer Nik Wheeler documented their way of life for *National Geographic* and *Aramco World*, and his remarkable photographs from that era are the focus of the exhibition. This herding and fishing people lived on islands made of mud and compacted reeds, and their slender watercraft and even their beautiful houses and community halls were made of reeds gathered from the marsh, all captured in Wheeler's photographs. Also on display are intimate scenes of everyday life in the area, along with majestic aerial images of the region. By 2003, however, thanks to the policies of Saddam Hussein, fewer than 80,000 people were left in the marshes, and water covered less than 20 percent of the original area. Efforts are now under way to rehabilitate a portion of the marshlands, and recent photographs by Mudhafar Salim of the Iraq Nature Conservation Society show some of the early results. Fowler Museum at UCLA, **Los Angeles**, through March 22.

Bonaparte and Egypt charts Napoleon's expedition to Egypt from the invasion through to the changed Egyptian identity after the French withdrawal, and also explores the birth of Egyptology, as the newly "discovered" culture swept the world and led to the rise of Orientalism, a fascination with ancient Egypt and massive importation of Egyptian artifacts to Europe. Institut du Monde Arabe, **Paris**, through March 29.

Utopian Visions brings together four Arab female artists living and working in various locations around the globe. They explore the idea of a perfect world, each with her own unique vision and style, drawing on disparate sources of inspiration, from nature to poetry to spiritual belief. Works by Rima Al-Awar (North Carolina and Toronto), Rana Chalabi (Cairo), Roula Ayoub (Beirut) and Emna Zghal (Tunis and New York) will be on display. Arab American National Museum, **Dearborn, Michigan**, through March 29.

The Olympic Stadium Project: Le Corbusier and Baghdad examines one of the last projects by Le Corbusier, begun in 1957: his fascinating design for a sports stadium in Baghdad. With specially commissioned models, it gives a sense of what this marvelous structure would have looked like had the project come to fruition. The stadium was planned around a set of innovative radial ribs or "voiles," the designs for 20 of which feature in the display. Le Corbusier regarded athletes as metaphors for modern man, and with Pierre Jeanneret he created an experimental design for a huge stadium for 100,000 people for athletic and cultural use, calling it a "civic tool for a modern age." The stadium and other sports facilities were originally the basis of Baghdad's bid for the 1960 Olympics. Victoria and Albert Museum, **London**, through March 29.

Exploring the Other: Contemporary Iran Through the Lens of Iason Athanasiadis challenges the conventional media narrative of Iran by offering candid insight from the perspective of an embedded international journalist and photographer. Focusing on young people, the exhibition looks at the reinterpretation of traditional Iranian culture by youths who look to the West. Craft and Folk Art Museum, **Los Angeles**, through March 29.

Thracian Treasures From Bulgaria introduces the ancient Thracian civilization, which flowered in the fourth and fifth centuries BC in present-day Bulgaria and parts of Turkey and Greece. The exhibition includes the "Golden Mask of a Thracian King" and a gold laurel-leaf crown. **Hiroshima [Japan]** Prefectural Museum, through March 31.

CURRENT April

The Lure of the East: British Orientalist Painting, 1830–1925 shows more than 110 images of bazaars, baths and domestic interiors in the Near and Middle East by such artists as Joshua Reynolds, J. F. Lewis, W. H. Hunt, David Wilkie, John Singer Sargent, William Holman Hunt, J. M. W. Turner, Roger Fenton, Andrew Geddes and Edward Lear. It is the first exhibition to survey British painters' representations of the Middle East from the 17th to the early 20th century; their responses to the people, cities and landscapes of the region; the cross-pollination of British and Islamic artistic traditions; and the use of "the Orient" as an exotic backdrop. Catalog. **Sharjah** Art Museum, **United Arab Emirates**, through April 1.

Generations Under the Arabian Sun commemorates Saudi Aramco's 75th anniversary and includes more than 500 historical pictures of company and community life. Grouped by decades, the 25 to 50 pictures per group are complemented by dioramas showing special events or developments in the company's past. ⓘ bereskcp@aramco.com or +966-3-872-0458. Saudi Aramco Community Heritage Gallery, **Dhahran, Saudi Arabia**, through April 1.

Dünya Size, Güller Bize / For You the World, For Us the Roses is a concert exploring the many cultural layers of Turkish music in one continuous conversation: rural and urban popular music, Sufi music, Greek music and Ottoman court music. Guest artist is the Canadian singer Brenna MacCrimmon. First Church, **Cambridge, Massachusetts**, April 3.

Mona Hatoum: Measures of Entanglement features sculptures and installations made by the Palestinian–British artist from 2006 onward, as well as a selection of her videos and works on paper. In Mona Hatoum's universe, familiar objects change scale and mutate to appear both alluring and dangerous. Thus a constellation of crystal spheres is arranged to form "Web," a net-like structure suspended from above, which attracts the eye but mimics the shape of a spider's trap. "Paravent" and "Dormiente" are enlarged kitchen graters whose scale transforms them into a room partition and a bed, respectively—but whose sharp edges threaten to harm those who would touch them. Ullens Center for Contemporary Art, **Beijing**, through April 5.

The Essential Art of African Textiles: Design without End illustrates the diverse classical textile genres created by artists in West Africa, displaying some of their earliest-documented and finest works. Textiles have constituted an important form of esthetic expression throughout Africa's history and across its cultural landscape, and have been a focal point of the continental trading networks that carried material culture and technological innovations among regional centers and linked Africa to the outside world. Exhibits include items from the Metropolitan's own holdings along with some 20 works that had entered the British Museum's collection by the early 20th century, as well as works by seven living artists. Metropolitan Museum of Art, **New York**, through April 5.

Shared Beauty: Eastern Rugs and Western Beaded Purses. Beaded purses were extremely popular in the 1920's, and a wide variety of patterns was depicted on them, including flowers, landscapes and other motifs. Some of the most fashionable designs were copied from Persian, Turkish, Caucasian,Turkmen and Indian carpets and textiles, and this exhibition explores the juxtaposition of bags and rugs and, more generally, the influences of eastern art on western art and fashion. **Indianapolis [Indiana]** Museum of Art, through April 5.

Content and Strategies for Teaching About the Arab World and Islam is a workshop for teachers conducted by Arab World and Islamic Resources (AWAIR). For information about attending: www.awaironline.org; for information about a program at your institution: awair@igc.org. West Valley College, **Saratoga, California**, April 17. **San Jose [California]** City College, April 21; Evergreen Valley College, **San Jose, California**, April 22.

Islamic Fabrics in the Collection of the Musée d'art et d'histoire uses a small, high-quality textile collection to explore the socio political history of Islamic Egypt. Exceptional items on exhibit include a very fine Mamluk tunic and, from the same period, a baby tunic made from small salvaged scraps of embroidered linen. Often fragmentary, such textiles nonetheless provide essential information on the clothing, living conditions and funeral rites of Islamic Egypt. Musée d'art et d'histoire, **Geneva**, through April 19.

The Art of Integration: Islam in Britain shows the talent of the photographer as well as the diversity of the society that he is portraying. Peter Sanders has emerged as one of the most skillful photographers in Britain today. His focus has been Muslims from all over the world, particularly from such remote and traditional societies as Mauritania, Hadhramaut, China and Japan. Sanders's deepest concern is to bridge the cultural divide between the secular West and Islam, and he has turned his observant eye on his homeland, a country that now has a large and significant Muslim population. Islamic Arts Museum **Malaysia, Kuala Lumpur**, through April 20.

Garden and Cosmos: The Royal Paintings of Jodhpur. Newly discovered paintings from the royal collection of Jodhpur form the core of this groundbreaking exhibition of 61 paintings from the desert palace at Nagaur, along with a silk-embroidered tent. These startling images, 120 centimeters (47") in width, are unprecedented in Indian art and reveal the emergence of a uniquely sensuous garden esthetic in the 18th century. Ten 17th-century Jodhpur paintings borrowed from museum collections in India, Europe and the US reveal the idiom from which the innovations of later Jodhpur painting emerged. **Seattle** Art Museum, through April 26; British Museum, **London**, May 28 through August 23.

Yousuf Karsh: Regarding Heroes displays 100 of Karsh's best portrait subjects in the prints he himself preferred, an exhibition marking the 100th anniversary of his birth. As a teenager the Armenian Karsh fled his native Turkey to live first in Syria and then in Canada with his photographer uncle. Always connected with traditional photographic methods, he honed his skills first as an apprentice in Boston, and then in his own studio in Ottawa. Such heroes as Ernest Hemingway, Georgia O'Keeffe, Albert Einstein, Winston Churchill and Marian Anderson sat before his lens. Art Institute of **Chicago**, through April 26.

CURRENT May

Delicacies From Cairo: The Egyptological Collection of Achille Groppi presents artifacts—especially mosaic glass, amulets, scarabs and small bronze and stone sculptures—collected by the Swiss-born coffeehouse owner and confectioner, whose father opened his first shop in 1890. Antikenmuseum und Sammlung Ludwig, **Basel, Switzerland**, through May 3.

In Praise of Shadows explores the traditional art form of shadow plays and their influence on the world of contemporary art, bringing together key works by eight contemporary artists from seven different countries and two master filmmakers. At the heart of the exhibition is the shadow theater tradition of Turkey and Greece, and its character Karagöz (Karaghiozis in Greece), an ever-hungry trickster who lives through hundreds of adventures and misadventures with a varied set of supporting characters. Karagöz dates back to the 16th century in Turkey and the 19th in Greece, but his stories are still performed today by puppeteers who have adapted his adventures for today's public. The more than 250 items on display range from free-standing models of theaters to drawings, collages and wall installations; they also include a significant number of rare figures and silhouettes, films, photographs, texts and manuscripts pertaining to shadow theater, and early silhouette and stop-motion movies. Film programs and lectures and live performances by Turkish and Greek shadow players are scheduled. **Istanbul** Museum of Modern Art, through May 6.

Persian Visions: Contemporary **Photography From Iran** presents more than 60 images that provide a revealing view of Iranian life and experience. The 20 artists featured are among Iran's most celebrated and include Esmail Abbasi (references to Persian literature), Bahman Jalali, Shariyar Tavakoli (family histories), Mehran Mohajer, Shoukoufeh Alidousti (self-portraits and family photographs) and Ebrahim Kahdem-Bayatvin. Some have lived abroad and returned to view their homeland from a changed perspective. Anti-exotic and specific, these images make up the first survey of contemporary Iranian photography to be presented in the United States. **Cedar Rapids [Iowa]** Museum of Art, through May 10; Telfair Museum of Art, **Savannah, Georgia**, June 10 through August 31.

Color & Light: Embroidery from India and Pakistan presents embroidery from India and Pakistan, areas long known for their beautiful and diverse textiles. Created in the 18th, 19th and 20th centuries, the textiles reflect the ethnic and geographic diversity of India and Pakistan in their variety of decorative motifs, color combinations, materials, patterns and stitching techniques. The exhibition is organized by the various functions that textiles held and still hold in the secular and spiritual life of the communities in which they were created: "Court and Commerce"; "Pasture, Farm, and Village"; "Embellishing the Home"; "Embroidery and Identity"; and "Ceremonies and Celebrations." Rubin Museum of Art, **New York**, through May 11.

Hussein Chalayan, a Turkish Cypriot designer, has twice been named British Designer of the Year, and is renowned for his innovative use of materials, meticulous pattern cutting and progressive attitudes to new technology. This exhibition is the first comprehensive presentation of Chalayan's work in the UK. Spanning 15 years of experimental projects, it explores his creative approach, his inspirations and the many themes that influence his work, such as cultural identity, displacement and migration. Design Museum, **London**, through May 17.

Tutankhamun and the Golden Age of the Pharaohs includes 130 works from the Egyptian National Museum, among them a selection of 50 spectacular objects excavated from the tomb of Tutankhamun, including one of the canopic coffinettes, inlaid with gold and precious stones, that contained his mummified internal organs. An additional 70 pieces in the exhibition derive from the tombs of royalty and high officials of the 18th Dynasty, primarily from the Valley of the Kings. These additional works place the unique finds from the tomb of Tutankhamun into context and illustrate the wealth and development of Egyptian burial practice during the New Kingdom. The exhibition is more than twice the size of the 1979 "King Tut" exhibition, and is on an "encore tour" of US museums. Tickets: +1-877-888-8587. **Dallas [Texas]** Museum of Art, through May 17.

Opening Tutankhamun's Tomb: The **Harry Burton Photographs** features 38 prints by the photographer who accompanied Howard Carter on the Tutankhamun expedition and documented the discovery of King Tut's untouched tomb. (See **Wonderful Things**, below.) The exhibition marks the first time the photographs appear with the Tutankhamun exhibition above. **Dallas [Texas]** Museum of Art, through May 17.

Afghanistan: Hidden Treasures from the National Museum, Kabul explores the cultural heritage of ancient Afghanistan from the Bronze Age (2500 BC) through the rise of trade along the Silk Roads in the first century of our era. Among the nearly 230 works on view, all from the National Museum of Afghanistan in Kabul, are artifacts as old as 4000 years, as well as gold objects from the famed Bactrian Hoard, a 2000-year-old treasure of Bactrian grave goods excavated at Tillya Tepe in 1978 and long thought to have been stolen or destroyed, but rediscovered in 2003. The earliest objects in the exhibition, from Tepe Fullol in northern Afghanistan, are frag-mentary gold vases dated between 2500 and 2200 BC. A second group, from the former Greek city Aï Khanum in a region conquered by Alexander the Great, reflects Mediterranean influence between the fourth and second centuries BC, and includes Corinthian capitals; bronze, ivory and stone sculptures representing Greek gods; and images of Central Asian figures carved in Hellenistic style. Trade goods from a third site, at Begram, date from the first century and include ivory statues and elaborately carved Indian ivory reliefs, as well as vases, bronzes and painted glassware, many imported from Roman, Indian, Chinese and East Asian markets. The Tillya Tepe group consists of some 100 first-century gold objects, including an exquisite crown and necklaces, belts, rings and headdresses, most inset with semiprecious stones. Many of the Bactrian objects reflect the distinctive local blend of Greek, Roman, Indian and Chinese motifs. Museum of Fine Arts **Houston**, through May 17; Metropolitan

Museum of Art, **New York**, June 23 through September 20.

Treasury of the World: Jewelled Arts of India in the Age of the Mughals presents more 300 pieces from the Al-Sabah Collection in Kuwait to demonstrate the artistic talents of jewelers working for Mughal patrons and the diversity of stones and styles they called on and the purposes they served. Ivan the Great Bell Tower, State Museums of the Kremlin, **Moscow**, through May 20.

Tutankhamun: The Golden King and the Great Pharaohs is [another] extensive exhibition of more than 140 treasures from the tomb of the celebrated pharaoh and other sites. It includes his golden sandals, created specifically for the afterlife and found on his feet when his mummy was unwrapped; one of the gold canopic coffinettes, inlaid with jewels, that contained his mummified internal organs; and a three-meter figure depicting Tutankhamun as a young man, which originally may have stood at his mortuary temple. Providing context and additional information are 75 objects from other tombs in the Valley of the Kings, including objects related to Khefren (Cheops), Hatshepsut and Psusennes I. Boisfeuillet Jones **Atlanta [Georgia]** Civic Center, through May 22.

Wonderful Things: The Harry Burton Photographs and the Discovery of the Tomb of Tutankhamun complements the Tutankhamun exhibition above. The tomb, one of the most famous archeological finds of all time, was one of the first large-scale excavations to be thoroughly documented through photography. The clearance of the tomb took 10 years, and in that time, photographer Harry Burton took more than 1400 large-format black-and-white images. The exhibition consists of 50 of Burton's photographs with explanatory labels, wall panels that discuss the discovery of the tomb of Tutankhamun and the role of the University of Chicago's Oriental Institute in its interpretation, the early use of photography in archeology, the photographic career of Harry Burton, and how the photographs fueled the public relations campaign of the excavators and spawned the myth of the curse of Tutankhamun. Carlos Museum, Emory University, **Atlanta, Georgia**, through May 25.

CURRENT June
To Live Forever: Egyptian Treasures from the Brooklyn Museum uses some 120 pieces of jewelry, statues, coffins and vessels dating from 3600 BC to the year 400 of our era to illustrate the range of strategies and preparations that the ancient Egyptians developed to defeat death and to achieve success in the afterlife. The exhibition explores the belief that death was an enemy that could be vanquished, a primary cultural tenet of ancient Egyptian civilization. To survive in the next world, Egyptians would purchase, trade or even reuse a variety of protective objects. The exhibition explains the process of mummification, the economics and rituals of memorials, the contents of the tomb, the funeral accessories—differentiated by the class of the deceased—and the idealized afterlife. Exhibits include the vividly painted coffin of a mayor of Thebes, mummies, stone statues, gold jewelry, amulets and canopic jars. Catalog by curator Edward Bleiberg, $39.95. **Columbus [Ohio]** Museum of Art, through June 7.

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***Evet:* I Do! German and Turkish Wedding Culture and Fashion from 1800 to Today** juxtaposes the customs and clothing associated with what is, for most people, still a very important occasion, when a simple "I do!" changes lives. Special clothing for bride and groom emphasizes the importance of the transition. Exhibits from Turkish and German museums, from the 19th century to contemporary designers' products, help answer such questions as "Why are bridal gowns traditionally white? What happens on the henna night? What—and why—is a shivaree?" Museum für Kunst und Kulturgeschichte, **Dortmund, Germany**, through June 7.

Akhenaton: Pharaoh of the Sun presents some 200 objects from large sculptures to personal possessions of the monotheist pharaoh and his wife, Nefertiti, to tell the political and individual stories of an extraordinary period of Egyptian history. Palazzo Bricherasio, **Turin, Italy**, through June 14.

Excavating Egypt: Great Discoveries from the Petrie Museum of Egyptian Archaeology offers a view into the lives of both royal and average Egyptians, showing more than 200 ancient objects and works of art from the earliest periods of Egyptian history to the late Roman period. The exhibition also tells the story of archeologist William Matthew Flinders Petrie (1853–1942), one of archeology's greatest pioneers, and captures the adventurous spirit of the early days of Egyptian archeology. The exhibits include one of the world's oldest garments, a rare beaded-net dress from the Pyramid Age, ca. 2400 BC; a fragment of a history book from 2400 BC; the earliest examples of metalwork in Egypt; the earliest examples of glass—so rare the Egyptians classed it with precious gems; the oldest "blueprint," written on papyrus; and the oldest known royal monument, from the reign of the legendary Scorpion King about 3100 BC. University of **Kentucky** Art Museum, **Lexington**, through June 14.

Shah 'Abbas: The Remaking of Iran explores 17th-century Iran through the reign and legacy of one of its most influential rulers, Shah 'Abbas I (reigned 1587–1629). He was a stabilizing force in Iran following a period of civil war and foreign invasion, strengthened the economy by establishing global trade links between Asia and Europe and revitalized the state religion, Shi'a Islam, which is still practiced today. The exhibition demonstrates Shah 'Abbas's social, religious and artistic influence on Iran through the gifts he endowed to major shrines in Mashhad, Ardabil and Qum and to his magnificent new capital at Isfahan. The objects, many of which have not been seen outside Iran, include copies of the Qur'an, mosque lamps, paintings, carpets, calligraphy, porcelain and silks. British Museum, **London**, through June 14.

"And So to Bed": Indian Bed Curtains From a Stately English Home. During the later part of the 17th century, Indian *callico* or chintz became a fashionable fabric to use in the decoration of bedrooms and small cabinets or dressing rooms. Unfortunately, little evidence of the massive number of textiles imported from India to Europe during this period has survived. Among the rare survivals are two sets of hangings—one of Indian embroidered cotton and the other of hand-painted Indian chintz—that hung in the bedroom of a member of the Ashburnham family. Using these curtains as a starting point, the exhibition explores the influence of the "Indies" on interior decoration of private spaces in 17th-century British architecture, the design and production of the curtains, and the textile trade between Europe and the East. Museum of Fine Arts **Boston**, through June 21.

What the Art Imparts: Understanding Islam Through Its Visual Arts is a workshop for teachers conducted by Arab World and Islamic Resources (AWAIR). ⓘ www.awaironline.org or awair@igc.org. **Urbana-Champaign, Illinois**, June 14.

The Gates of Heaven: Visions of the World in Ancient Egypt presents about 350 artifacts spanning three millennia, from the Old Kingdom to the Roman Period, to place everyday objects in their social, religious and artistic context. In the ancient Egyptian language, "the gates of heaven" referred to the doors of a sanctuary housing the statue of a divinity. Symbolizing the passageway into the afterworld, this expression also applies to other points of contact between the different elements of the universe as conceived by the Egyptians. Musée du Louvre, **Paris**, through June 29.

CURRENT July
A Yemeni Community: Photographs from the 1970s by Milton Rogovin. When social documentary photographer Milton Rogovin visited Lackawanna, New York in 1977, it was a bustling steeltown with a small but unique community of immigrants from Yemen. Devastating plant closings were a few years away, and daily life for Lackawanna's Yemenis was a combination of old-world traditions and contemporary American experiences. The exhibition resurrects that community and era with 30 photographs—never before exhibited together—that serve as a meditation on immigration history, cultural identity and the ways people adapt to a constantly changing world. Arab American National Museum, **Dearborn, Michigan**, through July 5.

Magic in Ancient Egypt: Image, Word, and Reality explores how the Egyptians, known throughout the ancient world for their expertise in magic, addressed the unknown forces of the universe. Ancient Egyptians did not distinguish between religion and magic and believed that the manipulation of written words, images and ritual could influence the world through a divinely created force known as *heqa*. Heqa could be used by the gods to control and sustain the universe and by humans to deal with problems of ordinary life. The exhibition, comprising 20 objects, also examines connections between magic and medicine, including the consumption of liquids imbued with magical powers and the use of magic after death. **Brooklyn [New York]** Museum, through October 30.

CURRENT September and Later
Nagas: Hidden Hill People of India are divided into a number of tribes and sub-tribes that speak as many as 30 different languages and live in the low Himalayan hills of northeastern India and Myanmar. Photographer Pablo Bartholomew offers a visual anthropology of these former headhunters now engaged with both tradition and transition, particularly the preservation of their traditional culture and their interaction with western religion and influence. Rubin Museum of Art, **New York**, through September 21.

The Life of Meresamun: A Temple Singer in Ancient Egypt focuses on the life of a priestess-musician in Egypt—probably Thebes—in about 800 BC. Centered on her coffin and mummy—recently scanned and "virtually" unwrapped—the exhibit illustrates the duties of a temple singer and explores what her life was like inside, as well as outside, the temple. Her temple duties are illustrated by such ritual objects as a sistrum, an ivory clapper, a harp and cult vessels; the section on her life outside the temple includes an examination of the social and legal rights of women in ancient Egypt and the professions open to them. Examples of domestic objects include dishes, jewelry and cosmetic vessels, while home religious rituals are illustrated by objects related to ancestor cults and fertility. Catalog. Oriental Institute Museum, **Chicago**, through December 6.

COMING March
From the Land of the Taj Mahal: Paintings for India's Mughal Emperors in the Chester Beatty Library. Among the most remarkable of Mughal paintings and calligraphies are those commissioned by the Emperors Jahangir (1605–1627) and Shah Jahan (1627–1658) for display in lavish imperial albums. A window into the worldviews of the emperors, these exquisite images depict the rulers, the imperial family in relaxed private settings, Sufi teachers and mystics, allies and courtiers and natural-history subjects. Many folios are full-page paintings with superb figural borders; others are collages of European, Persians and Mughal works collected by the emperors. Produced by the atelier's leading artists, they reveal the conceptual and artistic sophistication of the arts of the book at their apex in the early 17th century. The exhibition brings together 86 masterpieces—many not previously exhibited in the United States—from the renowned Dublin collection. Catalog $45. Nelson-Atkins Museum of Art, **Kansas City, Missouri**, March 21 through June 14; **Denver [Colorado]** Art Museum, July 4 through September 27.

In Pursuit of the Exotic: Artists Abroad in 19th Century Egypt and the Holy Land explores how artists in that era depicted their expanding world. The most exotic destinations for Europeans were Egypt and the Holy Land, which for centuries had been difficult to reach. Egypt offered a mysterious culture and monumental environment, while the Holy Land combined a historical, religious connection with European tradition and an extraordinary visual "otherness." Palitz Gallery, Lubin House, **New York**, March 24 through April 30.

Living Line: Selected Indian Drawings from the Subhash Kapoor Gift is a selection of 58 master drawings, principally from the 18th century and executed in black ink, sometimes enhanced with watercolor, typically on fine laminated papers. Such drawings were produced in the royal ateliers of the courts of Rajasthan and the Pahari hills of the Punjab and were generally retained within artist studios as reference works upon which finished paintings were based. They were also enjoyed as connoisseurs' objects in their own right, to be viewed by royal patrons in the privacy of their palaces. The exhibition signals the importance of the art of drawing in the later court arts of India. Metropolitan Museum of Art, **New York**, March 25 through September 6.

Daughters of India: Photographs by Stephen P. Huyler celebrates the strength, courage, resourcefulness and creativity of Indian "everywomen" from a wide variety of backgrounds. Artistic creativity plays an important part in the lives of many of them, as they express themselves and address others through paintings, sculpture, embroidery and the creation of decorative elements in their households. For others, the full force of their creativity is brought to bear simply in overcoming the severe obstacles presented by poverty, caste prejudice and other hardships. Fowler Museum at UCLA, **Los Angeles**, March 29 through July 26.

The Veil: Visible and Invisible Spaces shows the work of 29 artists, including videographers, filmmakers and new-media artists as well as painters, sculptors, performance and installation artists. Each considers and re-envisions the veil in its many manifestations and interpretations, and puts veils and veiling into context. The exhibit intends to engage received wisdom—particularly current clichés and stereotypes about Islamic practices—and to reflect on the great ubiquity, importance and profundity of the veil throughout human history and imagination. **Indiana** University East Art Galleries, **Richmond**, March 30 through April 30.

COMING April
Desert Jewels: North African Jewelry and Photography from the Xavier Guerrand-Hermès Collection reveals the power of traditional North African jewelry design. Crafted from silver and semiprecious stones, the jewelry illustrates the cultural diversity and the common themes of North African societies. Photographs depicting daily life, breathtaking landscapes and archeological monuments were made by such prominent photographers as Scotsman George Washington Wilson, the Neurdein brothers of France and Turkish photographer Pascal Sabah. ACA Gallery, Savannah College of Art and Design, **Atlanta, Georgia**, April 7 through May 2.

East Reads West; West Reads East: The Near and Far East in the Western World is the topic of the Second International Conference on Orientalisms. It will focus on the different interpretations of Orientalism that originated after the publication of Edward Said's seminal work *Orientalism* and with the opposite aspect of reading "the other": Occidentalism. It will also deal with cultural production by Asians and Arabs in the Americas and the Hispanic world. Kolligian Library, University of **California, Merced**, April 24–25.

COMING May
The Tsars and the East: Gifts from Turkey and Iran in the Moscow Kremlin features more than 60 objects, ranging in date from the late 16th to the late 17th century, that large embassies, diplomatic missions and trade delegations of Ottomans and Safavids offered to the tsars of imperial Russia. The exhibition explores the reasons these extraordinary gifts were presented, their artistic and cultural impact, and the aesthetic styles and ceremonial etiquette they inspired that came to characterize the Russian court in the 17th century and beyond. Sackler Gallery, **Washington, D.C.**, May 9 through September 13.

COMING June
Perspectives: Women, Art and Islam features the work of five female artists whose primary commonality is their personal relationship to Islam, and their art—video, photography and installation—engages the influence of Islam on their work. Museum of Contemporary African Diasporan Arts, **Brooklyn, New York**, June 4 through September 13.

A Collector's Passion: South Asian Selections from the Nalin Collection highlights the breadth of the holdings of Dr. David Nalin and explores South Asian art through a single collector's point of view. Rubin Museum of Art, **New York**, June 12 through November 9.

COMING July
Access and Rights is the topic of the Fifth Islamic Manuscript Conference. Improving access to manuscripts through digitization and electronic ordering and delivery systems while ensuring their proper long-term preservation is fundamental to the successful future study of the Islamic heritage. ⓘ tima@islamicmanuscript.org. Christ's College, University of **Cambridge, UK**, July 24–26.

COMING August
Raqs Nouveau: Turath wa Jadid (Traditional and New) is a new Jawaahir Dance Company production that presents new spins on traditional styles of Middle Eastern dance and music, with the Georges Lammam Ensemble providing the music. Southern Theater, **Minneapolis, Minnesota**, August 13–23.

COMING September and Later
Genghis Khan features artifacts from the reign of the legendary leader, including a newly discovered mummy and tomb treasures. Genghis conquered an empire three times the size of Julius Caesar's or Alexander's, but also established national parks, a postal system and the concept of international law, and set the boundaries of some modern nations. His empire was the safest and most tolerant of lands. Approximately 200 artifacts are on display, including Mongolian costumes, headdresses and instruments from the National Museum of Mongolian History, and imperial gold, metal ornaments, beads and a tombstone from Russia's State Hermitage Museum. **Houston** Museum of Natural Science, through September 7.

Grass Roots: African Origins of an American Art features approximately 225 humble but beautifully crafted coiled baskets that teach about the creativity and artistry of Africans in America from the 17th century to the present. The exhibition traces the parallel histories of coiled baskets in Africa and the Americas starting from the domestication of rice in Africa two millennia ago, through the history of the trans-Atlantic slave trade and the Carolina rice plantation, to the present. Fowler Museum at UCLA, **Los Angeles**, October 4 through January 10, 2010.

Heroes and Villains: The Battle for Good in India's Comics examines the legacy of heroes and heroines of ancient Indian mythology in contemporary South Asian culture through comic books. Indian superheroes and their archenemies are visualized from ancient archetypes long depicted in traditional painting and sculpture and deeply ingrained in India's historical imagination. In the 21st century, new incarnations of ancient Indian gods and goddesses are made manifest as modern superheroes brought to Earth to vanquish evil forces. Comic-book production takes place in a global cultural context and within a multimedia framework. On display is a selection of vintage Indian and American comics, and contemporary pencil- and ink-drawn character explorations by Indian artists, complemented by historical Indian paintings. **Los Angeles** County Museum of Art, October 15 through February 7, 2010.

PERMANENT
The Saudi Aramco Exhibit relates the heritage of Arab-Islamic scientists and scholars of the past to the technology of today's petroleum exploration, production and transportation, set against the background of the natural history of Saudi Arabia. **Dhahran, Saudi Arabia**.

Information is correct at press time, but please reconfirm dates and times before traveling. Most institutions listed have further information available at their Web sites. Readers are welcome to submit information for possible inclusion in this listing. Some listings have been kindly provided to us by Canvas, *the art and culture magazine for the Middle East and the Arab world.*

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